

Combined management report

of the EnBW Group and EnBW AG

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

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Fundamentals of the Group

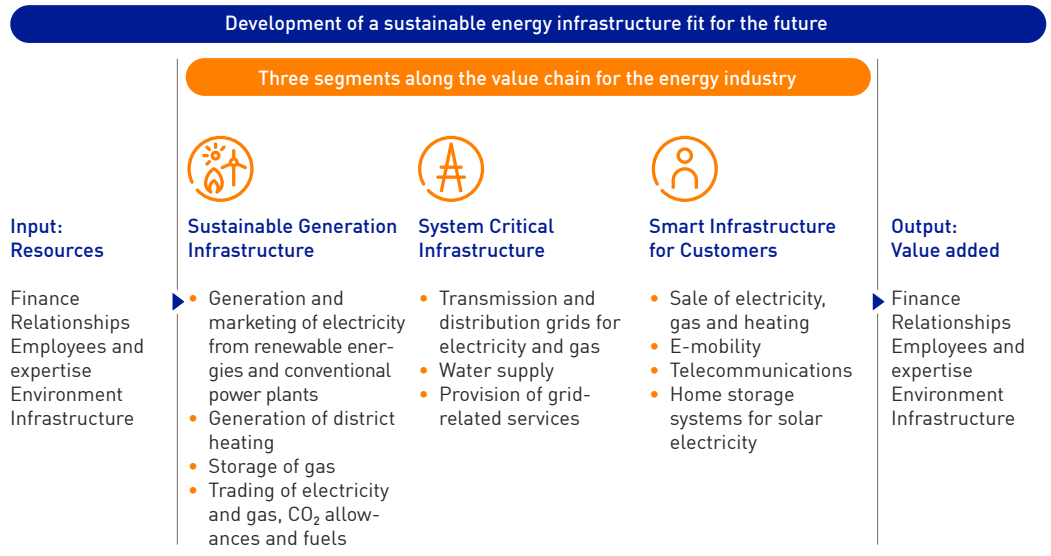
Business model

ESRS 2 SBM-1: Strategy, business model and value chain

ESRS 2 [↗](#)

Business principles

Business model



EnBW is one of the largest integrated energy companies in Germany and Europe, and supplies electricity, gas, water and heating together with products and services related to energy and infrastructure to its customers. Sustainability is an important element of our business model and our strategy. Our EnBW Sustainability Agenda 2.0 (p. 33 ff.⁷) acts as a compass to clearly guide our future 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 **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 also maintain the power plants that have been transferred to the grid reserve. In addition, this segment includes the trading of electricity, gas, CO₂ allowances and fuels, the storage of gas and the direct marketing of renewable energy power plants.
- The transmission and distribution of electricity and gas are the main components of the **System Critical Infrastructure segment**. The activities of our grid subsidiaries 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 **Smart Infrastructure for Customers** segment comprises the sale of electricity and gas, the provision and expansion of fast-charging infrastructure and digital solutions for electromobility, activities in the telecommunications sector and other solutions at a household level, such as photovoltaics and home storage systems.

A main goal of our **EnBW 2025 strategy** is to develop a balanced and diversified business portfolio along the entire value 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 section “Strategy, goals and performance management system” (p. 31 ff.⁷).

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 integrated 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. 33 ff.⁷] by the end of 2035 at the latest.

We believe that **digitalization** forms not only an important basis for sustainable growth, profitability and competitiveness, it is also fundamentally important for successfully developing the infrastructure world of tomorrow. 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 initiatives, including Group-wide ones. Our focus lies on the digital evolution of our business activities, developing skills and supporting our sustainability activities (examples can be found on p. 47⁷, 51⁷, 60 f.⁷, 62 ff.⁷, 67⁷, 87 f.⁷, 95 ff.⁷ and 100⁷).

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. 34⁷, 84⁷ and 163⁷). It is tasked with developing and implementing measures to maintain value-added processes so that the company is able to respond to events that may cause operational shutdowns, emergencies or crises in an optimal way. In the 2024 financial year, we combined the BCM/crisis management, information security and Group security departments into the **Corporate Security department**. This will allow us to develop an integrated and resilient strategy for EnBW that simultaneously takes account of all these themes so that we will be better prepared in the face of new hybrid conflict scenarios.

ESRS 2 SBM-3: Material impacts, risks and opportunities and their interaction with strategy and business model

ESRS 2 ⁷

ESRS 2 IRO-1: Description of the processes to identify and assess material impacts, risks and opportunities

E1: Climate change

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 restructuring of the energy system and the effects that the transformation towards climate neutrality will have on both the economy and private households. In this process, we also consider aspects such as the expansion of renewable energies, energy demand and the expansion of the grids, while resolutely focusing at the same time on grid stability and the security of supply. In this context, we examine the requirements with respect to climate protection, possible implementation paths and the impacts for the EnBW business. Accordingly, a main component of our analyses of energy industry conditions is **evaluating the different ways the transformation to climate neutrality** could possibly develop. This acts as an important basis for assessing the opportunities and risks for our business [p. 118 f.⁷] that will arise due to climate change and the dynamic regulatory environment associated with it.

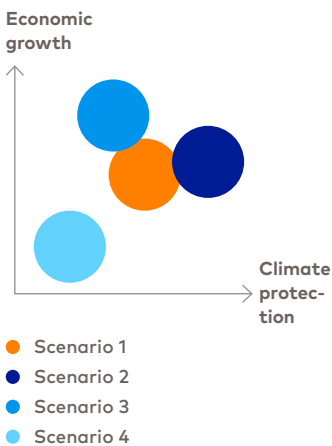
Conducting the resilience analysis

In order to evaluate these opportunities and risks, we use scenarios that give the most **realistic picture of future developments in the different aspects of the energy industry transformation**. These scenarios are primarily characterized by the dimensions climate protection and economic growth.

The **climate protection** dimension 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 chain.

The second dimension describes the **sustainable economic growth that is achievable in the long term**. The level of growth that can be achieved will also have an impact on key variables such as the demand for electricity or commodity prices.

Energy industry scenarios for EnBW



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 (based on IPCC Scenario SSP1-1.9). 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 restructuring of the energy system (based on IPCC Scenario SSP1-2.6). In addition, we describe two other scenarios in which there is a significant 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 rather than to the quick implementation of a transformation towards climate change mitigation. Greater growth will thus be achieved during the period under consideration (based on IPCC Scenario SSP2-4.5). 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 (based on IPCC Scenario SSP3-7.0).

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.

This analysis is carried out annually as part of our revaluation of developments in energy prices, which must be approved by the Board of Management.

Results of the resilience analysis

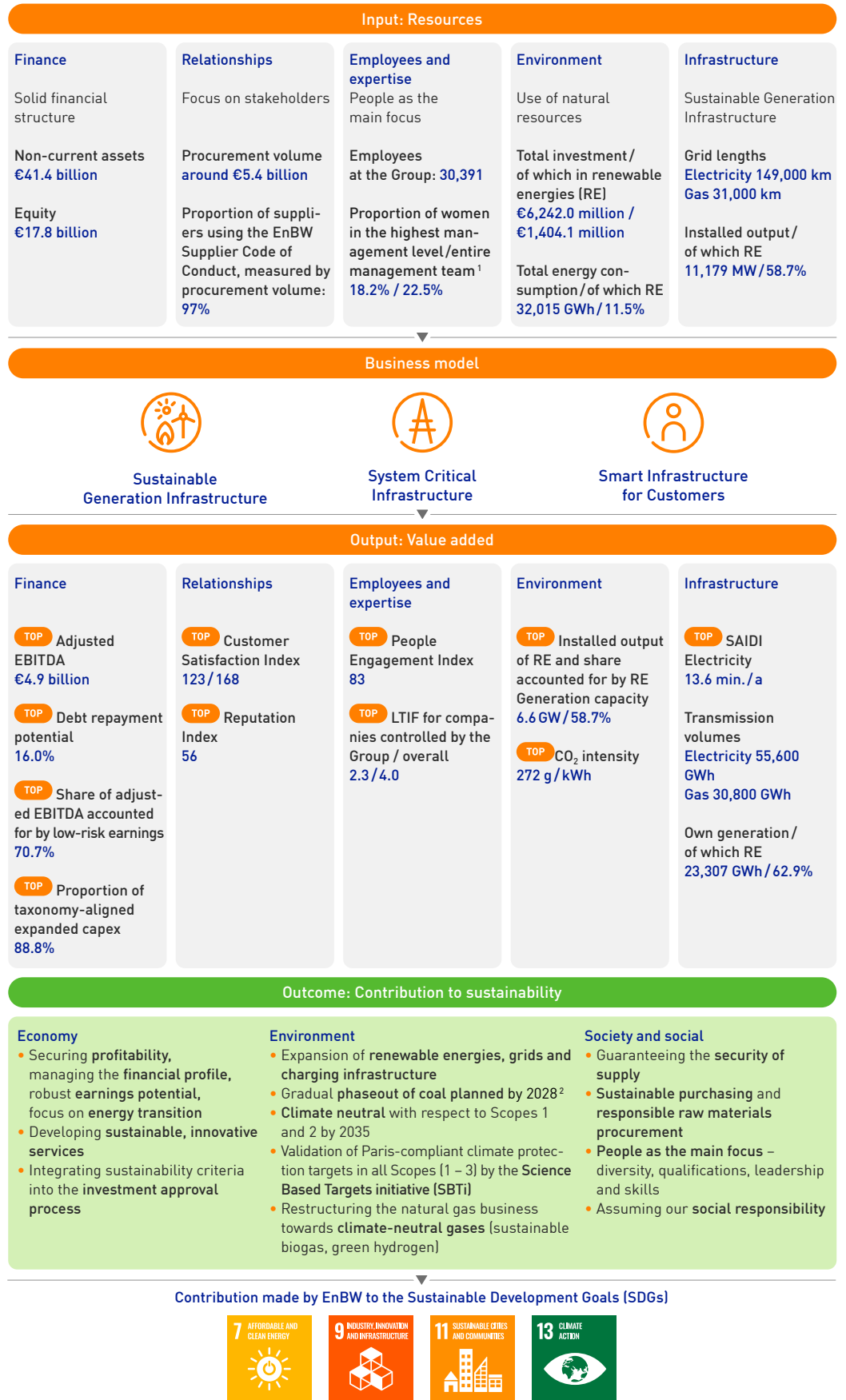
The pace of the transformation to a climate-neutral economy is different in each of the scenarios used in the resilience analysis, which means that the analysis results in a different electricity price for each scenario. These electricity prices are used on an annual basis to determine the value of the assets of the EnBW Group and are also considered when making new investment decisions. This continuous, scenario-based analysis has demonstrated the resilience of the business model pursued by the EnBW Group.

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. 52 ff.⁷) 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 2024 for EnBW and its stakeholders



1 The highest management level comprises top management and upper management. The entire management team comprises the highest management level and also middle management.
 2 As long as corresponding framework conditions are met.

We present how EnBW adds value and how we use our resources to this end by means of our key performance indicators (p. 38 ff.⁷) 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 play a material role in this area (p. 37 f.⁷). The value we generate for ourselves and our main stakeholders is presented in our value-added statement (p. 26⁷). 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. 52 ff.⁷). 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 our HR policy. Expertise, experience and diversity contribute to the success of the company (p. 99 f.⁷). We also engage in a range of research and development activities to identify market opportunities and trends and develop innovative products (p. 57 ff.⁷). We create room for personal development, offer apprenticeships and courses for students, run a multi-stage career integration program for refugees and migrants and are active in the area of diversity (p. 188 ff.⁷). 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 new products for customers and ensuring that we engage in sustainable and responsible procurement (p. 97 ff.⁷). 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 fast-charging infrastructure and the telecommunications and broadband business (p. 32⁷).

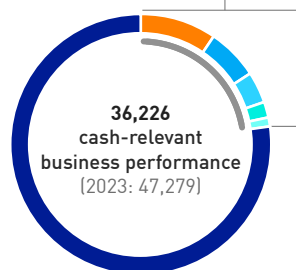
Value-added statement

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. 52 ff.⁷).

Value added of the EnBW Group

Output: value added
in € million

- 27,938 suppliers and service providers: material and other operational expenditure¹ (2023: 36,919)



8,288

Use of value added (2023: 10,360)

	2024	2023
● Active and former employees: primarily wages and salaries	41%	29%
● EnBW Group: retained cash flow	27%	47%
● State: taxes	17%	13%
● Shareholders: dividends	9%	6%
● Outside investors: interest	5%	4%

¹ 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 22.9% (previous year: 21.9%). Despite the decrease in cash-relevant business performance, the percentage value for value added was slightly higher than in the previous year. This was due to that fact that the fall in cash-relevant cost of materials was proportionally greater than the fall in cash-relevant revenues. 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 further stakeholder groups, the retained cash flow is available to the company for future investment without the need to raise additional debt (p. 91⁷).

Our operating segments

Overview of the segments



Sustainable Generation Infrastructure

Selected events 2024

- Construction of Germany's largest offshore wind farm in the North Sea: All 64 foundations installed for EnBW He Dreiht (p. 31⁷)
- EnBW has bid for construction of EnBW Dreekant wind farm in the North Sea accepted (p. 31⁷)
- EnBW builds largest solar park in Baden-Württemberg in Langenenslingen with output of 80 MW and without state funding (p. 112⁷)
- Progress made with fuel switch projects in Stuttgart-Münster (hot startup), Heilbronn (start of construction) and Altbach/Deizisau (p. 31 f., 70 and 147⁷)
- Commissioning of large-scale heat pump in Stuttgart-Münster (p. 36⁷)
- Groundbreaking ceremony for LNG terminal in Stade and conclusion of LNG procurement contract (p. 66⁷)



System Critical Infrastructure

Selected events 2024

- Implementation of the comprehensive expansion and renewal program for the transmission and distribution grids for electricity (p. 32 and 75⁷)
- Digitalization of the distribution grid, e.g., rollout of smart meters and a "self-healing grid" (p. 59 and 119⁷)
- Commissioning of the ULTRANET converter station and start of construction of the SuedLink power line (p. 32 and 74⁷)
- Approval for hydrogen core network by BNetzA: Our grid companies terranets bw and ONTRAS Gastransport will connect several German states to the hydrogen core network in future (p. 32 and 75⁷)
- Groundbreaking ceremony for the south German natural gas pipeline (SEL) and commissioning of the first section of the hydrogen-ready gas pipeline (p. 75⁷)

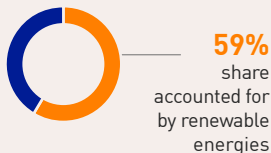


Smart Infrastructure for Customers

Selected events 2024

- E-mobility growth strategy continued: more than 6,000 of our own fast-charging stations nationwide and access to more than 700,000 charging points in the EnBW HyperNetwork (p. 32 and 78⁷)
- Further collaborations started to expand the charging infrastructure, such as at retail sites and for charging tariffs (p. 78 and 108⁷)
- Number of active customers using the EnBW mobility+ app increases by more than 30% (p. 78⁷)
- Market launch of dynamic electricity tariff for end-users, who enjoy cost benefits while shifting the load for the benefit of the market (p. 76 and 119⁷)

Installed output in 2024



Generation portfolio in 2024¹

Electricity generation	23,266 GWh
Installed output	11,154 MW

Adjusted EBITDA in 2024

€2,633.1 million

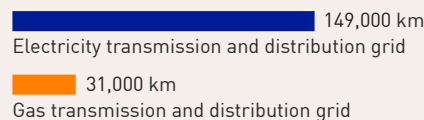
Share of adjusted EBITDA 2024²

53.7%

Other key figures 2024

Employees (as of 31/12/2024)	7,955
Investment	€2,191.7 million

Grid lengths in 2024



Transmission volumes in 2024

Electricity	55,600 GWh
Gas	30,800 GWh

Adjusted EBITDA in 2024

€2,243.1 million

Share of adjusted EBITDA 2024²

45.8%

Other key figures 2024

Employees (as of 31/12/2024)	12,811
Investment	€3,347.0 million

Sales in 2024



Number of customers in 2024

B2C and B2B	around 5.5 million
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Adjusted EBITDA in 2024

€323.9 million

Share of adjusted EBITDA 2024²

6.6%

Other key figures 2024

Employees (as of 31/12/2024)	5,703
Investment	€643.4 million

¹ 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 23,307 GWh (excluding positive redispatch volumes), of which 14,660 GWh is generated from renewable energy sources. The total installed output of the EnBW Group is 11,179 MW, of which 6,557 MW is from renewable energy power plants.

² The sum of the three segments does not correspond to the adjusted EBITDA for the EnBW Group. €-296.8 million [-6.1%] is attributable to Other/Consolidation in the 2024 financial year (p. 81 f.⁷).

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 546 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. 43 ff.⁷.

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
 SENEK GmbH, Leipzig
 Stadtwerke Düsseldorf AG, Düsseldorf
 VNG AG, Leipzig
 Yello Strom GmbH, Cologne

● Denmark

Connected Wind Services A/S, Skødstrup

● France

Valeco SAS, Montpellier

● Great Britain

Mona Offshore Wind Holdings Limited, Sunbury-on-Thames¹
 Morgan Offshore Wind Holdings Limited, Sunbury-on-Thames¹
 Morven Offshore Wind Holdings Limited, Sunbury-on-Thames¹

● Austria

SMATRICS EnBW GmbH, Vienna

● Sweden

EnBW Sverige AB, Falkenberg

● Switzerland

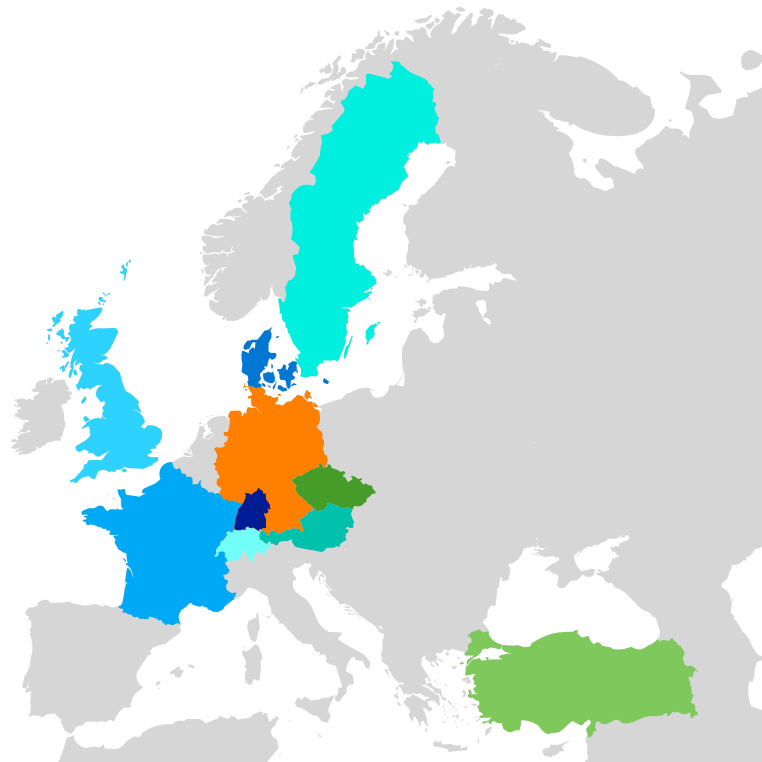
naturenergie holding AG, Laufenburg

● Czech Republic

Pražská energetika a.s., Prague

● Turkey

Borusan EnBW Enerji yatırımları ve Üretim A.S., Istanbul¹



¹ 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 several 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** in France 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 natureenergie (NEH) in Switzerland and Pražská energetika (PRE) in the Czech Republic, both shareholdings of EnBW 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 fast 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 on Baden-Württemberg in this sector.

Our **most important participating interests** in relation to the value chain include the following groups of companies:

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



Stadtwerke Düsseldorf (SWD) is one of the largest municipal energy supply companies in Germany. Employing around 3,500 people, 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 1,800 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 pushing forward the transformation from fossil gas supply to a renewable and decarbonized supply based on biogas and hydrogen.



natureenergie (NEH), based in Laufenberg, Switzerland, has around 1,300 employees and is an ecologically oriented German-Swiss listed company with various subsidiaries that is active in South Baden and Switzerland. NEH exclusively generates green electricity primarily using hydropower. Alongside the production, sale and distribution of electricity, this group of companies offers its customers smart, networked products and services, including photovoltaic plants, electromobility and e-car sharing.



Pražská energetika (PRE), based in Prague, Czech Republic, has around 2,000 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 provision of balancing energy for the transmission grid operator ČEPS, 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 second-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.



Valeco, based in Montpellier, France, is a project developer and plant operator in the renewable energies sector and an important player in the energy transition in France thanks to its strong territorial roots. The company has around 300 employees in the onshore wind, offshore wind, photovoltaics and battery storage system sectors and is active across the entire value chain – from development and construction through to operation, maintenance and, finally, dismantling. In cooperation with the EnBW subsidiary EnBW Valeco Offshore SAS (EVO), which was founded in 2024, Valeco is participating in offshore wind auctions in France. Valeco has several branches across France, as well as its company headquarters in Montpellier.

ESRS 2 SBM-1: Strategy, business model and value chain

ESRS 2 ↗

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**. 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**, naturenergie (NEH) sells green electricity across Germany and gas to retail and commercial customers in South Baden. In addition, NEH also offers many other sustainable products and services in the areas of heating, living, photovoltaics and mobility – from solar power plants and e-car sharing services through to heating concepts for residential districts. In Switzerland, this group of companies sells water and solar energy to commercial customers via the subsidiary enalpin, while the Swiss subsidiary tritec offers a comprehensive range of solar solutions across Switzerland. 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 shareholdings 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

ESRS 2 SBM-1: Strategy, business model and value chain

ESRS 2 ↗

E1-1: Transition plan for climate change mitigation

Development of a sustainable energy infrastructure fit for the future

As one of the largest integrated energy companies in Germany and Europe, we are pushing forward the **development of a sustainable energy infrastructure fit for the future** in all business fields along the entire energy industry value chain. What makes us unique is our fully integrated position that covers renewable and disposable generation, trading, transmission and distribution grids, through to sales and electromobility. This makes us one of the most important players on the German energy market.

We developed our **EnBW 2025 strategy** against the background of a changing energy market with the aim of exploiting the numerous, emerging growth opportunities. For this purpose, we have split our portfolio into three strategic segments along the value chain and are also addressing new market opportunities in the infrastructure business. The EnBW 2025 strategy is based on a holistic approach to stakeholders that defines specific non-financial targets as fixed components of our integrated management system, alongside financial and strategic aspects.

In accordance with our EnBW 2025 strategy, we had planned to increase our **adjusted EBITDA** to €3.2 billion by 2025. However, we already exceeded this target in the 2022 financial year and in the years since, and in our current plans we now expect to exceed this earnings target significantly in 2025 (p. 109⁷).

Further development of our strategy with an outlook to 2030

We are continuing to pursue our previous strategy by extending our strategic alignment and our targets with an outlook to 2030. In the process, we remain committed to maintaining our integrated position that has proven to be successful in the past and which we believe will also secure our success in the future. By integrating the areas of generation, the transmission and distribution of energy, sales and electromobility, we will be able to respond to market changes and external challenges flexibly and efficiently. For example, we are in a position to manage our investments across our segments to optimize returns, which ensures solid financial performance and reliable returns on investment. Furthermore, our diversified portfolio enables us to compensate for market fluctuations and regulatory uncertainties, which makes our business more resilient and gives us a more balanced opportunity/risk ratio across the portfolio.

To ensure that our business remains profitable in the long term, we aim to increase our investment in the short and medium term in a sustainable energy supply. We want to continue to play a leading role in developing the energy infrastructure of the future in Germany. We resolutely take economic and sustainability criteria (p. 42⁷) into account when making investment decisions while seeking to maintain a balanced portfolio and align our growth accordingly (p. 89 f.⁷).

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

In the **Sustainable Generation Infrastructure** segment, the main focus is placed on the expansion of renewable energies and flexibly dispatchable power plants and battery systems. We aim to increase the total generation capacity of our renewable energy power plants to between 10 GW and 11.5 GW by 2030. An important milestone in the expansion of renewable energies is the EnBW He Dreiht offshore wind farm, which is due to be placed into operation in 2025 with an output of 960 MW. 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. We have also had our bid accepted for the rights to develop the EnBW Dreekant offshore wind farm in the North Sea with an output of 1 GW. Long-term power purchase agreements (PPAs) with industrial customers will be used to safeguard this investment. At the same time, we are pushing forward the decarbonization of our thermal generation portfolio with the construction of new hydrogen-ready gas power plants. 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 that can be operated using hydrogen in the future. These power plants will be successively placed into operation from 2025 onwards at the three sites in Heilbronn, Altbach/Deizisau and Stuttgart-Münster. This will enable us to save around 60% of the CO₂ emissions at these sites. Our decarbonization target for the CO₂ intensity of our entire generation park in 2030 is between 90 and 110 g/kWh. 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.

In the **System Critical Infrastructure** segment, our grid subsidiaries will continue to expand both the transmission and distribution grids for electricity and gas, as well as for hydrogen in the long term. We plan to more than double our grid capacities in the transmission and distribution grids for electricity by 2030 compared to 2023, provided that demand develops accordingly. The main driver for the expansion of the transmission grid is the physical separation of wind power generated in the north of Germany and the centers of consumption in the south. The future requirements for electromobility, the increasing use of heat pumps and the decentralized feed-in of energy are the main drivers for the expansion of the distribution grids. 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. Our subsidiaries terranets bw and ONTRAS Gastransport are participating in establishing and expanding a national hydrogen core network, which, according to the German government's plans, is set to be completed by 2032.

Our **Smart Infrastructure for Customers** segment encompasses our end customer business. In the next few years, we will continue to focus especially on the growth area of electromobility. As the market leader, we aim to further expand our fast-charging infrastructure to more than 20,000 fast-charging points by 2030 and consolidate our market share of around 20% in this sector. In this context, we are taking into account the current slowdown in the ramp-up of electric cars but are always ready to respond flexibly should the switch to electric vehicles pick up pace again. In the retail and commercial business (B2C), we will continue to rely on digitalization in relation to our sales of electricity and gas, while improving our cost efficiency. We also want to offer our customers a holistic range of products and services within a "networked energy world" that reaches far beyond simply offering individual products. Growth in the electromobility sector should also give us access to a growing customer base.

In the period from 2024 up to and including 2030, we are planning gross **investment** totaling at least €40 billion. Approximately 60% of this investment will be in the System Critical Infrastructure segment and around 30% will be 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 at which the energy infrastructure of the future is being developed through the investment projects it is planning for the period up to 2030. In the process, we aim to increase the proportion of taxonomy-aligned expanded capex to more than 85%. We also want to continue developing our investment projects in cooperation with partners. Taking into account these partnerships, we expect total net investment of around €22 billion by 2030. Due to changing developments on the market, government initiatives and the plans approved by the Federal Network Agency, we have also identified additional investment opportunities of around €10 billion above and beyond our planned gross investment of €40 billion.

This will enable us to simultaneously push forward the development of the energy infrastructure of the future across all business fields and throughout the energy industry value chain.

In 2030, we expect an adjusted EBITDA of between €5.5 billion and €6.3 billion, of which between €2.7 billion and €3.0 billion will be accounted for by the Sustainable Generation Infrastructure segment, between €2.3 billion and €2.6 billion by the System Critical Infrastructure segment and between €0.7 billion and €1.0 billion by the Smart Infrastructure for Customers segment. We aim to increase the share of low-risk business to greater than 70%.

Further explanations of our financial and non-financial key performance indicators and the targets for 2025 and 2030 can be found in the section "Goals and performance management system" on p. 38ff.⁷.

ESRS 2 SBM-1: Strategy, business model and value chain

ESRS 2 SBM-3: Material impacts, risks and opportunities and their interaction with strategy and business model

ESRS 2 GOV-2: Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies

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

[Online ↗](#)

E1: Climate change

E2: Pollution

E3: Water and marine resources

E5: Resource use and circular economy

S1: Own workforce

S4: Consumers and end-users

EnBW Sustainability Agenda 2.0

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 the first phase, we started implementing the Sustainability Agenda at the beginning of 2022 – strengthening our sustainability profile and anchoring sustainability even more strongly into our core business. We followed this in early 2024 with the planned revision of our Sustainability Agenda, where we reflected above all on changing conditions with respect to legislation, competition, the capital market, society and customers, and on our activities relating to our target vision for 2025 with Outlook 2030 in line with the corporate strategy. The resulting **EnBW Sustainability Agenda 2.0** provides a strategic framework for sustainability at EnBW. It is founded on requirements in the environment (E), social (S) and governance (G) areas. The measures are specifically designed to deliver added value to the company. The EnBW Sustainability Agenda 2.0 is also being supported by an updated communication and stakeholder concept and is split into **two strategic focus areas** (“**Energy of change**” and “**Culture of sustainability**”), defining **14 measures** within the ESG themes:

The 14 measures in the EnBW Sustainability Agenda 2.0

Energy of change

Environment

- E** M1 Renewable energies
- M2 CO₂ reduction
- M3 Hydrogen and decarbonized gases
- M4 Customer solutions
- M5 Grid expansion and modernization
- M6 Circular economy
- M7 Biodiversity
- M8 Pollutants and water

Culture of sustainability

Social

- S** M9 Diversity and education
- M10 Human rights (especially supply chain)
- M11 Stakeholder management in affected communities

Governance

- G** M12 Reporting, ratings and sustainable finance
- M13 Corporate management
- M14 Climate resilience

We pushed forward all of these measures in the 2024 financial year. Here are some **selected examples**:

Energy of change

E1: Climate change

We have bundled all of our activities to mitigate the negative climate-related impacts of our greenhouse gas emissions in **measure 2 (CO₂ reduction)**. This includes the implementation of our Paris Agreement-compliant reduction targets for Scopes 1, 2 and 3 that have been certified by the SBTi. Key elements are our planned phaseout of coal, as long as corresponding framework conditions are met, and the switch to climate-friendly natural gas, and subsequently to decarbonized gases by the middle of 2030. To this end, we are optimizing and digitalizing all necessary data and processes. At the same time, we are supplementing the EnBW climate protection targets with a net zero target.

E1: Climate change

In **measure 3 (Hydrogen and decarbonized gases)**, we are building on our position as a responsible supply partner for sustainably certified hydrogen for the energy industry as well as business and industrial customers in Baden-Württemberg and across Germany. By establishing the foundations for a reliable supply of low-carbon hydrogen, we can strengthen our sales activities and develop long-term business relationships.

E4: Biodiversity and ecosystems

In **measure 7 (Biodiversity)**, we are focusing on mitigating the negative impacts that our company has on biodiversity. Our current activities to address issues related to biodiversity are developed, managed and implemented decentrally. We created the framework for a Group-wide Stakeholder Engagement Policy in 2024 and plan to ratify it in 2025. We have also entered into cross-sector dialog on biodiversity (econsense Nature Roundtable) via econsense, the sustainability network of German business, and we are planning to develop a Group-wide biodiversity policy, including a Group guideline on biodiversity, starting in 2025.

Further information on the **econsense** sustainability network can be found here.

[Online ↗](#)

S2: Workers in the value chain**Culture of sustainability**

Respecting human rights is a key pillar of our corporate culture and anchored in our business practices in **measure 10 (Human rights – especially in the supply chain)**. In cooperation with our business partners, we are working to make our supply chain more sustainable by improving transparency. For example, carrying out the risk analysis in accordance with the Act on Corporate Due Diligence Obligations in Supply Chains (LkSG) has made an important contribution to exercising our corporate due diligence. This resulted in the first publication of the report detailing our due diligence obligations by the Federal Office for Economic Affairs and Export Control (BAFA) on 19 August 2024. In addition, we are actively participating in initiatives such as econsense, the Energy Sector Dialog, and the Responsible Commodities Sourcing Initiative (RECOSI), to help us review and refine our approaches and level of ambition in cooperation with other companies and stakeholders.

S3: Affected communities

Measure 11 (Stakeholder management in affected communities) focuses on local communities that are impacted by our projects, such as the dismantling or conversion of electricity and heating power plants. In 2024, we made sure that all of the necessary preparations were carried out to develop a Group-wide policy for local stakeholder management (Stakeholder Engagement Policy) and to ratify it in 2025.

The latest **ESG Factbook 2024** contains all of the facts on our sustainability performance.

[Online ↗](#)

Measure 12 (Reporting, ratings and sustainable finance) aims to make EnBW more attractive to sustainability-oriented investors and improve our ESG performance. We are also expanding our range of sustainable finance products. In the 2024 financial year, we launched the ESGgo! Group project to anchor ESG themes within the organization and improve our sustainability performance. As well as updating our sustainability reporting in the management report in accordance with the European Sustainability Reporting Standards (ESRS) [p. 128⁷], we have also published an ESG Factbook. We were able to improve our sustainability performance in the main ESG ratings. In the area of sustainable financing instruments, we updated our Green Financing Framework, issued several green and hybrid bonds and renewed our sustainability-linked syndicated credit line.

ESRS 2 IRO-1: Description of the processes to identify and assess material impacts, risks and opportunities

In view of the growing consequences of impacts related to physical climate risks, such as prolonged periods of hot weather and floods resulting from extreme weather events, **measure 14 (Climate resilience)** is now especially relevant. We are expanding our previous activities in the area of climate risk management using targeted analyses based on the climate scenarios from the Intergovernmental Panel on Climate Change (IPCC). The results of these analyses help us develop action plans in the area of local authority emergency and crisis management and identify where we need to adapt our own infrastructure. The aim is to minimize material and social damage within our sphere of responsibility and prevent potential interruptions to supply.

E1-1: Transition plan for climate change mitigation

E1-2: Policies related to climate change mitigation and adaptation

E1-4: Targets related to climate change mitigation and adaptation

E2-1: Policies related to pollution

ESRS E1 [↗](#)

More about the decarbonization of our business model can be found in the [Climate Transition Plan](#).

Online [↗](#)

Further information on the [SBTi](#) can be found here.

Online [↗](#)

Further information on our [climate protection targets](#) can be found here.

Online [↗](#)

Our climate protection goals

A key element for the success of the **EnBW Sustainability Agenda 2.0** is compliance with ambitious, science-based targets for reducing greenhouse gas emissions along the whole length of our value chain. Accordingly, these targets and our ability to achieve them are important decision-making tools for strategic issues and especially for investment decisions. In April 2024, we published a **Climate Transition Plan** for the first time. It contains a detailed overview of our climate protection targets and also includes information on the success achieved so far, necessary action plans and funds and the next steps on the path to decarbonization. The plan also describes how the EnBW climate protection strategy is interlinked with our business activities, especially in the area of sustainable finance. Another important purpose of the Climate Transition Plan is to give details on how we will shape the necessary restructuring of the energy system with and for our employees in a socially responsible way, how our climate-related risk management system is designed and how we take our climate targets into account in our internal corporate bodies and our business decisions.

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 and we have thus aligned our climate protection targets with the targets of the Paris Agreement. These reduction targets cover the entire value chain for EnBW and are split into three emission categories or so-called Scopes: Scopes 1 and 2 are the company's own direct and indirect emissions and 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. 145 ff.](#)⁷) and the associated emissions in the upstream value chain. We aim to follow a 1.5 degree-aligned path for Scopes 1 and 2 emissions and a "well below 2 degrees"-aligned decarbonization path for Scope 3 emissions. The target is to reduce our CO₂ emissions in Scopes 1 and 2 by 83% by 2035 (based on the reference year of 2018). This target is based on a sector-specific emissions path. In the same period, we also aim to reduce our emissions from gas sales in Scope 3 by 43% in comparison to the reference year 2018. We have had these targets validated by the SBTi. We will offset any residual Scope 1 and 2 emissions in the period after 2035 on a transitional basis by purchasing CO₂ 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).

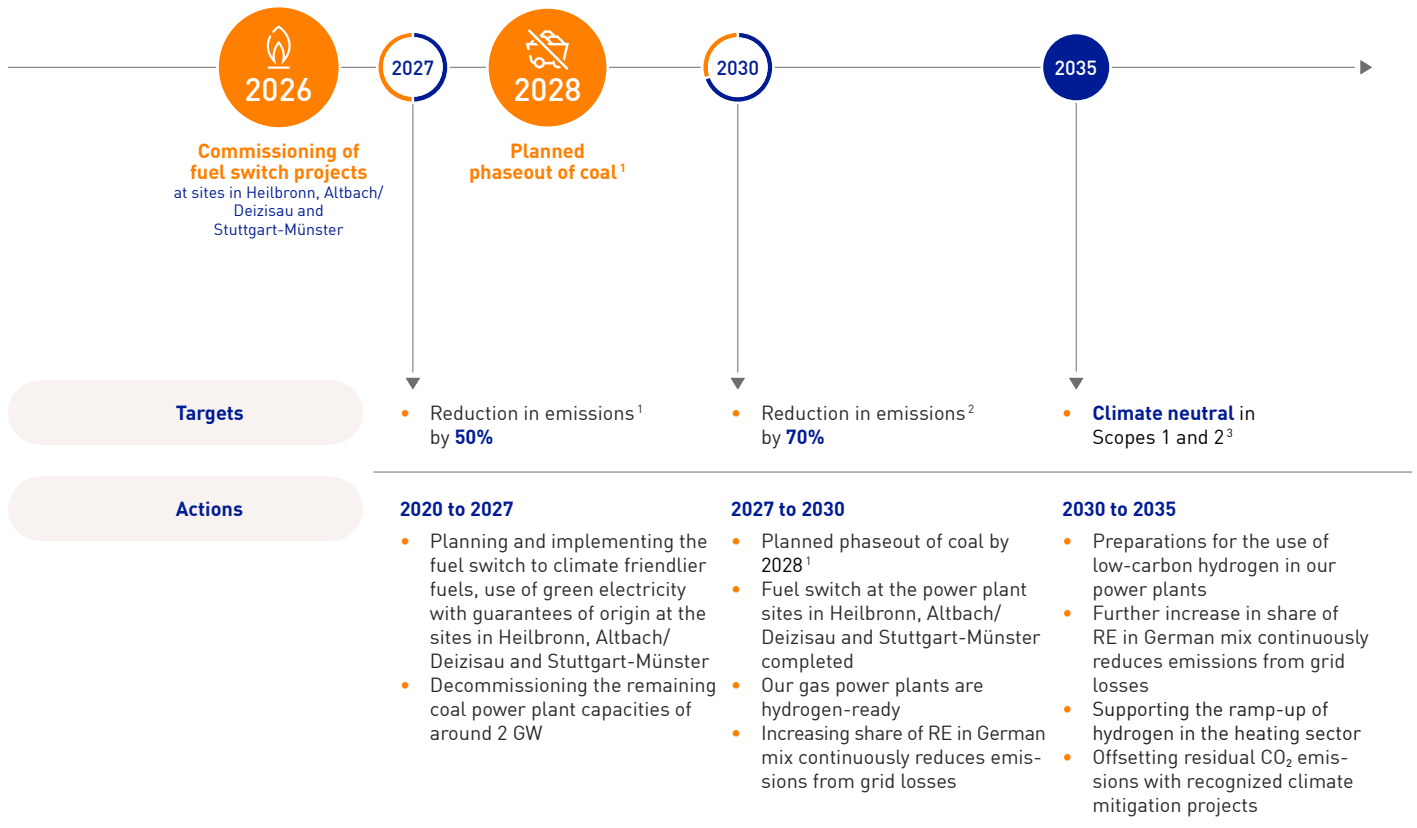
As an integrated energy company with its own generation portfolio – which is increasingly characterized by renewable energies – we can make an important contribution to decarbonization and thus to safeguarding the livelihoods of future generations.

In 2024, we began defining a net zero target for all scopes. We plan to present the corresponding targets in 2025.

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 regular dialog. This includes above all the provision of affordable and climate-friendly energy and ensuring the security of supply. The next steps in achieving our climate protection targets are the phaseout of coal and the switch to more climate-friendly natural gas and decarbonized gases. Based on the assumption that renewable energies will be ramped up as necessary and that significant progress will be made in expanding the grids, we plan to phase out coal by 2028, as long as corresponding framework conditions are met. 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 or the grids.

Our climate protection goals



1 As long as corresponding framework conditions are met.
 2 Reduction in Scope 1 and 2 emissions compared to the reference year of 2018.
 3 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 own business area

An important milestone for reducing our CO₂ emissions and phasing out coal 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 construction work at the plants is already underway and is due to be completed in 2026. The so-called “hot startup” phase for the new gas turbine began at the site in Stuttgart-Münster in October 2024. From the middle of the 2030s onwards the plants will be operated with climate-neutral gases to achieve, as near as possible, climate-neutral generation. We are supplementing the projects to convert existing generation sites with other new generation plants. As of April 2024, this includes a large heat pump, which is also located in Stuttgart-Münster, that utilizes the environmental heat from the cooling water discharge at the power plant to make a material reduction in the greenhouse gas emissions generated in the provision of district heating. We plan to phase out coal power plants with around 2,000 MW of generation capacity that are still on the market by 2028, as long as corresponding framework conditions are met.

Various measures will be required to reduce our indirect emissions from purchased or acquired energy (Scope 2). The CO₂ 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. Continuous improvements in energy efficiency and increasing our own consumption of green energy by, for example, systematically installing rooftop PV plants on our properties, will also help to reduce our Scope 2 emissions.

This video explains our **reduction path**.

[Online ↗](#)

Scope 3: Emissions in our upstream and downstream value chain

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 and in industry. 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.

As an integrated energy company, we have a broad range of solutions to accompany and support the heating transition. In the area of decarbonized gases, this includes our role as a partner for the development of a hydrogen infrastructure where we have projects along the entire value chain. In addition, we are expanding and simultaneously decarbonizing our district heating and supporting the electrical heating of buildings by offering associated products such as our tariffs for heating electricity. In our contracting department, we also provide innovative solutions to reduce emissions in the provision of energy and especially in heating in the B2B sector. We will be able to offer our gas customers a more environmentally friendly energy supply in future as we align our sales portfolio towards decarbonized gases and other emission-free solutions.

Climate protection outside of our own value chain

We already set ourselves the target in 2020 of offsetting our residual Scope 1 and 2 emissions by 2035. Any currently non-reducible, residual greenhouse gas emissions should be offset by supporting recognized climate change mitigation projects that are carried out according to the highest standards (such as the Gold Standard), while at the same time we will work to reduce our greenhouse gas emissions. Our grid subsidiary Netze-Gesellschaft Südwest has been measuring its Scope 1, Scope 2 and some of its Scope 3 emissions in previous years so it can offset them to remain climate neutral. Netze BW was certified as climate neutral in accordance with the newly published ISO 14068-1 standard for the first time in 2023. It not only offsets its direct emissions (Scope 1) and indirect emissions (Scope 2) but also its upstream and downstream emissions along the value chain (Scope 3). Netze BW also worked to achieve this target in 2024. In our measures to offset the company's own residual emissions, we are following a recommendation by the Science Based Targets initiative (SBTi), whereby we supplement our measures for reducing emissions via science-based reduction paths within our own value chain with other climate protection activities outside of our own value chain.

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). In July 2024, we published our updated Green Financing Framework, which provides the basis for the financing of all of our climate-friendly projects. This framework complies with the Green Bond Principles from the International Capital Market Association (ICMA) and the Green Loan Principles from the Loan Market Association (LMA) and is thus in line with all relevant standards for the market. All funds from green financing may only be used for projects that fulfill the criteria for a taxonomy-aligned activity and, at the same time, make a contribution to at least one of the 17 SDGs. We focus on making a contribution to four central SDGs: 7: Affordable and clean energy, 9: Industry, innovation and infrastructure, 11: Sustainable cities and communities, and 13: Climate action (p. 53 ff.⁷). Since 2018, we have successfully issued several **green bonds** on the capital market with a total volume of around €8.3 billion. As of 31 December 2024, the outstanding volume of green bonds was around €7.8 billion. In 2024, we issued green bonds with a volume of €3.3 billion. In accordance with our Green Financing Framework, the proceeds will be exclusively used in the areas of renewable energies and clean transport. Activities under the banner of renewable energies include the product categories offshore wind, onshore wind, photovoltaics, electricity distribution grids, smart meter and, as of the middle of 2024, electricity transmission grids and hydropower. Clean transport covers investment in the charging infrastructure for electromobility. We provide detailed information on the allocation of the funds regularly in our **Green Bond Impact Report**.

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

[Online ↗](#)

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

[Online ↗](#)

Alongside our green bonds, we have already concluded other sustainable financing instruments within the Group such as a sustainability-linked syndicated credit line and the green promissory note of our subsidiary VNG. 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 VNG** can only be used for environmentally sustainable projects: The focus in the medium to long term will be on decarbonized gases, primarily biogas and sustainably produced hydrogen.

Goals and performance management system






ESRS 2 GOV-1: The role of the administrative, management and supervisory bodies

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 the Board of Management level.

This Annual Report 2024 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 Financial and non-financial key performance indicators and targets

Goal dimension	Goal	Key performance indicator	2024	Target for 2025	Target for 2030
 Finance	Securing profitability	Adjusted EBITDA in € billion	4.9	3.2 ¹	5.5 – 6.3
	Managing the financial profile	Debt repayment potential in %	16.0	≥ 15 ²	≥ 15 ²
	Robustness of the earnings potential	Share of adjusted EBITDA accounted for by low-risk earnings in %	70.7	≥ 70	≥ 70
	Focus on the energy transition	Proportion of taxonomy-aligned expanded capex in %	88.8	≥ 85	≥ 85
The EnBW Group, p. 81 ff. ⁷ Forecast, p. 109 f. ⁷ Report on opportunities and risks, p. 114 ff. ⁷ Multi-year overview, p. 398 ⁷					
 Strategy³	Share of result accounted for by "Sustainable Generation Infrastructure"	Share of overall adjusted EBITDA in € billion	2.6/53.7%	1.3/40.0%	2.7 – 3.0
	Share of result accounted for by "System Critical Infrastructure"	Share of overall adjusted EBITDA in € billion	2.2/45.8%	1.3/40.0%	2.3 – 2.6
	Share of result accounted for by "Smart Infrastructure for Customers"	Share of overall adjusted EBITDA in € billion	0.3/6.6%	0.6/20.0%	0.7 – 1.0
The EnBW Group, p. 81 f. ⁷ Forecast, p. 109 ⁷ Report on opportunities and risks, p. 114 ff. ⁷ Multi-year overview, p. 399 ⁷					
 Customers and Company	Reputation	Reputation Index	56	55 – 59	56 – 60
	Customer proximity	EnBW/Yello Customer Satisfaction Index	123/168	125 – 136/ 148 – 159 ¹	148 – 157/ 155 – 175
	Supply reliability	SAIDI Electricity in min./year	13.6	< 20	< 20
The EnBW Group, p. 95 ff. ⁷ Forecast, p. 111 f. ⁷ Report on opportunities and risks, p. 124 ⁷ Multi-year overview, p. 399 ⁷					
 Environment	Expand renewable energies (RE)	Installed output of RE in GW and the share of the generation capacity accounted for by RE in %	6.6/58.7	6.5 – 7.5/> 50	10.0 – 11.5/ 75 – 80
	Climate protection	CO ₂ intensity in g/kWh ⁴	272	380 – 440 ¹	90 – 110
The EnBW Group, p. 97 ff. ⁷ Forecast, p. 112 ⁷ Report on opportunities and risks, p. 124 ⁷ Multi-year overview, p. 399 ⁷					
 Employees	Employee engagement	People Engagement Index (PEI) ⁵	83	77 – 83	77 – 83
	Occupational safety	LTIF for companies controlled by the Group ^{6,7}	2.3	2.1	–
		LTIF overall ⁶	4.0	3.5	–
		LTIF energy ^{7,8}	–	–	≤ 2
	LTIF overall ⁸	–	–	≤ 3.3	
The EnBW Group, p. 99 f. ⁷ Forecast, p. 113 ⁷ Report on opportunities and risks, p. 124 ⁷ Multi-year overview, p. 400 ⁷					

¹ It was already possible to exceed this target in the 2024 financial year and in our current plans we now also expect to exceed the earnings target for 2025.

² EnBW regularly reviews the target value for debt repayment potential to ensure it can maintain its rating target. The current target value is ≥ 15%.

³ The sum of the three segments does not correspond to the adjusted EBITDA for the EnBW Group. €-296.8 million [-6.1%] is attributable to Other/Consolidation in the 2024 financial year [p. 81 f.⁷]. The target value for 2030 includes €-0.2 to €-0.3 billion in Other/Consolidation.

⁴ The calculation for this performance indicator does not include nuclear generation and the share of positive redispatch that cannot be controlled by EnBW. CO₂ intensity including nuclear generation for the reporting year was also 272 g/kWh.

⁵ Variations in the group of consolidated companies [all companies with more than 100 employees are generally considered [except ITOs]].

⁶ The LTIF for companies controlled by the Group excluding waste management and LTIF overall, which includes waste management, only include companies with more than 100 employees excluding external agency workers and contractors.

⁷ Newly fully consolidated companies are not included for a maximum transition period of three years.

⁸ 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 and excluding contractors.

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 and 2030 strategy horizons. The following changes were made to the key performance indicators in the 2024 financial year in comparison to the previous year: Value spread was 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 **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 and, since 2024, 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 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. 80 ff.⁷ and p. 109⁷], 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 [p. 93⁷ and p. 110⁷].
- 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 our 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. 82⁷ and p. 110⁷].
- The **proportion of taxonomy-aligned expanded capex** describes the taxonomy-aligned capex including the proportion for entities accounted for using the equity method (expanded capex) in relation to the total capex for the EnBW Group as defined by the EU taxonomy. For the definitions of capex and expanded capex, please refer to the taxonomy section [p. 107 ff.⁷]. The key performance indicator proportion of taxonomy-aligned expanded capex is the main performance indicator for environmentally sustainable investment by the EnBW Group. We use this key performance indicator because external financing is an important tool for successfully implementing our 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 expanded capex." 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 [p. 90⁷ and p. 110⁷].

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. 95⁷ and p. 111⁷].

- 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. 95 f.⁷ and p. 111⁷).
- **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. 96 f.⁷ and p. 111 f.⁷). The reliability of the supply in the grid areas operated by our grid subsidiaries builds on their comprehensive investment in grids and facilities as well as their 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 CO₂ intensity:

- **The installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE** measure the expansion of renewable energies. They refer to the installed output of the power plants and not to their weather-dependent contribution to electricity generation (p. 97 f.⁷ and p. 112⁷).
- The emissions of CO₂ 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 **CO₂ 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 CO₂ released per kilowatt hour (p. 99⁷ and p. 112⁷).

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. 99 f.⁷ and p. 113⁷).
- **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 clearly exceeds the LTIF for companies controlled by the Group. This transitional period will make it possible to take measures to improve occupational safety. External agency workers and contractors are not taken into account in either performance indicator. In the 2025 financial year, the existing LTIF performance indicators will be supplemented by LTIF energy (excluding waste management) and LTIF overall, which includes waste management, and then replaced by them from 2026 onwards. 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 significantly exceeds the LTIF at Group level. Contractors are not taken into account in either performance indicator (p. 100⁷ and p. 113⁷).

ESRS 2 GOV-2: Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies

E1-3: Actions and resources in relation to climate change policies

Interdependencies

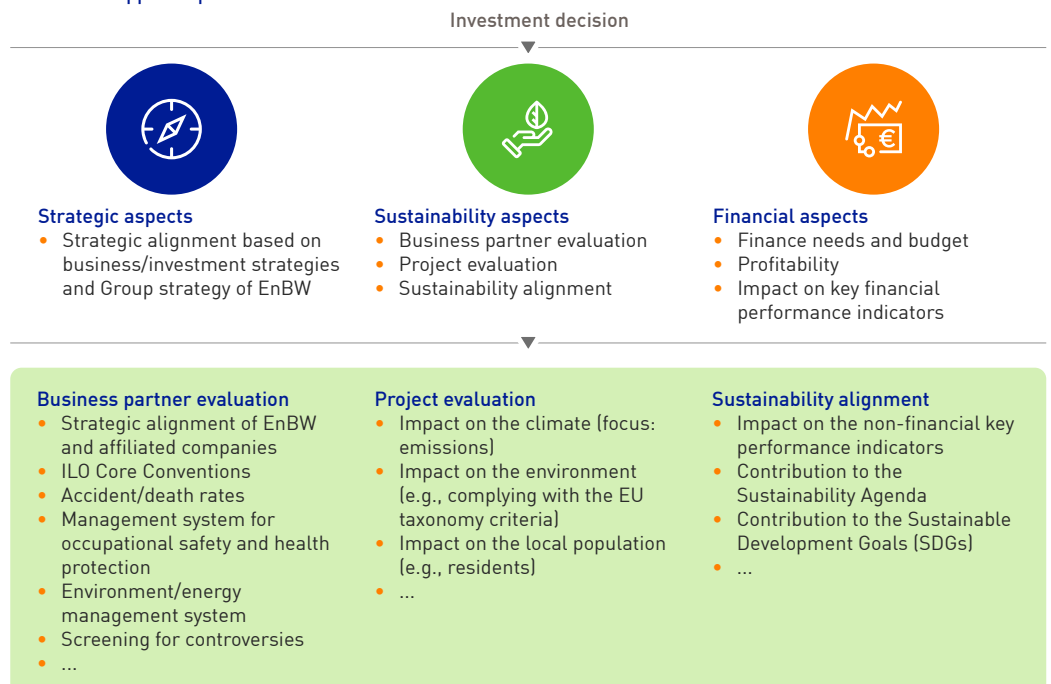
In order to give a comprehensive portrayal of the company, we are convinced that it is not only necessary to present economic, ecological and social aspects, but also to illustrate and provide an analysis of interdependencies between them. To further encourage the idea of a holistic corporate management 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.

We illustrate the progress we have made in anchoring integrated thinking in our company using the investment approval process as an example, and with it we can also 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. It provides information relevant to the decision-making process during the approval of investment projects by the EnBW investment committee (InC), the EnBW Board of Management and the EnBW finance, investment and sustainability committee of the Supervisory Board. The investment approval process is defined by the entire Board of Management. Individual projects are discussed and recommendations drawn up by the 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 are 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 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

G1: Business conduct

[ESRS G1 ↗](#)

ESRS 2 GOV-1: The role of the administrative, management and supervisory bodies

[ESRS 2 ↗](#)

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

[Online ↗](#)

ESRS 2 GOV-1: The role of the administrative, management and supervisory bodies

ESRS 2 GOV-2: Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies

G1-1: Corporate culture and business conduct policies

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 18 December 2024. The current declaration of compliance is part of the Annual Report ([p. 255 f.](#)) and is also published at www.enbw.com/declaration-of-compliance. The remuneration report can be found in a separate report at www.enbw.com/corporate-governance.

Management and supervision

A stock corporation under German law has three administrative bodies:

- the Board of Management,
- the Supervisory Board and
- the Annual General Meeting.

The tasks of the Board of Management, Supervisory Board and Annual General Meeting must be strictly separated by law. 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. A more detailed description of the tasks of the individual bodies and how they are organized and cooperate with one another can be found in the "Declaration of corporate management" ([p. 245 ff.](#)).

Board of Management

The Board of Management is responsible for the operational management of the company and jointly manages the company on its own responsibility. 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.

Allocation of responsibilities at Board of Management level (as of 10/09/2024)

Dr. Georg Stamatelopoulos Chairman	Thomas Kusterer Deputy Chairman, Finance	Colette Rückert-Hennen Director of Personnel, Human Resources, Legal	Peter Heydecker Sustainable Generation Infrastructure	Dirk Güsewell System Critical Infra- structure and Customers
<ul style="list-style-type: none"> • Strategy, corporate development and energy economy • Sustainability • Innovation management • Research and development • Communications and brand • Policy • IT and Digital Office • Corporate security • Occupational safety, environmental protection and crisis management 	<ul style="list-style-type: none"> • Accounting and tax • Controlling • Finance • Investor Relations • M&A • Digital finance and finance transformation • Equity investment management • Purchasing • Risk management/ICS • Risk management for trading • Venture capital • Performance in growth 	<ul style="list-style-type: none"> • Personnel • HR strategy • People-centered transformation • Legal • Auditing • Regulatory management • Compliance management and data protection • Boards and shareholder relationships • Occupational medicine and health management • Corporate real estate management 	<ul style="list-style-type: none"> • Conventional generation / nuclear • Renewable generation • Trading • Waste management / environmental services • Decentralized energy services 	<ul style="list-style-type: none"> • DSO¹ electricity / gas • TSO² electricity / gas • Sales, marketing and operations³ • Business fields development and management • Telecommunications • Gas value chain

1 Distribution system operator.

2 Transmission system operator.

3 Thomas Kusterer will be responsible for SENEK until further notice.

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

[Online ↗](#)

As of 31 December 2024, the Board of Management of EnBW AG consisted of five members. The Board of Management is jointly responsible for managing Group business. In addition to the role of CEO, the responsibilities of the Board of Management are split into the remits of “Finance,” “Human Resources, Legal and Corporate Real Estate Management,” “Sustainable Generation Infrastructure” and “System Critical Infrastructure and Customers.” 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. Until 1 May 2024, Dr. Georg Stamatelopoulos was still responsible for the remit “Sustainable Generation Infrastructure” alongside his duties as CEO. This remit has been the responsibility of Peter Heydecker since 1 May 2024, after he was appointed as a new member of the Board of Management by the Supervisory Board.

The Board of Management possesses the knowledge and skills required to perform its functions. In accordance with legal regulations and the Articles of Association, the Supervisory Board defines the number of members of the Board of Management and the qualifications they need and appoints suitable persons to fill each position. The curricula vitae for all members of the Board of Management have been published on the company website and provide information on their knowledge, skills and experience.

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, investment and sustainability 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 curricula vitae for all members of the **Supervisory Board** of EnBW AG can be found on our website.

[Online ↗](#)

The Supervisory Board also possesses the knowledge and skills required to perform its functions. The “Declaration of corporate management” describes the objectives for the composition of the Supervisory Board, its competency profile and how each competency is covered. Further information on the Board of Management and Supervisory Board can be found on our website in the Report of

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

[Online ↗](#)

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

[Online ↗](#)

the Supervisory Board, the Annual Report under the section on “Corporate bodies” (p. 389 ff.⁷) and in the Declaration of corporate management (p. 245 ff.⁷). 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.

Annual General Meeting

The Annual General Meeting is the body where shareholders exercise their rights with regard to company matters. However, the Annual General Meeting is not involved in decisions related to the normal management of the company.

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 appointment of half of the members of the Supervisory Board, on the discharge of Board of Management and Supervisory Board members, the appropriation of earnings and the election of the auditor. Certain fundamental measures, such as amendments to the Articles of Association, capital measures and conversion measures, require approval by the Annual General Meeting. Resolutions of the Annual General Meeting only require a simple majority of votes in most cases. Each bearer share is equivalent to one vote.

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 2024 when compared to the previous year.

Shareholders of EnBW

Shares in %¹

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

¹ 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 7 May 2024. It approved the proposal by the Board of Management and the Supervisory Board to distribute a dividend of €1.50 per share for the 2023 financial year to shareholders. Based on the shares entitled to dividends, this corresponds to a dividend payout of €406.3 million, which was disbursed on 10 May 2024.

The next ordinary Annual General Meeting will be held on 8 May 2025 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.

The **Code of Conduct** and other information on the theme of **compliance** are published here.

[Online ↗](#)

G1: Business conduct highlights impacts we identified as material.

ESRS G1 ↗

S1-1: Policies related to own workforce

G1-1: Corporate culture and business conduct policies

Corporate culture and business conduct policies

The Board of Management of EnBW approved a Code of Conduct in 2009 that is valid for EnBW AG and all companies in which it holds a controlling interest. Majority shareholdings over which EnBW Energie Baden-Württemberg AG has no controlling influence are requested to apply the Code of Conduct accordingly.

In the case of companies outside of Germany in which EnBW holds a controlling interest (foreign companies), the Code of Conduct creates a fundamental framework for the implementation of the requirements in the Good Governance Rules. These rules define the duties of companies that belong to the EnBW Group. They take the needs of foreign companies into account by freeing them from the obligation of complying with any internal regulations at the Group which are based on German and European law. This helps to avoid any potential conflicts between local laws and the regulations for the EnBW Group.

The Code of Conduct is aimed at all employees, managers, managing directors and members of the Board of Management of the EnBW Group. It provides an overview of the most important legal regulations and internal company regulations and provides guidance when making decisions and implementing actions during everyday business. The Code of Conduct is a binding framework for internal cooperation and interaction with customers, competitors, office holders and public institutions.

Employees are required to behave in accordance with the principles laid down in the Code of Conduct. Members of the Board of Management and managers must serve as role models for all employees. Therefore, it is particularly important that these persons comply with the Code of Conduct. In cases of doubt, employees should initially clarify any issues with their manager, specified contact persons, the compliance and regulation department or the legal department. The internal control system also covers numerous subjects and themes including the Code of Conduct and other compliance matters, monitors their effectiveness and, where necessary, takes action to improve them.

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 and bribery, as well as other economic crimes, the prevention of violations of competition and antitrust laws, compliance with sanctions and export controls, capital market compliance and the prevention of money laundering in those companies that are directly integrated into the CMS. In the reporting year, a total of 24 companies were closely or peripherally integrated into the CMS of EnBW (previous year: 24). The CMS is regularly examined and updated both internally and externally.

The companies that are indirectly integrated into the CMS – naturenergie (NEH), 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 management 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, training policies and an anonymous whistleblower system have been implemented at EnBW, the companies directly integrated into the CMS and the ITOs.

Around

200**participants** attended the Compliance Day 2024.**G1-1:** Corporate culture and business conduct policies**G1-3:** Prevention and detection of corruption and bribery

Compliance activities in the reporting year

In 2024, we held a **Compliance Day** under the motto “together | responsible | forward-looking” to strengthen our compliance culture. We discussed the latest developments, especially new regulatory requirements, the digital transformation and stakeholder expectations, as well as the resulting challenges and opportunities, with around 200 participants. In addition, we examined which new competences we need in our daily work and why compliance is often an important factor in business decisions.

We also made further progress with our **digitalization initiatives** in the reporting year. One example was the development and introduction of a “ComplAInce Bot.” This AI-based bot helps the compliance department to process and automatically archive compliance requests. Overall, the ComplAInce Bot supports more transparent and efficient working methods. We continued work on other projects and information services, such as the AI-based software “GePaRD” for carrying out efficient audits of business partners, and integrated the compliance review of donations and sponsorships into the overall digital process.

Training courses on policies and for the prevention and detection of corruption and bribery

EnBW regularly holds training courses and awareness campaigns for its employees and managers.

The training courses on general compliance themes and the Code of Conduct cover, in particular, issues such as conflicts of interest, the prevention of corruption and violation of antitrust laws, the prevention of money laundering, business partner audits and the whistleblower system. We also offer e-learning, in-person and online training courses on specific themes for sensitive areas and target group-specific training courses, for example, for managers with additional functional roles, as well as open courses on business partner audits.

Obligatory training courses are provided to employees via the learning management system. These courses are assigned to employees based on their membership of or relevance to certain target groups and risks. As part of their management responsibilities, managers must ensure that their employees complete these obligatory training courses.

Every employee who joins the company is instructed about compliance with the Code of Conduct.

Certain e-learning courses, such as the course on the General Act on Equal Treatment (AGG) / protection against discrimination and the prevention of corruption and bribery must be regularly completed by all employees and managers at EnBW. The e-learning course on the prevention of corruption and bribery must be completed every two years and by new employees in the year they join the company. It was completed by 11,118 employees at directly integrated companies in 2024.

Starting in 2025, the newly introduced e-learning course on basic compliance knowledge will become obligatory in order to raise awareness for the most important compliance themes.

Based on the results of a risk assessment, managers can also decide whether their employees must also complete other specific training courses and monitor their attendance.

Training courses and awareness campaigns on the theme of compliance are regularly held for managers, such as the leadership campaign “Compliance & Privacy – Culture | Leadership | Dialog” in 2023.

We take a risk-based approach under consideration of the constantly changing regulatory requirements to identify the training requirements of EnBW employees. We then develop and adapt appropriate content based on our findings.

All indirectly integrated companies also held compliance training courses on, for example, corruption and bribery to raise awareness for these issues among employees.

Number of participants in compliance training events¹

	2024	2023	2022	2021	2020
Sensitive areas	1,367	1,877	1,275	716	839
New management personnel / employees	666	501	484	355	369
Management personnel	132	184	188	34	75
Total	2,165	2,562	1,947	1,105	1,283

¹ At EnBW AG and directly integrated companies.

The members of the Board of Management and 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. The members of the Board of Management and Supervisory Board are kept informed about the systems to prevent and detect corruption and bribery in accordance with the decision-making processes and decision-making responsibilities.

S1-3 / S2-3 / S3-3 / S4-3: Processes to remediate negative impacts and channels to raise concerns

G1-3: Prevention and detection of corruption and bribery

Procedures to prevent, detect and address allegations or incidents

The Code of Conduct defines how EnBW should handle dealings with business partners, office holders and public authorities. More specific details can be found in the Corporate Guideline on Gifts, Invitations and Hospitality and the Corporate Guideline on Corporate Sponsoring, Memberships, Donations and University Engagements, which define qualitative criteria and value limits for the Group. If value limits are exceeded, approval must be obtained from the compliance department. The rules make an important contribution to protecting the integrity of the EnBW Group and its workers in business transactions. Group guidelines are approved by the Board of Management of EnBW. Managers and employees are responsible for complying with the internal guidelines, while managers have the additional responsibility of appropriately monitoring compliance with these guidelines.

The annual **compliance risk assessments** at EnBW are the basis for the compliance work carried out at the company and focus on the risks covered by the CMS. In 2024, they were carried out using a risk-based selection process at those companies closely integrated into the CMS.

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. A total of 1,310 requests for advice were received in 2024. They mainly involved questions related to the prevention of corruption, such as how to evaluate approval procedures for securing land for photovoltaic and onshore wind power plants, sponsoring, donations and gifts. We also provided advice on the Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz or LkSG), foreign trade law and other compliance themes. Advisory services dealing with compliance themes at the indirectly integrated companies were also used to good effect.

The report on the **Supply Chain Due Diligence Act** is published here.

[Online ↗](#)

Furthermore, we published our LkSG report for the 2023 financial year for the first time in 2024 in cooperation with our colleagues in the sustainability department. In this report, we provide detailed information on our human rights and environmental due diligence throughout our supply chain, demonstrate our commitment to sustainability and actively promote greater transparency in the supply chain.

S1-3 / S2-3 / S3-3 / S4-3: Processes to remediate negative impacts and channels to raise concerns

G1-3: Prevention and detection of corruption and bribery

G1-4: Confirmed incidents of corruption or bribery

Compliance whistleblower system and suspected breaches

To help identify potential misconduct and avert any associated damage to EnBW, individuals or third parties at an early stage, EnBW AG has established a whistleblower system. The whistleblower system provides persons within the company (e.g., employees) and also external parties with the opportunity to report, anonymously if desired, potential compliance breaches in their own business area at EnBW or in their supply chain using various channels. Compliance breaches include, in particular, behavior in contradiction of the EnBW Code of Conflict or other internal guidelines, unlawful behavior such as corruption or other criminal economic acts and cases of discrimination and human rights and environmental violations.

The EnBW guidelines define clear responsibilities and processes for investigating compliance breaches reported through the whistleblower system. Once a report is received via one of the channels in the whistleblower system, the central compliance department at EnBW checks the circumstances and investigates and evaluates the report with the cooperation, where necessary, of other specialist areas. If there are indications of misconduct, we take all necessary and appropriate measures to investigate the specific case, whereby we ensure that all available information is appropriately taken into account. This also includes discussing the circumstances with the whistleblower if it is possible to contact them. The obligatory rules of conduct within the company ensure a professional and impartial investigation and the best possible protection for the whistleblower, persons who are the subject of the report and other persons named in the report. In justified cases, we take appropriate action to prevent and redress the damage. Persons within the company (e.g., employees) and also external parties can find a detailed description of the whistleblower system in the publicly accessible rules of procedure of EnBW.

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

[Online ↗](#)

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 ↗](#)

G1-1: Corporate culture and business conduct policies

The compliance & regulation department reports on compliance breaches to internal stakeholders on a regular and, if necessary, ad hoc basis. Information and findings resulting from the handling of these cases are only shared with other parties within EnBW or due to a legal obligation with external authorities and institutions for the purpose of and to the extent necessary for the investigation or report.

The whistleblower system at EnBW AG complies with all of the legal requirements pursuant to the LkSG and Whistleblower Protection Act (Hinweisgeberschutzgesetz).

Protection of whistleblowers

Whistleblowers can report complaints via several different internal channels: The whistleblower tool has a telephone hotline that is available at all times (24/7) and an online form for submitting complaints in text form. Complaints can be submitted there in more than 50 languages. All reports are exclusively handled by the responsible employees at the EnBW Group. Whistleblowers can also submit reports to the compliance department by telephone, in person or via e-mail. Issues can not only be reported using the digital whistleblower tool but also to an external ombudsperson at any time.

Whistleblowers are also free to submit their complaints anonymously. The reporting channels and important information on the procedures for handling potential compliance breaches are an integral part of compliance training courses. All of the information on the whistleblower system is also easily accessible on the Intranet and Internet.

The Head of Compliance & Regulation and certain employees in this department are authorized to receive whistleblower reports. They all take part in further training courses on a regular basis.

EnBW AG handles any submitted reports or complaints as strictly confidential throughout the entire procedure in compliance with the regulatory requirements. Information and findings resulting from the handling of these complaints serve exclusively investigative purposes and are only shared with selected contacts within EnBW or with external authorities, such as law enforcement agencies, if this is necessary for the investigation or prescribed by law. Alongside guiding principles such as fair proceedings, the presumption of innocence, impartiality and protection against discrimination, confidentiality is another fundamental principle for the protection of the whistleblower. Whistleblowers are also able to submit complaints anonymously. Discrimination, unequal treatment or intimidation of the whistleblower or other negative effects that lie within the sphere of influence of EnBW AG and arise as a result of the whistleblower using the complaints procedure at EnBW are not tolerated and should be reported to the compliance department. As soon as the compliance department is made aware of such behavior, it should take appropriate action. This protection – especially against retaliation such as termination, warnings or other forms of discrimination – also applies after the proceedings have been completed.

G1-1: Corporate culture and business conduct policies

G1-3: Prevention and detection of corruption and bribery

Procedures for handling reports

The whistleblower system at EnBW AG can be used to report any potential concerns at EnBW AG and the Group companies over which EnBW AG exercises a decisive influence or within the supply chain. This includes reporting incidents related to corporate policy, which also covers cases of corruption and bribery.

The corporate bodies, top management, managers and decentral compliance officers at EnBW are obligated to immediately report any compliance breaches without delay as soon as they possess specific information about such incidents. In accordance with their fiduciary duty inherent in their employment contract, all other employees are asked to submit their reports of potential breaches to the compliance & regulation department or the ombudsperson.

Our foreign companies have their own management systems for preventing corruption, violations of competition and antitrust laws, handling conflicts of interest and preventing money laundering. These systems also include guidelines for the acceptance of gifts and invitations, rules for business partner audits and the options for reporting suspected breaches.

Alongside EnBW AG, the companies natureenergie (NEH), Pražská energetika (PRE), Stadtwerke Düsseldorf (SWD), VNG, ZEAG, terranets bw and TransnetBW have established a whistleblower system and other reporting channels. The whistleblower systems at indirectly integrated companies have a similar design to the system implemented at EnBW AG. Accordingly, these indirectly integrated companies have their own procedures for investigating incidents related to the management of the company without delay, independently and objectively. This also includes cases of corruption and bribery.

G1-3: Prevention and detection of corruption and bribery

Independence of investigators and involvement of the Supervisory Board

The employees tasked with handling complaints are obligated to act independently, professionally and impartially. This is ensured by the fact that employees who handle these complaints are obligated to comply with our underlying Group guidelines. Any appearance of a conflict of interest is immediately investigated and suitable measures are taken to resolve the issue. Investigations carried out as part of the complaints procedure are handled independently, objectively and with a presumption of innocence. These investigations are conducted in accordance with EnBW's internal standards and Group guidelines, based on the principle of a right to fair trial.

Investigators at indirectly integrated companies also act independently, professionally and impartially.

As part of its regular annual reporting, the Board of Management informs the Supervisory Board about, among other things, noteworthy compliance breaches and the associated action taken.

The Board of Management also informs the audit committee about issues relevant to the Supervisory Board as part of its quarterly reporting, including information on material compliance breaches. Furthermore, the Head of Compliance provides a regular quarterly report to the Board of Management. This has the same scope as the report to the audit committee.

An ad hoc notification will be published in the event of breaches with economic effects or which might cause reputational damage that could potentially jeopardize the continued existence of the company.

G1-4: Confirmed incidents of corruption or bribery

Cases of corruption and bribery

In the reporting year, a total of 110 potential compliance breaches were reported to the central compliance department of EnBW AG.

There was one case of corruption at AWISTA (Gesellschaft für Abfallwirtschaft und Stadtreinigung mbH), a subsidiary of SWD, in the reporting year. One employee at the company received private considerations for the removal of waste. Criminal charges have been filed against the employee and he no longer works for AWISTA.

In the reporting year and even in the last three years, there have been no public legal cases regarding corruption and bribery brought against the company.

Furthermore, there were no confirmed incidents in the reporting year relating to contracts with business partners that were terminated or not renewed due to breaches related to corruption or bribery.

In the reporting year, there were also no convictions or fines for violations of anti-corruption or anti-bribery laws.

The actions we have taken to fight corruption and bribery are explained in the passages of text in this section marked with G1-3. These include, in particular, training courses and awareness campaigns, internal guidelines, providing advice on compliance questions and the procedure for handling reports.

In the 2024 financial year, we faced neither antitrust law penalty procedures nor third-party antitrust lawsuits.

The proceedings against EnBW AG for infringements of antitrust law as an accessory party due to suspected abuse of a dominant position on one or more balancing energy markets and the criminal proceedings against three employees due to suspicion of the criminal manipulation of the market are still currently being investigated. In the latter case, EnBW AG is only named as a third party and not as one of the accused parties. No charges have been brought and no fines have been imposed in any of these proceedings. EnBW AG is cooperating fully with the authorities. The accusations are being dealt with internally.

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 CO₂ allowance trading also continued throughout 2024 without any discernible activity by the law enforcement agencies. It is still not possible to say at the present time when these proceedings will end.

S4-4: Taking action on material impacts on consumers and end-users, and effectiveness of those actions

ESRS S4 [↗](#)

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 cooperation within the Group on the implementation of data governance legislation, especially the AI Act, continued in the reporting period via, for example, a panel made up of cross-functional representatives. The scope of our activities in this area is governed by the deadlines for the implementation of the EU regulations.

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. The data protection management system is regularly reviewed from both an internal and external perspective and kept up to date. In the previous reporting year, these reviews were carried out by an independent law firm. The resulting recommendations were evaluated and some of them were implemented in the reporting year.

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. Our data protection guidelines are regularly examined and updated. We also continuously monitor the existing control mechanisms and extend them as necessary. This takes place with an eye to the increased use of AI applications, which is being accompanied by growing legislation at a European level. We 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. Digital learning activities and online/in-person training courses 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

ESRS 2 SBM-2: Interests and views of stakeholders

S3-2: Processes for engaging with affected communities about impacts

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

[Online ↗](#)

Our stakeholders

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, at various other dialog events such as public information events, during tours of the EnBW wind farms or in background information talks with the local press, as well as in our internal bar camp on the theme of “Sustainability in dialog: understanding and shaping ESG.” It is our belief that mutual understanding, social acceptance and trust are increased further through this **open and respectful exchange** of insights and perspectives. It can also help us to identify central developments and key topics or risks 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 energy infrastructure, the mobility transition, climate protection and sustainability.

We also refer you to the details provided in the “Report on opportunities and risks” (p. 119⁷).

Our stakeholder groups



-  Active communication via the media
-  Donation campaigns and relief efforts, participation and dialog with citizens, dialog with non-governmental organizations such as environmental associations and unions, tours, dialog on sustainability, engagement in art and culture, activities with Junge Stiftung, funding program “Stimuli for Diversity,” supporting entrepreneurs and start-ups, campaigns for the environment and climate protection
-  Dialog on responsible coal and gas procurement, discussions and cooperation with suppliers
-  Employee communication and services, diversity campaigns, social engagement of employees, opportunity for dialog with potential employees, ESG bar camp
-  Telephone conferences with investors and analysts, Annual General Meeting, Group Bankers’ Day, investor update and road show
-  Dialog and discussion with customers, networking events, test customer panel, participation in trade fairs and congresses
-  Development of Group-wide stakeholder engagement policy
-  Events held by the Energy and Business Club (EWC), discussion formats and exchange of ideas with politicians, discussion events held by the Energy & Climate Protection Foundation, local authority Energy Day, local authority events, Energy Team Baden-Württemberg, regional council meetings, discussions with local politicians

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 one of the largest integrated energy companies in Germany and Europe, 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 fast-charging infrastructure for electromobility
- Expansion of broadband infrastructure

- Performance indicator: Number of EnBW fast-charging stations in Germany



SDG 13: Climate action

- Planned phaseout of coal 2028¹ and climate neutrality 2035 (Scopes 1 and 2)
- Biodiversity at EnBW locations

- (Key performance) indicators: CO₂ intensity (generation), CO₂ emissions

Other important SDGs at EnBW



¹ As long as corresponding framework conditions are met.

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 current overriding social issues with the aim of making a positive contribution to the target groups of end customers, business partners and local authorities.

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 2024, **donations made by the EnBW Group** came to €3.6 million, which was the same amount as in the previous year. Donations worth around €581,000 (previous year: €580,000) were attributable to EnBW AG.

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

Online [↗](#)

Our Board of Management decided many years ago not to send Christmas gifts to business partners but instead to make donations to **social projects in Baden-Württemberg**. We supported eight charitable campaigns and campaigns initiated by readers of regional newspapers with total donations of €32,000 in 2024. The **EnBW “Making it happen” bus** went on tour again in 2024 and up to ten members of the bus team helped out at the respective charitable organization for one day. Each of the four winning projects was also awarded up to €5,000 for the necessary materials.

In order to promote the media and technical skills of school students, EnBW launched the **“IT First Aiders” program** in Baden-Württemberg in July 2024. A group of around 360 participants from twelve schools will be able to strengthen their media skills and learn how to use digital technologies in this program that is being held in six cities. Initially, a three-day boot camp is held in each of the cities before the students are provided with digital training courses over a period of one year. It is aimed at school students, especially girls, from 14 years of age and is being implemented in cooperation with the IT service provider Bechtle and the educational organization BG3000.

During the European Football Championship in Germany, we took part in a **solidarity initiative for the people in Ukraine**. Some 300 veterans and children of fallen soldiers were given the opportunity to attend the three first round matches of the Ukrainian national team. This solidarity campaign was organized by the Ukrainian energy company Naftogaz and was supported by us together with other German energy companies.

In response to the floods in southern Germany in June 2024, we launched a package of **support measures** for affected customers. We set up our own contact channel so that customers could find out about the support options. Customers impacted by the floods were able to benefit from relief measures such as the temporary suspension of prepayments or dunning blocks.

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

Online [↗](#)

In the area of **art and culture**, we presented the Sahara Project as part of the “Mack in the ZKM” exhibition in cooperation with the Center for Art and Media (ZKM) in Karlsruhe from November 2023 to April 2024. This exhibition was held in the foyer and invited visitors to explore photographs, collages and objects created by Heinz Mack. Since 2000, we have been a cooperation partner for the fundraising event “release and art” held every year at our site in Stuttgart. Half of the proceeds raised by the artists are donated to the organization release Stuttgart e. V. that provides advice and assistance to people with drug-related issues.

S3-4: Taking action on material impacts related to affected communities and effectiveness of those actions and approaches

In dialog with citizens

Dialog with citizens is important to us as an energy company. A large number of events were held in 2024 to distribute information and encourage the participation of citizens, for example:

Over 3,000 visitors took the opportunity in 2024 to visit **Forbach** and find out more about the progress being made at the large construction site for the **cavern power plant**. Local residents were also invited to two information events held there in May and June, which gave them the opportunity to ask questions, raise any concerns and make suggestions about the project in direct dialog with us.

At our site in **Altbach/Deizisau**, we opened a new information center in fall 2024 and also held a “construction site open day.” Interested citizens had and still have the opportunity at the information center to find out more about, among other things, the history of the site, the construction of the power plant (fuel switch project) and the expansion of renewable energies.

As part of the approval process in accordance with the Federal Immission Control Act, the application documents for the construction of a **sewage sludge combined heat and power plant at the site in Walheim** were posted in the town halls in Walheim and Gemmrigheim and at the Stuttgart Regional Council from 26 January to 26 February 2024 and were also published online. A public hearing organized by Stuttgart Regional Council was then held from 24 to 26 June 2024 at Forum Ludwigsburg, where we provided extensive information to those attending. At the end of 2024, we were able to hold talks with representatives of local communities again after several previous attempts by EnBW to enter into dialog remained unanswered. We plan to organize further public information events in 2025.

At the beginning of December 2024, we invited interested members of the public to an information market for our **WärmeWerk Wörth geothermal project** (p. 57⁷). In cooperation with our project partners the City of Wörth am Rhein and Daimler Truck AG, we provided visitors to the market with information about our geothermal project and the 3D seismic surveys that are planned in the region in 2025. Numerous discussions were also held with the local communities and various interest groups during the course of the year about our **GeoHardt geothermal project** (p. 57⁷). In November 2024, we attended twelve weekly markets in the region with employees of MVV to talk to citizens about the opportunities offered by deep geothermal energy and the GeoHardt project. We offered tours to interested readers of a local newspaper to the **geothermal power plant in Bruchsal** in 2024. Furthermore, two citizens who took part in a dialog forum in 2022 spoke as representatives at a public hearing in the state parliament about their positive experiences with this participation format.

Our mobile **EnBW Showhouse** has been on tour since fall 2024. Interested citizens can visit this tiny house on wheels to get to know our energy solutions, such as wallboxes, heat pumps and home energy management systems, find out how they can network together in a live experience and talk to the experts from EnBW.

Link to the **citizen participation platform**.

Online ⁷

G1: Business conduct highlights impacts we identified as material.

ESRS G1 ⁷

G1-5: Political influence and lobbying activities

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

Online ⁷

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. We implemented citizen participation models in Haiterbach and Schwaigern in 2024.

Political influence and lobbying activities

Ensuring transparency with respect to our **lobbying** activities forms part of our sustainability activities (p. 33 f.⁷). 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. Both EnBW AG and its subsidiaries are members of numerous organizations and associations (p. 221⁷).

All of our lobbying activities are monitored by the responsible Board of Management remit and the entire Board of Management and comply with our Code of Conduct.

EnBW AG represents the interests of some Group companies and this means that they do not have to be registered in the Lobby Register for the German Bundestag. Other companies are registered in a transparency and/or lobby register and engage in their own political lobbying (p. 220 ff.⁷).

Unlike in Germany, there is no lobby register in Switzerland but the Swiss Code of Best Practice to which naturenergie subscribes emphasizes the importance of disclosing conflicts of interest and observing compliance guidelines. naturenergie has its own code of conduct for all employees and corresponding guidelines for, among other things, how to handle and disclose conflicts of interest.

Political donations

EnBW made political donations in 2024 totaling €2.8 million. As some of the figures were not final at the time this report was prepared, this amount contains estimates based on figures for the previous year.

The **EnBW Code of Conduct** has been valid since 2009 for EnBW AG and all companies in which it holds a controlling interest. It stipulates that no donations may be made to political parties, organizations affiliated with them, civil servants, elected representatives or candidates for public office. Any contributions made must match the amounts that are declared in the relevant lobby registers (e.g., EU Transparency Register, Lobby Register for the German Bundestag, Transparency Register Baden-Württemberg). This covers, for example, financial contributions and in-kind contributions in the form of party sponsorships, loans, advertising, donated equipment or other donations. Our subsidiaries follow the same procedures.

Important themes covered by our lobbying activities

We campaign for a market-oriented and regulatory environment that supports the further development of our business activities and enables the realization of our strategy. In this context, our stance is clearly market-oriented and climate protection-oriented. As a result, we make public proposals that support climate protection via market signals (such as a proposal for the reform of the EU Emissions Trading System (ETS) or reform of the system of taxes, duties and levies) or promote the development of new markets such as the hydrogen market. However, we believe that market signals are alone not sufficient to achieve the national and European targets in many cases. In our opinion, there is a need for supplementary action within the regulatory framework and with respect to financing conditions that are fit for the capital market. The subsidiaries of EnBW that engage in their own political lobbying also position themselves in line with their particular interests and objectives. Please refer to the transparency and lobby registers for more information. We are carrying out lobbying via various different activities and have declared these activities in the corresponding registers [\[p. 221 f.\]](#).

Information about the appointment of members of administrative, management and supervisory bodies

In the reporting period, no members of the administrative, management and supervisory bodies who have held a comparable position in public administration (including regulators) in the two years preceding 2024 were appointed. This was also true at our subsidiaries.

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 of the EnBW Group decreased by 20 patents (previous year: -6) in the reporting year to 222 patents (previous year: 242). The patents held by EnBW focus mainly on the areas of renewable generation, gas, geothermal energy and electromobility.

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 **Nezzy²** – which has twin rotors that rotate in opposite directions – in cooperation with the engineering company aerodyn from northern Germany. Following successful tests on a 1:10 scale model, a 1:1 model was installed in 2024. The twin-rotor wind turbine **OceanX** with a nominal output of 16.6 MW was placed into pilot operation in December 2024 in a commercial offshore wind farm in the South China Sea and has even survived a typhoon without being damaged. We are now evaluating the opportunities offered by this design of turbine for future wind farm projects as part of a feasibility study with a European construction company. It would be possible to produce some sections of the floating foundations for OceanX locally as they contain a high proportion of concrete. We are also cooperating with Wind Catching Systems AS to demonstrate alternative ways of generating offshore wind energy. The companies plan to install a multi-rotor system 22 km off the coast of western Norway at a depth of 300 m in a pilot project that was awarded government funding in January 2025. The aim is to find out whether multi-rotor designs can help to simplify maritime operations and reduce operating costs as a result.

Further information on the **floating wind power plant Nezzy²** can be found on our website.

[Online ↗](#)

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

[Online ↗](#)

There are high logistical costs associated with the **servicing and maintenance of offshore wind turbines**. In future, **transport drones** will play a role in reducing the operating costs of offshore wind farms and help to increase the safety and reliability of the plants. Against this background, we organized the **“Offshore Drone Challenge”** together with the German Aerospace Center (DLR) in June 2024 to test whether drones are capable of taking the place of ships for transports of up to 200 kg over a distance of around 100 km. These tests were part of the “Upcoming Drones Wind Farm” project, which is being funded by the German Federal Ministry for Economic Affairs and Climate Action (BMWK), and showed that EnBW’s requirements with respect to the weight and distance of the transports cannot be fulfilled in the short term. We will continue our cooperation with the DLR with the aim of increasing the payloads and automating the transfer of the loads to the wind power plants.

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 2024 they carried out studies to identify the precise target areas for boreholes. In 2023, EnBW founded the company WärmeWerk Wörth together with Daimler Truck and the City of Wörth am Rhein, also with the aim of using geothermal energy to generate heat. At the beginning of 2024, the new company started explorations deep underground to find geologically attractive sites for boreholes funded by the BMWK.

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

[Online ↗](#)

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. It was already possible to exceed supply commitments to customers in the 2023/2024 heating season. The focus of the project in 2024 was on expanding and modifying the plant. A high temperature fuel cell from Bloom Energy with an output of 300 kW is currently being constructed and is due to be placed into operation in early 2025. It is the first fuel cell system from Bloom Energy in Germany and can convert up to 61% of the energy in the gas fuel into electricity. If the waste heat is also recovered, the system can even convert up to 85% of the energy. The fuel cell system can today already use a natural gas mix with a hydrogen content of up to 20% and 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. The aim is to decouple even more district heating from the geothermal power plant and double the performance of the site as a result. The expanded plant should be placed into operation in time for the 2025/2026 heating season.

Find out more about the **hydrogen projects in Wyhlen** [here](#).

[Online ↗](#)

Hydrogen from renewable energies: We are investigating how we can provide our customers with carbon-neutral gaseous energy sources in the long term in research projects such as the **H₂-Wyhlen field lab** run by our subsidiary naturenergie hochrhein (NEAG). Construction work on the second power-to-gas plant at the Wyhlen hydroelectric power plant officially began in June 2024 with the symbolic groundbreaking ceremony. The first main components were delivered at the beginning of 2025. This expansion in production capacities is being funded by the BMWK and should be completed by the end of 2025. The production plant will supply industry and mobility customers with green hydrogen generated using green electricity from the nearby hydropower plant.

Together with a consortium of 35 industry and research partners, we are carrying out research in the **H₂Mare** project into the production of green hydrogen directly at offshore wind power plants. The main focus in the reporting year was placed on technical planning and an invitation to tender for the floating hydrogen generator. The plan is to use the platform to convert the electrolytic hydrogen into synthetic fuel in another plant. At the beginning of 2025, the consortium started converting an existing floating construction to meet the requirements of the project. Construction of the plant should be completed by summer 2025 and it will then be tested in open waters. This pilot plant will be the first plant in Germany that can generate hydrogen and derived products at sea. Data will be collected during its operation to provide information for the construction of a large-scale version later on. This pilot plant is thus laying the foundations for the offshore generation of hydrogen in Germany.

Instead of using electrolysis, **climate-neutral hydrogen can also be produced from green ammonia**. EnBW, VNG and the Japanese company JERA are jointly testing the installation and operation of a plant for the generation of hydrogen from ammonia in the Rostock region. This project was launched in 2023 with the aim of developing a demonstration plant and there are now plans to build a plant that can generate hydrogen from ammonia on an industrial scale. It should be possible to transport large volumes of hydrogen in the form of ammonia from regions overseas before it is converted into hydrogen locally ready for German consumers. Rostock is the ideal location for this plant thanks to its existing ammonia infrastructure and its planned connection to the hydrogen core network.

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 chain for hydrogen.

[Online ↗](#)

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 chain for green hydrogen on a large 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. The project has been under construction since the investment decision was taken in early 2023. Further milestones, such as completing the construction and commissioning of the wind farm, the preparation work for the installation of the electrolyzer and the installation of the grid connection for the hydrogen consumers were achieved in 2024.

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 user-friendly and how to expand the current limits on the range of the vehicles. Inductively charged **electric buses** have been running as part of the regular public transportation service in Karlsruhe since 2021 and in Balingen since 2023. The buses charge their batteries inductively during the journey and while waiting at bus stops. In 2024, we developed an assistance system to help drivers find the ideal

position over the coils in the road. We started a project for billing the energy used to charge the buses in accordance with the German Standard Weights and Measures Law in 2024 and plan to implement it in Balingen and Karlsruhe in 2025.

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

[Online ↗](#)

Sustainable extraction of lithium: EnBW has successfully tested its **new method for the sustainable extraction of lithium**, for which a patent has been registered, at the existing geothermal power plant in Bruchsal. The patent was awarded in March 2024. In cooperation with LevertonHELM, it was possible to produce lithium carbonate with a purity of over 99.5% in the first half of 2024. The lithium salt is so high in quality that it can be used directly in the production of batteries. In June 2024, EnBW and LevertonHELM agreed to continue their collaboration to further improve the sustainable production of battery-quality lithium carbonate and lithium hydroxide and open up local resources for use in electromobility and energy storage solutions. We have also launched sustainability and environmental protection projects, such as the UnLimited project funded by the BMWK that was concluded in November 2024. This project will make it possible for us to sustainably manage lithium resources in the thermal water in Bruchsal over several decades.

Storage systems: The research project **“Resource-saving hybrid battery”** aims to use a hybrid 2.25 MWh battery storage system as a basis for the development of solutions for future energy systems that are not only cost-efficient but also flexible and environmentally friendly. It will combine sodium-ion batteries (NIB) with used lithium-ion batteries (LIB) from electric cars. LIBs facilitate fast charging and discharging, while NIBs are cheaper and more sustainable but less responsive. NIB cells do not contain any critical raw materials, and adding used LIBs lowers the carbon footprint of the system. The findings from this project, which is being funded by the BMWK, should make it easier to adapt storage systems to various different applications in the energy system. The hybrid battery is being installed at the Gundelsheim solar park, which has been under construction since March 2024.

Further information on **“NETZlabor Allgäu”** and the **“self-healing grid”** can be found here.

[Online ↗](#)

Smart and sustainable electricity grid: In view of the increasing electrification of the mobility and heating sectors and industrial processes, a reliable electricity grid is becoming increasingly important. To make grids more resilient to external factors, our subsidiary Netze BW has been testing a **“self-healing grid”** at **“NETZlabor Allgäu”** (Allgäu GRIDlab) since 2024 that uses automated switching processes. The vision behind the project is an electricity grid that can be operated in future in such a way that grid customers no longer notice any disruptions to the electricity supply. The project is currently being developed and tested in practice in Leutkirch. The main focus is discovering what would be possible to implement in the short to medium term using today's concepts and technologies, such as smart local transformer stations.

Expenditure and personnel

In the 2024 financial year, we spent €44.8 million (previous year: €38.8 million) on research and development. This increase was due to higher expenditure on hydrogen projects. We received government research grants of €6.8 million (previous year: €8.9 million). There was a total of 58 employees in areas dedicated to research and development at the Group (previous year: 66 employees). In addition, 310 employees (previous year: 259 employees) were involved in research and development projects as part of their operational work.

Expenditure on research and development

in € million	2024	2023
Grids	12.4	10.9
Generation from renewables	13.9	15.7
Smart energy world, storage and electromobility	4.1	4.3
Hydrogen	13.6	7.1
Customer-related research projects	0.2	0.2
Other	0.5	0.5
Total¹	44.8	38.8

¹ The figures may not add up due to rounding differences.

Innovation

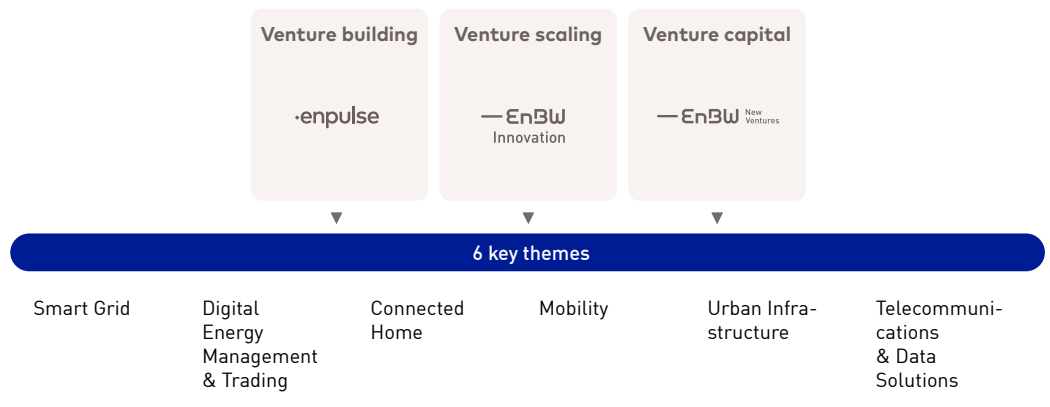
Goals

One fundamental aim of our business activities is to develop innovations that push forward the transformation of energy infrastructure. 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 teams 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 ↗](#)

Karin Klaus, Managing Director of **Enpulse**, was included in the **“Watchlist 2024: 100 leaders you need to know!”** published by Business Punk.

[Online ↗](#)

Find out more about the live data from **metiundo** here.

[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. EnBW uses the venture clienting model to offer pilot contracts to young start-ups that create the connection between the start-up ecosystem and the Group. This makes it possible to, for example, exploit technical innovations quickly and further develop them together. Using an early-stage investment strategy in key areas of focus, we introduce start-ups to EnBW and give them the opportunity to benefit from mutual growth. 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.

In 2024, Enpulse invested in narrowin, a cybersecurity start-up, and Zentur.io, an IT service provider for district heating grid operators. **narrowin** helps companies combat cyberattacks by creating a digital twin of the grid infrastructure. **Zentur.io** offers an AI-based software for district heating grid operators that can optimize their value-added processes. Enpulse also made an additional investment in **metiundo** as part of a recent funding round. This company provides property owners with access to live data on their energy and water usage in their real estate portfolio. Okka and “Dach für Dach” were spun off from Enpulse as independent companies. **Okka** provides customers with the opportunity to invest in solar parks and wind farms in combination with an electricity tariff and thus participate in a virtual solar or wind power plant. **“Dach für Dach”** has developed a business model whereby residents in apartment buildings are able to use their own PV electricity.

EnBW has been named one of the **Top 100 Corporate Startup Stars 2024** for Open Innovation.

[Online ↗](#)

Find out more about **enersis** here.

[Online ↗](#)

You can find all of the **ENV start-ups** here.

[Online ↗](#)

ENV is investing in the start-up **Sunhat** based in Cologne.

[Online ↗](#)

Further information on the ENV investment **Cozero** can be found here.

[Online ↗](#)

ENV has once again invested in **Easelink**.

[Online ↗](#)

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 specialist trainers 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.

In 2024, EnBW acquired the Swiss IT service provider **enersis** to strengthen its expertise in the area of digitalized distribution grids. enersis will still be run as an independent company by the current management team. The acquisition will boost the company's product development and improve its customer focus. At the same time, enersis will also benefit from the proximity to other IT subsidiaries at EnBW. enersis provides services to around 1,900 local authorities via, for example, its IT planning and analysis program Gaia, which serves as a digital twin for energy industry applications.

Venture capital: EnBW New Ventures (ENV) is responsible for financing external start-ups in line with EnBW's corporate venture capital logic. ENV supports entrepreneurs that develop solutions for digital and sustainable infrastructure and that have the potential to strengthen EnBW's competitiveness. 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 so far invested in a total of 20 start-ups. 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 invested in the companies Sunhat and Cozero in the first half of 2024. **Sunhat** offers a software solution that enables companies to identify their sustainability requirements and to make their sustainability data quickly available for various needs. **Cozero** provides companies with a software solution for measuring, documenting and reducing CO₂ emissions. In addition, ENV invested in its existing portfolio in the Series B funding round for the company **enspired**. This company offers AI-powered trading as a service and automates the electricity trading process for decentralized generation plants.

ENV has once again invested in the company **Easelink**, which has developed an innovative solution for the wireless charging of electric vehicles. Easelink's Matrix Charging® system establishes a fully automated and efficient charging connection between the vehicle and the charging infrastructure, without the need to plug the vehicle in manually. This technology will help improve the availability of electric vehicles in future energy ecosystems and supports sustainable development in the transport sector.

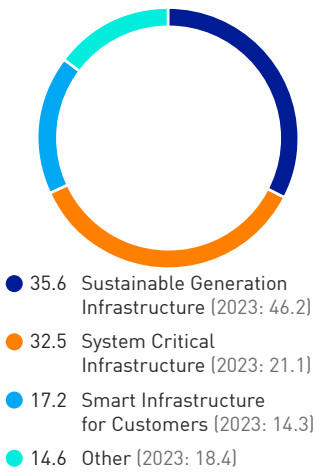
Procurement

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 along the entire value chain. 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 helping to establish the future energy infrastructure by applying its expertise in the supplier market and making a commercial contribution to the profitability of projects. Against the background of considerable investment over the next ten years, purchasing will make an important contribution to the competitiveness of the company and help to safeguard its future.

The **procurement volume** of the EnBW Group in 2024 (without ITOs) amounted to around €5.4 billion (previous year: around €6.3 billion). This level remains high due to major investment in fuel switch projects (hydrogen-ready gas power plants), the expansion of the grids (electricity distribution grids, broadband) and solar power storage systems.

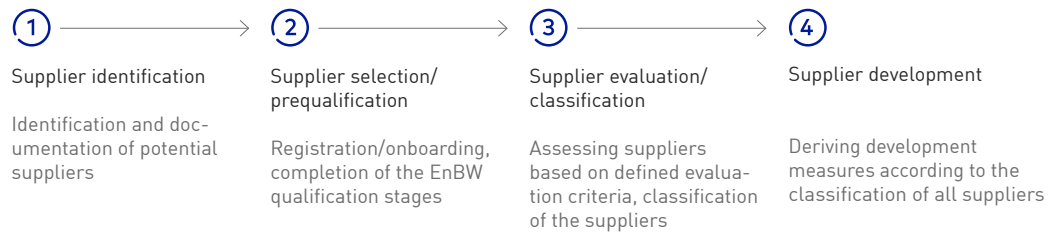
In 2024, we faced new challenges and opportunities on the **procurement markets**, especially in the areas of photovoltaics, grid infrastructure and electromobility. In the area of **photovoltaics**, there was high utilization of production capacities and at the same time saturation on the market. Suppliers responded by lowering their prices in order to decrease their stocks. Despite this price advantage, purchasing at EnBW continued to operate in an area of tension between high investment volumes, the overall profitability of newly installed solar parks, supply chain resilience and sustainability.

In the **grid business**, the aim is to guarantee the security of supply in the high-voltage, medium-voltage and low-voltage grids. We have launched initiatives to adapt our suppliers and our own working methods to new challenges. Furthermore, we are intensifying our cooperation with our business partners at all levels by jointly analyzing their strategic priorities and deriving corresponding improvement measures.

In both our grid and **electromobility** business areas, the conversion of medium-voltage transformers to SF₆-free products has presented us with financial challenges and issues due to long delivery times. In our charging station market segment, we have observed that there has been an increase in acquisitions and insolvencies but hardly any price reductions despite an excess of supply. We have also been able to guarantee our supply capacities for next year thanks to forward planning and Group-wide framework agreements.

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.

Supplier management process



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

[Online ↗](#)

Sustainable procurement begins with the careful selection of suppliers. Central purchasing at EnBW AG uses a standardized **prequalification process** for this purpose. Our **Supplier Code of Conduct (SCoC)** forms the foundation of our cooperation based on a common understanding of sustainability. Our suppliers confirm with their acceptance of the SCoC that they have sustainable measures in place in the areas of environmental management, occupational health and safety, respect for human rights, the fight against corruption, data protection and quality management. This applies to both their own business areas and also their supply chains. 97% (previous year: 97%) of our suppliers (measured by procurement volume) had accepted the SCoC by the end of 2024. Suppliers who do not comply with these requirements have been categorically blocked in our purchasing system since April 2023. In addition, we have integrated an **automated risk evaluation process** into our supplier management system that allows us to directly consider risks relating to human rights and the environment in the selection of suppliers and take appropriate preventative measures.

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**. In future, we will apply what we learn to, among other things, our invitations to tender. We will continue to align our procurement processes to the growing social and ecological criteria. This can be seen, for example, in the regular audits and updates of our SCoC.

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

[Online ↗](#)

In 2024, we continued **implementing the requirements of the Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz or LkSG)**. The act requires German companies to establish key elements of corporate due diligence in their own value chain and with respect to their suppliers. In this context, we already published a **policy statement** in 2023, which is based above all on the **EnBW Code of Conduct** and also on the **EnBW Declaration of Human Rights**. In 2024, we fulfilled our obligations by submitting data to the Federal Office for Economic Affairs and Export Control (BAFA). This included risk analyses on compliance with human rights due diligence, and this data is checked as part of a regular process.

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

[Online ↗](#)

Since the middle of 2022, our **CO₂ tracker for emissions** in the supply chain has helped us to mitigate our important drivers of Scope 3 upstream emissions. In 2023, we issued invitations to tender in which **CO₂ emissions were a relevant award criterion** for the first time. For example, we contractually obliged our suppliers to formulate and document clearly defined CO₂ reduction targets that cover both direct and indirect emissions. We are using these measures to further reduce the CO₂ emissions in our supply chains.

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

[Online ↗](#)

We also refer you to the details provided in the “Report on opportunities and risks” (p. 114 ff.⁷).

Origin of coal supplies to EnBW power plants

in million t	2024	2023
Columbia	0.8	1.1
USA	0.4	0.8
South Africa	0.1	0.1
Russia	0.0	0.1
Other	0.0	-
Total¹	1.4	2.2

¹ The figures may not add up due to rounding differences.

Around

37%

fewer coal deliveries than in the previous year.

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

[Online ↗](#)

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

[Online ↗](#)

Responsible raw materials procurement in the coal sector

Origin of coal supplies

With a view to the CO₂ 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, as long as corresponding framework conditions are met (p. 35 f.⁷) 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.

As the previous year, 2024 was characterized by a **sharp decrease in the amount of electricity generated from hard coal** in Germany, which was reflected again in the total amounts of hard coal delivered to the EnBW power plants. Deliveries fell from 2.2 million t in 2023 to 1.4 million t in 2024. Alongside the general market trend towards renewable energies, this was also attributable to the shutdown of power plants due to damage, including Block 7 in Heilbronn and the combined heat and power plant 2 in Altbach/Deizisau, and a longer period of downtime at Block 8 of the Rheinhafen steam power plant in Karlsruhe.

In 2024, Colombia was once again the most important source of supply for power plant coal, followed by the USA. Even so, deliveries of Colombian coal fell from 1.1 million t to 0.8 million t because of the fall in demand, while deliveries of coal from the USA fell sharply from 0.8 million t in 2023 to 0.4 million t in 2024. The Colombian coal delivered in 2024 was sourced from the producer Drummond. The coal from the USA was sourced from various mining regions.

As a result of the decrease in total deliveries and lower prices for coal, the **procurement volume** fell again from €260.0 million in the previous year to €142.5 million in 2024.

The further decrease in total deliveries combined with both significant fluctuations in demand for electricity generation from hard coal and falling prices on the market for power plant coal increased the need for **flexibility and optionality** in 2024. In the reporting year, this meant that the proportion of our power plant coal covered by trade intermediaries increased to 48%. In the same period, the proportion from contracts where the individual producers are already known when the contract is concluded fell to 52% (previous year: 93.8%).

The opportunities and risks in relation to coal procurement can be found in the “Report on opportunities and risks” (p. 114 ff.⁷).

Positioning, overarching policies 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 our current and potential coal suppliers is examined and evaluated in accordance with the values of our **EnBW rules of conduct** that govern 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 further digitalized our business partner audits in 2024 to improve and expand them. The aim was to increase transparency, especially internally, about business partners and their human rights and environmental sustainability performance, which in turn will help us manage any improvement measures in a more targeted and efficient way.

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

[Online ↗](#)

Another important component of our human rights and environmental due diligence is **dialog with relevant stakeholders on specific themes**. Alongside discussions with our suppliers and local representatives of civil society, this includes regular dialog within initiatives such as econsense, the Energy Sector Dialog and the Responsible Commodities Sourcing Initiative (RECOSI). The main aim is to examine and improve our approach and level of ambition together with other companies and stakeholders.

We have been a member of the corporate initiative **RECOSI** (formerly Bettercoal) since 2020. Via RECOSI, we are in regular contact with suppliers, potentially affected parties and relevant government representatives in the respective procurement countries to discuss human rights and environmental issues. In the course of regular local audits, representatives of EnBW form their own impressions of the situation at the production sites and in the mining areas. During these audits, discussions are not only held with the raw material producers but also with other stakeholders such as union representatives and representatives of local communities and civil society. 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. We are advocating for other coal producers in various different countries to agree to RECOSI audits.

Our **rules of conduct** form the foundations 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 multi-stage 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 concluded, the results of the analyses saved in the sustainability index are presented to an internal **committee for the responsible procurement of hard coal and other raw materials (AVB)** at regular intervals 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 monitored. In 2024, this committee held regular meetings to discuss possible additions to our portfolio of producers.

Current developments

Colombia

Colombia was the most important country to EnBW for the procurement of coal in 2024. 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. We believe that personal discussion with our business partners and civil society in the local regions is particularly important. This is why we sent a delegation on a **stakeholder engagement tour** to Colombia in March 2024 as part of our multi-stakeholder approach. The EnBW delegation met with the most important coal producers and also with relevant civil society and political actors. The discussions focused on issues related to occupational health and safety in the mines and the requirements for an ecologically and socially just transition in the coal mining regions. This allowed us to manifest and supplement the results of our regular risk analyses and thus achieve the most important aim of our trip.

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 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 the targets in our climate protection strategy by 2035, we are working intensively on switching over our power plants initially from coal to more climate-friendly natural gases (fuel switch) and then to climate-neutral gas such as biogas or hydrogen in the long term (p. 35 f.⁷). Natural gas plays an important role as a **transition technology** – either in the form of liquefied natural gas (LNG) or grid-based natural gas. LNG is essential for ensuring the security of supply in Germany, replacing Russian gas volumes and diversifying natural gas procurement. Against this background, we have expanded our LNG activities and continued to shift the focus onto human rights due diligence in the area of gas procurement. The key aspect will be a comprehensive business partner audit of all the direct LNG and pipeline gas suppliers before they are approved as a business partner for EnBW.

Origin and own consumption

In 2024, 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 in 2022, we strengthened our efforts in the reporting year to diversify our sources of gas to a much greater extent. In June 2024, the EnBW subsidiary VNG extended its long-term contract with the Norwegian company Vår Energi ASA (Vår Energi) for the supply of up to 5 billion m³ of natural gas for a further twelve years. The contract builds on the long-term relationship between Vår Energi and VNG that stretches back to the early 1990s. Norway has been a reliable energy supplier with a low carbon footprint for many years.

In December 2024, EnBW signed a contract with the Abu Dhabi National Oil Company (ADNOC) to purchase liquefied natural gas (LNG) over a period of 15 years. ADNOC will supply us with 0.8 billion m³ of LNG per year once the Ruwais LNG project has been commissioned as planned in 2028. Once commissioned, the Ruwais project will have a total capacity of 13.2 billion m³ and be the first LNG liquefaction plant in the Middle East to cover its electricity needs entirely using low-carbon sources. The electrically powered liquefaction plant will optimize the carbon footprint for LNG production, while the use of state-of-the-art AI technologies will also ensure a high level of energy efficiency in the overall process.

LNG is important for securing Germany's gas supply as a transition technology and will act as a **bridging fuel to a green energy supply**. The conversion from liquefied gas to a hydrogen-based energy source, such as ammonia, is already planned at the LNG terminal in Stade. Following the final investment decision, the groundbreaking ceremony was held in Stade in June 2024. EnBW has booked capacity of 6 billion m³ at the LNG terminal in Stade making it one of the main customers of the Hanseatic Energy Hub. The terminal is expected to be commissioned in 2027.

In 2024, we acquired 7,584 GWh of natural gas for our **own consumption at EnBW** (previous year: 7,203 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. 114 ff.⁷).

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. To support our auditing process, we are gradually introducing our own in-house tool called "Sus-Check," which guarantees that the audits are plausible and reliable.

We have initiated an **LNG pilot project** within the Responsible Commodity Sourcing Initiative (RECOSI) in order to better adapt our LNG procurement process to our sustainability requirements. This project will check whether the continuous improvement process for the procurement of coal can also be transferred to the procurement of LNG. A working group is currently developing a standard for a responsible gas value chain, similar to the Bettercoal standard. In 2024, we continued our engagement in various working groups of the **Energy Sector Dialog** in cooperation with other companies, associations, NGOs and unions, and headed by the Federal Ministry of Labour and Social Affairs. The findings will flow into the optimization of our business partner audits and risk analyses within the framework of the Supply Chain Due Diligence Act (LkSG).

Methane emissions

To reduce methane emissions in the energy sector, the EU passed a Methane Emission Regulation as part of the "Fit for 55" package in 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. In particular, the EU has not yet finalized all of the requirements related to detecting and repairing leaks. Further clarifications by the EU, including clarifications regarding imports, will be published in the form of Delegated Acts or Implementing Acts over the next few years.

As in the past, our grid companies and gas storage operators will continue to regularly check their gas infrastructure for methane emissions and repair any leaks they detect without delay. We currently base our reporting 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.

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 ↗

E1-3: Actions and resources in relation to climate change policies

ESRS E1 ↗

Business report

General conditions

Macroeconomic trends

Economies

Against the background of high inflation around the world and restrictive interest rate policies introduced in many countries in response, the global economy proved remarkably robust in 2024. The International Monetary Fund (IMF) believes that progress has been made in the fight against inflation but warns of risks for the further disinflation process. As a result, the IMF forecasts global inflation of 4.2% by the end of 2025. Despite the resilience of the global economy to high inflation, economic growth was, by historical standards, restrained in 2024. Negative factors continued to dominate short-term economic growth. Increased political uncertainty, volatility on the financial markets, the fact that restrictive interest rate policies are being loosened too slowly globally and a rise in protectionist measures in international trade harbor risks for further economic growth.

According to the IMF, global gross domestic product (GDP) grew by 3.2% in 2024 (previous year: 3.3%). The IMF forecasts global growth of 3.3% for 2025. According to the IMF, GDP in the eurozone grew by just 0.8% in 2024 and economic output in Germany actually declined by 0.2%. The IMF anticipates that economic output will accelerate again in 2025 and forecasts growth of 1.0% in the eurozone and growth of 0.3% for Germany. The energy markets were impacted by both positive and negative factors in 2024. On the one hand, European gas supplies remained stable and energy prices were considerably lower than the highs experienced during the energy crisis in 2022. On the other hand, geopolitical conflicts led to uncertainties on the energy markets. An escalation of the war between Ukraine and Russia and the crisis in the Middle East as well as the policies introduced by the new US government could result in volatility and further uncertainties.

Lower electricity prices led to a rise in electricity consumption again month-by-month in Germany in 2024, and it was 1.7% higher than in the previous year according to the energy sector association, the BDEW. The macroeconomic environment will probably also experience huge uncertainty and volatility in 2025, which makes it difficult to make specific statements about the impact on our company's business performance.

Development of gross domestic product (GDP)

in %	2025	2024 ¹	2023 ¹
World	3.3	3.2	3.3
Eurozone	1.0	0.8	0.4
Germany	0.3	-0.2	-0.3
France	0.8	1.1	1.1
United Kingdom	1.6	0.9	0.3
Sweden	2.4	0.9	-0.2
Switzerland	1.3	1.3	0.7
Czech Republic	2.3	1.1	-0.1
Turkey	2.6	2.8	5.1

¹ The figures for the previous year have been restated.

Development of interest rates

Inflationary pressure eased in 2024. While annual inflation in the eurozone still stood at 2.9% in December 2023, it fell during the course of the year to 1.7% by September. In the last quarter of 2024, however, inflation rose again and reached 2.4% in December.

The success of the restrictive monetary policies introduced by the European Central Bank (ECB) has allowed it to reduce key interest rates again. The ECB lowered its key interest rates from 4.5% to 4.25% in June and then made further cuts in September, October and December to 3.0%. These interest rate cuts were designed to stimulate the economy in the eurozone.

Development of the sector and competitive situation

The energy sector is currently experiencing a period of great change, driven by the restructuring of the energy system, digitalization and sector coupling. Over the last few years, financially strong competitors such as oil and gas companies have gained significant market shares and become established players on the market. Digital service providers and so-called “prosumers” are also becoming increasingly influential in the sector thanks to their innovative business models. Faced with this new competitive environment, traditional energy companies have been forced to reposition themselves and adapt their strategies to the changed market environment.

Selection of international, national, regional and new competitors

Established competitors

National and international

Alpiq, bp, EDF, EDPR, Enel, Engie, E.ON, Equinor, Fortum, Iberdrola, Lichtblick, Ørsted, RWE, Shell, SSE, Statkraft, TotalEnergies, Uniper, Vattenfall, Verbund

Regional

Badenova, Entega, EWE, Mainova, MVV, N-Ergie, SWM, Thüga

New competitors

Commodity suppliers / solution suppliers / start-ups

1Komma5°, Aira, Awattar, Corrently, Enpal, Next Kraftwerke, Octopus Energy, Ostrom, Rabot Energy, Sonnen, Thermondo, Tibber

Renewable energies

BayWa r.e., Encavis, Enertrag, Luxcara, PNE Wind, Wattner, wpd

E-mobility, telecommunications and broadband

1&1, Allego, Aral pulse, Chargepoint, Deutsche Glasfaser, Deutsche Telekom, Ecotel, EWE Go, Fastned, Ionity, Mer, Pfalzwerke, Shell, Tesla, VW

EnBW position:

- One of the largest integrated energy companies in Germany and Europe
- Focus on sustainable generation and a secure supply of energy, grids and customer solutions
- Active in Baden-Württemberg, Germany and selected foreign markets

Challenges:

- Increasing competition due to entry of new market participants with innovative business models and financial strength
- Market is highly regulated
- Financing the energy infrastructure of the future and affordability on the customer side

Cross-segment framework conditions

Climate protection

The **German Climate Change Act** has been reformed. The climate targets post 2030 remain unchanged (-65% by 2030; -88% by 2040), but responsibility is no longer split by sector. In future, the entire German government will be responsible for the achievement of the climate protection targets. However, emissions are still being monitored at a sector level. Attention has now turned to using forecasts for the achievement of the climate targets. If the forecasts from two years in a row indicate that a target will not be reached, the German government must submit a cross-sector climate action program. The German Environment Agency is responsible for the forecasts. The latest Projection Report indicates that the target will be missed slightly in 2030 (455 million t CO₂ equivalent instead of 438), but there will be a significant shortfall in subsequent years, especially in the building and transport sector.

To decarbonize the energy sector, the German government agreed a **power plant strategy (Power Plant Security Act (KWVG – Kraftwerkssicherheitsgesetz))** with the European Commission in July 2024. Consultations with the sector were concluded at the end of October 2024 and hearings with the federal states and associations were held in December. EnBW was present to give its opinions on both occasions. Following the collapse of the coalition government in fall 2024, the KWVG was not passed before the new elections were held in February 2024. There is cross-party consensus about the need for a regulatory framework for the construction of hydrogen-ready gas power plants and the establishment of a capacity market. However, detailed plans and a timetable will only follow when the new government takes office.

The development of a national **hydrogen infrastructure** is another key element of the strategy for decarbonizing the electricity and heating supply. The reform of the German Energy Industry Act (EnWG) to finance the hydrogen core network and for integrated network development plans for gas

and hydrogen has established the framework conditions for the development of a hydrogen core network. EnBW is investing in individual sections of this network via its transmission system operators. The Hydrogen Acceleration Act was meant to accelerate the development of generation, import and storage infrastructure but could not be approved anymore due to the early elections for the Bundestag. EnBW will need hydrogen to generate electricity and heating from the middle of the 2030s onwards. Imports will be required to ensure there are sufficient volumes available. This makes the German government's hydrogen import strategy and the delegated act on low-carbon hydrogen absolutely critical.

As part of **Solar Package I**, which also includes regulations for other renewable energy technologies, the government agreed measures to simplify the installation of roof-mounted photovoltaic power plants and expand the areas designated for open-field photovoltaic power plants. Furthermore, companies have now been given the right of way and the right to lay power lines on public property when installing renewable energy power plants. The **EU Emergency Regulation**, which is designed to speed up approval processes for wind energy power plants, was extended until 30 June 2025 and this **extension** has now been fully transcribed into national law. In June 2024, the German government passed a major **reform of the Federal Immission Control Act (BImSchG)** that will simplify the approval processes for onshore wind power plants considerably. Some of the regulations covered in the informal discussions for Solar Package II were transferred to the extensive draft version of the **reform of EnWG**. However, the process was not concluded due to the collapse of the coalition government and they were not included in the law passed by parliament. This law was chiefly limited to the urgent changes necessary to address so-called PV peaks or, in other words, excess power. In summary, it is fair to say that the measures in Solar Package I, the BImSchG and EnWG have led to a noticeable improvement for EnBW, even if the legislation has not fully exploited all of the opportunities.

The German government has presented its strategy for **Carbon Management (CMS)**. The **Carbon Dioxide Storage Act (KSpG)** did not get passed before the end of the legislative period as it was not possible to reach an agreement during the parliamentary process. The draft version of this act aims to permit and promote the use of technologies such as carbon capture and storage (CCS) and carbon capture and utilization (CCU). The storage of CO₂ is in general only permitted offshore under the seabed. However, there will be an opt-in clause that will permit onshore storage under certain conditions. CCS and CCU are intended for unavoidable emissions, such as those generated in waste incineration, industry or biomass recycling. Using these technologies in connection with coal power plants will still be prohibited, although using them for gas power plants is an option. This act will also establish a regulatory framework for the construction of carbon dioxide pipelines and measures to accelerate this process. It should also permit the transport of carbon dioxide across borders to storage facilities. Expanding the application of CCS/CCU technologies to gas power plants and the option of using them for onshore CO₂ storage are politically controversial issues. EnBW welcomes the drafts of the CMS and KSpG. In our opinion, CCS/CCU are essential for achieving the climate targets and to make the use of blue hydrogen possible until green hydrogen is available and economically viable.

In January 2025, the Bundestag approved an amendment to the **Heat and Power Co-Generation Act (KWKG)**. This amendment will now mean that funding will be available to combined heat and power plants that are commissioned after 2026 provided that they have reached a certain planning stage, such as approval in accordance with BImSchG, by a defined point in time. Originally, the KWKG had stipulated that these power plants must be commissioned by the end of 2026. For EnBW, this means that KWKG funding is now guaranteed for the three fuel switch projects in Heilbronn, Stuttgart-Münster and Altbach/Deizisau.

European energy policy

The year 2024 was dominated by the **elections for the European Parliament** and the appointment of the new European Commission. Right-wing political parties made big gains in the European Parliament and there is now a center-right majority. It remains to be seen how this change in the balance of power in parliament will impact energy and climate policy.

The European Parliament also formed the new European Commission headed by the reelected President of the European Commission Ursula von der Leyen. The President of the European

Commission has already announced some initiatives to strengthen competitiveness and reduce bureaucracy in sustainability reporting in the form of the **Competitiveness Compass** and **Clean Industrial Deal**.

With a view to strengthening European competitiveness and supporting industrial policy, the legislative proposals for a **Net Zero Industry Act (NZIA)** and a **Critical Raw Materials Act (CRMA)** presented by the EU Commission came into force in the first half of 2024. Both dossiers aim to strengthen the competitiveness of the EU in key strategic technologies for the green transition and to reduce Europe's dependence on individual states for raw materials. The European Commission is currently working intensively on producing implementing acts for the NZIA. An especially relevant aspect for EnBW is how the European Commission intends to design the resilience criteria with respect to renewable energy auctions and public procurement. The first drafts are expected in the first quarter of 2025.

The **EU Directive on corporate due diligence with respect to human rights and environmental protection**, which was the subject of much controversy and debate in Brussels, was passed in May 2024. Now that this directive has come into force, member states have two years to transcribe the regulations into national law. The regulations in this directive will be implemented gradually from 2027 onwards.

In this context, the **Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz or LkSG)** has already been in force in Germany since the beginning of 2023. The coordination of the national criteria with the forthcoming European framework has yet to take place. These discussions are focusing on, among other things, the extent to which the reporting obligations in the German law will apply until the European regulations come into force. The fact that companies will now face additional costs and extra work to comply with the European reporting obligations was already heavily criticized by several member states before the directive was passed at an EU level. It is possible that the EU Directive on corporate sustainability due diligence could be subsequently amended in 2025 as part of the European Commission's efforts to cut red tape.

Owing to the elections, the European Commission did not introduce any new legislative initiatives in the second half of 2024. Instead, the focus was placed on **finishing the delegated acts** and implementing acts. For example, the European Commission presented a draft delegated act on the methodology to determine the greenhouse gas emission savings of low-carbon fuels. The umbrella term low-carbon fuels also covers low-carbon hydrogen, which the sector believes will be essential for ramping up the hydrogen economy. EnBW participated in the associated consultations and remains in regular dialog with all of the affected stakeholders. A final proposal for the delegated act is expected in 2025.

Sustainable Generation Infrastructure segment

Installed net output for electricity generation from renewable energies in Germany¹

in GW	2024	2023	2022	2021	2020
Solar	99.2	82.7	67.6	60.1	54.4
Onshore wind	63.5	61.0	58.0	55.9	54.3
Biomass	9.1	9.0	8.9	8.9	8.7
Offshore wind	9.2	8.5	8.2	7.9	7.9
Hydropower ²	6.4	5.4	5.4	5.5	5.5
Gas	36.7	36.3	34.3	32.4	32.5
Hard coal	16.0	17.5	19.0	19.0	23.7
Brown coal	15.2	15.1	18.7	19.0	20.9
Nuclear power	–	–	4.1	4.1	8.1
Oil	4.4	4.0	4.7	4.7	4.9
Others, not renewable	3.2	–	–	–	–
Total³	262.9	239.6	228.7	217.3	220.8

¹ The figures for the previous year have been restated. Source: Fraunhofer ISE (www.energy-charts.de) | As of: 22/01/2025.

² Adjustment to the installed output from hydropower by EnBW.

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 62% in 2024 and thus significantly higher than in the same period of the previous year (restated as 54%). This increase was mainly attributable to a considerable rise in installed output in photovoltaic power plants in Germany.

Onshore wind

In 2024, the installed onshore wind capacity in Germany increased by around 2.6 GW due to the commissioning of new wind farms. In August, the submitted bids for new projects exceeded the volumes offered by the Federal Network Agency in the auctions once again.

Offshore wind

In 2024, offshore wind turbines with an output of around 740 MW were placed into operation in Germany. Bids for projects with a total output of 8 GW were accepted in the two auctions for offshore wind sites. EnBW had its bid to develop an offshore wind project with an output of 1 GW accepted in an auction for non-centrally pre-investigated sites in June 2024.

Photovoltaics

The dynamic growth in solar PV power plants continued in 2024. During this period, photovoltaic power plants with a total output of around 16 GW were installed. In order to achieve the German government's ambitious expansion target of 215 GW by 2030, annual growth of almost 20 GW will be necessary.

France

We have been active on the French market since 2019 through our subsidiary Valeco. As a key component of our strategy, we develop, construct and operate wind energy and PV projects in France and expect continued dynamic growth in this country in both generation sectors. Around 25 GW of onshore wind capacity is currently installed in France. The government's target is still to expand this figure to between 33 GW and 35 GW by 2030. It also aims to expand the installed photovoltaic capacity from currently 21 GW to between 45 GW and 56 GW by 2030. The French energy strategy includes ambitious expansion targets for offshore wind power with a total output of at least 40 GW by 2050. We participated in the first auction for a floating wind farm off the coast of Brittany and are already prequalified for the next phase of auctions in the Mediterranean Sea. We are bundling our offshore activities in the company EnBW Valeco Offshore SAS, which was founded in April 2024 in Paris and which will manage our offshore activities in France centrally in future.

Great Britain

In the sixth round of auctions for the British CfD scheme (Contracts for Difference, CfD Allocation Round 6), bids were accepted for new offshore wind farms with a total output of 5.3 GW. This was due to the improved framework conditions in comparison to the last round of auctions, in which no bids for offshore wind projects were submitted.

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 is one of the largest players on the Turkish wind energy market and operates wind turbines with a total output of around 700 MW. In addition, the joint venture operates a hydropower plant with an output of 50 MW and solar parks with a total output of 103 MW. Another wind project with an output of 80 MW is currently under construction and is due to be placed into operation by the end of 2025. Turkey has considerable untapped potential with respect to renewable energies, especially in the areas of onshore wind energy and photovoltaics. We believe that the Turkish market remains an attractive proposition, although we are monitoring the political and economic developments in Turkey very closely.

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

in €/MWh	Average 2024	Average 2023
Spot	79.57	95.18
Rolling front year price ¹	88.71	137.51

¹ The figures for the previous year have been restated.

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

in €/MWh	Average 2024	Average 2023
Spot	34.38	40.55
Rolling front year price	36.90	52.01

Conventional generation: market and fuel prices

Electricity wholesale market

In 2024, the average spot market price of almost €80/MWh was around €15/MWh lower than in 2023. The average price on the forward market of almost €89/MWh was around €49/MWh lower than in 2023. 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 high generation from renewable energies. The future development of electricity prices will depend on the development of fuel and CO₂ 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

Prices fell on the gas market up until the middle of February 2024 as a result of the mild European winter and the relatively full gas storage facilities. Gas prices have since followed an upward trend for a variety of different reasons.

The LNG sector faced several challenges in the reporting period. The Freeport LNG terminal in the USA was hit by production issues and hurricane damage, while the Gorgon and Wheatstone LNG terminals in Australia were impacted by temporary shutdowns. The sanctions imposed on the Russian LNG project Arctic 2 also limited supplies. Egypt started importing LNG again and this led to an increase in demand on the market. Global demand for LNG, especially in Asia (e.g., India) rose in comparison to the previous year, while in Brazil there was higher demand for LNG due to persistent drought in the country. The global LNG trade was also negatively impacted by the Houthi attacks and low water levels in the Panama Canal. Despite these challenges, global LNG production remained at a similar level to the previous year. However, the numbers of LNG ships arriving in northwest Europe were usually significantly lower than in the previous year.

The transit contract for the transport of Russian gas through Ukraine expired at the end of 2024 and it is currently unclear whether the contract will be renewed. In particular, Slovakia and Hungary have expressed an interest in renewing it. Since 1 January 2025, no transit contract exists between Ukraine and Russia and Ukraine has not yet shown any willingness to sign such a contract.

In the middle of April 2024, the European Parliament passed a law that permits member countries to ban imports of gas and LNG from Russia. The 14th package of sanctions against Russia passed in June prohibits the transshipment of Russian LNG in EU ports after a transitory period of nine months.

The gas storage facilities in Europe reached the prescribed fill levels at the beginning of November 2024 but remained below the very high levels in the previous year. In November, lower temperatures and increased demand at gas power plants resulting from lower generation from renewable energies meant that significant amounts of gas were withdrawn from gas storage facilities.

Russian gas has been and will be replaced to some extent by LNG. This means that increasing demand for LNG in other parts of the world will now have a bigger impact on the European gas markets than in the past.

Oil market

In 2024, the Brent oil price (calculated front year) was slightly below the level in 2023 and fluctuated between around US\$72/bbl and US\$82/bbl. For large parts of the year, the main price drivers of this development were economic concerns and concerns relating to the demand for oil, as well as the crisis in the Middle East.

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 markets¹

in US\$/bbl	Average 2024	Average 2023
Crude oil (Brent) front month (daily quotes)	79.76	82.16
Crude oil (Brent), rolling front year price (daily quotes)	74.63	75.52

¹ The figures for the previous year have been restated.

Development of prices on the coal markets

in US\$/t	Average 2024	Average 2023
Coal – API #2 rolling front year price	114.73	126.37
Coal – API #2 spot market price	112.51	128.52

Coal market

Coal prices fell initially in 2024. At the end of February, the USA announced that it would be imposing sanctions on Russia's largest steam coal producer SUEK. The list of Russian coal companies subject to US sanctions has been gradually growing. Importers of Russian coal were forced to secure alternative supplies at short notice. The Baltimore bridge collapse at the end of March exacerbated fears of a coal shortage because coal exports were blocked until June as a result. Prices climbed from US\$89.17/t on 19 February 2024 to US\$122.44/t on 12 April 2024, while prices on the spot market reached US\$126.58/t. This trend was supported by rising prices for natural gas on the TTF. The record highs in April were followed by volatile sideways movement strongly influenced by developments on the European energy market. The upper limit remained stable, but the lower limit tended to rise from July onwards. If China had not increased its imports of coal, global coal exports would have fallen in 2024. Demand remained stable thanks to China and there were no supply shortages.

While the increase in imports in China was able to compensate for the drop in imports in many other countries in 2024, there is a certain risk in 2025 related to the fact that China has built up high stock levels and recently increased its domestic coal production once again. The expansion of renewable energies and the use of nuclear energy in China and other countries is also expected to further reduce coal consumption.

Development of prices for emission allowances/daily quotes

in €/t CO ₂	Average 2024	Average 2023
EUA – rolling front year price	66.45	85.47

CO₂ allowances

In 2024, the price for EUA certificates of around €66/t CO₂ was about €19/t CO₂ lower than in 2023. The price fluctuated between around €52/t CO₂ and €77/t CO₂. The main price drivers were lower emissions in the electricity sector due to a fall in fuel switch costs and a drop in fossil-fuel-based generation, as well as high energy prices and the flagging economy in the industrial sector. In the long term, it is likely that prices will rise as a result of the reductions in supply imposed by the market stability reserve (MSR) and the tightening of the climate targets for 2030.

System Critical Infrastructure segment

In March 2024, the Federal Network Agency (BNetzA) confirmed the **Network Development Plan Electricity 2037 with Outlook 2045** (NDP Version 2023). 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 restructuring 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 five-fold increase in comparison to 2023. This and – according to forecasts in the NDP – a doubling in gross electricity consumption will require a huge increase in the rate at which the grids are currently being expanded. In the NDP, the expected investment in the German transmission grid and the offshore grid necessary for the integration of offshore wind turbines comes to more than €300 billion for the period up to 2045.

TransnetBW is participating with other transmission system operators (TSO) in two major projects to push forward the development of high-voltage DC (HVDC) transmission lines 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. A total of 15 km of this 42 km-long section had been completed by the end of November 2024 and the converter station in Philippsburg has already been placed into operation. Even before the completion of the ULTRANET project, the converter station is helping to maintain the security of supply in Baden-Württemberg by making a positive contribution to voltage regulation, reactive power compensation (necessary for the operation of electrical equipment) and networking capacity. 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. The construction work for the SuedLink converter in Leingarten for the most southern section started at the end of July 2023. Planning approval for the second section running through Baden-Württemberg was received in September 2024 and the BNetzA has approved the applications to start construction work early. The other six sections are still in the planning approval process. As

part of the NDP (Version 2023), the BNetzA has approved more projects in the transmission grid than were submitted by the four TSOs. NDP Version 2023 includes other investments by TransnetBW in the HVDC transmission technology projects DC41 (NordWestLink) and DC42 (SuedWestLink) that are due to be placed into operation in 2037.

As the largest distribution system operator in Baden-Württemberg, our subsidiary Netze BW published the **grid expansion plan for its high-voltage grid** in May 2024. It includes planned construction measures for the period up to 2045 – the legally defined target for Germany to become climate neutral – which have been derived from the southwest regional scenario in the NDP issued by the TSOs. The future energy infrastructure will also require comprehensive expansion of the high-voltage lines and transformer stations at the distribution grid level. Investment of €14.5 billion by 2045 will be necessary in the high-voltage grid operated by Netze BW alone. The southwest regional scenario assumes, for example, that the installed output from renewable energies in Baden-Württemberg will rise from 10 GW to 66 GW and the number of electric cars will increase from the current figure of 0.3 million to 5.3 million.

In December 2023, the **Network Development Plan (NDP) Gas 2022–2032** from the gas transmission system operators (FNB) was approved with one request for a change by the BNetzA. 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. In October 2024, the BNetzA approved the construction of the nationwide **hydrogen core network**. By endorsing the joint application submitted by the German gas transmission system operators, our grid companies terranets bw and VNG/ONTRAS Gastransport can now proceed with their projects to connect up several German states to the hydrogen core network. Any extensions to the hydrogen core network in the future will be approved within the joint NDP process for gas and hydrogen. The hydrogen core network will have a length of up to 9,040 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 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 CO₂-neutral energy supply. Construction work on the first section of the SEL pipeline from Heilbronn to Löchgau started in March 2024 and it was already placed into operation by the end of the year. Our subsidiary terranets bw will integrate the SEL pipeline into the hydrogen core network as a converted natural gas line.

Smart Infrastructure for Customers segment

Electricity and gas prices for retail and industrial customers

Electricity prices in Germany

Average electricity price for a household¹

in ct/kWh	2024	2023
Grid fees ²	11.53	9.52
EEG cost allocations	0.00	0.00
Procurement, sales	17.57	23.83
VAT	6.53	7.30
Electricity tax	2.05	2.05
Concession fees	1.66	1.66
Other allocations	1.58	1.37
Total	40.92	45.73

¹ Annual consumption of 3,500 kWh.

² Including metering and metering station operation. Source: BDEW | As of December 2024.

-10.5%

decrease in **electricity costs** for a household with an annual consumption of 3,500 kWh in 2024 in comparison to the previous year.

According to an analysis of electricity prices by the German Association of Energy and Water Industries (BDEW) published in December 2024, the average monthly electricity bill for a household with an annual consumption of 3,500 kWh came to €119.35 in 2024. The average monthly electricity bill in 2023 was €133.36. The decrease in **electricity costs** was due to falling prices in wholesale trade.

For **small to medium-sized industrial customers** receiving a medium-voltage supply, the average electricity price including electricity taxes decreased in 2024 to 16.99 ct/kWh according to calculations made by BDEW. The average price in 2023 was 24.46 ct/kWh.

Development of electricity prices and tariffs for the EnBW brand

We were initially able to reduce our **prices for heating electricity** under the EnBW brand from 1 January 2024 to, above all, pass on the effects of lower procurement costs to our customers. These prices relate to special electricity tariffs for electric storage heaters and heat pumps.

However, it was necessary for us to 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 rose by 4.5%. Tariffs outside of the basic supply and reserve supplies also changed 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 reason for these changes. For example, the federal subsidy to alleviate the network user charges set by the transmission grid operators was abolished. These decisions led to a significant increase in network user charges for household electricity.

The prices for **household electricity** under the EnBW brand remained constant in 2024.

We reduced **heating prices for the basic supply and reserve supplies** slightly with effect from 1 January 2025 – by up to 3.5% depending on the type of system and measurement method. This could result in a saving of up to €60 per year for households with annual consumption of 3,500 kWh. Although network user charges and government levies, other user charges and taxes increased overall recently, we were still able to pass on savings from lower procurement prices on the electricity markets to customers.

As of 1 April 2025, we were also able to slightly reduce our prices for the **basic supply and reserve supply of household electricity** despite an increase in the state-regulated pricing components.

We supplemented our range of tariffs in 2024 with the new electricity tariff "EnBW electricity dynamic." This tariff changes according to the hourly prices on the EPEX Spot electricity market that have been defined for the next day. It will enable customers to save on their electricity costs if they optimize their consumption accordingly. Customers who want to use a **dynamic electricity tariff** need a smart meter as defined in the Act on Metering Point Operation and Data Communication in Smart Energy Networks (MsbG – Messstellenbetriebsgesetz). These meters are able to transfer consumption data

every 15 minutes so that electricity consumption can be billed on an hourly basis. Users can save money by delaying their consumption until periods of lower demand, which in turn reduces the burden on the energy system. The EnBW zuhause+ app shows the market prices for the current day and following day so that customers can plan their consumption accordingly. This provides them with greater transparency with respect to their electricity consumption and resulting costs.

Average natural gas price for a household in a single-family house ¹

in ct/kWh	2024	2023
Procurement, sales	5.93	9.87
Grid fees ²	1.97	1.99
VAT ³	1.51	0.92
Natural gas tax	0.55	0.55
CO ₂ price ⁴	0.82	0.54
Other duties and cost allocations	0.24	0.12
Total	11.02	13.99

¹ 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.

² Including metering and metering station operation.

³ 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 1 October 2022 to 31 March 2024 from 19% to 7%.

⁴ The CO₂ price represents the cost for the acquisition of CO₂ emissions trading allowances according to the BEHG and is fixed at a price defined by law until the end of 2025. Source: BDEW IAs of December 2024.

-21.0%

decrease in **natural gas prices** for a household with an annual consumption of 20,000 kWh in 2024 in comparison to the previous year.

According to calculations made by the German Federal Statistical Office, **natural gas prices** for non-household customers, such as companies or authorities, fell in the first half of 2024 by 10.3% in comparison to the second half of 2023. In 2024, gas prices for private households fell significantly by 21.0% compared to the previous year. According to calculations by the BDEW published in December 2024, the average monthly natural gas bill for a household in a single-family house with an annual consumption of 20,000 kWh came to €183.71 in 2024. The average monthly bill in 2023 was €233.21. Natural gas prices started to rise again from the second quarter onwards. This was due to a slight increase in procurement costs in the third and fourth quarters and the restoration of the standard 19% VAT rate on natural gas on 1 April 2024 instead of the lower rate of 7%, which overcompensated at the beginning of the second quarter for wholesale market prices that were still falling at the beginning of the year.

Development of gas prices for the EnBW brand

Gas prices for the EnBW brand remained constant in 2023 but we were able to reduce them as of 1 January 2024. This was also mainly due to procurement cost reductions 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.

Procurement costs for gas on the energy markets are still high in comparison to prices before the start of the energy crisis in spring 2021. Gas prices for the EnBW brand remained stable as of 1 January 2025. Lower procurements prices compensated for some significant increases in network user charges and levies. As a result, prices for the basic supply of gas under the EnBW brand remain in the middle of the range of prices on the overall market.

Structural changes

The growth trend on the **home storage market** in Germany continued in 2024. According to an estimate by the German Solar Industry Association, the number of installed home storage systems increased by around 580,000 in 2024 to approximately 1.8 million, which corresponds to a capacity of around 15.4 GWh. The main drivers for the installation of energy storage systems in private buildings are the customers' desire to meet their own energy needs and to charge e-vehicles with self-generated electricity. An electricity storage system is now a standard component of new solar power plants installed in privately owned homes. Around 80% of customers now install a battery storage system together with a new PV power plant.

According to the Federal Motor Transport Authority, there were 380,609 newly registered **electric vehicles** in 2024 – which was 27.4% fewer than in the same period of the previous year. This meant that the share of total new registrations accounted for by purely electric vehicles reached 13.5%. There were 191,905 newly registered plug-in hybrid vehicles, which was 20.8% higher than the figure in the same period of the previous year. The number of battery-powered electric vehicles thus grew to 1.8 million and the number of plug-in hybrid vehicles to 1.1 million by the end of 2024. This corresponds to 3.6% and 2.2%, respectively, of the around 49 million passenger vehicles overall. The now dissolved German government set a target of 15 million electric cars by 2030. EnBW mobility+ is ensuring there will be sufficient **charging infrastructure** to achieve this target. It already operates the largest fast-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. When expanding the charging network, we are taking the current decrease in the number of newly registered electric vehicles into consideration. However, we believe that this development is only temporary and we will be able to adapt our expansion activities to increasing numbers of new registrations. There are plans to significantly expand the infrastructure for cars, commercial vehicles and ships with alternative drive systems at a European level. The Alternative Fuel Infrastructure Regulation (AFIR), which came into force on 13 April 2024, aims to push forward the development of a uniform charging infrastructure in the EU. It will lay the foundations for a comprehensive public charging infrastructure to support the transition to emission-free vehicles and help achieve the EU's aim of becoming climate neutral by 2050.

The development of a comprehensive **broadband infrastructure** also remains an important theme. As part of its Gigabit Strategy, the now dissolved German government set itself the target of developing a nationwide fiber-optic network in Germany by 2030. In those areas where the expansion of the network is not economically viable for private companies, the German government will fund the expansion of the digital infrastructure. Fiber-optic projects in undersupplied regions have been able to access funding since the publication of the amended version of the Gigabit Ordinance 2.0 on 30 April 2024. Alongside an obligation to provide free access to the network, this ordinance also includes an ex-ante regulation for the first time for the fees that can be charged for the initial outlay. At a European level, the Gigabit Infrastructure Act (GIA) came into force on 11 May 2024. It regulates, among other things, the right of shared use and enables telecommunication companies to access the existing fiber-optic network. According to a study published by the Federation of Telecommunications and Value-Added Service Providers and Dialog Consult, there were 45.9 million households and small and medium-sized companies with access to a gigabit connection via a fiber-optic and/or TV cable network in Germany by the end of June 2024. This represents an increase of two million households since the beginning of 2024, primarily achieved in the area of fiber-optic technology. In order to benefit from this development to a gigabit-ready infrastructure, our subsidiaries are active in this sector with Plusnet offering its services across Germany and NetCom BW focusing on Baden-Württemberg.

The EnBW Group

Finance and strategy goal dimensions

Results of operations

Electricity sales increase, gas sales at almost same level as previous year

Electricity sales volume (without System Critical Infrastructure)

in billion kWh	Sustainable Generation Infrastructure		Smart Infrastructure for Customers		Total (without System Critical Infrastructure)		Change in %
	2024	2023	2024	2023	2024	2023	
Retail and commercial customers (B2C)	0.0	0.0	13.1	13.4	13.1	13.4	-2.2
Business and industrial customers (B2B)	0.0	0.0	17.9	20.9	17.9	20.9	-14.4
Trade	56.8	46.7	0.1	0.2	56.9	46.9	21.3
Total	56.8	46.7	31.1	34.5	87.9	81.2	8.3

Electricity sales in the 2024 financial year increased compared to the previous year. Electricity sales to retail and commercial customers (B2C) were down slightly on the previous year because of lower average consumption by customers. Sales to business and industrial customers (B2B) decreased, primarily as a result of a foreign subsidiary ceasing sales activities. Sales in the trading sector increased in comparison to the same period of the previous year due to expanded trading activities. However, their effect on the earnings potential of the company is limited.

Gas sales volume (without System Critical Infrastructure)

in billion kWh	Sustainable Generation Infrastructure		Smart Infrastructure for Customers		Total (without System Critical Infrastructure)		Change in %
	2024	2023	2024	2023	2024	2023	
Retail and commercial customers (B2C)	0.0	0.0	12.7	13.7	12.7	13.7	-7.3
Business and industrial customers (B2B)	0.0	0.0	91.0	100.8	91.0	100.8	-9.7
Trade	431.5	431.0	2.6	2.1	434.1	433.1	0.2
Total	431.5	431.0	106.3	116.6	537.8	547.6	-1.8

E1-6: Gross Scopes 1, 2, 3 and Total GHG emissions

In the 2024 financial year, gas sales were almost at the same level as in the previous year. Gas sales to retail and commercial customers (B2C) fell due to lower average consumption by customers. There was a significant decrease in sales to business and industrial customers (B2B) in comparison to the same period of the previous year, which can be attributed to reduced sales activities at GVS and VNG Handel & Vertrieb. Sales in the trading sector were at the same level as in the previous year.

External revenue significantly lower than previous year

External revenue by segment

in € million ¹	2024	2023	Change in %
Sustainable Generation Infrastructure	14,058.8	20,832.4	-32.5
System Critical Infrastructure	6,382.2	6,327.9	0.9
Smart Infrastructure for Customers	14,044.9	17,249.2	-18.6
Other/Consolidation	38.5	21.2	81.6
Total	34,524.4	44,430.7	-22.3

¹ After deduction of electricity and energy taxes.

The fall in revenue was accompanied by a corresponding reduction in the cost of materials in all segments.

Sustainable Generation Infrastructure: Revenue in the Sustainable Generation Infrastructure segment fell significantly in the 2024 financial year in comparison to the previous year. This was primarily due to lower prices for trading activities despite higher sales volumes (p. 76 f.⁷). The proportion of total external revenue for the Group accounted for by coal-fired generation stood at 4.3% in 2024, compared to 3.3% in the previous year.

System Critical Infrastructure: Revenue in the System Critical Infrastructure segment in the 2024 financial year was at the same level as 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 higher expenses for the grid reserve into prices, including redispatch to maintain the security of supply.

Smart Infrastructure for Customers: Revenue in the Smart Infrastructure for Customers segment decreased in the 2024 in comparison to the previous year. The fall in revenue was mainly due to the decrease in sales to business and industrial customers (B2B) attributable to reduced sales activities at GVS and VNG Handel & Vertrieb.

ESRS 2 SBM-1: Strategy, business model and value chain

Material developments in the income statement

The decrease in revenue by €9,906.3 million in comparison to the figure in the previous year to €34,524.4 million was primarily the result of lower trading prices in the electricity and gas sectors combined with lower sales volumes to B2B customers. This decrease was offset to some extent by increased sales volumes in electricity trading. Against this background, the cost of materials fell significantly by €9,764.4 million. Other operating income decreased by €1,585.3 million in comparison to the previous year to €2,922.1 million. This was mainly attributable to lower income from derivatives. Other operating expenses also decreased by €1,253.0 million to €3,551.1 million as a result of the valuation of derivatives in comparison to the previous year. Another reason was the fall in expenses for incidents relating to battery storage systems at SENEK. Amortization and depreciation fell slightly by €85.8 million in comparison to the figure in the previous year. This was mainly due to lower impairment losses on conventional power plants and offshore wind farms.

The investment result in the reporting period stood at €214.8 million, which was €304.0 million higher than the figure of €-89.2 million in the previous year. This increase was largely due to lower impairments and higher reversals of impairments. The financial result also improved in the reporting period in comparison to the previous year by €50.6 million to €-360.7 million (previous year: €-411.3 million). This was primarily influenced by the result from the market valuation of securities and higher income from bank interest. This was offset to some extent by the change in interest rate for the nuclear provisions, which resulted in an expense in the current year compared to income in the previous year.

Overall, earnings before tax (EBT) totaled €2,692.2 million in the 2024 financial year, compared to €2,840.8 million in the previous year.

Earnings

The Group net profit/loss attributable to the shareholders of EnBW AG fell from €1,537.6 million in 2023, by €293.9 million to €1,243.7 million in the reporting period. Earnings per share were €4.59 in the 2024 financial year, compared to €5.68 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 adjusted EBITDA accounted for by the segments

TOP

Adjusted EBITDA by segment

in € million	2024	2023	Change in %	Forecast 2024
Sustainable Generation Infrastructure	2,633.1	4,647.6	-43.3	€2.6 to €3.1 billion
System Critical Infrastructure	2,243.1	1,772.0	26.6	€1.9 to €2.2 billion
Smart Infrastructure for Customers	323.9	239.5	35.2	€0.25 to €0.35 billion
Other/Consolidation	-296.8	-293.9	-1.0	-
Total	4,903.3	6,365.2	-23.0	€4.6 to €5.2 billion

TOP

Share of adjusted EBITDA accounted for by the segments

in %	2024	2023	Forecast 2024
Sustainable Generation Infrastructure	53.7	73.0	50 to 65
System Critical Infrastructure	45.8	27.8	35 to 50
Smart Infrastructure for Customers	6.6	3.8	5 to 10
Other/Consolidation	-6.1	-4.6	-
Total	100.0	100.0	

In the 2024 financial year, the adjusted EBITDA for the EnBW Group stood at €4,903.3 million, which represented a decrease of 23.0% in comparison to the adjusted EBITDA in the previous year of €6,365.2 million. Adjusted for the effects of changes in the consolidated companies in the reporting year and previous year, the adjusted EBITDA for the EnBW Group decreased by 26.0%. This earnings performance lies within the forecasted range for the 2024 financial year. All segments achieved a result within their forecasted range for 2024 and all shares of the adjusted EBITDA accounted for by the segments were within the forecasted range.

Sustainable Generation Infrastructure: The adjusted EBITDA in the Sustainable Generation Infrastructure segment stood at €2,633.1 million and was 43.3% lower than the result in the previous year.

Adjusted EBITDA Sustainable Generation Infrastructure

in € million ¹	2024	2023	Change in %
Renewable Energies	1,225.1	1,746.4	-29.8
Thermal Generation and Trading	1,408.0	2,901.2	-51.5
Sustainable Generation Infrastructure	2,633.1	4,647.6	-43.3

¹ The figures for the previous year have been restated.

In the Renewable Energies area, the adjusted EBITDA fell by 29.8% to €1,225.1 million but was within our expected range of €1.2 billion to €1.4 billion. This development was primarily attributable to lower earnings from pumped storage as a result of falling prices. All pumped storage power plants have been allocated to the Renewable Energies area since 2024 after they were classified as taxonomy-aligned; the figures for the previous year have been adjusted accordingly. In the Thermal Generation and Trading area, the adjusted EBITDA fell by 51.5% to €1,408.0 million, which was mainly due to decreasing volatility in gas trading and falling income from power plant distribution as a result of lower prices.

System Critical Infrastructure: The adjusted EBITDA for the System Critical Infrastructure segment increased considerably by 26.6% compared to the previous year and stood at €2,243.1 million. Higher income from the use of the grids as a result of returns on increased investment activity had a positive impact on earnings, while a rise in personnel expenses negatively impacted earnings to a certain extent.

Smart Infrastructure for Customers: In the Smart Infrastructure for Customers segment, the adjusted EBITDA rose significantly to €323.9 million, which represented an increase of 35.2% compared to the previous year. This positive development was primarily due to the elimination of the negative effects of the deconsolidation of bmp greengas from the previous year, which was

offset to some extent by larger negative effects from the operating business at SENEK as an indirect consequence of incidents with their battery storage systems. Adjusted for the effects of changes in the consolidated companies in the reporting year and previous year, the adjusted EBITDA decreased by 31.7%.

TOP

Share of adjusted EBITDA accounted for by low-risk earnings

in % ¹	2024	2023	Forecast 2024
Share of adjusted EBITDA accounted for by low-risk earnings	70.7	55.3	≥ 70

¹ The figure for the previous year has been restated.

The share of adjusted EBITDA accounted for by low-risk earnings increased significantly in 2024 compared to the previous year to 70.7% and was thus in the forecasted range of ≥ 70%. This development was due to the higher adjusted EBITDA in the System Critical Infrastructure segment, combined with lower earnings in the Renewable Energies area together with a lower overall adjusted EBITDA as the denominator.

Increase in the non-operating EBITDA in comparison to the previous year

Non-operating EBITDA

in € million	2024	2023	Change in %
Expenses/income relating to nuclear power	-146.5	-675.6	-78.3
Income from the reversal of other provisions	23.6	57.2	-58.7
Result from disposals	-13.9	-0.3	-
Additions to the provisions for onerous contracts relating to electricity procurement agreements	-94.6	-176.2	-46.3
Income from reversals of impairment losses	102.1	120.9	-15.6
Restructuring	-49.4	-47.8	3.3
Valuation effects	658.0	481.5	36.7
Other non-operating result	-233.3	-386.6	-39.7
Non-operating EBITDA	246.0	-626.9	-

The increase in non-operating EBITDA was mainly attributable to lower expenses relating to nuclear power due to updated cost estimates as well as positive valuation effects from derivatives. The valuation effects arose from certain hedging transactions, which we use to hedge against price fluctuations for positions of 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 recognize these effects in the non-operating result. Furthermore, there were negative effects in the other non-operating result connected with incidents relating to battery storage systems at SENEK, although they were less significant than in the previous year.

Slight decrease in Group net profit

Group net profit

in € million	2024			2023		
	Total	Non-operating	Adjusted	Total	Non-operating	Adjusted
EBITDA	5,149.3	246.0	4,903.3	5,738.3	-626.9	6,365.2
Amortization and depreciation	-2,311.2	-585.7	-1,725.5	-2,397.0	-710.7	-1,686.3
EBIT	2,838.1	-339.7	3,177.8	3,341.3	-1,337.6	4,678.9
Investment result	214.8	20.0	194.8	-89.2	-277.8	188.6
Financial result	-360.7	-78.5	-282.2	-411.3	94.7	-506.0
EBT	2,692.2	-398.2	3,090.4	2,840.8	-1,520.7	4,361.5
Income tax	-867.5	31.1	-898.6	-1,008.2	201.8	-1,210.0
Group net profit/loss	1,824.7	-367.1	2,191.8	1,832.6	-1,318.9	3,151.5
of which profit/loss shares attributable to non-controlling interests	(581.0)	(-106.8)	(687.8)	(295.0)	(-77.0)	(372.0)
of which profit/loss shares attributable to the shareholders of EnBW AG	(1,243.7)	(-260.3)	(1,504.0)	(1,537.6)	(-1,241.9)	(2,779.5)

Group net profit fell slightly in comparison to the previous year. This was primarily due to the lower EBITDA (please refer to the explanations in sections “Non-operating EBITDA” on p. 82⁷ and “Adjusted EBITDA” on p. 80 ff.⁷ for more information on the causes).

In contrast to the fall in EBITDA, the investment and financial results improved. The increase in the investment result was due to lower impairments and higher reversals of impairments. The improvement in the financial result was primarily influenced by the result from the market valuation of securities and higher income from bank interest. This was offset to some extent by the change in interest rate for the nuclear provisions, which resulted in an expense in the reporting year compared to income in the previous year.

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

The Group net profit attributable to non-controlling interests almost doubled as a result of the opening up of TransnetBW.

We use the amended adjusted investment result to calculate the return on capital employed (ROCE). This is calculated on the basis of the adjusted investment result less the adjusted result from investments held as financial assets of €116.3 million (previous year: €94.0 million).

Financial position

Financial management

Basis and objectives

The purpose of our financial management system is to ensure that we are able to meet our 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 12 months in our strategic financial analysis.

Our liquidity risk management system includes regular monitoring of the potential financial impacts of stress scenarios. By integrating the liquidity positions of EnBW AG, we are able to identify, evaluate and manage potential risks quickly. We have financing instruments in place to guarantee our solvency at all times, which we use in accordance with a rule-based roadmap.

Our business continuity management system enables us to identify critical financial processes, develop backup processes and test them on the basis of crisis scenarios. This guarantees that critical processes remain available even in the event of an emergency situation.

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 €15 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 risk management follows a strategy of limiting 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 and financing are closed by corresponding 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.

Our modern treasury IT landscape is continuously updated. It provides a high degree of automation and process stability, and ensures the system-based implementation of governance rules.

We 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 at competitive conditions by reaching a broader base of investors using sustainable financial instruments and through further diversification measures. Furthermore, we are digitalizing underlying information and decision-making processes by creating a centralized data structure that can be managed and viewed using new platforms.

We manage our financial profile using the key performance indicator debt repayment potential as the most important indicator of our creditworthiness. The debt repayment potential describes the retained cash flow in relation to the net debt and measures our ability to repay our debt from our current earnings potential. The target is reviewed on a regular basis to guarantee a solid investment-grade rating. In accordance with the latest requirements of the rating agencies, the current target value is at least 15% (p. 93⁷).

Further explanations of our financial terms can be found in the chapter "Strategy, goals and performance management system" on p. 38 ff.⁷.

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 2024):

- Debt Issuance Programs (DIP), via which bonds are issued: €~12.1 billion drawn
 - EMTN (Euro Medium Term Notes): €11.5 billion of €15.0 billion drawn
 - AMTN (Australian Medium Term Notes): AU\$1.0 billion (equivalent value of €~0.6 billion – translation on the pricing day)
- Hybrid bonds: €~2.5 billion
- US private placement: US\$~850 million (translation on the pricing day)
- Promissory notes: €0.6 billion
- Commercial paper (CP) program: €~2.0 billion undrawn
- Sustainability-linked syndicated credit facility: €2.0 billion undrawn. The credit line was renewed on 5 July 2024 in the amount of €2.0 billion with a term until July 2029 and replaces the previous credit line of €1.5 billion. The credit line can be extended by a further year after the first and second year with the agreement of the banks for a maximum period of up to July 2031. The financing costs of the syndicated credit line are once again linked to selected ESG criteria: the reduction in CO₂ emissions in Scopes 1 and 2 and for the first time a reduction path for CO₂ emissions in Scope 3. The share of EU taxonomy-compliant investment is also a new criterion.
- Committed credit lines: €~0.2 billion of €~4.2 billion drawn
- Uncommitted credit lines, which can be utilized in agreement with our banks: €~0.3 billion of €~1.8 billion drawn
- 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

	2024	2023	2022	2021	2020
Moody's	Baa1/stable	Baa1/stable	Baa1/stable	Baa1/stable	A3/negative
Standard & Poor's (S&P)	A-/stable	A-/stable	A-/negative	A-/stable	A-/stable

As of 31 December 2024, our creditworthiness 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.

Both rating agencies praised the balanced financial policy and integrated business portfolio at EnBW with a high share of regulated EBITDA and thus highly predictable income. We continue to have one of the strongest credit ratings among energy supply companies in Europe.

Assessment by rating agencies

Moody's (22/10/2024)

- Leading position within its home state of Baden-Württemberg
- High share of earnings from regulated grids under an established regulatory framework
- Growing share of renewable assets, mostly backed by feed-in tariffs or power purchase agreements
- Balanced financial policy and demonstrated commitment to maintaining robust credit quality
- Supportive shareholders
- Large capital spending programme will constrain credit metrics, mitigated by proceeds from disposals
- Expected increase in the share of minorities in the capital structure
- Earnings exposed to wholesale price volatility, mitigated through hedging

Standard & Poor's (23/08/2024)

- Strong EBITDA base with diversified and integrated position along energy supply chain demonstrated resilience across different economic and geopolitical cycles
- High share of EBITDA from regulated operations under strong regulation and an expanding share of renewable generation provide stability and predictability to earnings and cash flow
- Investment plan oriented toward low-risk regulated networks and long-term contracted renewable generation carries moderate execution risk and supports long-term earnings visibility
- Ambitious investment plan to pressure credit metrics to levels below expectations for current rating temporarily

Sustainability ratings

We take the analyses and evaluations of the corporate strategy, company situation and business prospects from leading sustainability rating agencies into account in our strategic considerations. In the selection of agencies, the main focus is placed on, among other things, transparent and plausible evaluations and the needs of our 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	Morningstar Sustainalytics
Result	A-/Leadership (2024)	B/Prime Status (2024)	AA/Leader (2024)	23.6/Medium Risk (2024)
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 worldwide: EnBW achieved an above-average result	"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 2024, we received good scores in important sustainability ratings within the energy sector. We were able to improve our MSCI ESG rating from A (Average) to AA (Leader) in 2024 and thus achieved an above-average result in comparison to the rest of the sector (scale: AAA/AA – Leader, A/BBB/BB – Average, B/CCC – Laggard). We also achieved a value of 23.6 in the ESG risk rating from Morningstar Sustainalytics, which meant it improved by four points compared to the previous rating of 28 points and now puts us right in the middle of the "Medium Risk" category. (Scale: 0 – 10 Negligible, 10 – 20 Low, 20 – 30 Medium, 30 – 40 High, 40+ Severe). The scores in other sustainability ratings were confirmed at the same level as in the previous year.

Further information on the non-financial key performance indicators can be found on [p. 95 ff.](#)

Capital market activities

On 23 January 2024, we issued a green hybrid bond with a total volume of €500 million and a term of 60 years. We have the right to redeem the bond with a starting coupon of 5.25% 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 hybrid bonds of EnBW. It was used to prefinance the hybrid bond from 2019, which was called on 5 November 2024.

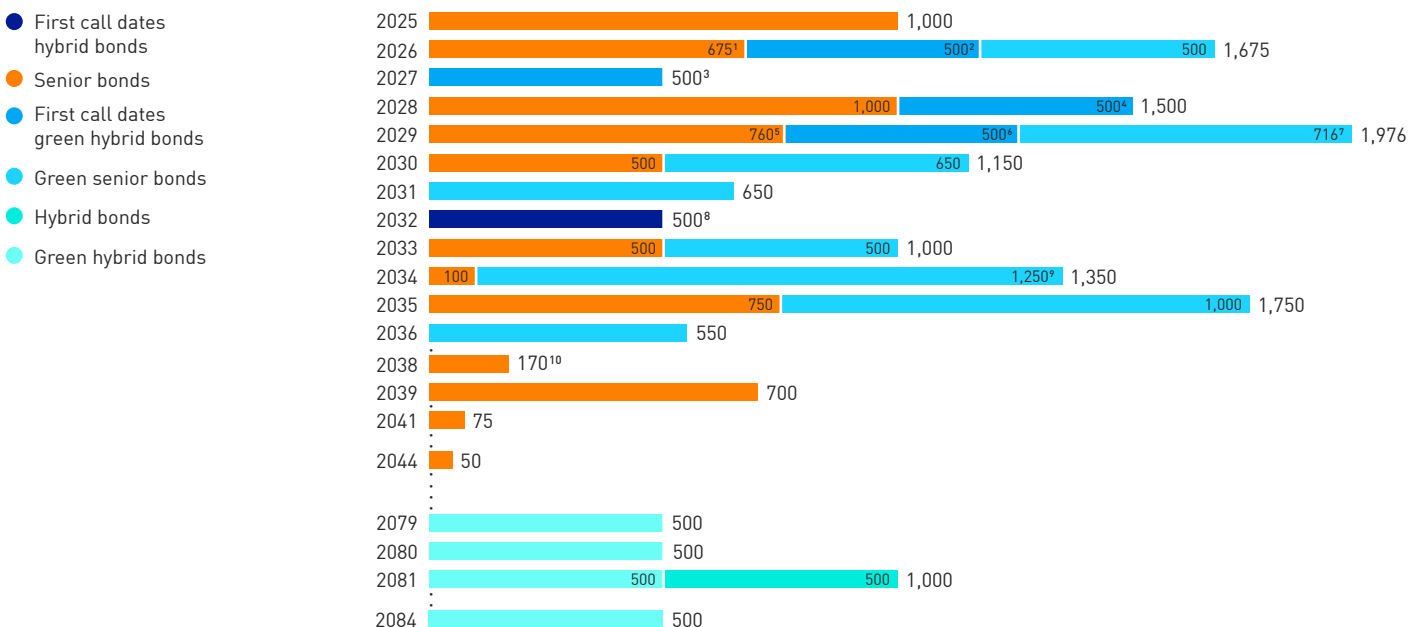
On 15 July 2024, we issued two green corporate bonds with a total volume of €1.2 billion. This meant that we were able to successfully implement our planned capital market financing for 2024 already by the middle of the year. The green bonds have a term of seven and twelve years and coupons of 3.5% and 4.0%, respectively.

In October 2024, we successfully issued our first two green bonds on the Australian capital market with a total volume of AU\$1 billion (around €616 million) and with terms of five and ten years. This transaction further diversifies our investor base and markets and the bonds already serve as a source of funding for the 2025 financial year. In the run-up to the issuance, we had been engaging in intensive dialog with mostly Australian and Asian institutional investors since the summer. We have established an Australian Medium Term Notes (AMTN) program specifically for the purpose of issuing bonds on the Australian capital market. Alongside the existing Euro Medium Term Notes (EMTN) program, which was increased from €10.0 billion to €15.0 billion on 7 October 2024, this constitutes a second framework for issuing bonds and gives the company even greater flexibility.

On 5 November 2024, we exercised the call option on our hybrid bond with a volume of €500 million issued in August 2019. It was repaid at its principal amount plus accrued interest in accordance with the terms and conditions. We view subordinated capital as a long-term element of our capital structure. With a total volume of €2.5 billion, we have now once again reached our current target level for subordinated capital.

Two bonds, including one green bond, with a total volume of €1.5 billion were issued on 13 November 2024. The proceeds will be used to, among other things, finance the transmission and distribution grids. At the beginning of July, we published an updated version of our Green Financing Framework, which now also provides us with the basis for the green financing of the electricity transmission grids and hydropower. Before this update, we were able to allocate the proceeds from our green bonds to projects in the categories of offshore wind, onshore wind, photovoltaics, electricity distribution grids, smart meters and charging infrastructure for electromobility. The bonds have a term of 4.5 and 11 years and coupons of 3.0% and 3.75%, respectively. As with the first bonds issued on the Australian capital market, the proceeds from these bonds are already being used to finance projects in the 2025 financial year.

Maturity profile of EnBW bonds (as of 31 December 2024) in € million



1 Includes CHF 165 million, translated into euro as of 31/12/2024.

2 First call date: green hybrid bond maturing in 2080.

3 First call date: green hybrid bond maturing in 2079.

4 First call date: green hybrid bond maturing in 2081.

5 Includes CHF 245 million, translated into euro as of 31/12/2024.

6 First call date: green hybrid bond maturing in 2084.

7 Includes AU\$350 million (swap in euro as of issue date).

8 First call date: hybrid bond maturing in 2081.

9 Includes AU\$650 million (swap in euro as of issue date).

10 JPY 20 billion (swap in euro as of issue date).

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 2024 financial year, the impact on the cash flow from

operating activities was around €382 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 2024, the dedicated financial assets for pension and nuclear provisions totaled €6,261.1 million (previous year: €6,239.7 million). 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 €1,475.4 million as of 31 December 2024 (previous year: €700.3 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 2024. 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. More than 80% of the capital investments already comply with these guidelines (as of 31/12/2024). The solutions implemented as part of our digitalization strategy are also supporting us on this path. For example, we have developed our own AI-based business partner audit that is essential for the selection and monitoring of fund managers. We have already been able to verifiably reduce CO₂ emissions and improve other ESG performance indicators in our portfolio. In the future, we plan to make our medium- to long-term capital investments CO₂ neutral – just like EnBW itself.

Net debt

As of 31 December 2024, net debt had risen by €2,541.0 million compared to the figure posted at the end of 2023. The increase in net financial debt in comparison to that reporting date was mainly due to net investments that were not fully financed via retained cash flow. The decrease in net debt relating to pension and nuclear obligations resulted primarily from an addition to the plan assets for pension obligations.

Net debt

in € million ¹	31/12/2024	31/12/2023	Change in %
Cash and cash equivalents available to the operating business	-4,500.4	-5,632.4	-20.1
Current financial assets available to the operating business	-3,926.1	-2,941.7	33.5
Long-term securities available to the operating business	-6.0	-4.8	25.0
Bonds	15,329.3	12,035.3	27.4
Liabilities to banks	2,797.4	3,157.4	-11.4
Other financial liabilities	1,378.5	1,275.1	8.1
Lease liabilities	1,252.7	986.4	27.0
Valuation effects from interest-induced hedging transactions	-14.9	-25.0	-40.4
Restatement of 50% of the nominal amount of the subordinated bonds ²	-1,250.0	-1,250.0	0.0
Net financial debt directly associated with assets classified as held for sale	-0.5	0.0	-
Other	-76.2	-42.1	81.0
Net financial debt	10,983.8	7,558.2	45.3
Provisions for pensions and similar obligations ³	5,275.4	6,030.6	-12.5
Provisions relating to nuclear power	4,605.2	4,768.4	-3.4
Receivables relating to nuclear obligations	-359.2	-414.4	-13.3
Net pension and nuclear obligations	9,521.4	10,384.6	-8.3
Non-current financial assets to cover the pension and nuclear obligations ⁴	-5,861.1	-5,829.5	0.5
Cash and cash equivalents to cover the pension and nuclear obligations	-106.0	-171.7	-38.3
Current financial assets to cover the pension and nuclear obligations	-109.0	-90.2	20.8
Surplus cover from benefit entitlements	-149.1	-113.9	30.9
Other	-35.9	-34.4	4.4
Dedicated financial assets	-6,261.1	-6,239.7	0.3
Net debt relating to pension and nuclear obligations	3,260.3	4,144.9	-21.3
Net debt	14,244.1	11,703.1	21.7

1 The restricted liquid assets in the EEG account, KWKG account and StromPBG 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.

2 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.

3 Less the market value of the plan assets (excluding the surplus cover from benefit entitlements) of €1,475.4 million (31/12/2023: €700.3 million).

4 Includes affiliated entities and equity investments held as financial assets as well as long-term securities and loans.

Investment analysis**Net cash investment**

in € million ¹	2024	2023	Change in %
Investments in growth projects ²	5,299.5	3,917.2	35.3
Investments in existing projects	942.5	985.4	-4.4
Total investments	6,242.0	4,902.6	27.3
Divestitures ³	-4.4	-13.3	-66.9
Participation models ⁴	-862.2	-1,976.3	-56.4
Disposals of long-term loans	-20.3	-18.0	12.8
Other disposals and subsidiaries	-158.4	-155.2	2.1
Total divestitures	-1,045.3	-2,162.8	-51.7
Net cash investment	5,196.7	2,739.8	89.7

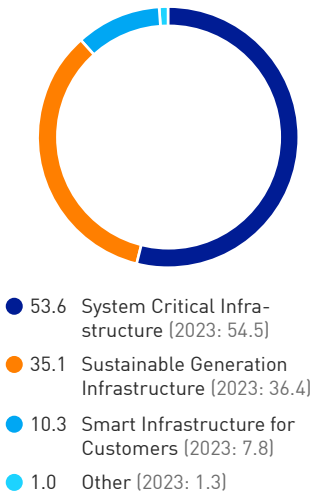
1 Excluding investments held as financial assets.

2 Does not include cash and cash equivalents acquired with the acquisition of fully consolidated companies. These amounted to €189.4 million in the reporting period (previous year: €28.5 million).

3 Does not include cash and cash equivalents relinquished with the sale of fully consolidated companies. These amounted to €4.7 million in the reporting period (previous year: €0.0 million).

4 This includes offsetting capital reductions in non-controlling interests against current receivables from minority shareholders. The latter was due to advance payments made in the previous year as a result of contractual regulations.

Gross investment by the EnBW Group of €6,242.0 million in 2024 was around 27% higher than the level in the previous year (€4,902.6 million). Some 84.9% of this investment was attributable to growth projects; the proportion of investment in existing facilities stood at 15.1%.

Investment by segment
in %

There was gross investment of €2,191.7 million in the **Sustainable Generation Infrastructure** segment, which was higher than the level in the previous year (€1,783.5 million).

Investments in Sustainable Generation Infrastructure

in %	2024	2023
Renewable Energies	22.5	24.0
Thermal Generation and Trading	12.6	12.4
Sustainable Generation Infrastructure	35.1	36.4

A total of €1,404.1 million of this investment was in the Renewable Energies area, compared to €1,174.2 million in the previous year. This increase was mostly attributable to the offshore wind sector due to the investment in our planned wind farms in Great Britain. A further large part of the investment in this segment continues to be in the construction of our EnBW He Dreih offshore wind farm that is due to be placed into operation in 2025. Investment in the Thermal Generation and Trading area stood at €787.6 million and was thus also higher than the level in the previous year of €609.3 million. This was largely due to the investment in our 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). All three of the projects are currently under construction. The hydrogen-ready gas power plant in Stuttgart-Münster will be placed into operation in 2025.

Gross investment in the **System Critical Infrastructure** segment of €3,347.0 million was significantly higher than the level in the previous year of €2,671.9 million. This increase was mainly the result of higher investment made by our subsidiary TransnetBW as part of the Network Development Plan Electricity.

Gross investment in the **Smart Infrastructure for Customers** segment was also considerably higher than the comparative figure in the previous year of €383.0 million and stood at €643.4 million. Contained within gross investment is an investor contribution to satisfy creditor claims as part of the insolvency proceedings for bmp greengas GmbH. Investment in this segment was still largely made in the area of electromobility and was higher than in the previous year.

Other gross investment of €59.9 million was almost at the same level as the previous year (€64.2 million) and mainly involved capital contributions at other investments and investment in the central IT system.

Total **divestitures** were significantly lower overall than in the previous year. In the reporting year, total divestitures were mostly influenced by the inflow of capital from third parties within our participation models launched in the previous year. In this regard, there was the sale of a minority shareholding in EnBW He Dreih GmbH & Co. KG in the third quarter of the previous year, as well as the sale of a minority shareholding in EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG and its subsidiary TransnetBW GmbH in the fourth quarter of the previous year. Other disposals and subsidies were at the same level as in the previous year.

We also take sustainability matters 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. 42⁷).

Proportion of taxonomy-aligned expanded capex

in % ¹	2024	2023	Forecast 2024
Proportion of taxonomy-aligned expanded capex	88.8	86.5	≥ 85

¹ In contrast to net cash investment, non-cash-relevant transactions are also relevant for taxonomy-aligned expanded capex.

The proportion of taxonomy-aligned expanded capex in the reporting year was 88.8% and thus in line with our forecast. The increase in comparison to the previous year was mainly due to a significant increase in investment made by TransnetBW, as well as higher investment in our offshore wind projects in Great Britain, fuel switch projects and the e-mobility sector. Please refer to the section "EU taxonomy" for further information.

Liquidity analysis

Condensed cash flow statement

in € million	2024	2023	Change in %
Cash flow from operating activities	2,620.2	899.7	-
Cash flow from investing activities	-6,206.7	-5,797.0	7.1
Cash flow from financing activities	2,380.3	4,419.3	-46.1
Net change in cash and cash equivalents	-1,206.2	-478.0	-
Change in cash and cash equivalents due to changes in the consolidated companies	20.2	6.4	-
Net foreign exchange difference and other changes in cash and cash equivalents	23.0	-8.9	-
Change in cash and cash equivalents	-1,163.0	-480.5	142.0

In the reporting period, there was a significant increase in cash flow from operating activities compared to the previous year, despite the clear drop in cash-relevant EBITDA. This development was attributable to a significant reduction in the outflow of cash in the net current assets. The main reason for this was a fall in the net balance of trade payables and receivables, which was influenced in the previous year by a sharp decrease in EEG liabilities. Furthermore, the reduction in inventories due to price factors, in comparison to the increase in the previous year, especially in emissions certificates, also had a positive effect. Lower cash outflows for collateral and a decrease in the net balance of other tax receivables and liabilities for reasons related to the reporting date also contributed to the increase in cash flow from operating activities.

Cash flow from investing activities returned a 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. This was offset to some extent by lower net investment as part of the portfolio management of securities and financial investments.

Cash flow from financing activities returned a significantly lower cash inflow than in the previous year. This was primarily due to a smaller net increase in financial liabilities acquired as part of liquidity management. In the previous year, this item included cash received for changes in ownership interest without loss of control due to investments by partners in the EnBW He Dreih offshore wind farm and EnBW Übertragungsnetz Immobiliengesellschaft mbH & Co. KG and its subsidiary TransnetBW. This was offset to some extent by an increase in cash inflow for alterations of capital in non-controlling interests.

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	2024	2023	Change in %
EBITDA	5,149.3	5,738.3	-10.3
Change in provisions excluding obligations from emission allowances	-596.0	203.9	-
Non-operating valuation effects from derivatives ¹	-657.9	-481.5	36.6
Other non-cash-relevant expenses / income ¹	-161.3	735.2	-
Income tax paid	-937.2	-906.7	3.4
Interest and dividends received	627.8	529.8	18.5
Interest paid for financing activities	-448.5	-421.2	6.5
Dedicated financial assets contribution	53.6	104.9	-48.9
Funds from operations (FFO)	3,029.8	5,502.7	-44.9
Declared dividends	-757.8	-671.3	12.9
Retained cash flow	2,272.0	4,831.5	-53.0

¹ The non-operating valuation effects from derivatives contain effects on the cash flow statement of €58.0 million (previous year: €-108.2 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 are thus adjusted for the described effects.

Funds from operations (FFO) were significantly lower than the level in the previous year. This was primarily due to the lower EBITDA and other non-cash-relevant income. In contrast, other non-cash-relevant expenses had a positive effect in the previous year. This was primarily caused by valuation effects on inventories and their associated derivatives and higher expenses for risk provisions in the previous year. The higher non-operating valuation effects from derivatives and the decrease in provisions, which had increased in the previous year, also contributed to the fall in FFO in the reporting year.

As a result of the decrease in FFO and higher declared dividends in comparison to the previous year, the retained cash flow was also significantly lower than in the previous year. 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 ¹	2024	2023	Change in %
Change in assets and liabilities from operating activities²	-892.6	-4,762.8	-81.3
Change in cash and cash equivalents in the EEG, the KWKG and the StromPBG account	-32.8	2,098.5	-
Non-operating valuation effects from derivatives	715.9	373.3	91.8
Adjusted change in operating assets and liabilities	-209.5	-2,291.0	-90.9
Net balance of inventories and obligations from emission allowances	(396.0)	(-398.9)	-
Net balance of trade receivables and payables, services not yet invoiced and payments on account that have been made and received	(-887.5)	(-1,053.7)	(-15.8)
Net balance of other assets and liabilities	(282.0)	(-838.4)	-

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

² The cash flow statement provides a further breakdown of the cash-relevant change in operating assets and liabilities.

Alongside the retained cash flow and net investment, the change in working capital has a major influence on net debt. As the cash and cash equivalents in the EEG, KWKG and Electricity Price Control Act (StromPBG) account are only held in custody by the transmission system operators, they are not included in the calculation of net debt. Therefore, the adjusted working capital is corrected for any changes in the cash and cash equivalents in these accounts.

The change in cash and cash equivalents 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 cash and cash equivalents into account.

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Debt repayment potential

in € million	2024	2023	Change in %
Retained cash flow	2,272.0	4,831.5	-53.0
Net debt	14,244.1	11,703.1	21.7
Debt repayment potential in %	16.0	41.3	-

In the reporting year, the retained cash flow was within the forecasted range of €2.0 billion to €2.5 billion, mainly due to the decrease in cash-relevant EBITDA. As a result of the decrease in retained cash flow and increase in net debt, the debt repayment potential was significantly lower in the 2024 reporting year than in the previous year but was still within the target range of between 13.0% and 16.0%.

Net assets

Condensed balance sheet

in € million	31/12/2024	31/12/2023	Change in %
Non-current assets	42,793.4	39,512.0	8.3
Current assets	21,459.6	25,206.9	-14.9
Assets held for sale	24.7	0.0	-
Assets	64,277.7	64,718.9	-0.7
Equity	17,767.8	15,853.0	12.1
Non-current liabilities	32,545.6	30,712.7	6.0
Current liabilities	13,962.0	18,153.2	-23.1
Liabilities directly associated with assets classified as held for sale	2.3	0.0	-
Equity and liabilities	64,277.7	64,718.9	-0.7

As of 31 December 2024, total assets were slightly lower than the figure at the end of the previous year. Non-current assets increased by €3,281.4 million to €42,793.4 million between the two reporting dates, which was mainly due to payments on account for property, plant and equipment. In contrast, current assets fell by €3,747.3 million to €21,459.6 million. This was primarily attributable to the decrease in short-term derivatives and the fall in cash and cash equivalents, offset to some extent by, above all, the increase in financial assets.

Equity increased by €1,914.8 million to €17,767.8 million as of 31 December 2024. The primary reason for this development was the Group net profit achieved in the reporting period. This was reflected in the increase in the equity ratio from 24.5% at the end of 2023 to 27.6% on the reporting date.

Non-current liabilities increased by €1,832.9 million. Current liabilities decreased by €4,191.2 million in comparison to the end of the previous year. This decrease was mainly due to the fall in short-term derivatives and in collateral received. The amount of collateral received in the previous year was impacted by fluctuations on the market.

Please refer to note [35] "Segment reporting" of the notes to the consolidated financial statements for information on how capital employed is calculated.

Return on capital employed – 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 used for assessing the return on capital employed in the respective financial year.

ROCE of the EnBW Group by segment 2024

	Sustainable Generation Infrastructure	System Critical Infrastructure	Smart Infrastructure for Customers	Other/ Consolidation	Total
Adjusted EBIT including the adjusted investment result ¹ in € million	2,009.9	1,532.8	109.5	-362.7	3,289.5
Average capital employed in € million	12,537.3	15,762.1	1,742.7	997.7	31,039.8
ROCE in %	16.0	9.7	6.3	-	10.6

¹ Amended adjusted investment result of €78.5 million, adjusted for taxes (investment result/0.703 – investment result; with 0.703 = 1 – tax rate 29.7%).

ROCE of the EnBW Group by segment 2023

	Sustainable Generation Infrastructure	System Critical Infrastructure	Smart Infrastructure for Customers	Other/ Consolidation	Total
Adjusted EBIT including the adjusted investment result ¹ in € million	3,950.3	1,148.0	76.0	-360.8	4,813.5
Average capital employed in € million	11,571.0	13,336.7	1,802.6	599.7	27,310.0
ROCE in %	34.1	8.6	4.2	-	17.6

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%).

In the 2024 financial year, ROCE decreased in comparison to the previous year by 10.6%. The reason for this development was the significant fall in adjusted EBIT including the adjusted investment result compared to 2023 and the increase in capital employed due to investment activities by €3.7 billion to €31.0 billion.

Sustainable Generation Infrastructure: ROCE in the Sustainable Generation Infrastructure segment was 16.0%, which was 18.1 percentage points lower than the value in the previous year. EBIT including the adjusted investment result decreased to €2.0 billion. The slight increase in capital employed in comparison to the previous year was mainly attributable to investment in the expansion of renewable energies, especially in the EnBW He Dreiht offshore wind farm.

System Critical Infrastructure: ROCE in the System Critical Infrastructure segment increased by 1.1 percentage points in comparison to 2023. Adjusted EBIT including the adjusted investment result was €384.8 million above the figure in the previous year, while capital employed was higher than in the previous year due to investments made, above all, in the transmission and distribution grids.

Smart Infrastructure for Customers: ROCE in the Smart Infrastructure for Customers segment increased by 2.1 percentage points in 2024 compared to 2023. This was due to the significant increase in adjusted EBIT including the adjusted investment result. At the same time, the average capital employed was largely at the same level as in the previous year.

Performance indicators relevant to remuneration

The performance indicators relevant to remuneration are derived as follows:

EBT relevant to remuneration

in € million	2024	2023
EBT	2,692.2	2,840.8
Less outstanding items for derivatives allocated under trading within EBITDA	-658.0	-481.5
Less the measurement of financial assets and outstanding items for derivatives allocated under trading within the financial result	-119.8	-16.1
Less changes to the inflation rate and discount rate for nuclear provisions	100.2	-202.9
EBT relevant to remuneration	2,014.6	2,140.3

Funds from operations (FFO) relevant to remuneration

in € million	2024	2023
Funds from operations (FFO)	3,029.8	5,502.7
Less income tax paid	937.2	906.7
Funds from operations (FFO) relevant to remuneration	3,967.0	6,409.4

Other performance indicators relevant to remuneration

	2024	2023
Expansion of renewable energies (electrical output in MW)	284.6	283.8
LTIF for companies controlled by the Group	2.3	2.4

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.

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

Online ↗

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

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 pioneer in the development of a sustainable energy infrastructure fit for the future. 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. 52 ff.⁷).

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. 40⁷).

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Key performance indicator

	2024	2023	Change in %	Forecast 2024
Reputation Index	56	55	1.8	54 – 58

The Reputation Index improved in 2024 by one index point in comparison to the previous year. It was thus in the middle of the forecasted range of between 54 and 58 points and is moving in the right direction towards the previous record value of 58 points from 2022. This development was due to the fact that EnBW has been able to improve its reputation index values nationwide among important stakeholder groups. In particular, the sentiment among the wider public and relevant opinion leaders improved noticeably at a national level. We also believe that there was a sector effect in 2024 as various themes were generally perceived more positively across the sector as a whole than in the previous year.

More details on reputational risks can be found in the “Report on opportunities and risks” on p. 119⁷ and p. 122 f.⁷.

Customer proximity

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.

Customer Satisfaction Index

The Customer Satisfaction Indices for EnBW and Yello are compiled from customer surveys of retail customers carried out by an external provider (p. 41⁷).

TOP

Key performance indicator

	2024	2023	Change in %	Forecast 2024
Customer Satisfaction Index for EnBW/Yello	123/168	130/161	-5.4/4.3	114 – 125/ 145 – 155

The Customer Satisfaction Index for EnBW fell by 5.4% to a value of 123 in 2024. 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 for between 114 and 135 points.

You can find our
company website here.

Online ⁷

The fall in the Customer Satisfaction Index in 2024 was due to an especially challenging market environment. As a result of the sharp decrease in the procurement price for energy, pricing levels for new and existing customer contracts are diverging on the market as expected. This fosters a more critical opinion of energy companies and their pricing policies among customers. According to our findings, the measures to adjust electricity prices for EnBW customers in early 2024 also dampened the Customer Satisfaction Index. Against this background, the Customer Satisfaction Index for EnBW was lower than the comparative figure from 2023 (130).

We initiated various different measures to improve customer satisfaction. These included developing sustainable ranges 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 and the EnBW dynamic electricity tariff, 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 a positive effect on the image of the company with respect to innovation and sustainability. Another tool for evaluating and improving customer satisfaction is the customer test panel "Powerhelden" (power heroes) (p. 216⁷).

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

[Online ↗](#)

The satisfaction of Yello customers improved in 2024 to an index value of 168 and 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 for between 159 and 181 points. To improve customer satisfaction, Yello implemented a series of measures in 2024 to improve the quality of its digital and analog service processes.

Further information on the **Customer Service Online Ranking** from the SZ Institute can be found here.

[Online ↗](#)

In 2024, the customer service provision of EnBW and Yello was once again commended in independent tests. In this year's analysis by the SZ Institute to find out which companies in Germany offer "really outstanding customer service," EnBW received the highest score among the 37 energy supply companies tested and was thus rated as having the "highest service quality." Yello also received a score that was significantly better than average for the sector and was rated as having "very high service quality."

Further details are available in the "Report on opportunities and risks" on p. 119⁷ and p. 123f.⁷.

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. Our grid companies are responsible for the efficient 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 (p. 75⁷). A main focus here is the gradual development of smart grids to improve the stability of the grids (p. 59⁷ and p. 61⁷).

SAIDI

We record all unscheduled interruptions to supply at our distribution system 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. 41⁷).

Further information on the **expansion of the grids at Netze BW** can be found here.

[Online ↗](#)

TOP

Key performance indicator

	2024	2023	Change in %	Forecast 2024
SAIDI electricity in min./year ¹	13.6	19.3	-29.5	< 20

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

The figure for the supply reliability of the electricity distribution grids improved to a very good level of 13.6 minutes of interruptions per end consumer in the 2024 financial year and was thus within our forecast. The main reason for this development was the absence of extraordinary weather events in the reporting year. The increasing digitalization of our grids also helped to reduce supply interruptions in our grids.

At our gas distribution system operators, the average duration of unplanned supply interruptions per end consumer (SAIDI Gas) was below 2 min./a, which was unchanged from the previous year.

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 CO₂ intensity. Our Group environmental goals are supplemented by activities and targets for the implementation of environmental themes in the EnBW Sustainability Agenda (p. 33f.⁷). EnBW AG and other subsidiaries have an environmental management system certified according to DIN EN ISO 14001 or validated according to EMAS. We have thus created the prerequisites for ensuring that environmental requirements are systematically and continuously taken into account. It 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 heating 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.

We have changed the method we use for calculating the following environmental performance indicators to the operational control approach because this is required by the GHG protocol and its rules for the inclusion of plants go further than those in the financial control approach. The operational control approach not only covers fully consolidated companies but also plants that although not fully consolidated are under the operational control of the company.

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

	2024	2023	Change in %	Forecast 2024
Installed output of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE in % ¹	6.6/58.7	6.3/54.9	4.8/6.9	6.5 – 6.8/ 56 – 57

¹ The figures for the previous year have been restated.

In 2024, the installed output of renewable energies (RE) increased to 6.6 GW and was thus within our forecasted range. This rise was primarily attributable to the expansion of photovoltaic power plants and onshore wind farms in Germany and France. Pumped storage power plants that do not use the natural flow of water were reallocated under renewable energies as planned now that pumped storage power plants are classified as a taxonomy-aligned economic activity. Overall, the share of the generation capacity accounted for by RE increased to 58.7% and thus exceeded our forecast.

You will find a detailed presentation of the [EnBW Sustainability Agenda](#) and our [climate protection strategy](#) here.

[Online ↗](#)

You can download the [Environmental Declaration of Netze BW](#) here.

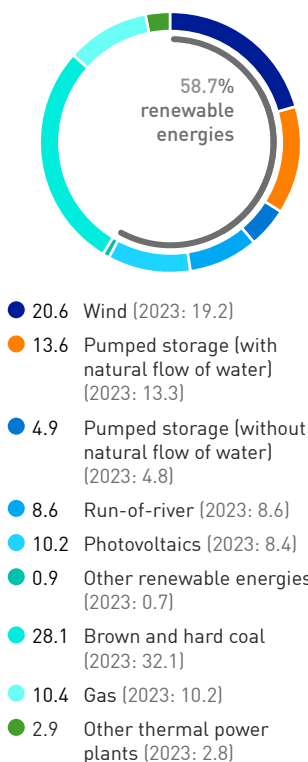
[Online ↗](#)

E1-3: Actions and resources in relation to climate change policies

E1-5: Energy consumption and mix

Alongside the increase in renewable energies, the transfer of Block 7 of the Rheinhafen steam power plant in Karlsruhe to the grid reserve also had an effect, as forecasted. The targets in our EnBW 2025 strategy of increasing the generation capacity of all of our renewable energy power plants to between 6.5 GW and 7.5 GW by 2025 and ensuring that they account for more than 50% of our total generation portfolio were thus already achieved in 2024.

Installed output in %



Generation capacity¹ [as of 31/12]

Net electrical output² in MW

	2024	2023
Renewable Energies	6,557	6,273
Run-of-river power plants	964	982
Storage power plants/pumped storage power plants using the natural flow of water ²	1,517	1,517
Pumped storage power plants that do not use the natural flow of water ²	545	545
Onshore wind	1,323	1,212
Offshore wind	976	976
Photovoltaics	1,136	956
Other renewable energies	96	85
Thermal power plants	4,622	5,150
Brown coal	875	875
Hard coal	2,262	2,791
Gas	1,162	1,161
Other thermal power plants	323	323
Installed output³	11,179	11,423
of which renewable in %	58.7	54.9

1 The figures for the previous year have been restated.

2 Output values irrespective of marketing channel, for storage: generation capacity.

3 In addition, power plants with an installed output of 1,786 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. TransnetBW has additional capacity for the grid of 860 MW available at the large power station in Mannheim. The grid stabilization plant in Marbach with an output of around 300 MW was also commissioned in 2024. It was built by TransnetBW to secure grid stability nationwide in Germany.

Own generation^{1,2} by primary energy source

in GWh

	2024	2023
Renewable Energies	14,660	13,574
Run-of-river power plants	5,609	5,211
Storage power plants/pumped storage power plants using the natural flow of water	835	676
Pumped storage power plants that do not use the natural flow of water	1,112	894
Onshore wind	2,396	2,425
Offshore wind	3,427	3,218
Photovoltaics	966	869
Other renewable energies	315	281
Thermal power plants	8,647	11,150
Brown coal	2,717	3,501
Hard coal	2,729	3,237
Gas	3,062	2,767
Other thermal power plants	139	1,645
Own generation	23,307	24,724
of which renewable in %	62.9	54.9

1 The figures for the previous year have been restated.

2 Generation volumes are reported without the volumes for positive redispatch that cannot be controlled by EnBW. Own generation including positive redispatch in 2024 was 24,810 GWh (previous year: 27,185 GWh).

Own generation of electricity fell in 2024 compared to the previous year to 23.3 TWh. Renewable energy generation increased in comparison to the previous year. This rise was due to higher generation volumes from hydropower plants and the expansion of photovoltaic power plants and onshore wind farms, despite the fact that the onshore wind farms experienced poorer weather conditions than in the previous year. The volume of electricity generated by our thermal generation plants fell in comparison to the previous year. The reasons for this decrease were lower deployment of our thermal generation plants due to market prices and availability issues and the transfer of Block 7 of the Rheinhafen steam power plant in Karlsruhe to the grid reserve. The proportion of own generation from renewable energy sources thus increased in comparison to the previous year to 62.9%.

CO₂ intensity/climate protection

CO₂ intensity

TOP

Key performance indicator

	2024	2023	Change in %	Forecast 2024
CO ₂ intensity in g/kWh ^{1,2}	272	319	-14.7	290 – 350

- 1 The figures for the previous year have been restated.
- 2 The calculation for this performance indicator does not include the share of positive redispatch that cannot be controlled by EnBW and nuclear generation. In the reporting year, this performance indicator includes generation volumes of 23,307 GWh (previous year: 23,229 GWh). The amount of CO₂ emissions from controllable electricity generation included in the performance indicator is 6,338 thousand t (previous year: 7,407 thousand t). The CO₂ intensity including nuclear generation for the reporting year also was 272 g/kWh (previous year: 300 g/kWh). We publish a five-year comparison of the performance indicators in our "Multi-year overview" on p.399.

The CO₂ intensity of our own electricity generation fell in comparison to the previous year by 14.7% to 272 g/kWh and thus was below our revised forecast in the Six-Monthly Financial Report for a CO₂ intensity of between 290 g/kWh to 350 g/kWh. Our coal power plants were deployed to a much lower extent due to market prices, availability issues and the transfer of Block 7 of the Rheinhafen steam power plant in Karlsruhe to the grid reserve. Higher generation volumes from hydropower plants and the addition of new renewable energy power plants also led to higher generation from renewable sources.

Further **environmental data** is available on the Internet.

Online ↗

Alongside the key performance indicators in the environment goal dimension, other environmental targets are defined in the EnBW Sustainability Agenda (p. 33f.⁷). We utilize a broad range of additional environmental performance indicators for measuring, managing and reporting on the other results of our environmentally relevant activities. Further information can be found in the sustainability statement (p. 128 ff.⁷), in our multi-year overview (p. 399⁷) and on our website.

We also refer you to the details provided in the "Report on opportunities and risks" (p. 118 f.⁷).

Employees goal dimension

Employee engagement is essential for the long-term success of EnBW and that is why we place huge importance on our HR work on fostering motivation, satisfaction and employability. We use the **key performance indicators PEI (People Engagement Index)** and **LTIF (Lost Time Injury Frequency)** to measure our HR development. This helps us to better tailor our HR work to the needs of our employees.

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. 41⁷).

TOP

Key performance indicator

	2024	2023	Change in %	Forecast 2024
People Engagement Index (PEI) ¹	83	82	1.2	> 78

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

S1-4: Taking action on material impacts and effectiveness of those actions and approaches

The employee survey EnMAB was held from 7 October to 25 October 2024. The survey achieved its highest coverage to date, being answered by around 25,000 employees, including trainees and students. According to this survey, the PEI for 2024 improved to 83 points on a scale of 0 to 100 and was thus in line with our forecast. It stood at 82 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, was unchanged at 74 points in 2024. Our figures remained very high in comparison with other companies in 2024 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. 118f.⁷).

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. A main focus of our work in this area is minimizing danger in the workplace through training and programs of measures. We use a digital software solution called Quentic to document and manage the various measures that focus on occupational safety.

LTIF

We use the key performance indicator LTIF (Lost Time Injury Frequency) to measure our performance in the area of occupational safety. It measures the number of LTI (Lost Time Injuries) according to the definition on p. 41⁷. 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.

S1-4: Taking action on material impacts and effectiveness of those actions

TOP

Key performance indicator

	2024	2023	Change in %	Forecast 2024
LTIF for companies controlled by the Group ^{1, 2, 3}	2.3	2.4	-4.2	2.1
LTIF overall ^{1, 2}	4.0	3.7	8.1	3.6

- 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. 41.
- 2 The LTIF for companies controlled by the Group excluding waste management and LTIF overall, which includes the area of waste management, only include 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 2024 financial year and fell to 2.3. Although we were not able to achieve our forecasted value for 2024 of 2.1, this still represented an improvement for the second year in a row. In contrast, the average days of absence per accident for companies controlled by the Group increased considerably and stood at 19.6 (previous year: 13.8). This means that there was a noticeable increase in the severity of the accidents. The LTIF overall – including our subsidiaries in the area of waste management – increased in the reporting period to 4.0 (previous year: 3.7). The average days of absence per accident also increased – from 14.2 in the previous year to 14.5. This was attributable to a significant rise in the number of accidents in the area of waste management compared to the previous year. However, the number of accidents in the area of waste management was still at a good level compared to other companies in this sector.

There were no fatal accidents in the 2024 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. 118f.⁷).

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 BDO AG 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. 31 ff.⁷ and p. 68 ff.⁷).

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 ¹	2024	2023	Change in %
Revenue	70,076.5	116,487.0	-39.8
Cost of materials	-67,176.4	-111,978.5	-40.0
Amortization and depreciation	-287.9	-230.0	25.2
Other operating result	-880.2	-1,564.1	43.7
Earnings before interest and taxes	1,732.0	2,714.4	-36.2
Financial result	-656.1	-457.6	43.4
Tax	-346.0	-656.4	47.3
Net profit	729.9	1,600.4	-54.4

¹ In accordance with German commercial law.

EnBW AG reported an annual net profit of €729.9 million. The decrease in comparison to the previous year was mainly influenced by the €982.4 million drop in earnings before interest and taxes, the decrease in the financial result by €198.5 million and the increase in the tax result by €310.4 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 by €46,410.5 million was offset by a decrease in the cost of materials by €44,802.1 million.

Revenue (after the deduction of electricity and energy taxes) of €70,076.5 million primarily includes revenue from electricity sales of €15,035.2 million and gas sales of €53,044.2 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 €46,638.5 million in revenue in 2024 to €66,089.6 million, which was due to lower trading volumes and prices for electricity and gas. The decrease in revenue in the trading business was offset by the fall in the cost of materials of €44,621.9 million to a total of €64,613.7 million.

Revenues from sales activities were split into €2,056.1 million for electricity and €394.5 million for gas, which represented an overall increase of €129.1 million.

Electricity sales to retail and commercial customers (B2C) were slightly lower than in the previous year because of lower average consumption by customers. Electricity sales fell by 0.1 billion kWh to 5.9 billion kWh, while sales in the gas business fell by 0.5 billion kWh to 3.0 billion kWh. Increased revenues in the B2C electricity business were primarily due to passing on energy sector costs to customers, while decreased revenues in the B2C gas business were attributable to price effects in the reporting year.

The cost of materials includes costs for electricity procurement of €12,234.5 million and costs for gas procurement of €52,243.0 million.

Alongside scheduled amortization and depreciation, the amortization and depreciation item includes impairment losses of €84.1 million, which mainly relate to power plants.

The other operating result increased by €683.9 million, which was mainly attributable to reversals of impairment losses of €408.3 million, income from intercompany restructuring of €305.5 million and income from the reversal of impairments of receivables of €120.8 million. Significant changes in comparison to the previous year included higher income from the reversals of provisions of €203.2 million, lower expenses for gas transmission and storage facilities of €115.4 million and a reduction in impairments of receivables by €135.4 million. In contrast, there was a fall in income from the disposal of assets by €517.5 million and increased expenses for pensions of €149.8 million.

The decrease in the financial result was mainly due to a lower investment result. This was offset to some extent by higher income from bank interest of €69.8 million and lower impairment losses on financial assets of €52.0 million.

The tax expense in the financial year was €346.0 million, which was €310.4 million lower than in the previous year. The taxes mainly comprise corporate income tax of €112.8 million, trade tax of €122.4 million and tax on investment income of €101.1 million. The tax result includes out-of-period expenses of €34.9 million. 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 ¹	31/12/2024	31/12/2023	Change in %
Assets			
Non-current assets			
Intangible assets	244.6	277.4	-11.8
Property, plant and equipment	1,858.9	1,384.8	34.2
Financial assets	29,493.3	25,735.8	14.6
	31,596.8	27,398.0	15.3
Current assets			
Inventories	1,249.9	1,846.9	-32.3
Receivables and other assets	3,852.3	5,796.9	-33.5
Securities	940.0	230.0	-
Cash and cash equivalents	5,657.1	6,457.2	-12.4
	11,699.3	14,331.0	-18.4
Prepaid expenses	897.4	4,674.3	-80.8
Surplus from offsetting	40.7	47.1	-13.6
	44,234.2	46,450.4	-4.8
Equity and liabilities			
Equity			
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	3,182.5	2,822.5	12.8
Retained earnings	1,119.0	1,155.4	-3.2
	5,770.9	5,447.3	5.9
Extraordinary items for investment cost subsidies and grants	24.6	24.0	2.5
Provisions	13,267.4	14,903.6	-11.0
Liabilities	23,751.7	21,118.8	12.5
Deferred income	1,419.6	4,956.7	-71.4
	44,234.2	46,450.4	-4.8

¹ In accordance with German commercial law.

The net assets of EnBW AG as of 31 December 2024 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 €19,864.3 million, loans to affiliated entities of €4,685.9 million, securities held as non-current assets of €2,668.0 million and investments of €2,266.8 million. The increase of €3,757.5 million in financial assets mainly comprises payments into the capital reserves at shares in affiliated entities, additions of €1,227.5 million to loans to affiliated entities and reversals of impairment losses on financial assets of €408.3 million. This was offset to some extent by impairment losses of €1,092.3 million.

Trade receivables decreased by €256.1 million to €1,160.4 million and mainly comprise receivables from trading activities and consumption accruals for electricity and gas deliveries not yet invoiced.

Receivables from affiliated entities decreased by €793.6 million to €1,690.4 million. They mostly comprise receivables from intercompany settlement transactions as part of centralized financial and liquidity management, as well as claims from profit and loss transfer agreements.

The decrease in other assets by €881.8 million to €971.0 million was attributable, on the one hand, to a decrease in the collateral to stock markets and trade partners by €447.5 million due to changes in market prices and a corresponding adjustment to the hedge strategy. On the other hand, the purchase price claim for the sale of minority shareholdings in EnBW Übertragungsnetz Immobilien-gesellschaft mbH & Co. KG, which is due at the latest in 2028, was transferred to a trustee in a Contractual Trust Arrangement (CTA) in order to cover the claims from pension commitments.

Cash and cash equivalents of EnBW AG totaling €5,657.1 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 €3,776.9 million to €897.4 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 €6,498.6 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. The decrease in provisions for pensions and similar obligations by €519.5 million resulted mainly from the transfer of assets of €822.3 million to another CTA, which was carried out as part of the transfer of pension commitments. In addition, provisions relating to nuclear power of €3,591.1 million are disclosed, which are formed to fulfill public law obligations and requirements in the operating licenses.

Of the liabilities totaling €23,751.7 million, €17,402.2 million have a residual term of more than one year. Overall, there are liabilities of €16,981.8 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 increase in liabilities by €2,632.9 million was mainly attributable to the increase in liabilities to affiliated entities and investments by €3,811.4 million. This was offset to some extent by the decrease of €1,132.3 million in other liabilities. The decrease in the collateral to stock markets and trade partners by €1,280.4 million was mainly due to changes in market prices and a corresponding adjustment to the hedge strategy.

Non-current liabilities exist to the amount of €11,204.7 million to EnBW International Finance B.V. as part of the Debt Issuance Program (DIP), of which €3,803.6 million is attributable to five subordinated bonds, a private placement of bonds and promissory notes, and €1,742.3 million to loan agreements with credit institutions. The main changes in comparison to the previous year were the issuing of six new bonds with a total volume of €3,309.2 million via EnBW International Finance B.V., the issuing of a subordinated bond with a volume of €500.0 million and taking out a bank loan of €250.0 million. This was offset to some extent by the repayments of a subordinated bond with a volume of €500.0 million and bank loans of €295.5 million.

The decrease in deferred income by €3,537.1 million to €1,419.6 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 €29,493.3 million are offset by long-term debt of €26,547.2 million.

At all times during the reporting year, the liquidity of EnBW AG guaranteed the solvency of the company for the payment of current liabilities from the operating business.

Financial position of EnBW AG

In comparison to the reporting date in the previous year, the liquidity of EnBW AG fell from €6,457.2 million by €800.1 million to €5,657.1 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 2024 financial year are summarized below:

Cash inflows of around €600 million were generated in the operating business of EnBW AG and the subsidiaries within the intercompany cash pooling system.

Cash outflows from investing activities stood at around €3,700 million. Significant effects included cash outflows from investment in fixed assets of €2,200 million, capital measures at subsidiaries of €1,800 million and other financial investments of €700 million. These were offset to some extent by cash inflows from interest and dividends received of €1,000 million.

Overall, financing activities generated cash inflows of around €2,300 million. Significant effects included cash inflows from the increase in financial liabilities of €4,200 million, which was offset to some extent by cash outflows for repayments of financial liabilities of €1,000 million and interest and dividends paid of €900 million.

Overall assessment of the economic situation and the 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 2024 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 €1,150 million in 2024, influenced by positive effects not relevant to the ongoing management of the company of around €250 million.

The annual net profit for 2024 stands at €729.9 million and was significantly 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 net profit/loss for 2024 was influenced by negative effects not relevant to the ongoing management of the company of around €500 million.

The main effects not relevant to the ongoing management of the company were impairment losses on financial assets of €1,092.4 million. Other negative effects were additions to the provisions relating to nuclear power of €354.0 million (of which €186.7 million was reported as cost of materials of EnBW AG), additions to the provisions for onerous contracts of €251.8 million, increased expenses for pensions of €149.8 million and impairment losses on intangible assets and property, plant and equipment of €84.1 million.

These effects were offset to some extent by income from reversals of impairment losses of €408.3 million, income from intercompany restructuring of €305.5 million, higher income from reversals of provisions of €203.2 million and income from the reversal of impairments of receivables of €120.8 million. Other significant effects included the reversal of nuclear provisions of €246.3 million, reversals of provisions for onerous contracts of €120.2 million and other provisions of €114.3 million. Furthermore, there were interest rate effects on non-current provisions of €172.9 million (of which €151.4 million was reported in the interest result of EnBW).

Based on the annual net profit of €729.9 million, and taking into account the profit carried forward of €749.1 million and the transfer into other revenue reserves of €360.0 million, there are retained earnings of €1,119.0 million.

We anticipate an annual net profit in the order of €1,000 million in 2025. This will be influenced by positive effects not relevant to the ongoing management of the company of around €150 million. Adjusted for these effects, the annual net profit will be around €850 million.

The amount that is ineligible for distribution as dividends is expected to be around €10 million as of 31 December 2025 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 [\(p. 107⁷\)](#).

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 €79.80 at the start of 2024 and stood at €60.00 by the end of the year.

In the long term, EnBW plans to pay out no more than 40% to 60% of the adjusted Group net profit in dividends. Based on the annual net profit of €729.9 million, and taking into account the profit carried forward of €749.1 million and the transfer into other revenue reserves of €360.0 million, there are retained earnings of €1,119.0 million and thus dividends will be paid for the 2024 financial year. If approved by the Annual General Meeting, the dividend to be distributed for the 2024 financial year will be €1.60 per share. This corresponds to a dividend payout ratio of 29% 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 [↗](#)

Overall assessment of the economic situation of the Group

As an integrated energy company, we are pushing forward the development of a sustainable energy infrastructure fit for the future in all business fields along the entire energy industry value chain. Sustainability is an important element of our business model and our strategy, which is reflected in our EnBW Sustainability Agenda 2.0. We continued to pursue our strategic goals by, for example, accelerating the expansion and take-up of renewable energies, optimizing the grid infrastructure, realizing our fuel switch projects and expanding e-mobility. Organized in three segments, we plan to invest heavily over the next few years to further accelerate the pace at which the energy infrastructure of the future is being developed.

€4.9 billion

Adjusted EBITDA

In 2024, the operating business at a Group level developed as expected. The adjusted EBITDA for the Group fell by 23.0% compared to the previous year but was within our forecasted range. All of our segments also achieved both their earnings forecasts and their forecasted shares of adjusted EBITDA in 2024. The result in the Sustainable Generation Infrastructure segment fell considerably as expected. The adjusted EBITDA for the Renewable Energies area and for the Thermal Generation and Trading area were both lower than in the previous year. However, the adjusted EBITDA for the System Critical Infrastructure segment increased compared to the previous year, as did the adjusted EBITDA for the Smart Infrastructure for Customers segment. The share of adjusted EBITDA accounted for by low-risk earnings, which was reported for the first time in 2024, stood at 70.7% and was thus in line with our expectations. Non-operating EBITDA increased in comparison to the previous year. In contrast, the Group net profit/loss attributable to the shareholders of EnBW AG fell from €1,537.6 million in 2023 by €293.9 million to €1,243.7 million in the reporting period. Earnings per share were €4.59 in the 2024 financial year, compared to €5.68 in the previous year.

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. Net debt rose compared to the figure posted at the end of 2023 by €2,541.0 million. This was mainly attributable to the payments made within net investment that were not fully financed via retained cash flow. As a result of the decrease in retained cash flow and increase in net debt, the debt repayment potential in 2024 was significantly below the figure in the previous year but still within the target range we had set of between 13.0% and 16.0%. Gross investment in 2024 exceeded the level in the previous year by around 27%. Around 84.9% of overall gross investment was attributable to growth projects. The proportion of taxonomy-aligned expanded capex, which was reported for the first time in 2024, stood at 88.8% and was in line with our expectations.

88.8%

Proportion of taxonomy-aligned expanded capex

In the customers and society goal dimension, the Reputation Index improved in 2024 by one index point compared to the previous year to 56 points, which was in the middle of the forecasted range for 2024 of between 54 and 58 points. The Customer Satisfaction Index for EnBW fell by 5.4% in 2024 to a value of 123 but remained at a good level. Yello was able to further improve the satisfaction of its customers at an outstanding level. There was a clear improvement in SAIDI Electricity in 2024 to a very good level of 13.6 minutes of interruptions per end consumer, which was within our forecasted range, as in the previous year. In the environment goal dimension, we were able to increase the share of generation capacity accounted for by renewable energies to 58.7%. The CO₂ intensity of our own electricity generation fell in comparison to the previous year by 14.7% to 272 g/kWh 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 both the previous year and with other companies. In the area of occupational safety, the LTIF for companies controlled by the Group decreased in comparison to the previous year, while LTIF overall increased.

58.7%

Share of the generation capacity accounted for by RE

272 g/kWh

CO₂ intensity

83 points

People Engagement Index (PEI)

Overall, our company was able to achieve the expected results in the 2024 financial year thanks to its robust, integrated approach. The year was shaped by increased investment in growth projects, which we used to continue pushing forward the restructuring of the energy system in Germany.

Forecast

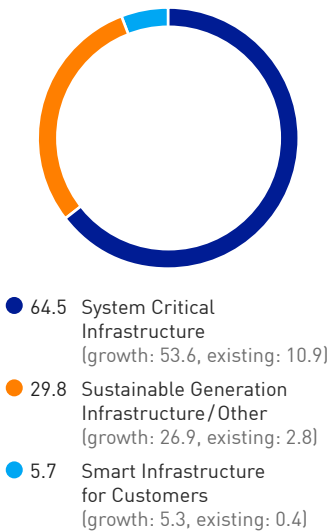
In our forecast we take a fundamental look at the expected growth and development of EnBW over the coming year and at our investments over a three-year period. It should be noted that the present conditions – such as the high volatility on the markets (p. 73 ff.⁷) – increase the level of uncertainty with which predictions about future developments can be made. The expected economic, political and regulatory conditions are presented in the chapter “General conditions” (p. 68 ff.⁷). Potential factors influencing the forecast are described in detail in the “Report on opportunities and risks” (p. 114 ff.⁷).

Expected trends in the finance and strategy goal dimensions

Investment over a three-year period

Following investment of €6.2 billion in the reporting year, gross investment of €25.5 billion is planned for the 2025 to 2027 period so that we can continue actively shaping the energy infrastructure of the future. This represents on average €8.5 billion per year. Some 86% of this investment will be on growth projects and 14% on existing projects. The majority of the gross investment (85%) will be made 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 2025–2027
in %¹



¹ The figures may not add up due to rounding differences.

Around 30% (about €7.6 billion) of the investment is planned for the **Sustainable Generation Infrastructure** segment and for other investment (about 2%). Investment of around €5.3 billion is planned for the expansion of renewable energies, which corresponds to 21% of the gross investment. This includes funds for the realization of further offshore wind farms, such as our EnBW He Dreih wind farm that will be placed into operation in 2025. We have secured the offshore wind rights for the construction of offshore wind farms in Great Britain and also had our bid accepted for the right to develop the EnBW Dreekant offshore wind farm, which, like EnBW He Dreih, will be located in the German North Sea. We plan to invest in these projects within the three-year period. In addition, we also plan to invest in the construction of onshore wind farms and photovoltaic parks. Furthermore, the planned investment for the Sustainable Generation Infrastructure segment includes €1.8 billion for the thermal power plants. This is primarily for the construction of our three hydrogen-ready gas power plants in order to guarantee the future supply of district heating, in particular, from these three sites and maintain the security of supply in Baden-Württemberg. The hydrogen-ready gas power plant in Stuttgart-Münster will be placed into operation in 2025.

Around 65% (about €16.4 billion) of the investment will flow into the **System Critical Infrastructure** segment. 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. Both of these infrastructure projects are currently under construction. Extensive investment in the expansion, upgrading and renewal of the existing distribution grids is also planned by our grid subsidiaries. Our subsidiary ONTRAS Gastransport plans investment in the three-digit million euro range in the hydrogen core network within the three-year period.

Around 6% (about €1.5 billion) of the investment is planned for the **Smart Infrastructure for Customers** segment. This investment is mainly intended for the expansion of electromobility, as well as for the expansion of the telecommunications infrastructure.

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 in the energy infrastructure of the future, we intend to secure about half of the overall gross investment planned for the period 2025 to 2027 as cash returns in the form of **divestitures**. Almost 50% of these cash inflows will come from existing participation models. There will be other cash inflows from entering into further strategic partnerships in specific areas of the company, refinancing measures in the form of project financing and the receipt of building cost subsidies.

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

TOP

Development in 2025 (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	
	2025	2024	2025	2024
Sustainable Generation Infrastructure	€2.4 to €2.7 billion	€2,633.1 million	45% to 55%	53.7%
System Critical Infrastructure	€2.3 to €2.6 billion	€2,243.1 million	45% to 55%	45.8%
Smart Infrastructure for Customers	€0.25 to €0.35 billion	€323.9 million	5% to 5%	6.6%
Other/Consolidation		€-296.8 million		-6.1%
Total	€4.8 to €5.3 billion	€4,903.3 million		100.0%

The adjusted EBITDA in the **Sustainable Generation Infrastructure** segment is expected to be between €2.4 billion and €2.7 billion in 2025. The Renewable Energies area is expected to contribute €1.1 billion to €1.3 billion to earnings. This forecast is subject to the full commissioning and connection to the grid of our EnBW He Dreiht offshore wind farm in 2025. Furthermore, the expansion in other 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 by onshore wind farms in 2024 were below this level, we anticipate higher generation volumes in 2025 in comparison to the previous year. This will be offset to some extent by falling prices in comparison to 2024. In the Thermal Generation and Trading area, we anticipate that we will be able to compensate for falling income from power plant distribution as a result of lower prices through the commissioning of the grid stabilization plant in Marbach and the planned commissioning of the hydrogen-ready gas power plant in Stuttgart-Münster. We thus expect earnings at the same level as in the previous year. The share of the adjusted EBITDA for the Group accounted for by this segment is not expected to exceed that in the previous year.

The expected adjusted EBITDA for the **System Critical Infrastructure** segment will be higher in 2025 than in the previous year. The main reasons for this development will be 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. This will be offset to some extent by the increase in personnel expenses due to the continued rise in the number of employees. We expect a higher share of adjusted EBITDA for the Group accounted for by this segment in comparison to the previous year.

We expect the adjusted EBITDA for the **Smart Infrastructure for Customers** segment to be between €0.25 billion and €0.35 billion in 2025. The earnings performance will depend on the opportunity/risk profile for this segment, which will be influenced by strong recovery in competition in the B2B and B2C commodity business, the ramping up of electromobility and the development of the energy solution business. The share of adjusted EBITDA for the Group accounted for by this segment should be below the level in the previous year.

The **adjusted EBITDA for the EnBW Group** is expected to be between €4.8 billion and €5.3 billion in 2025. We also expect the adjusted EBITDA for the Group to be around the same level as this in 2026.

The expected **EBITDA** in 2025 and 2026 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 €2.3 billion and €2.7 billion in 2025 and thus above the level in the previous year. An EBT at the lower end of the range for 2025 is expected in 2026. 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 €4.8 billion to €5.3 billion, we expect to achieve a **retained cash flow** in 2025 of between €2.5 billion and €3.0 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 €3.9 billion and €4.4 billion. We expect that the retained cash flow in 2026 will be in the same range as forecasted for 2025.

Debt repayment potential

TOP

Key performance indicator

	2025	2024
Debt repayment potential in %	15–18	16.0

Despite our ambitious investment program, we expect a debt repayment potential in 2025 of between 15% and 18% which will confirm the good level achieved in the previous year. 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

	2025	2024
Share of adjusted EBITDA accounted for by low-risk earnings in %	≥ 70	70.7

The share of adjusted EBITDA accounted for by low-risk earnings is again expected to reach at least 70% in 2025, as in 2024. An increase in adjusted EBITDA for the System Critical Infrastructure segment and adjusted EBITDA for the Renewable Energies area at the same level as the previous year will contribute to this development.

Proportion of taxonomy-aligned expanded capex

TOP

Key performance indicator

	2025	2024
Proportion of taxonomy-aligned expanded capex in %	≥ 85	88.8

We expect the proportion of taxonomy-aligned expanded capex to reach at least 85% in 2025, which will mainly be attributable to our ongoing high investment in the expansion of the grids, investment in our offshore wind farms, such as the EnBW He Dreiht wind farm and our wind farms in Great Britain, and in the construction of the three hydrogen-ready gas power plants.

Expected trends in the customers and society goal dimension

TOP

Key performance indicators

	2025	2024
Reputation Index	55 – 59	56
Customer Satisfaction Index for EnBW/Yello	125 – 136/ 159 – 170	123/168
SAIDI electricity in min./year ¹	< 20	13.6

¹ 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

Various external factors could cause uncertainty for private households in 2025 and have a negative impact on the satisfaction of our customers. Potential negative effects could arise due to the continued weakness of the German economy (p. 39⁷) and the associated impact on employment and earnings prospects. We anticipate that weak consumer demand will persist among private households in 2025. Positive effects that will reduce the burden on private households, such as increases in wages covered by collective bargaining agreements and planned measures to compensate for cold progression. Will be offset by the negative effects of rising social costs and falling employment rates. There is also uncertainty associated with geopolitical changes (new government in the USA, war between Russia and Ukraine, Gaza conflict). We anticipate higher price sensitivity among private households in 2025 due to a fall in disposable income (higher rents and ancillary costs, discussions about higher property taxes for house and apartment owners and passing this on to tenants). Various effects related to the energy market could also impact the satisfaction of our customers. The use of different energy procurement models on the market means it will remain 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. Falling procurement prices for electricity and gas will be offset in 2025 by rising network user charges and government levies, due to, among other things, investment to support grid stabilization and to develop an energy infrastructure fit for the future.

To improve the satisfaction of our customers, we are expanding our range of sustainable energy industry services and energy solutions even further. 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. 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. We provide specialized services, such as the EnBW zuhause+ app and the EnBW dynamic electricity tariff, to help our customers properly understand and reduce their energy costs. By continuing the comprehensive expansion of fast-charging infrastructure in Germany and extending the EnBW HyperNetwork across Germany and Europe with our partners, we will also make the future of personal mobility more sustainable.

On this basis, we expect a slightly higher value for the Customer Satisfaction Index for EnBW of between 125 and 136 points and for Yello of between 159 and 170 points in the 2025 financial year. This means that the Customer Satisfaction Index for Yello is likely to exceed the target value of 148 to 159 points for 2025 defined in our strategy (p. 39⁷).

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 13.6 minutes in 2024. We will continue striving to achieve a value of consistently below 20 minutes in the 2025 financial year and subsequent years.

Expected trends in the environment goal dimension

TOP

Key performance indicators

	2025	2024
Installed output of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE in %	7.9 – 8.2/63 – 64	6.6/58.7
CO ₂ intensity in g/kWh ¹	290 – 350	272

¹ The calculation for this performance indicator does not include 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 RE will increase significantly in 2025. This forecast is subject to the full commissioning of our EnBW He Dreht offshore wind farm in 2025. We also expect the further expansion of our onshore wind farms and photovoltaic power plants. In 2025, this includes the commissioning of the Langenenslingen solar park with an output of around 80 MWp, which will become the largest photovoltaic park in Baden-Württemberg. In subsequent years, we also expect a continuous rise in the installed output of renewable energies, which will increase the share of the generation capacity accounted for by RE even further. In addition, we will place our first hydrogen-ready gas power plant in Stuttgart-Münster with an installed output of 124 MW into operation in 2025. It will replace the existing coal and heating oil-fired power plants at this location and will be operated using natural gas until it is converted to hydrogen. The forecasted values for 2025 now lie above the targets defined in our strategy (p. 39⁷). 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).

CO₂ intensity

Despite the increase in renewable generation, we anticipate that CO₂ intensity will increase again in 2025 as a result of higher generation volumes (on account of prices on the market) and an improvement in availability of our thermal power plants compared to 2024. In combination with wind yields, which are forecast using the long-term average, we anticipate that CO₂ intensity in 2025 will be between 290 g/kWh and 350 g/kWh and is likely to be below the target value for 2025 defined in our strategy (p. 39⁷).

Expected trends in the employees goal dimension

TOP

Key performance indicators

	2025	2024
People Engagement Index (PEI) ¹	≥ 78	83
LTIF for companies controlled by the Group ^{2,3,4}	2.1	2.3
LTIF overall ^{2,3}	3.5	4.0
LTIF energy ^{2,4,5}	2.5	–
LTIF overall ^{2,5}	3.7	–

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

2 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. 41.

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

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

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

People Engagement Index

The People Engagement Index (PEI) stood at 83 points in the reporting year. We were thus able to once again slightly improve on the very good result in the previous year (82 points). An international benchmark index compiled using similar questions at numerous companies from various different sectors was unchanged at 74 points in 2024. Taking into account this global benchmark score, we are once again striving to achieve a target value for the PEI of at least 78 points in 2025 as in the previous year.

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. In 2025, we will continue implementing the measures we introduced to improve occupational safety – especially in the area of conventional generation – in the reporting year. 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).

In the 2025 financial year, the existing LTIF performance indicators will be supplemented by LTIF energy (excluding waste management) and extended LTIF overall, which includes waste management, and then be replaced by them in the 2026 financial year. 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 and excluding contractors.

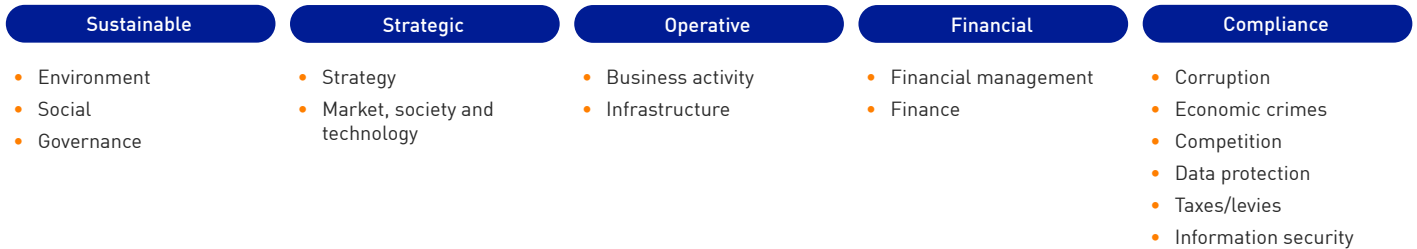
Overall assessment of anticipated developments by the management

We expect an adjusted EBITDA for the Group in 2025 of between €4.8 billion and €5.3 billion, which will be contributed to by higher earnings from the System Critical Infrastructure segment in comparison to the previous year. 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 development in 2025.

Report on opportunities and risks

Principles of the integrated opportunity and risk management system

Opportunity and risk map



ESRS 2 IRO-1: Description of the processes to identify and assess material impacts, risks and opportunities

ESRS 2 ↗

ESRS 2 GOV-5: Risk management and internal controls over sustainability reporting

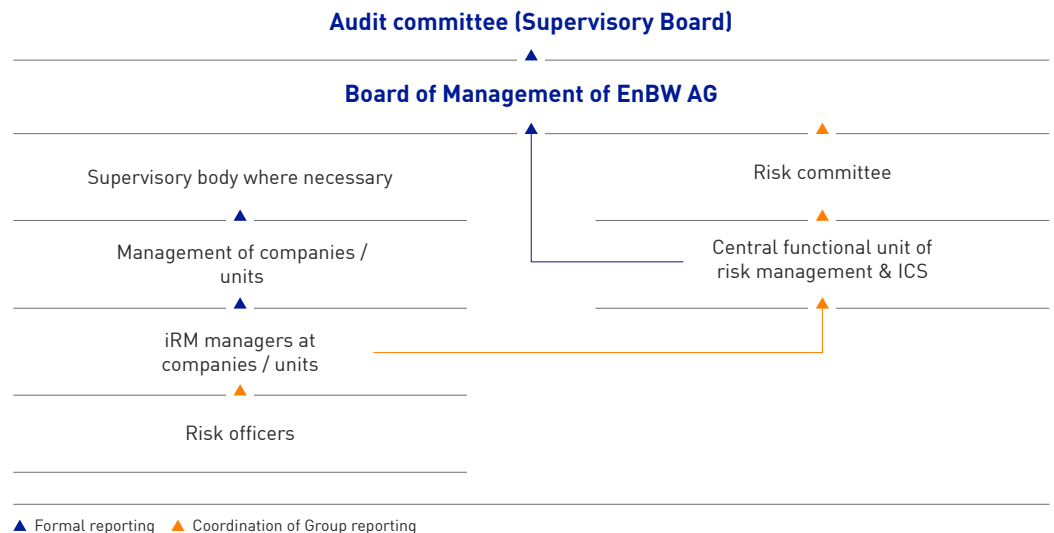
ESRS 2 SBM-3: Material impacts, risks and opportunities and their interaction with strategy and business model

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 for the Group. The risk map is used to 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 non-financial declaration, the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) are also taken into account.

The opportunity and risk map and the iRM process are continuously refined and amended to take account of the regulatory requirements and the specific reporting needs of the company. Climate-relevant matters are firmly anchored in the opportunity and risk map and embedded in the iRM.

Structure and processes of the integrated opportunity and risk management system

Structure and process of the iRM system



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. The reports consider the possible impacts of opportunities and risks on, in particular, 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. 39⁷). The possible effects on the key non-financial performance indicators (p. 40f.⁷) are discussed with those responsible in the specialist areas.

Opportunities and risks are evaluated within the medium-term planning period. The financial valuation is used to determine the potential ranges and expected values. If they lie above the uniformly defined thresholds in the relevance filter, the opportunities and risks are included in the Group report on opportunities and risks. The top risks/opportunities are opportunities and risks that are of particular importance. 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 medium-term planning. 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 provisions are made.

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. 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

Relevance class	5	6
Sustainability Achievement of sustainability targets, impact on business relationships	At least one of the following impacts: <ul style="list-style-type: none"> • One sustainability target for the EnBW Group is not achieved • Business relationships massively disrupted beyond the company/business unit/functional unit level or negatively impacted Group-wide 	At least one of the following impacts: <ul style="list-style-type: none"> • Several or all sustainability targets for the EnBW Group are not achieved • Business relationships massively disrupted Group-wide
Strategic Achievement of strategic targets	One strategic target for the EnBW Group is not achieved	Several or all strategic targets for the EnBW Group are not achieved
Operative Achievement of corporate targets, functional processes, retaining added value, effect on customers/external effects	<ul style="list-style-type: none"> • One key operational target for the EnBW Group is not achieved • Value added is massively disrupted beyond the company/business unit/functional unit level 	<ul style="list-style-type: none"> • Several or all operational targets for the EnBW Group are not achieved • Value added throughout the whole Group is massively disrupted
Financial Achievement of financial targets, generally in accordance with medium-term planning or approved (project) budgets	> €50 million (relevance threshold for functional units and EnBW Group)	> €250 million
Compliance Compliance with legal/official regulations and internal regulations	Breach of legal/official regulations and/or internal regulations with negative consequences for the EnBW Group	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.

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.

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 using the probability of occurrence and the extent of the impacts on the balance sheet of a potential misstatement in relation to the financial statement items concerned. 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 divided into units whose processes and the preparation of financial statements are managed by the central shared service department at EnBW AG and units that manage their own accounting. The process described below is that for the units covered by the shared service department. Units that manage their own accounting are responsible for the appropriateness and effectiveness of an accounting-related ICS. The ICS officer at Group level assists the material units of this type with the implementation of standardized procedures and also consolidates collected data. In addition, these units issue a declaration to confirm the appropriateness and effectiveness of their accounting-related ICS.

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 relevant companies/units, significant items in the financial statements and processes, including their associated control measures.

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 used for the iRM process, as well as 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 five categories: "sustainability," "strategic," "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, an assessment of the management of the risk is carried out by the risk officer. As an internal control mechanism, 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. The results flow into 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 are summarized in the effectiveness report and presented to the auditor and the internal audit department during the audit of the early risk detection system. The Board of Management reports on the results to the Supervisory Board and substantiates the findings.

As of the reporting date of 31 December 2024, there were no findings in 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.

ESRS 2 IRO-1: Description of the processes to identify and assess material impacts, risks and opportunities

ESRS 2 ⁷

Risks and opportunities as part of the double materiality assessment

In the 2024 financial year, we carried out a double materiality assessment according to the European Sustainability Reporting Standards (ESRS) for the first time. In addition to the impacts, we analyzed and evaluated the opportunities and risks derived from these. Refer to ESRS 2 IRO-1 [p. 135ff.⁷] for detailed information on the double materiality assessment. In order to guarantee that the requirements are fulfilled, we use the established iRM methods and the associated process. In this context, the iRM also identifies opportunities and risks related to climate change mitigation and thus provides important impetus for implementing the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). You can find further information on this subject on p. 230⁷.

We identified the following material risks during the materiality assessment:

- In connection with E1: “Expansion of major projects” [p. 122⁷] and “Fluctuations in energy yield in the North Sea and Baltic Sea” [p. 122f.⁷]
- In connection with S4: “Market ramp-up of battery storage solutions” [p. 124⁷]

In the following section, we describe the fundamental opportunities and risks connected with the EnBW business model and the activities based upon it.

Environmental standards E1, E2, E3, E4, E5

Risks generally exist in the approval and auction processes for renewable energy power plants. 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 report on the top risk “Expansion of major projects” in this regard [p. 122⁷]. 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. 97f.⁷]. In addition, risks exist in the area of environmental protection due to the operation of power and heating generation plants and infrastructure facilities, with the consequences this could potentially have for air, water, soil and nature. The importance of climate protection is taken into account in, for example, the key performance indicator CO₂ intensity [p. 99⁷]. We counter such risks using, among other things, an environmental management system certified according to ISO 14001 or validated according to EMAS, which has been established at EnBW AG and other subsidiaries [p. 97ff.⁷]. We likewise take the safety of the population and the protection of the environment very seriously.

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. We report on the top opportunity / top risk “Fluctuations in energy yield in the North Sea and Baltic Sea” in this regard [p. 122⁷]. The process for identifying climate-related risks and opportunities includes an analysis of physical climate risks and the development of mitigation and adaptation measures [p. 137f.⁷]. Transition risks [p. 138ff.⁷] and physical risks related to biodiversity [p. 139⁷] were also taken into account. The recommendations from the TCFD are continuously implemented and are communicated in the reporting on opportunities and risks.

Social standards:

S1: Own workforce

As a result of a persistent level of competition on the labor market, especially for qualified and highly qualified specialists, there is a fundamental risk for the recruitment of employees that the company will not be able to secure a sufficient number of employees with the necessary qualifications at the right time. Actions such as our intensive measures to strengthen the company’s reputation as an employer, the improvement and acceleration of our recruitment processes, the needs-based staffing of the recruiting department with sufficient employees to expand our training measures and improve efficiency through digitalization projects make an important contribution to mitigating

this risk. We believe that anonymous annual 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. 99 f.⁷).

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. 100⁷).

S2: Workers in the value chain

In the area of procurement, risks cannot be excluded due to increasing levels of complexity, a high level of competition and the growing demand for, and heightened public interest in, 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. As part of our raw materials procurement process, we also carry out a comprehensive business partner audit that evaluates human rights and environmental risks.

S3: Affected communities

Our own operations, such as the expansion of renewable energies, have an impact on biodiversity and local ecosystems. Accidents are also a possibility and may not only impact affected communities but also our own operations if they result in the shutdown of plants, lawsuits, strikes, fines or a drop in demand due to a loss of reputation. We counteract these risks by holding continuous discussions, initiated at an early stage, with relevant stakeholders on the basis of transparent information about the necessary conditions for the development of efficient, reliable and sustainable infrastructure (p. 52 ff.⁷).

S4: Consumers and end-users

Opportunities and risks arise as a result of intensified competition in the new and existing customer business when new competitors enter the market. This is accompanied by recurring volatile and politically uncertain framework conditions. Opportunities exist, above all, in the provision of a broader range of customer-specific products and services, such as the expansion of additional business, which we are achieving by 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 and the EnBW dynamic electricity tariff, to help our customers properly understand and reduce their energy costs. The slow and inadequate rollout of smart metering systems is currently making the quick and comprehensive digitalization and marketing of smart products more difficult. EnBW also continued to expand its range of electromobility products and services, sustainable and digital energy industry services and energy solutions in 2024 and targeted its sales activities in this direction (p. 95 ff.⁷). With respect to the personal safety of consumers and end-users, we report on the top risk "Market ramp-up of battery storage solutions" (p. 124⁷).

Governance standard G1

The observance of relevant legal regulations and internal company rules forms the basis of our business activities. Managing compliance and data protection risks at EnBW is the task of the compliance and data protection management systems, in which regular assessments of the following risks are carried out: corruption, bribery, antitrust and data protection risks, as well as other economic crimes (including fraud). Further information on how we handle compliance risks can be found on p. 45 ff.⁷.

ESRS 2 IRO-1: Description of the processes to identify and assess material impacts, risks and opportunities

ESRS 2 [↗](#)

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, the 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. Unless stated otherwise, the extent of the damage is measured based on the impact on adjusted EBITDA and net debt. The risk classification is based on the performance indicator that is impacted the most. The effects break down as follows:

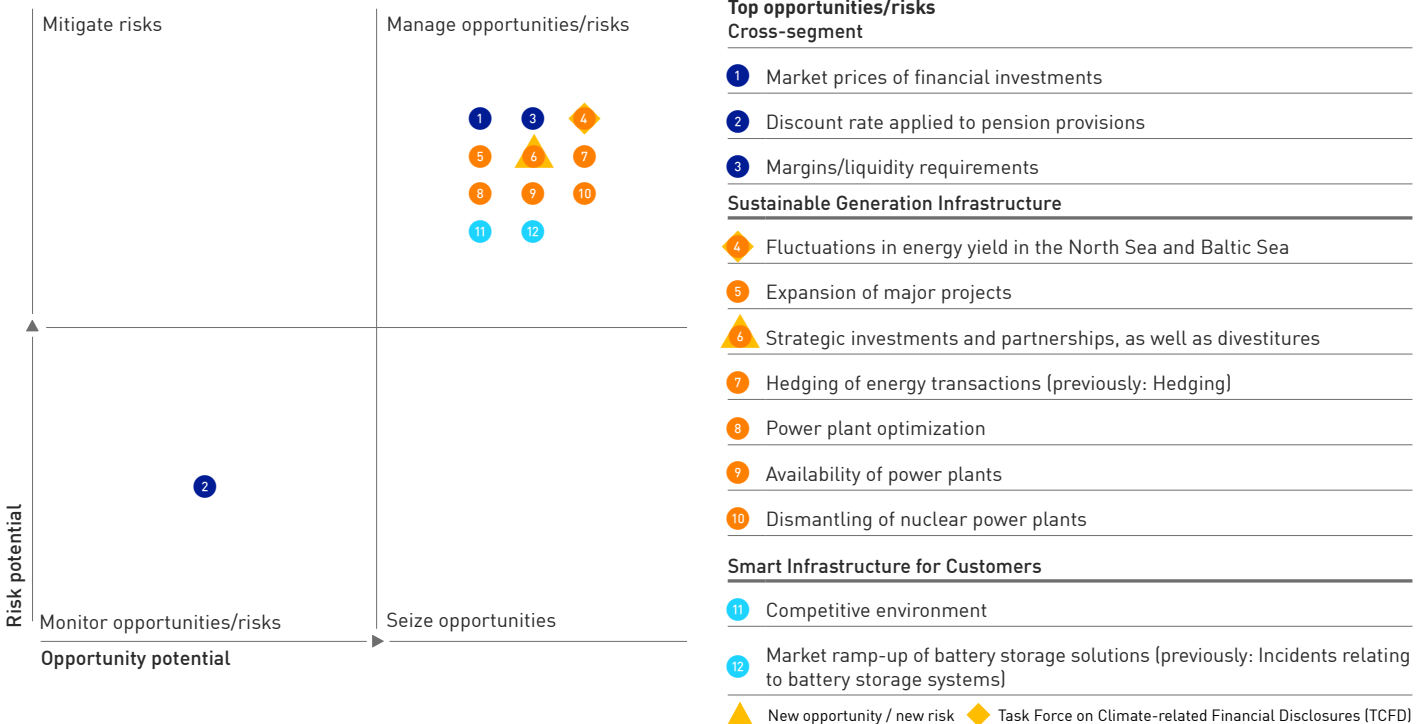
Classification of the level of opportunity/risk

	Adjusted EBITDA	Net debt
Low	> €0 million to < €200 million	> €0 million to < €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 31/12/2024



Details on the top opportunities/risks and their potential effects on the relevant performance indicators are listed in the following section.

Changes compared to the 2023 financial year

The following top opportunities/risks were new in 2024:

- Strategic investments and partnerships, as well as divestitures

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:

- Credit risk in energy trading (below the reporting threshold)
- State-sponsored cyberattacks due to the war between Russia and Ukraine (the general risk of cyberattacks persists)

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 has not been possible so far to reach such an agreement due to a difference of opinion on the valuation. Therefore, there continues to be a risk in 2025 of losing the water grid without receipt of adequate compensation.

Financial opportunities and risks

1 Market prices of financial investments: The financial investments managed through the asset management system are subject to opportunities and risks that arise from price fluctuations and other fluctuations in value as a result of the volatile financial market environment. Interest rate changes could lead to higher or lower refinancing costs and negatively or positively impact the level of debt as a result. To improve the opportunity/risk ratio of the portfolio, we rigorously focus on sustainability criteria in our investments. Interest rates fell during the course of the year. There is a moderate level of opportunity and moderate level of risk in 2025 and 2026. 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 2024, the discount rate was 3.45%, which was up 0.3 percentage points on the rate at the end of 2023 (3.15%). Against the background of the expected development of interest rates, we identify a significant level of opportunity and a significant level of risk for 2025 and a material level of opportunity and a significant level of risk for 2026. This will have an impact on net debt and thus on the key performance indicator debt repayment potential.

3 Margin/liquidity requirements: The Group's liquidity planning is subject to an inherent degree of uncertainty, especially with respect to margin payments. Sharp changes in prices and high volatility in energy trading on the commodity markets (EEX/ICE) have led to high liquidity inflows and outflows as part of margining processes which are beyond the normal margin requirements. This risk is reduced significantly by using bank guarantees instead of cash securities. There are also credit risks in relation to securing liquidity at subsidiaries. There is a significant level of opportunity and a significant level of risk for 2025 with an impact on net debt and thus on the key performance indicator debt repayment potential.

Compliance opportunities and risks

Compliance risk assessments focus, in particular, on assessing risks and defining appropriate preventative measures in the risk areas of corruption and bribery, antitrust law, other economic crimes 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. 45ff.⁷.

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 departments.

Sustainable Generation Infrastructure segment

Financial opportunities and risks

4 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 a low level of risk for 2025 and 2026 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.

5 Expansion of major projects: We face various challenges when realizing major projects, especially those in the area of offshore generation and the expansion of our solar capacities. One of the main uncertainties until the time the final investment decision is taken are changes that may be made to regulatory framework conditions. Any changes to the regulatory environment can have a big influence on the planning and implementation of our projects. There may also be additional effects arising from increasing prices and the limited availability of materials and raw materials. There are potential impacts on the key performance indicator adjusted EBITDA and share of adjusted EBITDA accounted for by low-risk earnings and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow. Changes to investment decisions can also impact the key performance indicator proportion of taxonomy-aligned expanded capex.

6 Strategic investments and partnerships, as well as divestitures: We monitor our current and potential markets with respect to the opportunities and risks associated with strategic investments and partnerships. This includes both acquisitions and divestitures. When planning an investment project that will be developed together with a partner, there is a risk that the partnership cannot be entered into at all or cannot be entered into by the scheduled date and/or in the intended amount. Possible changes to these projects may have an impact on net debt and therefore on the key performance indicator debt repayment potential. Furthermore, they could have an impact on the key performance indicator proportion of taxonomy-aligned expanded capex.

E1: Climate change

ESRS E1 ↗

ESRS 2 IRO-1: Description of the processes to identify and assess material impacts, risks and opportunities

E1: Climate change

ESRS E1 ↗

ESRS 2 IRO-1: Description of the processes to identify and assess material impacts, risks and opportunities

7 Hedging of energy transactions (previously: Hedging): When selling electricity volumes generated at EnBW, there are generally opportunities and risks associated with rising or falling electricity prices, as well as with the favorable or 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 opportunities and 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 a low level of risk for 2026 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.

8 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 a low level of risk for 2025 and 2026 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.

9 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 no opportunity and a low level of risk in 2025 and 2026. 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. 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

10 Dismantling of nuclear power plants: For long-term major projects such as the 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 a low level of risk for 2025 and a low level of opportunity and a moderate level of risk for 2026 with an impact on net debt and thus on the key performance indicator debt repayment potential.

Smart Infrastructure for Customers segment

Financial opportunities and risks

11 Competitive environment: Competition in the new customer and existing customer business remains challenging due to the spread between the prices for existing and new customers. There is increased volatility with respect to customer attrition. We have developed ambitious targets for securing new customers, especially in additional business and in the heat pump sector. In the area of electromobility, the procurement of charging electricity leads to price fluctuations that cannot be passed on to customers straight away. Regulatory interventions and a slowdown in the sale of electric cars have an influence on margins and sales of charging volumes. Consistently high prices and a rise in new customer activities have increased the risk of bad debt, as has our basic supplier status. There is a low level of opportunity and a low level of risk for 2025 and no opportunity and a low level of risk for 2026 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.

S4: Consumers and end-users

ESRS S4 [↗](#)

ESRS 2 IRO-1: Description of the processes to identify and assess material impacts, risks and opportunities

12 Market ramp-up of battery storage solutions (previously: Incidents relating to battery storage systems): Following a comprehensive package of measures in response to the incidents relating to battery storage systems at SENEK, the biggest challenge now is to restore customer confidence. In terms of any remaining residual risks, there is no opportunity and a low level of risk for 2025 and 2026 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.

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		●												
Sustainable Generation Infrastructure														
4 Fluctuations in energy yield in the North Sea and Baltic Sea	●	●	●				●							○
5 Expansion of major projects	●	●	●	●			●						○	○
6 Strategic investments and partnerships, as well as divestitures		●		●									○	○
7 Hedging of energy transactions (previously: Hedging)	●	●	⊘				●							
8 Power plant optimization	●	●	⊘				●							○
9 Availability of power plants	●	●	⊘				●	○						○
10 Dismantling of nuclear power plants		●						○						
Smart Infrastructure for Customers														
11 Competitive environment	●	●	⊘		●			○	○		○			
12 Market ramp-up of battery storage solutions (previously: Incidents relating to battery storage systems)	●	●	⊘		●			○			○			

- Direct effect
- ⊘ Indirect effect via the denominator for the performance indicator (adjusted EBITDA)
- Potential / long-term effect
- ◆ Task Force on Climate-related Financial Disclosures (TCFD)

Overall assessment by the management

In the current financial year, we are expecting to be confronted by falling margins, increasing costs and more intense competition, which could impact our earnings performance and investment planning. Current interest rates on the capital market could continue to have a negative impact on refinancing costs and, as a result, on the level of debt. There is still uncertainty with respect to the development of political and economic framework conditions for the energy sector, which is accompanied by a general threat of cyberattacks. Growing regulatory and legal requirements and increasing complexity and dynamics will have an impact on the whole Group. These factors influence planning uncertainties for investment projects, especially major projects in the area of sustainable generation infrastructure. Opportunities may also arise, for instance, with respect to the availability and distribution of power plant capacities, as well as the hedging of energy transactions. Competition in the new customer and existing customer business remains challenging and is characterized by rising risks due to fluctuating prices, especially in the area of electromobility. We also face a challenge in successfully establishing our battery storage solution on the market.

Nevertheless, the overall risk position has improved slightly in comparison to the previous year. No risks currently exist that might jeopardize the EnBW Group as a going concern.

Disclosures pursuant to sections 289a sentence 1 and 315a sentence 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 sentence 1 and 315a sentence 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. 307⁷].

Restrictions relating to voting rights or transferability of shares

Agreements were reached on 22 December 2015 between, on the one hand, Zweckverband Ober-schwäbische 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 2024, 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 sentence 1 no. 8 and 315a sentence 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 €2.0 billion
- committed credit lines with banks with a volume of €2.4 billion
- bilateral bank loans with a volume of around €1.8 billion
- promissory notes with a volume of €0.6 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 €0.6 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 €0.4 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.

Note

Nos. 4, 5 and 9 of sections 289a sentence 1 and 315a sentence 1 HGB were not relevant for EnBW in the 2024 financial year.

Sustainability statement

ESRS 2: General disclosures

BP-1 – General basis for preparation of the sustainability statement

In accordance with sections 315b and 289b German Commercial Code (HGB), the EnBW Group and EnBW AG are both obligated to issue a non-financial declaration. These two non-financial declarations are combined. Any differences between statements made for the EnBW Group and for EnBW AG are clearly identified in the text. As the highest-level parent company in the EnBW Group, EnBW Energie Baden-Württemberg AG prepares the non-financial declaration on a consolidated basis in accordance with section 315b HGB. In accordance with section 315c (3) in combination with section 289d HGB, we have used the European Sustainability Reporting Standards (ESRS) as a recognized framework for the preparation of the non-financial declaration for the first time. This is because of the importance of the ESRS, which was adopted as a reporting standard within the European Union in 2023. The datapoints reported in the declaration are derived from our double materiality assessment for determining material sustainability matters. For the 2024 financial year, we have mostly not reported on datapoints that are subject to voluntary reporting requirements or phased transitional provisions. Furthermore, our reporting is based on the International Integrated Reporting Framework and the recommendations issued by the Task Force on Climate-related Financial Disclosures (TCFD), while we also focus on the Sustainable Development Goals from the United Nations.

The group of consolidated companies covered by the sustainability statement is the same as that used for preparing the financial statements of the EnBW Group and includes all fully and partially consolidated companies. Please refer to the notes to the 2024 financial statements of the EnBW Group for further information (p. 263 ff.⁷).

In the 2024 reporting year, the impacts and risks relating to the entire upstream and downstream value chain were taken into consideration when preparing the sustainability statement to ensure that above all those areas of the upstream and downstream value chain that contribute to material impacts, risks and opportunities are taken into account. This applies with respect to

- the extent to which the materiality assessment of impacts, risks and opportunities covers the value chain,
- the extent to which the policies, actions and targets extend to the value chain and
- the extent to which the value chain is covered by disclosed metrics.

We did not utilize the option to omit the disclosure of certain information on intellectual property, know-how or results of innovation, the option to omit the disclosure of information on impending developments or matters in the course of negotiation.

BP-2 – Disclosures in relation to specific circumstances

Time horizons and accuracy of the reporting

For our reporting in accordance with ESRS, we differentiate between different time horizons. The short-term time horizon corresponds to the reporting period for the financial statements for the EnBW Group, i.e., our financial year. The medium-term time horizon covers a period of up to five years from the end of this period, while the long-term time horizon covers periods of more than five years. Metrics based on value chain data estimated using indirect sources are only presented with respect to Scope 3 emissions (p. 156 ff.⁷). Further information on any estimates is provided together with the metric in the respective section. This includes a description of the basis for data collection for the metric and the resulting level of accuracy. Any planned actions to improve the accuracy of a metric are also explained, where necessary, together with the respective metric.

Furthermore, quantitative metrics and monetary amounts that are subject to a high level of measurement uncertainty are identified in the corresponding sections of the report. This applies only to the metric for political donations. As some of the figures were not final when preparing this sustainability statement, this amount contains estimates based on figures for the previous year. The sources of this measurement uncertainty and any assumptions and approximations made in the measurements are also explained, where relevant. This information is always provided in relation to the specific circumstances and together with the relevant metric.

ESRS disclosure requirements that derive from other legislation and are incorporated by reference

Please refer to “Datapoints that derive from other legislation” (p. 226 ff.⁷) and “Information incorporated by reference” (p. 229 ff.⁷) in the section “Indexes and tables.”

GOV-1 – The role of the administrative, management and supervisory bodies

Responsibilities and governance processes at EnBW comply with the statutory requirements. A stock corporation under German law has three administrative bodies: the Board of Management, the Supervisory Board and the Annual General Meeting. The tasks of the Board of Management, Supervisory Board and Annual General Meeting must be strictly separated by law. Accordingly, each of these bodies performs specific tasks. Good corporate governance is an essential part of the corporate culture at EnBW, whereby the composition and qualifications of the corporate bodies play an important role. The Board of Management and the Supervisory Board have each defined rules of procedure according to which they perform their organizational and supervisory duties. The members of the Board of Management have divided the responsibility for their duties between themselves in accordance with the published Allocation of responsibilities at Board of Management level (p. 44⁷). Please refer to the Declaration of Corporate Management (p. 245 ff.⁷) for information on the individual committees of the Supervisory Board. In addition, the integrated opportunity and risk management system, which is under the responsibility of the Chief Financial Officer, takes a holistic and integrated approach to effectively and efficiently identify, evaluate and manage opportunities and risks, as well as ensure the appropriateness and functionality of the processes.

You can find further information on the relevant expertise and experience of **members of the Board of Management** and their curricula vitae on the Internet.

[Online ↗](#)

The curricula vitae of the **members of the Supervisory Board** have also been published on the company website.

[Online ↗](#)

The members of the Board of Management and Supervisory Board have a wide range of academic backgrounds and possess comprehensive professional experience in the energy industry and other relevant sectors. In accordance with legal regulations and the Articles of Association, the Supervisory Board defines the number of members of the Board of Management and the qualifications they need and appoints suitable persons to fill these positions.

The Supervisory Board as a whole also possesses the required expertise and skills on sustainability matters to fulfill its duties. It took full account of the objectives for its composition during the reporting period with respect to both its overall composition and appropriate coverage of its competency profile. Further information on the competency profile and the respective competencies can be found in the declaration of corporate management. Please also refer to our explanations under “Management and supervision” (p. 43 ff.⁷), which includes information on the number of members of the Board of Management.

The gender diversity on the Board of Management and Supervisory Board and the percentage of independent members of the Board of Management and Supervisory Board are presented in the following table.

Diversity and independence of the Board of Management and Supervisory Board

	Unit	31/12/2024	31/12/2023
Diversity of the Board of Management			
Proportion of women on the Board of Management	%	20.0	20.0
Diversity of the Supervisory Board			
Proportion of women on the Supervisory Board	%	35.0	35.0
Percentage of independent members of the Supervisory Board	%	95.0	95.0

The Supervisory Board of EnBW AG is comprised of 20 members, half of which are representatives elected by the shareholders and half by employees. The term “independent” is not regulated uniformly for a supervisory body of a listed company. According to the German Corporate Governance Code (DCGK), a member of the Supervisory Board who is a shareholder representative in the sense of the DCGK is considered independent if he/she is independent of the company and its Board of Management and is independent of a controlling shareholder. The shareholder representatives on the Supervisory Board of EnBW AG are independent because they are considered independent in the sense of the DCGK. Further information can also be found in the declaration of corporate management.

Employee representatives are considered independent if they are detached from the company structures and free from any economic influence by the company and its Board of Management. More specifically, this means that they are not part of the management of the company and are not influenced by a dominating shareholder. Consequently, employee representatives are considered independent if they are not part of the management team at the company and have been elected or nominated to serve on the Supervisory Board within a legally recognized system of employee representation that provides adequate protection against abusive dismissal and other forms of unfair treatment. The representatives for top management on the Supervisory Board are thus not considered independent in this sense.

Training is provided to the Supervisory Board and Board of Management on a regular basis to cover continuously developing and evolving sustainability matters, including current trends, issues and developments. The members of these bodies can draw on the specialist knowledge in the sustainability department, accounting department and the responsible functional units at any time besides using their own expertise. For all material impacts, risks and opportunities, the specialist departments within the company have been identified that possess the necessary expertise and are available to answer questions. Documents covering relevant sustainability matters are made available to those involved in decision-making processes. Where necessary and depending on the subject matter, these documents are taken into account in the decision-making process. The fact that the Supervisory Board and Board of Management have skills and expertise with regard to the sustainability matters derived from the materiality analysis ensures that sustainability information is taken into consideration in strategic decisions.

Please refer to our information on corporate governance for a description of the roles involved in the monitoring process (p. 43 ff.⁷). The monitoring of the processes to define the corporate targets with respect to material sustainability matters and the progress made by the company in this regard are described in the section “Performance management system” (p. 38⁷).

GOV-2 – Information provided to and sustainability matters addressed by the undertaking’s administrative, management and supervisory bodies

The information and monitoring processes of the Board of Management and Supervisory Board are described under “Management and supervision” (p. 43 ff.⁷) and in the declaration of corporate management. The Board of Management and Supervisory Board are informed about relevant sustainability matters on a regular basis and then decide on how to address them. This information is integrated into relevant processes as necessary if the topic is considered pertinent. For example, the Board of Management was informed in 2024 about the progress of the EnBW Sustainability Agenda and how it has been updated (p. 33 f.⁷) and about reporting in accordance with the Supply Chain Due Diligence Act (LkSG). Individual business and functional units are involved in the relevant processes as necessary if the topic is considered pertinent or via the Sustainability Committee, which was newly formed in 2024. It comprises the heads of the business and functional units. Its purpose

is to ensure consistent implementation on a decentralized basis and transparent monitoring of progress. It meets at least twice a year to discuss, among other things, selected updates for implementing the EnBW Sustainability Agenda (p. 33f.⁷) that cover the material impacts, risks and opportunities (p. 135f.⁷) and also other relevant sustainability projects and issues.

In addition, information on the requirements of key sustainability rating agencies and other relevant stakeholder groups (p. 52⁷), on regulatory updates with respect to sustainability matters and on good practice examples from comparable peer companies is regularly provided to the boards for discussion. They are also informed about the results and effectiveness of the policies, actions, metrics and targets associated with sustainability matters.

EnBW has a central sustainability department that reports directly to the Chairman of the Board of Management and is responsible for addressing sustainability risks and opportunities. This department also coordinates and supports actions across all areas of the Group. Another important component is the integration of sustainability matters into the investment approval process and the risk management process (p. 42⁷).

GOV-3 – Integration of sustainability-related performance in incentive schemes

Based on proposals of its personnel committee, the Supervisory Board passes resolutions on the remuneration system for members of the Board of Management, including the main contractual elements, and reviews it on a regular basis. The criteria for determining appropriate remuneration include the duties and performance of the members of the Board of Management, the economic situation, the success and sustainable development of the company and the relationship between the remuneration of the Board of Management and the remuneration of top management and the workforce as a whole, as well as its development over time.

Sustainability matters are incorporated into various levels of the Board of Management remuneration system and have an influence on both the Short Term Incentive (STI) and Long Term Incentive (LTI).

The amount of the total preliminary STI remuneration, which is calculated exclusively on the basis of financial performance indicators, is then evaluated qualitatively using additional evaluation criteria. The adjustment is carried out by multiplying the total preliminary short-term remuneration by a certain factor, whose lowest value is 0.7 and highest value is 1.3. The size of this factor is primarily determined by the Supervisory Board on the basis of the evaluation criteria that are defined in advance on an annual basis. The sustainable growth of the company is an aspect that is particularly taken into account. The amount of the total preliminary LTI remuneration, which is calculated based on financial and non-financial performance indicators, is then evaluated qualitatively using additional evaluation criteria, as is the case for the STI.

Variable remuneration is also subject to sustainability criteria within the scope of the LTI. The Supervisory Board interprets the term “sustainability” broadly to mean more than environmental protection and conservation.

The calculation is performed using two to a maximum of four sustainability performance indicators. When selecting the sustainability performance indicators, the Supervisory Board endeavors to strike a sensible balance for the company with respect to the ESG (environment, social, governance) components and their associated themes.

The percentage of variable remuneration is based on the achievement of these sustainability-linked targets. From the LTI performance period 2022 to 2024 onwards, the target remuneration consists of two differently weighted partial remuneration amounts. The Supervisory Board has defined that between 50% and 70% of the variable remuneration can be attributed to the performance indicator EBT and therefore between 50% and 30% to sustainability performance indicators. Each partial remuneration amount will be achieved if the target value for the respective performance indicator is achieved to 100%.

Please refer to the **remuneration report** for further information.

[Online ↗](#)

The Supervisory Board is responsible for approving and regularly updating the incentive program. There are currently no climate-related considerations factored into the remuneration of the Supervisory Board of EnBW AG. There are several climate-related considerations factored into the remuneration of the Board of Management. This includes targets with respect to the expansion of renewable energies and also general ESG targets, such as the key performance indicator LTIF, to promote the sustainable development of EnBW.

GOV-4 – Statement on due diligence

We take compliance with due diligence into account in our corporate governance, our strategy and our business model.

Core elements of due diligence	Paragraphs in the management report, including the sustainability statement
Embedding due diligence in governance, strategy and business model	Business model, Strategy, Corporate governance and Report on opportunities and risks in the general section of the management report, as well as ESRS 2 GOV-1, ESRS 2 GOV-2, ESRS 2 GOV-3, ESRS 2 SBM-3
Engaging with affected stakeholders in all key steps of due diligence	ESRS 2 SBM-2
Identifying and assessing adverse impacts	ESRS 2 SBM-3, ESRS 2 IRO-1
Taking actions to address those adverse impacts	Measures in the topical standards
Tracking the effectiveness of these efforts and communicating	E1-4, E2-3, E3-3, E4-4, E5-3, S1-5, S2-5, S3-5, S4-5

GOV-5 – Risk management and internal controls over sustainability reporting

Our risk management and internal control system is presented in the “Report on opportunities and risks” (p. 114 ff.⁷).

SBM-1 – Strategy, business model and value chain

Products, services and markets

The business model section includes detailed information on important groups of products and services (p. 22 ff.⁷) and on customers and sales brands (p. 30⁷). We are not aware of any products or services that are prohibited in certain markets.

The company employs a significant number of employees. Information on the precise number of employees and their geographical distribution can be found in the section S1-6 Characteristics of the undertaking’s employees (p. 198⁷).

Our portfolio mainly comprises products and services in the energy sector, primarily in the generation of electricity and heating and the supply of energy, as well as in the water and waste management sectors. Information on revenue can be found on p. 80⁷. We are also active in the “gas” fossil fuel sector. In 2024, we generated revenue related to gas of €14,917.1 million (previous year: €21,895.4 million).

Our strategy 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 component of our corporate strategy. Please refer to the information provided on our strategy (p. 31 f.⁷) and the EnBW Sustainability Agenda (p. 33 f.⁷).

Business model and value chain

EnBW is one of the largest integrated energy companies in Germany and Europe and supplies electricity, gas and water together with products and services related to energy and infrastructure to its customers. EnBW's **upstream value chain** encompasses various sectors of the energy industry and covers all suppliers. It includes the exploration, development and production of energy sources and their import, conversion, transport and storage. Examples include the procurement of fuel for conventional power generation or the acquisition of wind power plants. The **downstream value chain** focuses on the provision and sale of energy to end customers, including both private households and also commercial and industrial customers. Furthermore, EnBW is a provider of smart infrastructure, such as digital solutions for electromobility, activities in the telecommunications sector and other household-related solutions. Please refer to the information on our business model for further information (p. 22 ff.⁷).

SBM-2 – Interests and views of stakeholders

Engagement with and importance of stakeholders

Continuous dialog with our internal and external stakeholders is an important tool for shaping and guiding our business activities (p. 52 ff.⁷). Our stakeholders are taken into account in the processes to identify and assess actual and potential impacts. The most important stakeholders include the capital market, customers, local communities, policy-makers, the general public and media, civil society, industrial partners and employees. We take affected stakeholders and also users of sustainability reports into account.

How we organize our stakeholder engagement

We take the perspectives of stakeholders into account in the materiality assessment via internal representatives. Specific departments or persons who have regular contact with stakeholders and can present their point of view are selected for this purpose. These representatives identify and confirm potential material impacts as part of the materiality assessment so that the interests of stakeholders are taken into account appropriately. To ensure that the views of stakeholders are comprehensively taken into account, we have set up an internal expert committee comprising these representatives from relevant departments. This committee aims to meet twice a year and met for the first time in the 2024 financial year. The accounting and sustainability departments are responsible for coordinating and documenting these meetings. These internal representatives should reflect the interests and views of stakeholders relevant to EnBW. We also survey the representatives about material themes from their perspective in writing as a form of documentation. These representatives are made aware of how important it is to stay in regular contact with the stakeholder groups to maintain continuous dialog with both internal and external stakeholders to take their needs and views into account on an ongoing basis. We are currently revising the entire process for engaging with stakeholders, developing, among other things, a stakeholder policy and reviewing formats so that the views and interest of stakeholders can be taken into account more effectively and in a more targeted manner.

Purpose and results of the stakeholder engagement

Regular dialog with stakeholders provides us with a basis to continuously validate our strategy and business model with respect to, among other things, their interests and views. It also provides important impetus for making strategic and informed decisions. As part of the materiality assessment, we analyzed the feedback from the internal representatives in detail. We also regularly receive feedback on our business activities via political dialog formats. The EnBW Sustainability Dialog event that was held in 2022 and 2023 and will be held again in 2025 gives relevant stakeholders the opportunity to discuss sustainability issues with the management team at EnBW. This has allowed the feedback and the interests of stakeholder groups to flow directly into the materiality assessment. The interests of our stakeholders are in line with the impacts, risks and opportunities we identified, so they did not provide us with any additional material matters.

Engaging with the interests of the own workforce (S1)

The interests, views and rights of our employees are taken into account in our HR strategy 2025 “Mensch im Mittelpunkt” and in our business model. Our managers should not just place expectations on their employees but also support them and lead their teams with assurance in a complex world. We also help employees by developing new forms of cooperation and by providing them with further training and education. We view the diversity of our employees as an area of potential. Our sustainable HR strategy comes under the strategic focal point “Culture of sustainability” in the EnBW Sustainability Agenda. The central works council also discusses sustainability matters so that the interests and issues it has can be taken into account in the further development of the EnBW Sustainability Agenda.

EnBW is mindful of human and labor rights and thus respects the associated rights of its employees. Fulfilling this commitment is a central aspect of our governance and anchored in the EnBW Code of Conduct and the EnBW Declaration of Human Rights. In this context, we do not tolerate any child and forced labor and respect freedom of association and the right to collective bargaining.

Engaging with the interests of value chain workers (S2)

Respecting the human rights of workers along our entire value chain is an important criterion for EnBW when it makes strategic decisions. We carefully screen and evaluate our business partners to determine whether they respect human rights (p. 203 ff.⁷). This ensures that human rights are respected throughout the entire value chain. Suppliers are obligated to comply with our Supplier Code of Conduct (SCoC), which guarantees, above all, respect for human rights, observance of social and environmental standards, compliance and fair collaboration. Suppliers who refuse to recognize the SCoC are blocked in the purchasing system.

Taking the interests of affected communities and consumers and end-users into account (S3 and S4)

We take the interests and rights of affected communities and consumers and end-users into account in our strategy by engaging in continuous dialog with internal and external stakeholders within these groups. These are important stakeholders and their views and rights, including the respect for human rights and the rights of indigenous peoples, are taken into account in corporate decisions.

The role of management and supervisory bodies

The members of the Supervisory Board of the EnBW Group have the responsibility of ensuring that they are kept informed about the views and interests of stakeholders regarding the impact of the company's sustainability-related actions. They are supported by, among others, experts from the sustainability team and other functional and business units. The Supervisory Board is also provided with appropriate training and education measures. The Chairman of the Supervisory Board is available to talk with investors about relevant matters, as recommended by the DCGK.

Between the meetings of the Supervisory Board, the Chairman of the Supervisory Board remains in regular contact with the Board of Management, especially the Chairman of the Board of Management, in order to discuss issues relating to strategy, planning, business development, the risk situation, risk management and compliance. The company informs the Chairman of the Supervisory Board immediately about any events important to the management of the company. If necessary, the Chairman will also inform the entire Supervisory Board and call an extraordinary meeting. Reporting between the Board of Management and Supervisory Board generally takes place during regular meetings and through the work of specialist committees. The Board of Management informs the Supervisory Board about important business transactions, strategic decisions, financial reports and relevant sustainability-related matters. Committees such as the audit committee and the finance, investment and sustainability committee prepare proposals for the resolutions taken by the Supervisory Board.

SBM-3 – Material impacts, risks and opportunities and their interaction with strategy and business model

Material impacts, risks and opportunities and their assessment

Material impacts, risks and opportunities are identified and assessed in the materiality assessment according to IRO-1. Risks and opportunities are reported in the “Report on opportunities and risks” (p. 114 ff.⁷). The actual and potential impacts identified influence the focus areas of our EnBW Sustainability Agenda (p. 33 f.⁷) within the framework of our 2025 strategy with outlook 2030. By expanding our business model to develop a balanced and diversified business portfolio along the entire value chain via our three central growth fields, we mitigate our actual and potential negative impacts.

Financial risks and the resilience of the business model

Please refer to our “Report on opportunities and risks” for information on material financial risks and their impact on the financial position, financial performance and cash flows of EnBW (p. 114 ff.⁷). Please refer to our “Assessment of the robustness of our business model against the background of climate change” for further information on the business model (p. 23 f.⁷).

IRO-1 – Description of the processes to identify and assess material impacts, risks and opportunities

Materiality assessment and its methodology

Our sustainability statement is based on the so-called double materiality assessment (hereinafter referred to as “materiality assessment”). In this materiality assessment, we examine and evaluate both impacts on people and the environment and sustainability-related financial risks and opportunities. We evaluate a sustainability matter as material when either the impact perspective (impact materiality) and/or risk/opportunity perspective (financial materiality) is material. Using the sustainability aspects listed in ESRS 1 Appendix A AR 16 as a basis, we have allocated our business activities to the topics and identified the impacts, risks and opportunities throughout this list. We take account of all relevant criteria in the process to identify material impacts, risks and opportunities. This includes location, activity, sector and structure. As we engage in broadly similar business activities across the entire EnBW Group, we decided to take a top-down approach with a subsequent bottom-up validation process. Our evaluation of the financial risks and opportunities was based on our existing risk management processes to ensure that risks and opportunities were evaluated consistently.

Impact materiality

We used the three segments “Sustainable Generation Infrastructure,” “System Critical Infrastructure” and “Smart Infrastructure” (similar to EnBW’s financial reporting) and their subordinate areas of activity to identify potential material impacts related to our own operations. In the process, we did not place particular focus on any individual activity or geographical location. The time horizons defined in the ESRS were used (p. 128 f.⁷). This applies for topics from all of the topical standards. Unless stated otherwise, the identified impacts, risks and opportunities are matters with short, medium and long-term (permanent or long-standing) effect.

We concentrated on the stage of the value chain “own operations” and for our business relationships on the stage “upstream” and integrated both into our materiality assessment. In the process, we took a risk-based approach and focused on those suppliers who were expected to have the biggest impacts, risks and opportunities. The materiality assessment will be extended to cover additional stages of the value chain over the next few years and then be gradually expanded until it covers the entire value chain (upstream and downstream).

In order to monitor material impacts, the materiality assessment will be carried out on an annual basis in future with at least an update. Important changes to the business model, such as the addition or removal of companies or business activities and any changes to existing business activities will be taken into account.

In accordance with ESRS 1, we identified four different types of impact.

Type of impact

	Positive	Negative
Actual	Actual positive impact	Actual negative impact
Potential	Potential positive impact	Potential negative impact

In the subsequent evaluation of these impacts, we used the following methodology:

- We evaluated “Actual positive impacts” based on their severity (the average of the severity factors scale and scope).
- We evaluated “Potential positive impacts” based on their severity (the average of the severity factors scale and scope) multiplied by their likelihood.
- We evaluated “Actual negative impacts” based on their severity (the average of the severity factors scale, scope and irremediable character).
- We evaluated “Potential negative impacts” based on their severity (the average of the severity factors scale, scope and irremediable character) multiplied by their likelihood.

Both the severity factors and the likelihood were evaluated according to a four-point rating scale. For every negative impact where one of the three factors (scale, scope and irremediable character) was awarded the maximum rating, we carried out a separate assessment to determine whether this factor was so serious that it would overshadow the others and make this impact serious or even material as a result. This methodology was not used for potential negative impacts related to human rights. In this case, the likelihood was disregarded and only severity was used for its rating. Based on our four-point rating scale, if an impact reached or exceeded a threshold value of 3 we classified this impact and the associated sustainability matter as material. The perspectives of any affected stakeholders were taken into account in both the identification of the impacts and their evaluation. The perspectives of the most important affected stakeholders were taken into account via the internal representatives at the company. These persons were asked to act as representatives for the respective group of stakeholders and identify potential material impacts (p. 133 ff.⁷).

Financial materiality

Risks and opportunities were identified within the segments described above in a way similar to that for impacts. We used previously identified impacts and also existing internal sources, such as our integrated opportunity and risk management system, for this identification process. This approach should ensure that we can identify risks and opportunities that derive from EnBW’s own impacts on sustainability matters and also those that derive from dependencies on natural and social resources. The time horizons defined in the ESRS were used. The risks and opportunities were evaluated in each case using the potential financial impacts and their likelihood. Both factors were evaluated according to a four-point rating scale and then multiplied together. In this case also, we classified the risk or opportunity and the associated sustainability matter as material if the risk or opportunity reached or exceeded a threshold value of 3. Potential financial impacts were evaluated using the EnBW risk management system as a basis and adjusting the rating scale to the classes in the EnBW risk inventory. Please refer to our disclosures in the “Report on opportunities and risks” (p. 114 ff.⁷).

Decision-making process

We used a four-step process to determine materiality. In the first step, the departments at EnBW AG identified potential material impacts, risks and opportunities (IROs) for the ESRS sustainability matters. In the second step, the core team for CSRD reporting evaluated these IROs centrally to ensure consistency in the evaluation process. These evaluations were then validated again by the departments at EnBW AG. In the third step, we carried out a survey of all fully and partially consolidated companies on the material sustainability matters to ensure that the process correctly reflected the situation across the entire Group. Our investments were able to provide feedback on material topics associated with their business model to the core team for CSRD reporting. This feedback was then used to finalize the materiality assessment. In the final step, we used the material impacts, risks and opportunities identified in this process to determine the content of the reporting in the following sections. This included determining how relevant an ESRS disclosure requirement (or datapoint) is for describing our material impacts, risks and opportunities and how relevant this disclosure requirement is for users of the sustainability statement.

In order to adapt the EnBW risk management system to the materiality assessment process, we will fully integrate the long-term time horizon required for the materiality assessment according to ESRS 1 into the risk management process alongside the short and medium-term time horizons already used.

Our data for the materiality assessment, which we carried out in accordance with ESRS for the first time in the 2024 reporting year, comes from internal sources, such as our policy statement and the integrated opportunity and risk management system, as well as from external sources identified through desktop research. This includes publications from the Fraunhofer Institute, the Federal Network Agency and the Intergovernmental Panel on Climate Change (IPCC). When determining the materiality of information, we took special care to disclose all relevant information that presents a full and accurate picture of EnBW. The disclosed information should enable stakeholders to make informed decisions (p. 133f.⁷).

E1

In our materiality assessment, we identified the topics of climate change adaptation, including greenhouse gas emissions, climate change mitigation and energy as material and identified positive and negative impacts due to our own operations and in the upstream and downstream value chain.

Process to identify climate-related physical risks

The process for identifying climate-related opportunities and risks in all business areas is part of the integrated opportunity and risk management system (iRM). Climate-relevant issues are depicted in a standardized risk map, upon which the structure of the risk inventory is based. The risk management and ICS departments and the long-term strategic planning department are in regular contact throughout the year to determine the impact and relevance of the long-term opportunities and risks for risk management. Please refer to the "Report on risks and opportunities" for a more detailed description of this process (p. 114ff.⁷).

The process for identifying climate risks focuses on the current year (short term), the period up to 2030 (medium term) and the period up to 2050 (long term) in accordance with the EU taxonomy. For the generation plants, we carried out location-based climate risk analyses at selected locations and then derived the potential risks and any mitigation and adaptation actions. Over the next few years, we will carry out risk analyses of the physical climate risks at all generation locations where plants are in operation and integrate the findings into our processes, including into the risk management process. The physical climate risks in the upstream and downstream value chain are not currently considered.

These location-based climate risk analyses are carried out using standardized software to make predictions related to the risks in a changing climate using leading scientific climate models. The software applies the latest scientific findings so that we can carry out precise and reliable analyses of the different approaches in the climate models. This enables us to determine the climate-related risks at each of our locations posed by water, wind, heat and solid material hazards (such as landslides or coastal erosion). All of our business activities are potentially exposed to physical climate risks. When evaluating the individual locations, we apply the increase in risk that was determined

in the risk analysis to the complete lifespan of the plant. We also take into account the value of the assets and climate-related hazards specific to the respective location. We have so far considered relevant meteorological parameters for selected power plant locations and three climate scenarios such as an increase in the frequency of floods, an increase in sea level, heavy rain, drought, extreme heat and an increase in the number and duration of heat waves using the following IPCC scenarios: SSP 1 – RCP 2.6, SSP 2 – RCP 4.5 and SSP 5 – RCP 8.5.

Our operations were evaluated using scenario-based predictions of future energy prices and underlying demand (p. 23 f.⁷). We are currently working on a method that includes climate-related developments in the energy price calculations. The value of assets was determined in the form of write-ups and write-downs. One of our Group projects is developing a method that takes climate risks into account in the valuation of assets. You can find a description of this project in the EnBW Sustainability Agenda under measure 14 (p. 34⁷).

Process for identifying climate-related transition risks

Climate-related opportunities and risks resulting from the transition to a carbon-neutral economy are taken into account in the scenarios used by EnBW. We have only considered our own internal value added within the company up to now. In future, we aim to expand this process to also consider the value chain. We use our own scenarios to evaluate all our own operations and assets. One of the four scenarios we use (scenario 1) is based on the assumptions that the transition will be completed on time and global warming will be limited to 1.5°C. Please refer to our explanations in “Assessment of the robustness of our business model against the background of climate change” (p. 23 f.⁷).

E2 and E3

Our evaluation was based on the process described under “Impact materiality” and the already disclosed information on environmental pollution and water management in the environment section. The perspectives of any affected stakeholders were taken into account in both the identification of the impacts and their evaluation (p. 135 f.⁷).

E4

Our evaluation was based on the process described under “Impact materiality” and the already disclosed information on biodiversity and ecosystems in the environment section. The negative impact on biodiversity at EnBW’s most important locations is examined in the course of the approval process and mitigated by the applicable nature conservation legislation. Comprehensive studies and, if relevant, compensatory action must be carried out as part of this process.

The analysis of the activities of raw material producers carried out by the corporate initiative Responsible Commodities Sourcing Initiative (RECOSI), of which we are a member, and information from 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. Environmental issues are a key focus of our comprehensive business partner audits for raw material suppliers (coal, gas). Biodiversity has been added as one of the areas of focus for bilateral stakeholder dialog. The perspectives of any affected stakeholders were taken into account in both the identification of the impacts and their evaluation (p. 135 f.⁷). In accordance with the applicable legislation, the concerns of affected communities are taken into account in every approval process for the construction, modification or operation of power plants. Studies by external experts are carried out to identify the degree to which they are affected, and in certain processes the affected communities also have the opportunity to give their opinion in a public consultation process.

Transition risks, physical risks and systemic risks

Risks and opportunities related to biodiversity and ecosystems are identified using the integrated risk management process (iRM). By applying a relevance filter, the risk management process ensures that serious risks can be identified at an early stage. The use of the risk map and targeted risk management action in the individual business and functional units and at investments also ensures that biodiversity and ecosystems are taken into account. Please refer to the “Report on risks and opportunities” for a more detailed description of this process [p. 114 ff.⁷]. We do not currently carry out a scenario analysis focusing on biodiversity and ecosystems.

Locations

The use of land has a significant impact on biodiversity. In the past, existing plants and buildings such as power plants, hydropower plants, transmission lines and administration buildings have contributed to soil sealing and the destruction or fragmentation of habitats. Future projects such as wind farms and photovoltaic power plants, as well as transmission lines and smaller facilities such as charging parks, will also use land and thus contribute to land-use change. External environmental assessors carry out studies and assessments required by the applicable legislation (such as the Federal Nature Conservation Act (Bundesnaturschutzgesetz, BNatSchG), the Fauna Flora Habitat Directive and the Environmental Impact Assessment Act (Umweltverträglichkeitsprüfungsgesetz)) as part of the approval process. It is a legal requirement in Germany for companies to minimize unavoidable negative impacts and to take remedial action (section 15 BNatSchG) and this is taken into account in all new construction projects. The European Natura 2000 legislation also requires companies to minimize unavoidable negative impacts and take remedial action.

If any existing operations were to have negative impacts on habitats or cause significant disruptions, the responsible authorities could issue official orders requiring the company to remedy the situation. This has never happened up to now. Whether any remedial action is necessary is determined in each case during every project approval process or process for issuing operating licenses and, when necessary, will be carried out by the company in accordance with the official orders issued by the authorities.

E5

Our evaluation was based on the process described under “Impact materiality” and the already disclosed information on resource use and waste management in the environment section. The perspectives of any affected stakeholders were taken into account in both the identification of the impacts and their evaluation [p. 135 f.⁷].

G1

Our evaluation was based on the process described under “Impact materiality” and the already disclosed information on political engagement and corruption and bribery.

Overview of the material impacts, risks and opportunities

E1 Climate change

Climate change adaptation

Positive impact Own operations	Our actions to adapt to changing circumstances caused by climate change will have a positive impact on the environment in the long term. We are pushing forward the transformation of the energy system by switching our business model over to climate-neutral electricity and heating power plants, monitoring the conditions at our locations and the location-related climate risks and taking appropriate mitigation actions to strengthen the resilience of our power plants.
Negative impact Upstream value chain / own operations	The mitigation actions taken by us and our suppliers as a result of the constant monitoring of location-related climate risks and the construction measures that may be associated with them can also negatively impact the people and environment in the vicinity of the locations.

Climate change mitigation

Positive impact Own operations	Several of our economic activities (such as our onshore and offshore wind power plants, pumped storage power plants, photovoltaic power plants and hydrogen-ready gas power plants) help to reduce greenhouse gas emissions within our own operations and thus make a contribution to transforming the energy system.
Positive impact Own operations / downstream value chain	Several of our economic activities (such as the construction and operation of district heating grids, fast-charging parks and e-charging infrastructure, and the sale of biomethane) help to reduce greenhouse gas emissions of customers and end-users.
Negative impact Upstream value chain / own operations / downstream value chain	The generation of electricity and heating using our conventional power plants (such as our coal power plants) produces relevant greenhouse gas emissions. The consumption of gas by our customers and the mining of raw materials for the production of energy by our suppliers (such as coal and natural gas) also produce greenhouse gas emissions.
Risk Own operations	Expansion of major projects (p. 122 ⁷)

Energy

Positive impact Own operations	Grate ash produced in our activities in the area of thermal waste processing is reused in road maintenance and construction. Ferrous and non-ferrous metals are also recovered from the cinders and recycled.
Positive impact Own operations	By expanding the distribution and transmission grids, we make it possible for renewable energies to actually be used in households, companies and the transport sector and we contribute to the stability of the system.
Positive impact Own operations	By installing and operating battery storage systems, we help to reduce the need to expand the grids, promote smart sector coupling and, as a result, contribute to the transformation of the energy system, especially by enabling a higher proportion of renewable energies in the electricity supply.
Positive impact Own operations	As a provider of system critical infrastructure, we help to maintain the security of supply through, among other things, expanding the distribution and transmission grids in Germany.
Negative impact Upstream value chain / own operations / downstream value chain	Energy is consumed during our economic activities and the economic activities of our suppliers and customers in the area of energy services. This varies depending on the level of efficiency. This includes, for example, the installation and operation of electric heat pumps or the operation of battery storage systems.
Negative impact Own operations	Our activities in the expansion of the distribution and transmission grids produce greenhouse emissions and lead to an increase in grid losses.
Negative impact Own operations	Energy is consumed in our economic activities in the area of wastewater treatment.
Risk Own operations	Fluctuations in energy yield in the North Sea and Baltic Sea (p. 122 ⁷)
Risk Own operations	Expansion of major projects (p. 122 ⁷)

E2 Pollution**Pollution of air, pollution of living organisms and food resources, substances of concern, substances of very high concern**

Negative impact Own operations	Several of our economic activities (such as those related to our coal power plants, thermal waste processing and sludge dewatering/incineration) emit air pollutants that could have a negative impact on the environment, including on living organisms and food resources. These pollutants also include substances of concern and substances of very high concern.
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Substances of very high concern

Negative impact Own operations	Our activities in the dismantling of our nuclear power plants can result in, for example, the production of small amounts of radioactive waste.
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E3 Water and marine resources**Water**

Negative impact Own operations	Our economic activities have various impacts on existing aquatic ecosystems. For example, discharging heated cooling water used in conventional generation back into surrounding bodies of water can result in oxygen deficiency, changes in the water chemistry and a deterioration in water quality, with possible impacts on aquatic ecosystems.
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E4 Biodiversity and ecosystems**Direct impact drivers of biodiversity loss**

Negative impact Own operations	Several economic activities, which could have both a positive and negative impact on climate change, encroach into ecosystems. These include the construction of power plants, grids, renewable energy power plants, fast-charging parks and environmental harm in run-of-river and pumped storage power plants as a result of interrupting the biological and morphodynamic passability of watercourses.
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Negative impact Upstream value chain	Several economic activities cause direct damage to ecosystems and have a negative impact on biodiversity. These include, for example, the mining of brown and hard coal, development of new mining areas (e.g., by lowering groundwater levels, clearing forests, etc.), production of gas, mining of metals, etc., required for the expansion of the grids and the mining of materials required for the construction of renewable energy power plants.
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Impacts on the state of species

Negative impact Own operations	It is possible that living creatures on land and in water could be endangered by our operation of plants and power plants (such as onshore and offshore wind power plants, run-of-river and pumped storage power plants) and the expansion and operation of the grids.
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Impacts on the extent and condition of ecosystems

Negative impact Own operations	Several of our economic activities pose a risk of soil sealing, which can have a negative impact on ecosystems.
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E5 Circular economy**Resource inflows, including resource use and waste**

Negative impact Own operations	We use and consume natural resources in the course of our economic activities. This is associated with emissions and environmental impacts in general. Furthermore, activities in the dismantling of our nuclear power plants can result in the production of small amounts of radioactive waste.
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S1 Own workforce**Working conditions**

Positive impact Own operations	We promote the health of our employees through our comprehensive range of services across all segments. These include, for example, preventative medical services, vaccinations, physiotherapy and psychological counseling.
Negative impact Own operations	Various risks to health and safety arise in the operation of (and transport of the necessary raw materials for) our various plants (e.g., coal power plants, fast-charging parks, grids, hydropower plants, biogas plants). We carry out risk assessments, safety inspections, briefings and training courses to prevent accidents.
Negative impact Own operations	There is a potential risk of accidents involving hazardous materials for our own workforce in the dismantling of our nuclear power plants. We carry out risk assessments, safety inspections, briefings and training courses to prevent accidents.

Working conditions, equal treatment and opportunities for all

Positive impact Own operations	Our initiatives, further training opportunities and consideration of the issues of diversity, equity and inclusion have a positive influence on the workforce and also have a positive effect by helping to prevent discrimination and unequal treatment. These include, for example, the BestWork initiative, education and further training opportunities, leadership campaigns, campaigns to raise awareness and preventative campaigns.
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Equal treatment and opportunities for all

Negative impact Own operations	The possibility of failing to achieve gender equality and equal pay for equal work could have a negative impact on our own employees.
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S2 Workers in the value chain**Working conditions**

Positive impact Upstream value chain	We help to develop a common understanding of the sector-specific impacts on workers in the value chain and draw up measures to mitigate negative impacts covering selected key focus areas in the sectors through our active membership in corporate initiatives such as econsense, RECOSt and SolarPower Europe.
Negative impact Upstream value chain	Several of our economic activities result in risks to the health and safety of workers in the upstream value chain. Our coal and gas power plants, onshore and offshore wind farms, photovoltaic power plants and grids can pose risks to the health and safety of employees of direct business partners if occupational health and safety measures are disregarded. Various potential health risks can also harbor the risk of secondary diseases (such as cancer, bone and muscle disorders).

Working conditions, equal treatment and opportunities for all

Negative impact Upstream value chain	Economic activities related to the procurement of raw materials could have potential negative impacts on workers in the value chain.
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Equal treatment and opportunities for all

Negative impact Upstream value chain	Our economic activities could have potential negative impacts on workers in the value chain. There is a particular risk in Colombia of acts of violence and robberies. This could have a direct impact on workers and residents and this risk is combated using private security services. We also tackle the possibility that workers at third-party companies may face discrimination through awareness-raising measures and our Declaration of Human Rights.
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S2 Workers in the value chain**Other work-related rights**

Negative impact Upstream value chain	Our economic activities in the area of coal and gas mean that we are active in countries in which there is a potential risk of violations of the ILO's core labor standards (such as child labor and forced labor).
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S3 Affected communities**Communities' economic, social and cultural rights**

Negative impact Upstream value chain / own operations	Our economic activities can pose a risk to persons in the near vicinity and lead to a loss of ecosystems and biodiversity, which can also result in a loss of cultural ecosystem services for residents. This includes, for example, potential impacts on health caused by conventional generation and the dismantling of nuclear power plants and impacts resulting from the mining of raw materials, which we counteract by taking various different actions.
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Communities' economic, social and cultural rights, rights of indigenous peoples

Negative impact Upstream value chain / own operations	Our supply chain and our own operations, such as construction projects, pose potential risks for (indigenous) populations arising from only partially consensual resettlement and unlawful dispossession of land. We take various different actions to prevent these impacts.
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S4 Consumers and end-users**Information-related impacts for consumers and/or end-users**

Positive impact Own operations	Our economic activities in the area of telecommunications help companies, communities and authorities improve their cybersecurity strategies.
Negative impact Own operations	Our economic activities can lead to potential violations of the General Data Protection Regulation (GDPR), which could endanger sensitive customer data. Numerous 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 departments.

Personal safety of consumers and/or end-users

Negative impact Own operations	Our home storage systems for solar electricity can result in fires when the home storage systems are used by customers. The ongoing exchange program for the affected home storage systems means that this will only have a short-term impact.
Risk Own operations	Market ramp-up of battery storage solutions (p. 124 ⁷)

G1 Business conduct**Political engagement and lobbying activities**

Positive impact Own operations	Our lobbying activities could have a positive impact on society and the environment if we, for example, support laws with a positive impact on people and the environment.
Negative impact Own operations	Our lobbying activities in support of, for example, the expansion of the generation infrastructure and the grids could also have negative impacts on people and the environment.

Corruption and bribery

Positive impact Own operations	We have various channels for reporting compliance breaches or suspected cases that could help us to quickly identify potential misconduct and thus avert any associated damage to third parties.
Negative impact Own operations	Insufficient training and prevention measures in this area could have a negative impact on people and the environment. In order to mitigate the impacts, we have established various training courses and a compliance management system (CMS) in which the prevention, detection and sanctioning of corruption is firmly anchored. Our Code of Conduct defines how we deal with business partners, office holders and public authorities. The rules make an important contribution to protecting the integrity of the EnBW Group and its workers in business transactions.

IRO-2 – Disclosure requirements in ESRS covered by the undertaking's sustainability statement

We have defined the material matters according to ESRS 1 Appendix A AR 16 based on the results of the materiality analysis. Whenever an impact, risk or opportunity reached or exceeded the threshold value of 3, we classified this impact, risk or opportunity and the associated sustainability matter as material and included it in the reported standards, disclosure requirements and datapoints. You can find an overview in the “Reported disclosure requirements pursuant to ESRS 2 IRO-2” (p. 224 ff.⁷) under “Indexes and tables.”

Disclosures about events after the end of the reporting period

In the middle of February, we received a report about a potential human rights violation in our supply chain for liquid natural gas via the whistleblower system at EnBW AG. This report is currently being carefully examined and processed in accordance with applicable laws and the rules of procedure to ensure that all relevant information is taken into account and necessary action is taken.

E1: Climate change

In our materiality assessment, we identified the themes of climate change adaptation, climate change mitigation and energy as material.

In relation to climate change adaptation, we identified a positive impact of our own operations in switching our business model over to the long-term, climate-neutral generation of electricity and heating. The mitigation actions taken by EnBW in this area also have a negative impact in the form of location-specific climate risks and the associated construction measures. In relation to climate change mitigation, we identified positive impacts of our own operations and in the downstream value chain. Several of our economic activities help to reduce the greenhouse gas emissions related to our own operations and our customers. We identified a negative impact in the form of greenhouse gas emissions from our conventional generation of electricity and heating and gas consumption by our customers. In addition, we have identified the top risk (p. 122⁷) with respect to the expansion of major PV projects due to delays in the project development process and the construction phase. In relation to energy, there are positive impacts of our own operations as a result of reusing or recycling materials, connecting renewable energies to the grid, reducing the need to expand the grids and supporting the security of supply. We identified negative impacts due to the consumption of energy in our economic activities and the economic activities of our suppliers and customers. The expansion of the grids also results in grid losses and energy is also consumed in the treatment of wastewater. Please also refer to the top risk “Fluctuations in energy yield in the North Sea and Baltic Sea” (p. 122⁷).

E1-1 – Transition plan for climate change mitigation

Further information on the **Climate Transition Plan** can be found online.

[Online ↗](#)

Transition plan for climate change mitigation

EnBW published a Climate Transition Plan for the first time in 2024. It is described under “Our climate protection goals” (p. 35 ff.⁷). The published transition plan for the reduction of greenhouse gas emissions includes the targets, actions and necessary resources for all subsidiaries in the group of consolidated companies.

Conformity of the targets with the Paris Agreement

In October 2021, we announced that we were developing science-based climate protection targets within the Science-Based Targets initiative (SBTi). These targets were verified and tested at the beginning of 2023 and confirmed to be in line with the targets set out in the Paris Agreement. The precise nature of the targets is described under “Science Based Targets initiative (SBTi)” (p. 35⁷). We started to develop a plan to achieve net zero in the 2024 reporting year. We have taken into account the level of ambition of the targets that we have currently set and the historical emissions since the reference year 2018 and also ensured that the targets set by EnBW fully comply with the objective of limiting global warming to 1.5°C.

In the 2024 financial year, we did not receive any information about any exclusions of the reference values in line with the Paris Agreement. This will be examined every year in the future.

Decarbonization levers and material action

In order to achieve the climate targets defined in our transition plan, we have identified various decarbonization levers. These will help us to reduce emissions in all Scopes.

Scope 1 emissions

The most important decarbonization lever for Scope 1 emissions is the transformation of the EnBW generation portfolio. This includes switching over generation of electricity and heating to renewable energies and the gradual decommissioning of coal-fired power plants and potentially also gas-fired power plants that are not hydrogen-ready. Please refer to our disclosures in the section “Strategy, goals and performance management system” from p. 31 f.⁷ onwards.

Stadtwerke Düsseldorf AG also generates electricity and district heating with fossil fuels. The decarbonization levers with the actions described above will therefore have a similar impact at this company. For example, a heating station is already under construction to utilize waste heat from a factory operated by the company Henkel. At our subsidiaries who operate electricity grids (Netze BW, TransnetBW, Netzgesellschaft Düsseldorf, Pražská energetika [PRE], Netzgesellschaft Heilbronn-Franken [NHF], naturenergie netze, Netze ODR), transition-related actions such as the conversion and expansion of the distribution grid and above all the construction of HVDC transmission lines (TransnetBW) have an indirect impact by improving the integration and supply of renewable energies, which will minimize the deployment of redispatch and reserve power plants and thus reduce Scope 1 emissions.

Scope 2 emissions

The most important decarbonization lever for Scope 2 emissions is the procurement of green electricity. External effects such as the increasing decarbonization of the German electricity system also have a positive impact on the reduction of Scope 2 emissions.

As the Scope 2 emissions at the EnBW Group are predominantly caused by indirect emissions related to grid losses, the use of green electricity is the most important decarbonization lever for the electricity grid operators in the EnBW Group. Netze BW and naturenergie netze already use green electricity today. In order to achieve the ambitious targets for Scope 2 emissions, it is foreseeable that other grid operators in the Group will have to use green electricity in future. The increasing proportion of renewable energies in the German electricity mix also has a positive impact on the Scope 2 emissions related to grid losses.

Scope 3 emissions

Most of the Scope 3 emissions of the EnBW Group are due to emissions caused by the consumption of gas sold to end customers and the associated emissions in the upstream supply chain. Action to reduce these emissions will mainly involve the subsidiary VNG (p. 37⁷). Other relevant emissions are generated in the procurement of electricity supplied to end customers. Scope 3 emissions from waste, purchased goods and services and investments were included in the Scope 3 inventory for the first time in 2024 as a result of the materiality assessment. These areas will be gradually taken into account in the transition plan.

Similarly to Scope 1 emissions, the phasing out of coal-fired power generation at power plants, as long as corresponding framework conditions are met, that are not fully consolidated in the Group will be an important lever because emissions from power plants that are not under the operational control of EnBW fall under Scope 3 emissions. The ongoing process of switching the product range over to green electricity products also has a positive impact on emissions.

The expansion of the distribution and transmission grids will indirectly create the prerequisites for increasing electrification. Wholly external effects such as an improvement in the energy efficiency of buildings and permanent changes in demand due to the energy crisis will also lead to a reduction in the demand for gas.

Please also refer to our disclosures on climate change mitigation outside of our own value chain (p. 37⁷) and the disclosures for E1-3 (p. 149⁷).

Capex for implementing the action plan

The material decarbonization levers for our company's carbon footprint arise from the transformation of the energy system both directly and indirectly. Alongside these investments, a large proportion of the total investment being made by EnBW (p. 32⁷) can be classified as relevant to supporting the transition plan, even if it does not directly result in any reductions. For example, the ambitious expansion of renewable electricity and heating generation is the prerequisite for reducing the use of fossil fuel-fired power plants and for being capable of supplying sufficient amounts of green energy for the comprehensive electrification of the energy system. The expansion of the transmission grid is a prerequisite for reducing redispatch emissions. The expansion and restructuring of the electricity distribution grids and the expansion of district heating grids will enable the replacement of natural gas-based heating generation, while the expansion of the hydrogen core network is a prerequisite for the operation of emission-free power plants (p. 179 ff.⁷).

Locked-in greenhouse gas emissions

Locked-in greenhouse gas emissions are the total emissions for the period from the reporting year until 2030 or 2050 that are expected to be generated in the operation of our material existing facilities and power plants and those definitely planned for the future (construction within the next five years).

Up to the end of 2030, EnBW AG has locked-in emissions from its fossil fuel-fired thermal power plants that are currently still in operation. Until our planned phase out of coal by 2028, as long as corresponding framework conditions are met, this mainly refers to our coal power plants.

As it will be necessary to maintain the stability of the grids, it is still possible beyond 2028 that the full decommissioning of our coal power plants will not be approved by the authorities and the plants will be transferred to the grid reserve. This could lead to further emissions that are not within the control of the company but which must be included in the company's carbon footprint.

With a view to potentially eliminating the need for redispatch and reserve generation from coal power plants, we are investing in hydrogen-ready power plants fit for the future at the current locations of coal power plant blocks in Heilbronn, Stuttgart-Münster and Altbach/Deizisau. They will be operated with natural gas until they are converted to decarbonized hydrogen. The existing power plant block F operated by Stadtwerke Düsseldorf also has locked-in emissions.

For the period from 2040 onwards, the Group currently only has locked-in emissions from the operation of two thermal waste treatment plants. Alongside a potential reduction in the amounts of waste treated at the plant and a reduction in the fossil carbon fraction of the waste, it is possible to reduce emissions by using carbon capture and storage (CCS) technology. This option is currently being examined within the company. However, the regulatory situation with respect to the use of CCS in Germany still remains largely unclear because the German government has so far only published the first key points for a carbon management strategy.

The operation of natural gas transmission and distribution grids by EnBW's subsidiaries will also result in locked-in emissions.

The EnBW Group accounts for material emissions from the use of sold products exclusively within the area of fuel sales to end-users. However, as these emissions only occur when the fuels are delivered, they are not classified as locked-in emissions.

Targets and plans for adapting economic activities to the EU taxonomy

We have been reporting on the EU taxonomy since the 2020 financial year, which was before the introduction of the reporting obligation. Alongside the information on revenue, capex and opex required by the Taxonomy Regulation, we also report on other performance indicators that are relevant to the ongoing management such as adjusted EBITDA and expanded capex (capex including the proportion for entities accounted for using the equity method). Please refer to our disclosures on the EU taxonomy [p. 179 ff.⁷].

Embedding the transition plan into the business strategy and financial planning

Climate change mitigation has been an integral component and important objective of our general corporate strategy and our EnBW Sustainability Agenda for a long time. Accordingly, we have derived our Climate Transition Plan directly from our corporate strategy. The EnBW Sustainability Agenda defines the themes and measures for integrating targets into the corporate strategy and acts as a strategic framework for our sustainability activities. The transition plan adds a greater level of detail to the general corporate strategy for a fast and consistent energy transition and ambitious climate change mitigation efforts, subject to the energy industry goals of security of supply and affordability. As climate change mitigation is being taken into account in the currently ongoing transformation of our company, we do not have any special financial planning for the climate change mitigation actions defined in the transition plan. Please refer to our disclosures in the section "Strategy, goals and performance management system" from p. 31 f.⁷ onwards. The EnBW Climate Transition Plan was approved by the Board of Management and published in April 2024. Regular updates are planned.

Progress in the implementation of the transition plan

We already started to resolutely transform and realign our portfolio in 2013 by following a corporate strategy focusing on the energy transition. Since then, we have not only increased the proportion of electricity generation from renewable energies from around 19% to over 40% with an installed output currently of around 5,700 MW but have so far also been able to decommission 2,700 MW of fossil fuel-fired generation.

Here are some milestones in our transformation to date:

- In April 2011, EnBW Baltic 1 was the first commercial offshore wind farm in Germany to be connected to the grid.
- In 2013, we decommissioned the first of our fossil-fuel fired power plants in Baden-Württemberg, which was then transferred to the grid reserve to guarantee the stability of the grids. Of the other power plants so far decommissioned by EnBW, nine had been transferred to the grid reserve by 2023 with a total output of approx. 1,700 MWe.
- In 2018, EnBW completed its first fuel switch project at a coal-fired EnBW power plant when the coal power plant in Stuttgart-Gaisburg was replaced by a 30 MWe gas power plant.
- In 2021, EnBW commissioned the largest open field solar park in Germany without state funding in Weesow-Willmersdorf/Brandenburg with an output of 187 MW.

Our transition plan was published in April 2024. It builds on these milestones and paves the way for further transformation. The following progress was made in the reporting year:

- As part of the phaseout of coal, the power plant block RDK 7 (517 MW) in Karlsruhe was transferred to the grid reserve in May.
- Since May 2024, we have been constructing the He Dreih offshore wind farm, which is the largest offshore wind farm in Germany without state funding, with an output of 960 MW.

Since 2013, we have transferred ten EnBW power plants with a total output of around 2,223 MW to the grid reserve, of which seven power plants with a total output of almost 1,786 MW were still in the grid reserve at the end of 2024.

SBM-3 – Material impacts and risks and their interaction with strategy and business model

Please refer to our explanations in “Assessment of the robustness of our business model against the background of climate change” (p. 23 f.⁷).

E1-2 – Policies related to climate change mitigation and adaptation

The key policy at EnBW is the Climate Transition Plan that was published on our website in April 2024 and describes how the company will achieve its climate protection targets by 2035. The Climate Transition Plan also describes how the risks arising from changes to the environment and climate should be addressed in a more direct manner (p. 35 ff.⁷).

EnBW AG has had an environmental management system according to ISO 14001 for many years. Most of the employees in the EnBW Group work at companies that are validated according to EMAS or certified in accordance with ISO 14001 (75.8%). The procedures and obligatory processes within the environmental management system reflect the environmental matters, environmental targets and environmental programs. In the case of targets relating to things like improving our energy efficiency and the associated reduction in CO₂ intensity of own electricity generation, programs have been defined within the environmental management system to help achieve them. The continuous and structured analyses and tests carried out within the environmental management system ensure continuous improvement of the company's performance in all areas relevant to internal energy consumption and energy efficiency. In its Business Allocation Plan, the Board of Management of EnBW AG has transferred responsibility for the universal task of “environmental protection” to the Chairman of the Board of Management.

Among the material subsidiaries relevant to environmental matters, Netze BW, Stadtwerke Düsseldorf, Netzgesellschaft Düsseldorf, natureenergie, ZEAG, Netzgesellschaft Heilbronn-Franken, Netzgesellschaft Südwest, ODR and others have also operated energy and environmental management system for many years. EnBW AG uses buildings of its wholly owned subsidiary EnBW Real Estate that has an integrated energy and environmental management system according to ISO 50001 with a continuous improvement process to improve the energy efficiency of our business activities, especially in relation to our properties.

With respect to EnBW's climate protection strategy, the restructuring of the generation portfolio and the associated changes in technology are helping to improve energy efficiency. For example, the hydrogen-ready gas and steam power plants currently under construction in Heilbronn and Altbach/Deizisau have higher fuel utilization than the coal power plant blocks they are replacing due to the improvement in plant efficiency – especially in combined heat and power operation. As part of the transformation of our district heating grids, we have installed large heat pumps that are more efficient than the old fossil fuel-based heating systems as they use ambient air. The same is true for our Scope 3 emissions, where we offer heat pump solutions as a replacement for systems operated with the fossil fuel natural gas.

E1-3 – Actions and resources in relation to climate change policies

Actions and resources for climate change adaptation and climate change mitigation

EnBW has taken a series of actions related to climate change adaptation and climate change mitigation. For example, the impact new investment projects will have on the climate protection targets is evaluated during the investment approval process using an EnBW sustainability audit. This evaluation is carried out for all projects presented to the investment committee in accordance with Group guidelines [p. 42⁷].

Another focal point is the **expansion of renewable energies** and **flexibly dispatchable power plants**. This is anchored in measure 1 of the EnBW Sustainability Agenda [p. 33 f.⁷] and covers the selective internationalization and realization of projects without state funding. The installed output from renewable energies in 2024 is presented on p. 97 f.⁷. We are planning the construction of three offshore wind farms off the coast of Great Britain together with bp that have a total output of 5.9 GW and are due to be placed into operation in 2029. Furthermore, we plan to phase out coal-fired power generation by 2028, provided that this does not endanger the security of supply. Important conditions for achieving this target are the accelerated expansion of renewable energies and the transmission and distribution grids, the development of the gas and hydrogen infrastructure and flexible gas power plants that will later be converted to decarbonized hydrogen. To replace the coal power plants, we decided in 2022 to construct three hydrogen-ready gas power plants with a total capacity of 1,464 MW, which also can be operated using decarbonized hydrogen in the future. These so-called fuel switch projects are taxonomy-aligned according to the EU taxonomy. The excavation work is at an advanced stage or has already been concluded at the locations in Heilbronn and Altbach/Deizisau and the first major components such as the gas turbine are being installed onsite. In 2025, we will commission the first hydrogen-ready gas power plant in Stuttgart-Münster with an installed output of 124 MWel.

Measure 2 of the EnBW Sustainability Agenda “CO₂ reduction” will also help to reduce the identified impacts and risks through the implementation of the coal phaseout, as long as corresponding framework conditions are met, the fuel switch projects and the long-term target of achieving net zero (p. 33⁷). Furthermore, measure 3 (p. 34⁷) will help mitigate the identified impacts and risks by positioning the company as a supplier and user of certified H₂ products and decarbonized gases.

Our own energy needs benefit from the expansion of renewable energies. For example, all of the electricity consumed in the buildings managed by EnBW Real Estate is green electricity. As part of a project to develop a climate-neutral real estate portfolio in its existing buildings, EnBW Real Estate is systematically retrofitting the buildings with PV power plants if this is possible, depending on the structure of the building. This project will run until the end of 2025. Legal regulations stipulate that PV power plants must be installed on 60% of the roof surface of new buildings and we are striving to exceed this figure and cover the maximum surface area that is technically possible, which will also increase our own electricity generation.

There is a potential risk of methane emissions at our gas grid companies. These companies use targeted measures to combat this risk such as regularly inspecting all of their pipelines for leaks. The gas grid company ONTRAS Gastransport carries out these inspections in accordance with the guidelines issued by the DVGW (German Technical and Scientific Association for Gas and Water). These guidelines cover predetermined maintenance work, maintenance of the gas transmission lines and compliance with measurement equipment requirements. terranets bw has possessed its own mobile compressor since 2024. Using this compressor, terranets bw can reduce methane emissions by around 80%. Any residual gas is burned off with a mobile gas flare to convert the methane into CO₂, which is less damaging to the climate. Netze BW has a comprehensive maintenance strategy to keep its methane emissions as low as possible. Before carrying out construction measures, Netze BW reduces the pressure and feeds gas into neighboring grids to keep any residual gas to a minimum. It is unavoidable to fully remove all of the gas from the pipeline for safety reasons. This methane is also flared to CO₂. Furthermore, it uses inflatable pipe plugs to reduce any other gas escaping during construction work. A description of how the regulatory guidelines for handling methane are implemented at the company can be found on p. 67⁷.

In the area of B2C sales, we only offer new contracts for green electricity with guarantees of origin (except for basic supply and reserve supply contracts).

The use of renewable energies plays an important role in decarbonization at our subsidiaries. Using green electricity and procuring guarantees of origin for green electricity are important tools for Netze BW to achieve greenhouse gas neutrality. Customers using the charging points provided by EnBW mobility+ are also supplied exclusively with green electricity. Our sales subsidiary Yello only offers green tariffs and Stadtwerke Düsseldorf already switched all of its own B2C customers, including those with basic supply contracts, to a green electricity supply in 2023.

As part of our reporting for the EU taxonomy, we carried out a scenario-based analysis of physical climate risks to develop relevant parameters for representative locations and assets. We are continuously expanding this analysis. The results serve as the basis for examining and, if necessary, amending actions against the growing impact of climate change – e.g., to protect our power plant locations against more severe flood events. To proactively take the advance of climate change into account and minimize the need for subsequent adaptations, we are expanding the approval process for investment decisions so that these risks will be taken into account in our management processes.

Netze BW is planning to raise the height of the land for its Denzlingen substation so that it is better protected in the event of an extreme flooding event. In comparison to the general cost of renovating the substation, this action will not require any major additional funds. This action is incorporated into the plans for the renovation of the substation that will take a period of five years. The construction work is due to start in the middle of 2025.

Actions and resources for handling energy

Reducing our negative impacts related to energy is also anchored in the EnBW Sustainability Agenda in measure 5 (p. 33⁷). We are strengthening and modernizing the grids so that an increasing proportion of renewable energy power plants and electromobility services can be integrated into the energy system. We are also planning to increase the proportion of sustainable customer services to 40% by 2027.

E1-4 – Targets related to climate change mitigation and adaptation

Measurable and outcome-oriented targets

Our transition plan contains targets that are valid across the Group. All of EnBW's climate targets at a Group level are in line with the goals of the Paris Agreement. These targets are also absolute, relatively precisely defined and valid until 2035 and thus contribute to EnBW's key strategic climate protection goals. They are based on the reference year 2018. The scope of these targets is aligned to the standardized scopes given in the Greenhouse Gas Protocol. The methodologies, assumptions and targets follow the SBTi methodology and have a scientific basis as a result. The targets were agreed with all relevant stakeholders within the company and acknowledged by the Supervisory Board. The relevant stakeholders include the Board of Management and the heads of the generation, trade, controlling, finance, politics and communication, corporate strategy and energy industry areas of the company. In addition, the targets were defined in coordination with the shareholdings VNG, SWD and Gasversorgung Süddeutschland (GVS) where the reduction measures will be most significant. Any changes that must be made to the targets will be transparently explained. We will track the current status of the climate targets using a digital platform and discuss the progress in meetings held twice a year – which will include the responsible top managers and the EnBW Sustainability Committee. There were no changes made to the climate targets in 2024. A detailed description of the targets and milestones can be found under “Our climate protection goals” (p. 35ff.⁷).

As the material decarbonization levers are not equally applicable at all subsidiaries, intermediate targets and the actions required to achieve the targets have not been broken down across all Group companies. Some subsidiaries also have their own targets, supplemental to the Group-wide targets, that refer to the entire company or sometimes just partial areas of the company. This does not impact the validity of the Group targets because any targets set by the subsidiaries are even more ambitious than the Group targets.

Setting the targets

Reducing emissions by expanding renewable energies and reducing greenhouse gas emissions

The fossil fuel-fired power plants that are currently still in the EnBW portfolio have a negative impact on climate change due to their greenhouse gas emissions. In order to mitigate this impact quickly and in accordance with scientific thinking, the climate-related targets described above include plans for an ambitious reduction in absolute emissions from these power plants. The transformation of the energy system and above all of electricity and heating generation will help to avoid greenhouse gas emissions and thus counteract climate change. In order to manage this positive impact internally, we have explicitly defined an expansion target for renewable electricity and heating generation. The high strategic relevance of this target is reflected in the key performance indicator “Installed output of renewable energies (RE) in GW and share of the generation capacity accounted for by RE in %.” This target is defined during the regular strategy process, meaning it is defined by the Board of Management and approved by the Supervisory Board.

Some of our subsidiaries have also set their own targets for reducing emissions by expanding renewable energies. For example, SWD aims to reduce Scope 1 emissions by 30% and Scope 2 emissions by 60% by 2030 in comparison to the reference year 2020. TransnetBW has formulated a reduction path and reduction measures to achieve targets for Scopes 1, 2 and 3. TransnetBW aims to be greenhouse gas neutral with respect to Scope 1 and 2 emissions by 2035 and with respect to Scope 3 emissions by 2045. The targets were developed in cooperation with experts and have been approved by the management team.

Exploiting the potential of renewable energies in district heating grids

As the operator of district heating grids, we have the opportunity to integrate numerous renewable energy sources into the heating supply. Operating heating grids also supports sector coupling. A key target for measuring progress with the heating supply is the Scope 1 and 2 emission intensity, which is defined as part of the SBTi targets. The emission intensity also incorporates heat generation explicitly as well as electricity generation and we intend to reduce it by 87.4% by 2035.

Alongside EnBW's district heating activities, SWD is also active in this sector and has defined targets for the expansion and simultaneous decarbonization of district heating in Düsseldorf within the latest cycle of its strategy process. These targets were discussed and developed with internal experts and approved by the Board of Management and Supervisory Board.

Reducing the emissions of greenhouse gases by our customers

By expanding our district heating grids and especially by way of climate-friendly energy sources, we can reduce greenhouse gas emissions by our customers. This will contribute to the target of reducing Scope 1 and 2 emission intensity for electricity and heating generation by 87.4% by 2035.

The expansion of fast-charging infrastructure will enable our customers to reduce their mobility emissions. A closely related target is that of increasing the number of EnBW's own fast-charging points to more than 30,000 by 2030.

As is the case at EnBW AG, SWD also has targets for reducing the emissions from sold products in the gas business. It aims to reduce Scope 3 emissions by 26% by 2030, in comparison to the reference year 2020, and has so far managed to reduce these emissions by 14%. An important factor that will contribute towards achieving the Scope 3 target is to expand district heating and reduce gas heating.

Science-based emission reduction targets

The current climate targets for the EnBW Group were developed on a scientific basis and follow an emissions budget approach designed for protecting the climate. They were developed in accordance with the methodology used by the Science Based Targets initiative (SBTi), which validated the targets in 2023. The targets for Scope 1 and 2 emissions (formulated as both specific targets and absolute targets) have a level of ambition of 1.5 °C. The Scope 3 emission targets currently have a level of ambition of "well below 2 °C" and are thus compatible overall with the goals of the Paris Agreement from 2015.

In accordance with the SBTi standards¹, the Scope 1 and 2 reduction targets are based on a sectoral decarbonization pathway. The targets for Scope 3 emissions use an absolute contraction approach. The reduction paths required by the SBTi are developed mainly on the basis of scenarios from the Integrated Assessment Modeling Consortium (IAMC) and the International Energy Agency (IEA). The IAMC has more than 400 emission paths, which are summarized in the Special Report on Global Warming of 1.5 °C (SR15) published by the Intergovernmental Panel on Climate Change (IPCC). The newer scenarios take into account the five Shared Socioeconomic Pathways (SSPs) from the IPCC process.²

¹ SBTi Corporate Manual TVT-INF-002 v1.1, June 2021; SBTi Criteria and Recommendations – TWG-INF-002 v5.0 October 2021; Setting 1.5 °C-aligned Science Based Targets: Quick start guide for electric utilities – as of June 2020.

² For more details see: SBTi: Foundations of Science-based Target Setting.

Future developments that will have a relevant influence on the reduction targets particularly include a rising demand for electricity due to the increasing electrification of the energy system. This was taken into account in the development of the reduction paths for the Scope 1 and 2 targets. Another relevant future development that will play a decisive role in achieving the targets is the availability and price of renewable and low-emission gases, which can replace natural gas in dispatchable power plants. As an integrated energy provider, EnBW is active in all stages of the value chain for a future hydrogen economy and participates, in particular, in the purchase of hydrogen and hydrogen derivatives so that it is able to analyze any changes immediately and factor in their impacts on the achievement of the targets.

Some subsidiaries will be required to make a mandatory contribution to the achievement of the Group-wide climate protection targets by 2035. The most relevant lever for achieving the Scope 1 targets can be found within EnBW AG (fossil fuel-fired generation portfolio). For the Scope 2 targets, some of the electricity grid operators in the Group compensate for their grid losses with green electricity certificates. For the Scope 3 targets for emissions related to the use of sold products and the associated upstream value chain, the shareholdings with significant gas sales (SWD, GVS and VNG) must each achieve a reduction target of -42.5%. These targets have been derived from the SBTi targets for the whole Group.

Above and beyond these guidelines, or independent of them, some of our subsidiaries have also set their own reduction targets (Erdgas Südwest, PRE, SWD, terranets bw, TransnetBW). These will have a positive impact on achieving the targets for the whole Group. In some cases, these targets were developed based on the SBTi method (TransnetBW, SWD) without seeking independent validation by the SBTi or being able to achieve it for the defined level of ambition. Other subsidiaries have based their targets on sectoral targets (PRE) or sectoral agreements (terranets bw), on the targets set by the EnBW Group (Erdgas Südwest) and, in the case of targets focusing on specific themes, on the targets developed by voluntary initiatives such as the VN Oil and Gas Methane Project (OGMP) and reduction targets produced by initiatives associated with the United Nations COP Climate Change Conferences.

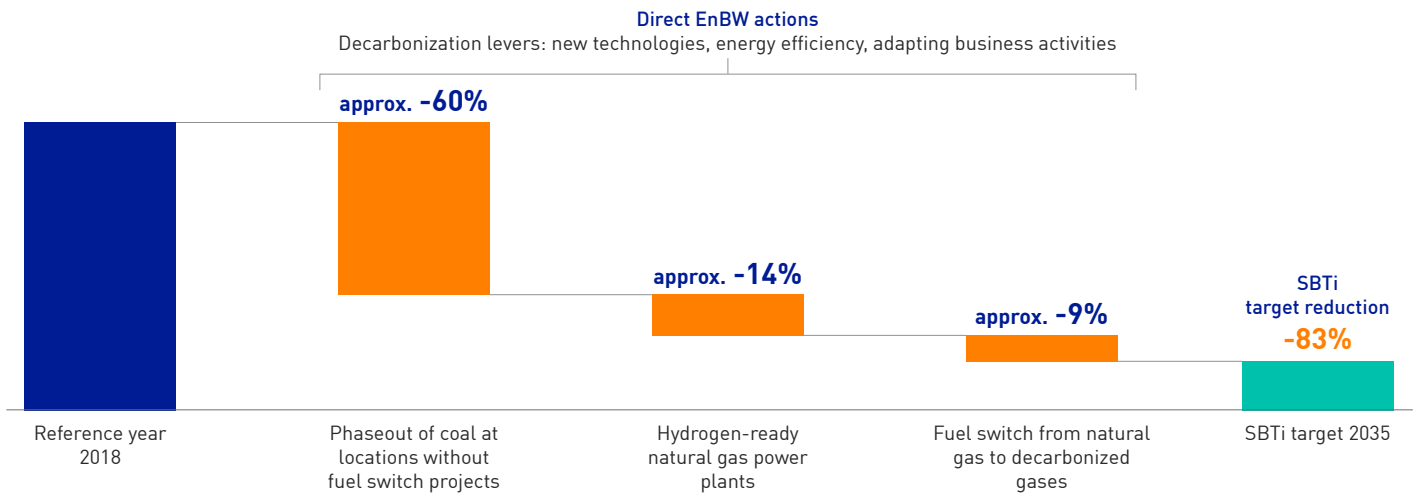
GHG emission reduction targets

	Unit	2030	2035	Reference year 2018 ¹
Emissions in the reference year				
Scope 1	Million t CO ₂ eq	-	-	16.6
Scope 2	Million t CO ₂ eq	-	-	1.0
Scope 3	Million t CO ₂ eq	-	-	50.8 ²
Share of reduction by scope				
Scope 1	%	-70 to -75	-83	-
Scope 2 ³	%	-70 to -75	-83	-
Scope 3	%	-23 to -37	-40.6 ⁴	-

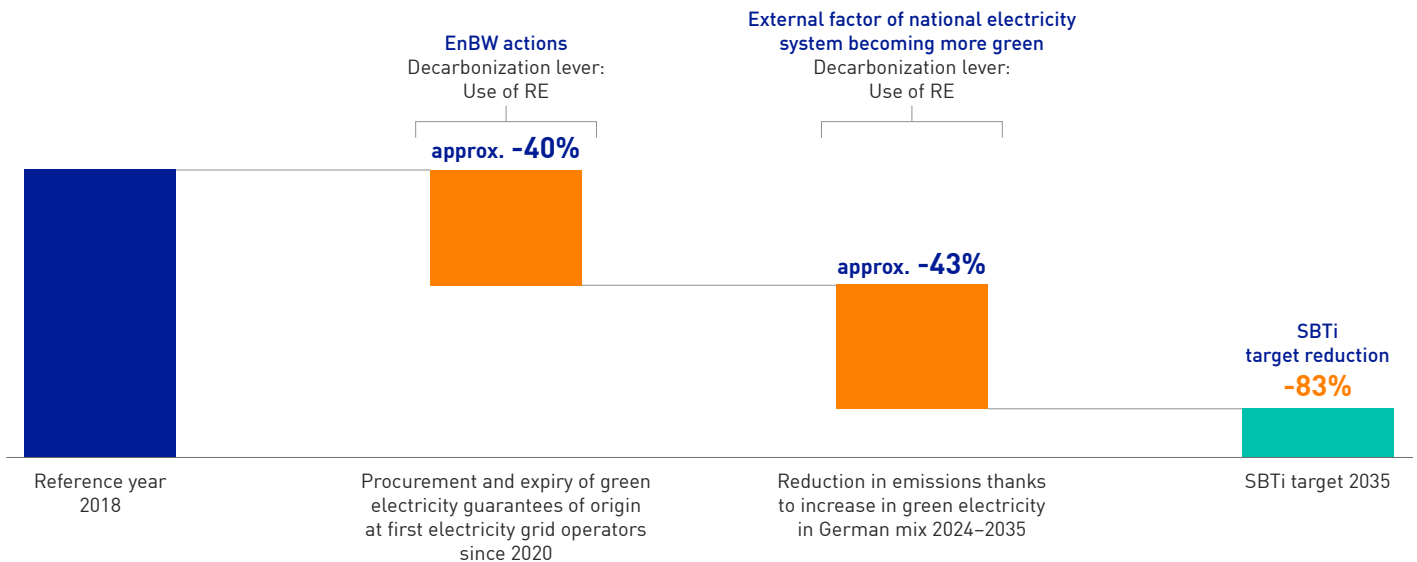
- ¹ The reference year stated here corresponds to the year used for the validation process of the Science Based Targets initiative. The figures are thus based on the principles for emissions accounting in 2022. As a result, there could be deviations in comparison to the current reporting on the company's carbon footprint in this report.
- ² This figure is based on the synthetic reference year generated for the science-based targets in discussion with the SBTi. It takes the acquisition of an investment with relevant gas sales between the reference year of 2018 and the time of validation of the targets into account. This amendment applies to the Scope 3 categories "Emissions related to the use of sold products" (3.11) and the associated upstream value chains (since this reporting year, assigned to the collective category 3.1/3.2 "Purchased goods and services"). Emissions in the synthetic reference year for this category were 49.51 million t CO₂e. Together with the other emissions reported for the 2018 reference year, this results in the total value stated above.
- ³ The targets are formulated using market-based logic.
- ⁴ This reduction target deviates from the target validated by the SBTi of -42.5% [p. 153] because the SBTi target is based on emissions in the category "Emissions related to the use of sold products" (3.11) and the associated upstream value chain emissions (since this reporting year, assigned to the collective category 3.1/3.2 "Purchased goods and services") – totaling 49.51 million t CO₂e. The percentage reduction target stated above refers to the total amount of Scope 3 emissions of 50.8 million t CO₂ in the 2018 reference year.

Contribution of the decarbonization levers to the targets

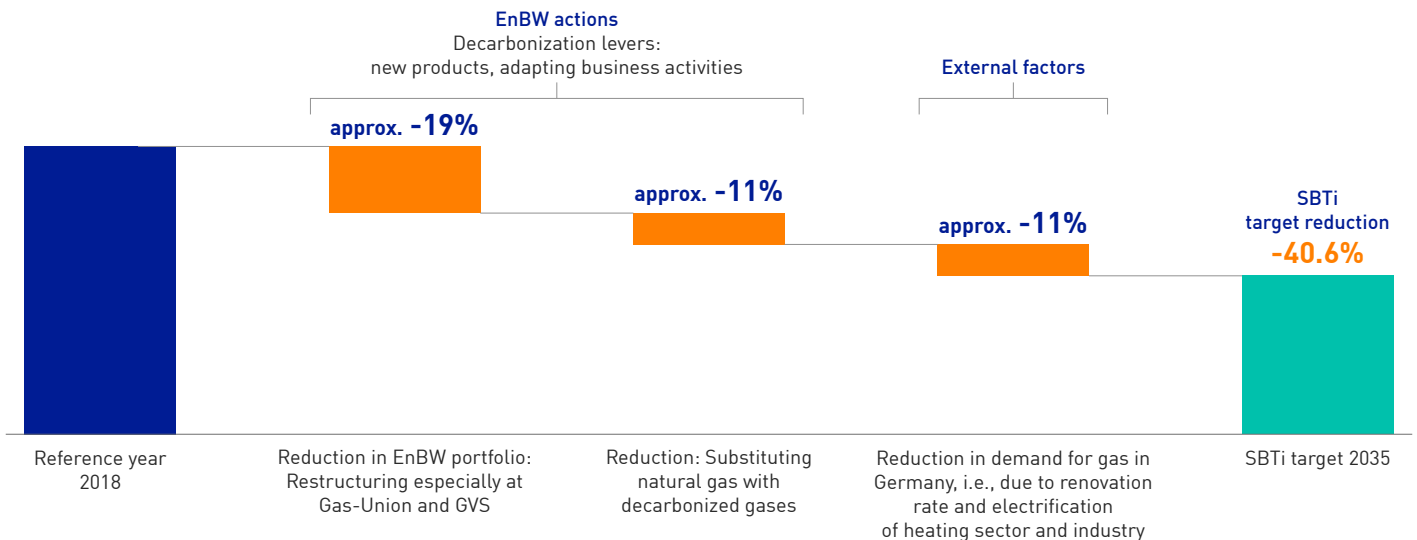
Scope 1 emissions



Scope 2 emissions



Scope 3 emissions



E1-5 – Energy consumption and mix

Energy consumption and mix in high climate impact sectors

Energy consumption and mix

	Unit	2024	2023
Total energy consumption	MWh	32,014,718	37,593,792
Energy consumption from fossil sources¹	MWh	28,346,234	34,384,880
Share of fossil sources in total energy consumption	%	88.5	91.5
Fuel consumption from coal and coal products	MWh	18,402,706	24,663,144
Fuel consumption from crude oil and petroleum products	MWh	638,568	625,130
Fuel consumption from natural gas	MWh	7,565,696	7,189,943
Fuel consumption from other fossil sources	MWh	1,191,760	1,170,683
Consumption of purchased or acquired electricity, heat, steam and cooling from fossil sources	MWh	547,504	735,980
Energy consumption from nuclear sources	MWh	0	0
Share of consumption from nuclear sources in total energy consumption	%	0	0
Energy consumption from renewable sources	MWh	3,668,484	3,208,912
Share of renewable sources in total energy consumption	%	11.5	8.5
Fuel consumption from renewable sources ²	MWh	1,389,528	1,372,784
Consumption of purchased or acquired electricity, heat, steam and cooling from renewable sources ³	MWh	2,269,743	1,831,319
Consumption of self-generated renewable energy	MWh	9,213	4,809
Energy production			
Non-renewable energy production	MWh	8,647,262	11,149,812
Renewable energy production	MWh	14,659,693	13,574,072
Energy intensity			
Energy intensity of activities in high climate impact sectors (per net revenue)	MWh/ € mill.	927.3	846.1
Net revenue from activities in high climate impact sectors	€ mill.	34,524	44,431

1 Fuel consumption including use of primary energy in our power plants.

2 Also includes the use of sewage sludge in our electricity and heating plants.

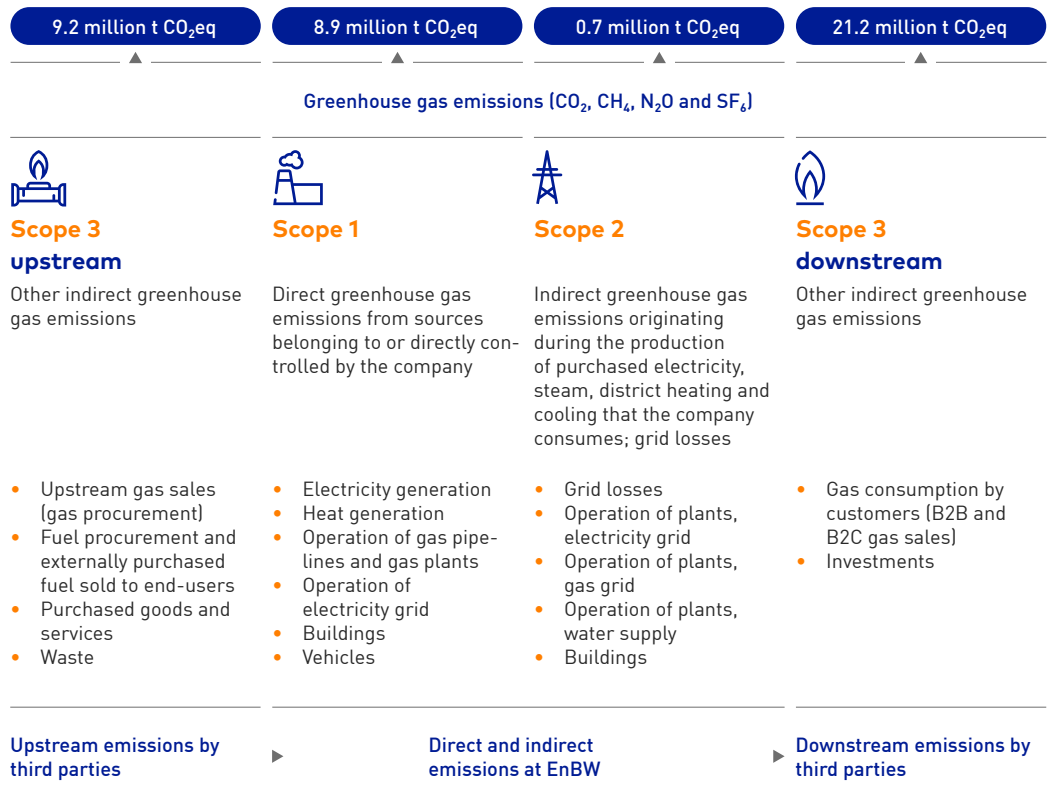
3 Also includes energy supplies from renewable sources at our electricity and heating generation plants, including pumped energy.

From the 2024 reporting year onwards, the total energy consumption reported by EnBW includes the final energy consumption of the generation and infrastructure plants, buildings and vehicles, as well as the fuel consumption – including primary energy – in our electricity and heating generation plants. Total energy consumption is dominated by the use of primary energy and fuels in the power plants. Lower deployment of our coal power plants due to market prices and availability issues and the transfer of Block 7 of the Rheinhafen steam power plant in Karlsruhe to the grid reserve led to a reduction in total energy consumption in the reporting year. In combination with the increased uptake of energy from renewable sources, the proportion of renewable energy sources in total energy consumption rose from 8.5% to 11.5% [p. 97⁷].

All of EnBW's activities are in high climate impact sectors. We are mainly active in the high climate impact sectors D "Energy supply" and E "Water supply."

E1-6 – Gross Scopes 1, 2, 3 and total GHG emissions

Emissions (Scope 1, 2 and 3)



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 using 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 CO₂ 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.

Scope 3 emissions are reported in accordance with the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Standard, which splits the Scope 3 inventory into 15 categories. In the 2024 financial year, we carried out a full materiality assessment of the Scope 3 categories and determined that the EnBW Group had material emissions in a total of six of the 15 Scope 3 categories. We identified emissions in five categories that were below our materiality threshold of 100 thousand t CO₂eq (absolute). The emissions in category 3.4 are currently taken into account in category 3.1 and the emissions in category 3.8 are taken into account in Scope 1. We excluded the categories 3.10 and 3.14 as we have no material business activities related to them (p. 158⁷).

We are currently working with a general emissions factor of 29 g CO₂eq/kWh for the Scope 3 emissions in the upstream value chain related to 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. For the gas combustion of our customers, we use an emissions factor of 201 g CO₂/kWh natural gas in accordance with Annex 2 of the Emissions Reporting Ordinance 2030.

We calculate the upstream CO₂ emissions for procured fuel used for the generation of power and heating in our power plants and the externally purchased fuel that we sell to end-users using information from recognized, publicly accessible databases (GEMIS, UK Defra, German Environment Agency, CaDI). Please refer to the table on [p. 158](#) for further information on the collection of data on emissions.

We also provide information on the performance indicator “CO₂ emissions avoided” when reporting our carbon footprint. A key goal of the energy transition is to protect the climate by reducing greenhouse gas emissions and using energy efficiently. “CO₂ 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 CO₂ 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 CO₂ emissions from 10.9 million t CO₂eq in 2023 to 8.9 million t CO₂eq in 2024. We reduced our market-based and location-based Scope 2 CO₂ emissions from 789 thousand t CO₂eq to 691 thousand t CO₂eq and from 1,438 thousand t CO₂eq to 1,247 thousand t CO₂eq, respectively. This was due to lower indirect CO₂ emissions from grid losses, while our indirect CO₂ emissions from our power plants including pumped storage power plants remained at the same level as in the previous year. Scope 3 CO₂ 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 B2B and B2C gas sales ([p. 79](#)), Scope 3 emissions fell from 33,987 thousand t CO₂eq in the previous year to 30,356 thousand t CO₂eq in the 2024 financial year. The increase in electricity generation from renewable energies led to a rise in CO₂ emissions avoided from 9,874 thousand t CO₂eq in 2023 to 10,815 thousand t CO₂eq in the reporting year.

Gross GHG emissions

	Unit	2024	2023 ¹	Absolute change	Percentage change
Gross Scope 1 GHG emissions					
CO ₂ emissions from combustion and bio-degradation of biomass	Thou. t CO ₂ eq	495	490	5	1.0%
Share from regulated emission trading schemes	%	94	92	2	2.2
Scope 1 emissions from non-controllable electricity generation ²	Thou. t CO ₂ eq	1,592	2,558	-966	-37.8%
Scope 1 emissions from controllable electricity generation ³	Thou. t CO ₂ eq	6,379	7,431	-1,052	-14.2%
Scope 1 emissions from heat generation	Thou. t CO ₂ eq	669	676	-7	-1.0%
Scope 1 emissions EnBW Group ⁴	Thou. t CO ₂ eq	8,862	10,923	-2,061	-18.9%
Gross Scope 2 GHG emissions					
CO ₂ emissions from combustion and bio-degradation of biomass ⁵	Thou. t CO ₂ eq	0	0	0	0.0%
Gross location-based Scope 2 GHG emissions	Thou. t CO ₂ eq	1,247	1,438	-191	-13.3%
Gross market-based Scope 2 GHG emissions	Thou. t CO ₂ eq	691	789	-98	-12.4%
Market-based Scope 2 emissions from grid losses	Thou. t CO ₂ eq	274	364	-89	-24.5%
Market-based Scope 2 emissions from pumped electricity	Thou. t CO ₂ eq	195	182	13	7.1%
Market-based Scope-2 emissions from power plants ⁶	Thou. t CO ₂ eq	162	185	-23	-12.4%
Scope 2 emissions EnBW Group	Thou. t CO ₂ eq	691	789	-98	-12.4%
Gross Scope 3 GHG emissions⁷					
CO ₂ emissions from combustion and bio-degradation of biomass	Thou. t CO ₂ eq	<100	<100	-	-
Scope 3 emissions from purchased goods and services [3.1/3.2] ⁸	Thou. t CO ₂ eq	4,865	5,394	-529	-9.8%
Scope 3 emissions from fuels and energy-related emissions [3.3] ⁹	Thou. t CO ₂ eq	3,753	4,623	-870	-18.8%
Scope 3 emissions from waste [3.5] ¹⁰	Thou. t CO ₂ eq	552	616	-64	-10.4%
Scope 3 emissions from business travel [3.6] ¹¹	Thou. t CO ₂ eq	<100	<100	-	-
Scope 3 emissions from employee commuting [3.7] ¹²	Thou. t CO ₂ eq	<100	<100	-	-
Scope 3 emissions from transmission and distribution (downstream) [3.9] ¹³	Thou. t CO ₂ eq	<100	<100	-	-
Scope 3 Emissions related to the use of sold products [3.11] ¹⁴	Thou. t CO ₂ eq	20,553	22,603	-2,050	-9.1%
Scope 3 Emissions from end-of-life treatment of sold products [3.12] ¹⁵	Thou. t CO ₂ eq	<100	<100	-	-
Scope 3 emissions from downstream leased assets [3.13] ¹⁶	Thou. t CO ₂ eq	<100	<100	-	-
Scope 3 emissions from investments [3.15] ¹⁷	Thou. t CO ₂ eq	629	748	-119	-15.9%
Scope 3 emissions EnBW Group	Thou. t CO ₂ eq	30,356	33,987	-3,633	-10.6%
Total GHG emissions					
Total emissions using location-based Scope 2 methodology	Thou. t CO ₂ eq	40,465	46,348	-5,883	-12.7%
Total emissions using market-based Scope 2 methodology	Thou. t CO ₂ eq	39,909	45,699	-5,790	-12.7%
Location-based total GHG emissions per net revenue	Thou. t/€ mill.	1.2	1.0	0.1	12.5%
Market-based total GHG emissions per net revenue	Thou. t/€ mill.	1.2	1.0	0.1	12.6%
CO₂ emissions avoided¹⁸	Thou. t CO ₂ eq	10,815	9,874	941	9.5%

1 The figure for the previous year has been restated.

2 Includes the CO₂ emissions for electricity generation from redispatch and reserve power plant deployment.

3 CO₂ emissions from electricity generation excluding redispatch and reserve power plant deployment.

4 Also includes emissions from long-term leases for the use of reserve power plants that are not fully consolidated according to Scope 3.8.

5 Data is not available at this level of granularity. The Scope 2 emissions from combustion and bio-degradation of biomass are locked-in in the total Scope 2 emissions.

6 Electricity and heating plants excluding pumped electricity.

7 Materiality threshold: 100,000 metric tons CO₂eq.

8 Includes emissions from purchased goods and services [1,856,483 t CO₂] and upstream emissions for sold gas [3,008,534 t CO₂]. The GHG emissions for purchased goods and services were calculated based on the procurement volume and using emission factors based on NACE codes. This category was reported for the first time in the 2024 reporting year. The upstream emissions for sold gas [from category 3.11] were already reported in the 2023 reporting years under "Upstream gas sales."

9 Includes the upstream emissions from electricity and heating plants in Scopes 1 and 2, the upstream emissions from other fuels (vehicles, buildings), the upstream emissions from grid losses and the externally purchased fuel that we sell to end-users (reported for the first time in the 2024 reporting year).

10 Includes the volumes of waste from the annual reports of the waste management officers, plus the volumes of radioactive waste from EnBW Kernkraft. We applied appropriate emission factors from the Ecolnvent database. This category was reported for the first time in the 2024 reporting year.

11 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.

12 We estimate the emissions from employee commuting based on an analysis of their places of residence conducted in 2023. We estimate days of remote working based on the BestWork decision from 2019. This category was reported for the first time in the 2024 reporting year.

13 Includes the transport of sold power plant byproducts. This category was reported for the first time in the 2024 reporting year.

14 Includes emissions from the combustion of gas by our customers.

15 Includes power plant byproducts and SENEK products. This category was reported for the first time in the 2024 reporting year.

16 Includes the leasing of offices, real estate and vehicles from third parties. This category was reported for the first time in the 2024 reporting year.

17 Includes emissions from the activities of investments that are not fully consolidated (except for leased grid companies of Netze BW, because it was taken into account in Scope 1 and 2 and shell companies because they are not actively operating), as well as power plant investments, if not already included in Scope 3.3. This category was reported for the first time in the 2024 reporting year.

18 Avoided emissions are calculated using the methodology from the German Environment Agency.

E1-7 – GHG removals and GHG mitigation projects financed through carbon credits

GHG removals and storage

At the EnBW Group and within its downstream and upstream value chain, there are currently no GHG removals from the atmosphere with subsequent permanent storage.

GHG emission reductions or removals from climate change mitigation projects

CO₂ offsetting measures in the form of climate change mitigation projects are not currently recorded on a systematic basis at EnBW AG because they fall under the materiality threshold.

The subsidiaries use carbon credits for offsetting a little more widely, although still at a relatively low level compared to the total emissions of the EnBW Group. The carbon credits are used for two main reasons. On the one hand, they are used to offset end-user emissions, while on the other hand, they are used as a measure to achieve climate neutrality at certain investments (Netze BW and Netze-Gesellschaft Südwest) or also in individual business areas (TransnetBW).

Projects to reduce greenhouse gases, financed using carbon credits¹

	Unit	2024
Total quantity of carbon credits outside the value chain cancelled in the reporting period	t CO ₂ eq	346,951
Total quantity of carbon credits outside the value chain for which cancellation is planned	t CO ₂ eq	533,350

¹ No figures for previous year because collected for first time in 2024.

Target of climate neutrality

EnBW is aiming to achieve climate neutrality with respect to its own emissions (Scope 1 and Scope 2) across the whole Group by 2035. This target implies the use of CO₂ allowances. As the SBTi methodology used to validate the EnBW climate protection targets views emissions accounting and CO₂ allowances as complementary but requires that they be taken into account separately, the target of reducing Scope 1 and 2 emissions by at least 83% relative to the reference year 2018 must be independent of the use of CO₂ allowances. CO₂ allowances can only be used for the remaining maximum amount of 17% of residual emissions unavoidable at this point in time.

Our subsidiary Netze-Gesellschaft Südwest was already measuring its Scope 1, Scope 2 and some of its Scope 3 emissions in previous years in order to offset them to neutral. Netze BW was certified as climate neutral for the first time in accordance with the newly published ISO 14068-1 standard in 2023. It not only offsets its direct emissions (Scope 1) and indirect emissions (Scope 2) but also its emissions along the downstream and upstream value chain (Scope 3). Netze BW is aiming to achieve this target again in 2024. TransnetBW has set itself the target of becoming climate neutral with respect to Scopes 1 and 2 by 2035 – which is also the target for the EnBW Group. The minimum reduction it must achieve before the use of CO₂ allowances is based on the targets for TransnetBW's contribution to the achievement of the Group targets (reduction in Scope 1 and 2 emissions by at least 59%). It is then permitted to use CO₂ allowances for residual emissions.

Disclosing the achievement of climate neutrality by our subsidiaries and announcing the target of achieving climate neutrality by 2035 for the EnBW Group add to the climate target architecture of EnBW and are supplementary to the SBTi reduction paths. These could also be supplemented by a net zero target in the future.

Pursuant to the Group-wide reduction targets validated in accordance with the SBTi standard, EnBW is not currently using carbon credits to achieve the reduction targets described in E1-4 nor will it do so after 2035. The use of carbon credits from renowned providers is a climate protection measure outside of the EnBW value chain that reduces greenhouse emissions or removes them from the atmosphere. Supporting these projects makes an additional contribution alongside the measures within the EnBW value chain. This contribution is therefore understood as being "beyond value chain mitigation" because it goes beyond the reduction targets we have set.

Credibility and integrity of the carbon credits

We have a series of guidelines for the use of carbon credits within the EnBW Group that are designed to ensure the credibility and integrity of the carbon credits:

- Certification: Verified Carbon Standards or Gold Standard
- Scalability: Possibility of offsetting large volumes
- Diversity of action: Not exclusively reforestation projects
- Age of the allowances: Not older than five years

In preparation for our target of achieving climate neutrality by 2035 and against the background of recent controversies in the voluntary carbon credit markets, we are currently reviewing these quality requirements with respect to their validity for the whole EnBW Group and the role of carbon credits in our climate protection strategy.

The subsidiaries Netze BW, natureenergie and Netze-Gesellschaft Südwest exclusively use credits from Gold Standard or Verra-certified projects to guarantee their GHG neutrality. natureenergie has stricter quality standards and selects credits using a catalog of criteria, whereby exclusively ex-post carbon credits come into consideration. Certain countries are excluded due to their higher risk of corruption or the technologies and modes of action that can be used for the credits are limited (e.g., exclusion of pure reforestation projects).

E1-8 – Internal carbon pricing

As part of our investment planning, we analyze the impacts that new projects will have on the SBTi-tested reduction targets and greenhouse gas budgets (Scopes 1 to 3). This analysis is carried out to ensure that we comply with our greenhouse gas budgets across the entire generation portfolio. Within our Group strategy, we analyze the impacts of the different options available, especially with respect to the strategic orientation of our segments, on the EnBW climate targets, especially the reduction paths and greenhouse gas budget. This approach ensures compliance with our climate protection targets as an alternative to a carbon pricing system.

E2: Pollution

Emissions of air pollutants are generated in the Group by burning fossil fuels, especially brown and hard coal, and by waste incineration plants. These emissions occur both at EnBW AG and also at some investments such as Stadtwerke Düsseldorf, Lippendorf Beteiligungsgesellschaft and KNG (Kraftwerks- und Netzgesellschaft). The air pollutants that are released are reported in accordance with the Pollutant Release and Transfer Register (PRTR).

In our materiality assessment, therefore, we identified the matters of pollution of air, pollution of living organisms and food resources, substances of concern and substances of very high concern as material. Several of our economic activities (such as thermal waste processing and sewage sludge incineration in our coal power plants) emit air pollutants that have a negative impact on the environment, including on living organisms and food resources. These pollutants also include substances of concern and substances of very high concern, such as particulate matter and nitrogen oxide. Another negative impact of our own operations is the generation of substances of very high concern. For example, small amounts of radioactive waste products are generated during the dismantling of nuclear power plants. Our disclosures on radioactive waste can be found in E5.

E2-1 – Policies related to pollution

Management of material impacts of pollution of air, pollution of living organisms and food resources, substances of concern and substances of very high concern

Our main policy for reducing air pollutants is the fuel switch from coal to natural gas and later to sustainably generated hydrogen at the power plant locations in Altbach/Deizisau, Heilbronn and Stuttgart-Münster. The aim is to significantly reduce emissions of, for example, dust, heavy metals, nitrogen oxides, sulfur oxides and mercury. These emissions will be gradually reduced and eliminated over the long term as part of our planned phaseout of coal by 2028, as long as corresponding framework conditions are met [p. 36⁷]. Until the fuel switch can take place, modern flue gas cleaning systems will be operated at the fossil-fuel fired electricity and heating generation plants in the Group to reduce material emissions to air. The fuel switch policy is embedded in the Climate Transition Plan [p. 35 ff.⁷]. The published transition plan includes all subsidiaries in the scope of consolidation in terms of objectives, measures and necessary resources. The plan was approved by the Board of Management and published in April 2024. EnBW plans to update it on a regular basis.

Reducing negative impacts related to the emission of air pollutants is also anchored in the EnBW Sustainability Agenda in measure 8 [p. 33⁷]. The EnBW Sustainability Agenda acts as a strategic framework for our sustainability activities and is the responsibility of the Board of Management.

We evaluate specific environmental impacts, including those identified by the materiality assessment, and derive risks and opportunities using established environmental management systems certified according to the Eco Management and Audit Scheme (EMAS) or ISO 14001. These systems cover, in each case, the whole organizational unit and define key obligations, tasks and overarching processes. The responsibilities in an environmental management system according to EMAS or ISO 14001 are organized top-down. In its Business Allocation Plan, the Board of Management of EnBW AG has transferred responsibility for the universal task of “environmental protection” to the Chairman of the Board of Management. In addition, environmental management officers and employees are responsible for designing the environmental management system. Other elements of the environmental management systems, such as evaluating environmental matters and implementing environmental programs, are documented in the environmental management systems at the main environmentally relevant Group companies. The various roles are defined in the ISO standard and are also anchored in the guidelines for environmental and energy management at EnBW AG. Evaluations of potential environmental pollution are thus communicated up to management level and used to derive avoidance and mitigation actions. The environmental targets with respect to air pollutants in the environmental management system apply to the whole Group. This means

Further information on the fuel switch policy can be found in the [Climate Transition Plan](#).

[Online ↗](#)

The proportion of employees working in companies validated according to EMAS or certified according to ISO 14001 is:

75.8%

reducing emissions of air pollutants via the fuel switch policy and the future switch to sustainably generated hydrogen are anchored in the environmental management system.

Most of the employees in the EnBW Group work at companies that are validated according to EMAS or certified in accordance with ISO 14001 (75.8%). This creates the prerequisites for ensuring that we take environmental requirements systematically and continuously into account, that we have established the necessary guidelines and regulations, define environmental targets and continue to monitor them and have the necessary testing processes in place. The consistent implementation and further development of the environmental management system helps to avoid negative impacts caused by pollution in the best possible way.

Management of material impacts with respect to substances of very high concern

The dismantling of nuclear power plants by EnBW Kernkraft also has impacts with respect to substances of very high concern. EnBW Kernkraft has a holistic policy for managing risks and emergency situations. This includes measures for firefighting and water and soil protection implemented by the works fire department and local fire departments, structural installations for preventing the release of pollutants and radiological solutions to ensure activity retention.

Radioactive residues and waste are produced when EnBW Kernkraft dismantles the nuclear power plants. These residues and waste are documented in accordance with the statutory or regulatory guidelines in the residue management and control system and the Waste Flow Tracking and Product Control System. Furthermore, EnBW Kernkraft uses planning, preparation and protection measures to avoid pollution of water and soil, especially during construction or dismantling work. It is able to initiate a set of cleaning measures if water or soil does get polluted. The legal requirements for larger modifications to plants or construction measures include the completion of environmental impact assessments. If required by law, compensatory measures are taken.

Management of material impacts in the supply chain

As there are indirect negative environmental impacts in the supply chain, our Supplier Code of Conduct requires our suppliers and business partners to take suitable action to minimize environmental damage resulting from their business activities and business relationships. In particular, we expect them to check for compliance with relevant environmental, health and safety regulations in their operations and in their supply chain on an ongoing basis. Our suppliers are also obligated to preserve resources, mitigate emissions, pollutants and polluted wastewater, and maintain the quality of water and fertility of soil. They are also required to continuously improve resource efficiency through appropriate processes and methods, properly dispose of waste and promote the application of environmentally friendly technologies.

Policies for avoiding incidents and emergency situations

In comparison to air pollution, our business activities only have a negligible impact when it comes to pollution of water and soil. There is no situation where this type of pollution occurs continuously or to a material level. Therefore, we do not exceed the thresholds with respect to the reporting criteria according to the PRTR. Despite the small scope of this pollution, we take organizational and procedural actions to counter the risks, including within the scope of our emergency planning and hazard prevention measures.

The Group guidelines for business continuity & crisis management include standardized emergency drills so that employees can learn how to behave in an emergency situation through regular exercises, sometimes together with external emergency services. Every conventional power plant has an alarm and hazard prevention plan in place that describes how to behave correctly in emergency situations. All furnaces and safety-relevant plant components, such as ammonia storage facilities, across the Group are continuously monitored by measurement equipment to detect any deviations from normal operation automatically so that countermeasures can be initiated immediately. Shift personnel also carry out regular inspections of the plants. Furthermore, we service the plants regularly and have them inspected by certified experts.

For plants that are subject to the 12th Federal Immission Control Act (12th BImSchV, Major Accidents Ordinance), we have developed comprehensive policies and safety reports with clearly defined action plans. These plans include, for example, accident and emergency measures and regular inspections and updates.

The gas grid company terranets bw routinely carries out inspections of its pipelines and compressor stations to identify and resolve potential hazards at an early stage. This includes manual inspections and the use of remote sensing technologies and sensors to detect leaks. It also holds regular exercises and training courses on safety, emergency situation management, etc. If incidents nevertheless occur, comprehensive emergency plans are also in place (e.g., processes for shutting down the plant, triggering alarms).

E2-2 – Actions and resources related to pollution

The EnBW Group takes the following actions to avoid and mitigate air pollution in its coal power plants and waste incineration plants:

- Dust separation using electric and fabric filters
- Operation of flue gas desulfurization systems
- Operation of flue gas denitrification systems
- Dosing with precipitation agents to separate mercury

Substantial funds are made available for these measures. They are necessary for existing exhaust air and wastewater cleaning systems in order to fulfill legal requirements. Generous project budgets are made available for new exhaust air cleaning systems and modernized wastewater cleaning systems, etc., in the new construction projects.

The gas and steam turbine power plants being constructed within the fuel switch projects are also being equipped with modern SCR catalysts to reduce nitrogen oxide emissions.

We also mitigate negative impacts by complying with legal regulations. At relevant locations within the EnBW Group, we commission certified experts to carry out regular inspections in accordance with section 29a Federal Immission Control Act (BImSchG) and section 53 of the Ordinance on installations for handling substances hazardous to water (AwSV) so that we can identify and rectify potential sources of environmental pollution at an early stage. These external inspections guarantee that we comply with environmental standards. The authorities also carry out on-site inspections and help to identify and mitigate risks. Our work is based on strict compliance with relevant legal regulations, such as the Technical Instructions on Air Quality Control (TA Luft), the 44th Federal Immission Control Ordinance (44th BImSchV), the Federal Water Act (WHG) and the Ordinance on installations for handling substances hazardous to water (AwSV). Furthermore, internal audits continuously monitor legal compliance and help to identify potential for improvement. This enables us to systematically assess risks and take appropriate action to reduce environmental impacts.

Action taken by VNG includes regularly measuring emissions, which are continuously monitored and analyzed to ensure that emission values do not exceed the legally prescribed limits. The gas grid company ONTRAS Gastransport has invested in modern technologies such as exhaust gas aftertreatment systems and new burner technologies that reduce NO_x emissions to a minimum.

We use cleaning and filtration processes to combat our material impact with respect to substances of very high concern at EnBW Kernkraft. These processes include regularly measuring emissions, which are continuously monitored and analyzed. This helps us ensure that emission values, the legally prescribed limits and any official values or requirements stipulated in the power plant license are complied with. In order to comply with emission values, we clean and monitor radiological emissions in the exhaust air and chemically and mechanically clean and prepare our wastewater.

To satisfy requirements with respect to climate change mitigation, it is vital that we provide our employees with regular internal training and external training courses on environmental regulations and best practices. This is the only way to ensure that the latest developments and new legal regulations are integrated into our everyday work.

E2-3 – Targets related to pollution

Companies in the Group with environmental and energy management systems certified according to EMAS, ISO 14001 or ISO 50001 have set measurable targets and defined actions and metrics for improving environmental impacts and energy efficiency. Please refer to the table on p. 165f.⁷ for substances with an obligatory reporting requirement according to the PRTR.

We currently have targets for reducing NO_x and SO₂ emissions by 2025. The targets are voluntary and follow the Group strategy for the gradual phaseout of fossil fuel sources.

SO₂ intensity and NO_x intensity

EnBW has specific environmental targets for reducing pollutant emissions. Our target is to reduce the SO₂ intensity and NO_x 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. The calculation of our key performance indicators (metrics) SO₂ intensity and NO_x intensity is carried out using emissions of SO₂ and NO_x 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 and the generated volume of electricity. They thus describe the specific amount of SO₂ or NO_x released per kilowatt hour.

SO₂ and NO_x intensity

	Unit	2024	2023	Change	Target for 2025	Reference year 2018
SO ₂ intensity ^{1,2,3}	mg/kWh	119	206	-42.1%	-15% to -25%	295
NO _x intensity ^{1,2,3}	mg/kWh	169	211	-20.2%	-10% to -20%	337

1 The figure for the previous year has been restated.

2 Own generation including contract power plants, excluding nuclear generation.

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

The SO₂ intensity and NO_x intensity of our own electricity generation decreased in comparison to the previous year by 42% to 119 mg/kWh and by 20% to 169 mg/kWh, respectively. The reduction in these performance indicators in comparison to the previous year is due to the increase in generation from renewable energy sources and the lower deployment of our coal power plants as described previously. SO₂ intensity and NO_x intensity in 2024 had fallen 60% and 50%, respectively, in comparison to the reference year 2018 (295 mg/kWh and 337 mg/kWh, respectively).

Except for air pollutants and the specific loads in each case, we have not currently defined any targets for the reduction of substances of concern in any specific application, except for a substitution requirement for hazardous substances.

The targets set by EnBW Kernkraft are defined based on EnBW's targets and supplemented with specific targets. The overriding goal is to minimize loads released to air, even if they are below the approved values.

E2-4 – Pollution of air

In accordance with the legal, license and sector-specific requirements, we report the following air pollutants from the large combustion plants and waste incineration plants in the EnBW Group in accordance with PRTR:

PRTR

	Unit	Emitted to air 2024	Emitted to air 2023	Main hazard classes according to CLP
Sulfur oxide (SO _x /SO ₂)	kg/year	3,274,166	5,949,574	H330, H314, H318, H370
Nitrogen oxide (NO _x /NO ₂)	kg/year	5,160,826	6,734,467	H330, H314, H318
Carbon monoxide (CO)	kg/year	1,080,947	905,500	H331, H360D, H372
Particulate matter (PM10) ¹	kg/year	< TV ²	–	no CLP classification
Fluorine and inorganic compounds (as HF) ¹	kg/year	6,401	–	H330, H314, H318
Chlorine and inorganic compounds (as HCl) ¹	kg/year	25,021	–	H330, H315, H319, H335, H400, H410
Mercury and compounds ¹	kg/year	37.9	–	H330, H360D, H372, H400, H410
Sum of heavy metals ^{1,3}	kg/year	87.8	–	H341, H350, H361fd, H372, H400, H410, H301, H310, H330, H314, H318, H317, H334, H335, H340, H361f, H351, H412, H360FD, H362

¹ No figures for previous year because we only collected data on other substances of concern for the first time in 2024, insofar as individual plants exceeded the threshold values according to PRTR. The figure for 2023 is thus not comparable with the figure for 2024.

² TV: Threshold value.

³ Contains compounds of: cadmium, thallium, antimony, arsenic, lead, chromium, cobalt, copper, manganese, nickel, vanadium, tin.

The release of particulate matter is measured to check compliance with the limit value in accordance with PRTR. In 2024, we did not exceed the limit value at any of our relevant locations. However, there is still the possibility that this may change in the future. To ensure consistent and transparent reporting, particulate matter has been included in the table despite the fact that our emissions are currently below the limit value.

The pollution of water and soil is not as important an issue for EnBW because these types of pollution do not occur on an ongoing basis. This is why we only report quantitative metrics for air pollution.

The PRTR loads correlate with the use of fossil fuel-fired plants, which is why they will fall as we decrease the deployment of fossil fuel-fired power plants over the next few years. We have voluntarily collected data on the PRTR air pollutants (SO₂, NO_x, CO) for many years and this allows us to make year-on-year comparisons. The annual reductions for SO₂ and NO_x are within the planned target corridor for a reduction of between 10% and 25% by 2025 in comparison to the reference year 2018 (p. 164⁷). Although they are classified as PRTR air pollutants, it is important to note in the case of CH₄ and N₂O that they do not fulfill the characteristics of pollutant emissions as described in this standard. Please refer to the disclosures on greenhouse gas emissions in this report for more information on these substances (p. 158f.⁷).

Description of the measurement methodologies

Emissions of air pollutants are measured across the Group by certified bodies. To determine the annual loads in accordance with PRTR, there are approved calculation methodologies for specific substances (generally using data taken from the flow of flue gases for the consumed fuels). Each of the air pollutants is measured in the flue for exhaust gases using legally defined measurement methodologies (FTIR: Fourier transform infrared spectroscopy, AAS: thermocatalytic conversion and atomic absorption spectrometry).

Measurement methodologies:

- Nitrogen oxide via FTIR
- Sulfur dioxide via FTIR
- Carbon monoxide via FTIR
- Dust via the scattered light method
- Fluorine and organic compounds via FTIR
- Chlorine and organic compounds via FTIR
- Mercury and compounds via FTIR
- Heavy metals (antimony, arsenic, cadmium, thallium, lead, chromium, cobalt, copper, manganese, nickel, vanadium, tin) and their compounds via gas and dust extraction and subsequent laboratory analysis via AAS

The measurements of air pollution at EnBW Kernkraft are carried out using detailed measurement programs. Air activity is continuously analyzed using carbon vane pumps.

The rest of the process for determining the annual loads is the same as the PRTR method and as described on the German portal provided by the German Environment Agency and Federal Ministry for the Environment on the website Thru.de.

We measure our air emissions using methodologies and tools that comply with the legal requirements in each case. They reflect the current state of technology and are regularly revised. The company VNG uses standard factors for the calculations if no real values are available or measurable at the plants. The volumes of gas used for the emission calculations are determined using appropriate meters. Standard emission factors are used for the calculations.

E2-5 – Substances of concern and substances of very high concern

Material substances of concern are produced at EnBW in the form of emissions during the operation of coal power plants. These substances are nitrogen oxide, arsenic, mercury and particulate matter. We also report on other substances of concern in accordance with the PRTR (p. 165f.⁷). Radioactive waste is reported in E5.

Substances of concern

	Unit	2024
Substances of concern that leave the undertaking's plants		
Emissions of substances of concern ^{1,2}	t	9,547

1 Substances of very high concern are disclosed in E5 under radioactive waste.

2 This amount includes the PRTR substances that can be assigned to the main hazard classes according to CLP (p. 169).

E3: Water and marine resources

Water resources are primarily used at EnBW within the following business activities: conventional generation, electricity generation using hydropower and the supply of water. In the operation of fossil fuel-fired electricity and heating plants (coal, oil, gas, thermal waste disposal), we mainly withdraw river water for cooling purposes and as process water and discharge it back into the river after use. The use of water resources in this way is necessary for technical reasons. We withdraw the largest volumes of water and thus also discharge the largest volumes at our power plant locations in Altbach/Deizisau, Düsseldorf, Heilbronn, Karlsruhe, Lippendorf and Rostock. Due to the fact that the water is discharged back again, EnBW does not withdraw a material volume of water.

In our materiality assessment, therefore, we identified the theme of water discharge in connection with our own operations as material. The discharge of heated cooling water back into nature can result in oxygen deficiency and changed water chemistry and can reduce the quality of the water, with negative impacts on aquatic ecosystems.

E3-1 – Policies related to water and marine resources

The reduction of our negative impacts related to water discharge is also anchored in the EnBW Sustainability Agenda in measure 8 (p. 33⁷). One of the milestones for this measure is the design of a policy for reducing the withdrawal of fresh water and for the treatment of wastewater. The EnBW Sustainability Agenda acts as a strategic framework for our sustainability activities and is the responsibility of the Board of Management.

Furthermore, the targets, programs and actions within the environmental management systems established in the Group contribute to, for example, the efficient use of water. We use them to analyze progress made in the area of cooling water usage. We use an environmental management system to evaluate our targets with respect to reducing volumes of cooling water every year in the management review.

Detailed information on our environmental management system can be found in the section on E2-1 (p. 161 f.⁷).

Water management is the responsibility of public authorities. Water resources must be managed to create a fair balance between resource availability and competing demands for water. The EnBW Group uses water in compliance with the water management plans issued by authorities. The scope of use authorized by the authorities is monitored using a comprehensive approval, measurement and verification system. This means that the water management plans contribute towards the responsible and economical use of water for cooling purposes.

The climate crisis has led to increasing periods of hot weather and there is now much greater public interest in water levels and temperatures, especially in the Rhine and Neckar rivers. As an operator of thermal power plants, EnBW is able to work with the authorities to give as much due consideration to fresh water ecology as possible, as well as to security of supply with the support of forecasts from new water balance models and thermal models. In practical operation, deployment of the power plants can be planned in line with water level and temperature forecasts and selectively reduced if necessary. This can also be done for ecological reasons (protection of fish and macrozoobenthos).

In terms of marine resources, the only relevant activities in the EnBW Group are in the offshore wind sector. The offshore power plants in the North Sea and Baltic Sea and the power plants planned in the Irish Sea are installed only in sufficiently large areas of water to utilize the especially good wind conditions there – without actually using the water itself. We comply with all necessary environmental protection requirements to mitigate the impact on the ocean and its flora and fauna.

The proportion of employees working in companies validated according to EMAS or certified according to ISO 14001 is:

75.8%

Locations in areas of water stress

According to the WWF Water Risk Filter (WWF Water Risk Filter – Maps – November 2024), 58.2% of the generation locations in the EnBW Group with materiality with respect to water are in areas of high water stress. A total of 41.8% of the EnBW locations are in areas of low or medium water stress.

All of the locations in areas of high water stress primarily use surface water. The WWF classification is based especially on an assessment of groundwater resources. However, groundwater is only withdrawn at these locations to a very small extent (less than 1%). Surface water is mainly withdrawn directly from rivers and is thus not affected by or does not affect a lack of precipitation or groundwater in the local area. Furthermore, we discharge around 97% of the cooling water back into the river. Therefore, this classification of “water stress” does not fully reflect our actual usage conditions. For this reason, we do not believe it is necessary to classify the locations or to develop specific policies for areas of high water stress. Nevertheless, the locations are still covered by our environmental management system.

E3-2 – Actions and resources related to water resources

We derive actions within our environmental management system to promote the **careful use of water**. Alongside regular monitoring by the authorities and comprehensive sampling and analyses carried out by third parties, EnBW has also, for example, appointed water protection officers to protect water resources where relevant across the Group. In addition, we create comprehensive reports and maintain verification documentation (in the form of water withdrawal logbooks) to ensure we only use water to the necessary extent.

We counteract impacts related to the discharge of heated cooling water using **modern cooling systems**. By increasingly using modern cooling systems – such as air coolers, newer and more efficient power plants and combined heat and power systems – at our power plant locations we reduce the burden on waterways considerably in comparison to thermal discharge from older heating power plants that use direct flow cooling systems (reducing the temperature to protect nature and species). During periods of high temperature and low water levels in the summer, EnBW has developed a water, heat and oxygen management system together with the authorities to mitigate adverse effects on bodies of fresh water.

Despite all of the preventative measures, there is still a risk that substances hazardous to water could escape in the event of an accident. We have defined Group-wide hazard prevention and emergency response procedures for these eventualities, train personnel and keep appropriate materials ready to mitigate the severity of such incidents. The company also cooperates closely with external emergency services. In the event of an accident, we commission specialist companies to immediately remove the contamination and, together with the water protection officers and responsible authorities, gather data and evaluate it to identify potential for improvement.

Alongside ecological incentives to use the least possible amount of water for cooling and processing purposes, the water levies that have now been imposed for many years by regional water authorities for the withdrawal of water at the Group locations also act as an economic incentive.

E3-3 – Targets related to water resources

We have defined a voluntary, Group-wide target for minimizing the volumes of cooling water and wastewater used. As cooling water is treated as wastewater in German water law and both types of water are dependent on one another to a certain extent, we have developed a combined target for them. To reduce our volumes of cooling water and wastewater, we have set ourselves a reduction target for wastewater intensity of between 20% and 30% by 2025 in comparison to the reference year 2018. The calculation of the key performance indicator wastewater intensity is carried out using the volumes of cooling water and wastewater discharged from our own electricity generation at the EnBW Group together with the volume of electricity generated within the Group without the contribution made by the nuclear power plants.

Wastewater intensity

	Unit	2024	2023	Change	Target for 2025	Reference year 2018
Wastewater intensity^{1,2}	l/kWh	23	28	-18.57%	-20% to -30%	31

1 Wastewater is the total of the amounts of cooling and wastewater that are discharged into surface water.

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

Wastewater intensity is used as a comprehensive measure to reduce the volumes of cooling water and wastewater at all of EnBW's power plant sites and thus helps to mitigate any negative impacts that have been identified. The effectiveness of this indicator is assessed annually as part of the environmental management system and in management reviews.

In 2024, the wastewater intensity of our own electricity generation fell in comparison to 2023 by 19% from 28 l/kWh to 23 l/kWh. The reduction in comparison to the previous year is due to the increase in generation from renewable energy sources and the lower deployment of our coal power plants as described previously. The wastewater intensity was 26% lower in 2024 in comparison to the reference year of 2018 (31 l/kWh).

In addition, the Group companies also annually define and implement their own voluntary targets and actions related to the use of water and the protection of bodies of fresh water in environmental programs. These targets and actions are derived from the environmental management systems and are individually tailored to each individual company and location.

E4: Biodiversity and ecosystems

In our materiality assessment, we identified the themes of direct impact drivers of biodiversity loss (climate change, land use change, fresh water use and seawater use, direct exploitation), impacts on the state of species (species population size) and impacts on the extent and condition of ecosystems as material.

In this context, our own operations such as the construction of power plants and grids contribute to losses in biodiversity. In our upstream value chain, the procurement of coal and gas and mining materials for renewable energies can have negative impacts. Furthermore, our economic activities can have negative impacts on the state of species and on the extent and condition of ecosystems due to soil sealing. We compensate for the negative impacts on biodiversity in our new construction projects in accordance with the mitigation hierarchy.

E4-1 – Transition plan and consideration of biodiversity and ecosystems in strategy and business model

As an energy company and infrastructure provider, EnBW encroaches on nature by using land and water and sealing soil. Therefore, the material business activities include, in particular, conventional and renewable generation and critical infrastructure (electricity and gas grids). New construction projects also require the use of more land, which can result in the loss of habitats and thus biodiversity. This also applies to numerous other companies in the Group. If the use of land has negative impacts, we implement compensatory measures in accordance with the legal regulations. Reducing our negative impacts on biodiversity is also anchored in the EnBW Sustainability Agenda in measure 7 (p. 34⁷). The EnBW Sustainability Agenda acts as a strategic framework for our sustainability activities and is the responsibility of the Board of Management. A Group-wide biodiversity policy is being developed within this measure. Work on the policy will start in 2025 after the corresponding Group guideline has been approved. In this context, we are also currently developing a transition plan for how to bring the business model and strategy in line with the visions of the Global Biodiversity Framework. An analysis of the resilience of the strategy and business model with respect to biodiversity and ecosystems is not currently carried out centrally for the whole Group. Stadtwerke Düsseldorf (SWD) plans to develop a biodiversity strategy including a resilience analysis by 2026.

SBM-3 – Material impacts and their interaction with strategy and business model

Material locations and management of the impacts

With respect to biodiversity and ecosystems, the material EnBW locations comprise the eleven power plants and three gas cavern storage facilities.

The operations at our locations can have minor negative impacts within the legally permissible limits (e.g., the Habitats Directive, Birds Directive, Federal Nature Conservation Act) in biodiversity-sensitive areas. As negative impacts cannot be excluded, they are mitigated or compensated for in accordance with the legal regulations and the requirements imposed during the licensing process. Comprehensive environmental impact assessments are carried out for our new construction projects.

The proportion of employees working in companies validated according to EMAS or certified according to ISO 14001 is:

75.8%

E4-2 – Policies related to biodiversity and ecosystems

Biodiversity is a high priority for EnBW. Conserving biological diversity is a key component of environmental protection and sustainable corporate management. This is clearly highlighted by the fact that this theme is anchored in the EnBW Sustainability Agenda in measure 7 (p. 34⁷). We will be developing a Group-wide biodiversity policy within this measure in 2025 with a team of relevant internal stakeholders from different areas of the Group.

Biodiversity is also a key area of the environmental management system. These concepts are also anchored in the guidelines for environmental and energy management at EnBW AG and act as a framework for our activities. You can find detailed information on our environmental management system in the disclosures for E2-1 (p. 161 f.⁷). The obligatory processes and procedures in the environmental management system provide a systematic framework for identifying, evaluating and improving relevant environmental matters. This includes species protection and nature conservation. For example, our environmental programs address how to improve species protection at hydropower plants.

As the exact design of the policy and the specific actions and targets for the whole Group are still largely at the planning stage, it is not possible at this time to give more detailed information on prospective matters. In general, it is important to point out that protected areas in Europe and especially Germany, where most of our companies are active, already have a special legally protected status. As part of all of our new construction projects, we are required to investigate the impacts on protected areas and, if identified, how we can prevent, mitigate or, if this is not possible, compensate for them.

Some companies have also developed their own special policies. For example, TransnetBW has developed guidelines for the protection of soil in cooperation with regional and interregional environmental associations. These guidelines include rules for taking soil protection into consideration and are valid for high-voltage DC transmission lines. Managers at the first level below top management are responsible for implementing these guidelines. natureenergie netze has developed conservation plans for managing power plant sites and concession routes. The plans include guidelines that are designed to promote a close-to-nature design and conserve native species. The High Rhine Production department is responsible for implementing these conservation plans. Spot checks are carried out to measure the success of these plans.

E4-3 – Actions and resources related to biodiversity and ecosystems

Biodiversity has been one of the 14 measures in the EnBW Sustainability Agenda since 2024. This ensures that appropriate resources are dedicated to the theme of biodiversity. German and European legislation includes comprehensive regulations on actions to manage impacts on biodiversity, which are complied with by EnBW AG and all of the Group companies. In particular, this includes completing environmental impact assessments and other environmental surveys, as well as compliance with any licensing requirements to mitigate the negative impacts on the environment. We avoid, mitigate and compensate for the negative impacts related to new construction and conversion projects and to the operation of plants in accordance with the mitigation hierarchy. We commission and have recently commissioned external experts to investigate the environmental impacts of any new locations and locations where we recently carried out construction projects (e.g., as part of an environmental impact assessment or an environmental report).

We usually define action for the protection of biodiversity specifically for a particular business area. Our protection program for amphibians and reptiles, which is part of the funding program “Impulses for Diversity,” is one example of action that covers all business areas and has been in place since 2011. EnBW initiated this funding program in 2011 in cooperation with the Baden-Württemberg State Institute for the Environment. Following its successful launch, we extended the program in 2016 to include funding for protective measures for reptiles. We have now funded 140 individual projects for amphibians and reptiles and provide funding of €50,000 for this purpose every year. This program is open-ended.

EnBW AG is actively involved in the development of installations that allow fish to easily ascend rivers. Both technical installations and naturalistic bypass waterways have now been constructed at numerous EnBW hydropower plants. State-of-the-art fish ladders that enable fish to descend the river have been retrofitted at many smaller hydropower plants, mostly in combination with a rack system with narrow gaps between the bars.

Subsidiaries have also taken various actions depending on the size of the plant and on their responsibility to protect fish populations and restore ecological passability in cooperation with the responsible licensing authorities. The German federation is responsible for ensuring ecological passability (section 34 (3) WHG) and minimum water discharge (section 33 WHG) of the Neckar river, while power plant operators must comply with population conservation requirements (section 35 WHG) at the power plants. Some temporary, alternative mitigation measures (e.g., catch & carry, also known as “fish taxi”) have been approved and are recognized as practical intermediate solutions. They are currently being used by Neckar AG in agreement with the regional councils. We implemented a pilot project for fish-friendly turbines in Hirschhorn, which is currently being monitored. In agreement with the responsible approval authorities, EnBW takes continuous action to restore ecological passability and the associated measures are included in the latest management plans issued by the authorities.

If relevant, we take action to protect or improve habitats depending on the natural ecosystems in the impacted bodies of water. For example, Neckar AG has established a project to improve the river below the weir system in the Altneckar river in Ladenberg by adding gravel to improve morphology. Neckar AG will examine the effectiveness of this measure every three years. Projects to monitor the effectiveness of new technologies (e.g., fish lifts) are initiated in agreement with the authorities when they are in the test phase.

Our actions to mitigate the negative impacts of construction projects include the development of weather-resistant vegetation to provide shade, the creation of additional habitats for insects and measures to protect fish populations. Routes for power lines are also selected to have the least possible negative impacts on people and nature. Many of these measures are implemented in response to regulatory requirements, such as environmental impact assessments.

Our subsidiaries take a diverse range of actions to promote biodiversity and protect ecosystems. For example, compensatory measures such as flower meadows and replacement planting have been taken by BALANCE Erneuerbare Energien, Erdgasspeicher Peissen and VNG Gasspeicher. Other key actions to resettle and monitor amphibians, bats and birds are taken by EnBW Erneuerbare Operation & Service, onshore wind farms and EnBW Kernkraft. We carry out biomonitoring during the approval process for our offshore wind farms to investigate and counteract potential impacts.

Application of a mitigation hierarchy and action plans

The application of a mitigation hierarchy is enshrined in law in Germany in the Federal Nature Conservation Act and in Europe through Natura 2000. We apply the mitigation hierarchy in every new construction project.

The EnBW Group does not currently have overarching action plans. However, we implement compensatory measures for every new construction project in accordance with legal regulations. These include, for example, vegetation maintenance, restoration and renaturation measures following the completion of construction projects, the development of replacement habitats and resettlement measures. The measures are carried out in agreement with experts and the licensing authorities. Action plans will be developed in 2025 as part of the biodiversity policy.

E4-4 – Targets related to biodiversity and ecosystems

We will be developing Group-wide biodiversity targets as part of measure 7 of the EnBW Sustainability Agenda in 2025.

However, several subsidiaries have already developed targets for mitigating or avoiding material impacts related to biodiversity. naturenergie has defined a target for increasing the number of fish ladders to help fish ascend and descend the river at its hydropower plants. The fish ladders are surveyed about every ten years because improvements are generally associated with structural modifications. In the 2024 financial year, naturenergie started planning the redesign of the fish ladder in Laufenburg to make it easier for fish to ascend and descend the river. TransnetBW has set itself the target of operating at least 95% of the power line sections in forested and green areas in accordance with the ecological route management concept (ÖTM – ökologisches Trassenmanagement) by 2030. This target was developed in cooperation with the responsible specialist department “Plant Operations” at TransnetBW. Around 75% of the power line sections are managed in accordance with the ÖTM concept at the moment. A detailed inventory is being carried out in 2025.

E4-5 – Impact metrics related to biodiversity and ecosystems change

Group-wide metrics related to material impacts will be developed in the next few years. Selected parameters to describe impacts in relation to land-use change will be separately developed for Group companies as part of a biodiversity policy in 2025.

The high density of biodiversity sensitive areas means that 14 of our material sites and thus 358 hectares of land are either located in or¹ of biodiversity-sensitive areas where they could have minor impacts on biodiversity. The Federal Nature Conservation Act requires that these locations comply with comprehensive regulations on the protection of biodiversity-sensitive areas.

¹ Within a radius of 2 km

E5: Resource use and circular economy

In our materiality assessment, we identified the themes of resource inflows, including resource use, and waste as material. We use and consume natural resources in our own operations, which is associated with emissions and general environmental impacts. Small amounts of radioactive waste are also produced in the dismantling of our nuclear power plants.

E5-1 – Policies related to resource use and circular economy

Policies for resource inflows and waste

EnBW understands the importance of avoiding the use of virgin resources and increasing the use of secondary (recycled) resources in relative terms. This is underlined by the fact that the concept of a circular economy is firmly anchored in the EnBW Sustainability Agenda [p. 33 f.⁷]. It acts as a strategic framework for our sustainability action plan and is the responsibility of the Board of Management. In measure 6, we are working to establish the concept of a circular economy as a fixed component in the planning, development and implementation of projects. In 2023, we carried out a comprehensive status quo analysis, followed by a feasibility study in 2024 to identify circular economy-related potential across the company. We are working to identify specific applications for a circular economy based on the findings.

Furthermore, resource efficiency and the careful management of resources are components of the environmental management system at EnBW. These concepts are also anchored in the guidelines for environmental and energy management at EnBW AG and act as a framework for our activities. You can find detailed information on our environmental management system in the disclosures for E2-1 [p. 161 f.⁷].

The responsible management of resources covers several core areas. We utilize innovative technologies to minimize the consumption of resources in our operational processes. Important elements include optimizing energy and water consumption, reducing waste and supporting the reuse and recycling of materials. We have established projects for the recovery of raw materials and the use of recycled materials and second-life use for this purpose. These projects help us to better understand the circular economy-related potential of our business activities and derive plans for future action.

We manage our waste in compliance with the statutory regulations in section 6 German Circular Economy Act (KrWG). This means that waste is preferably avoided, prepared for reuse or recycled before its disposal is even considered. The respective manager has overall responsibility in this area. Alongside the general commercial and municipal waste generated at our company, the conventional power plants at EnBW AG – which are responsible for the largest waste streams in the company – produce, in particular, sludge mixtures, fly ash, bottom ash, slag and filter dust as waste.

EnBW Kernkraft, which is the EnBW subsidiary legally responsible for the remaining operation and dismantling of EnBW's nuclear power plants in compliance with the German Atomic Power Act and thus also for residual substances and radioactive waste, must comply with various legal and state regulations for the disposal of nuclear and conventional waste. To achieve these objectives, we maintain high standards during the disposal process and avoid risks by, among other things, commissioning certified waste disposal companies.

The proportion of employees working in companies validated according to EMAS or certified according to ISO 14001 is:

75.8%

Sustainable sourcing and use of renewable resources

Our Supplier Code of Conduct (SCoC) ensures that we give preference when purchasing materials and products to those suppliers that comply with high environmental standards and sustainable practices. The purchasing department at EnBW AG is responsible for ensuring that the SCoC is accepted by suppliers. Acceptance of the SCoC is a prerequisite for collaboration with suppliers. The key to sustainable supply chains lies in this collaboration with our suppliers. We strive to purchase fair and sustainable goods and services. In cooperation with our more than 10,500 suppliers, we take responsibility for minimizing our resource consumption by considering sustainability criteria in the procurement process. Elements of the tools we use for this purpose are the evaluations and ratings from EcoVadis. We will also include sustainability criteria in the evaluation matrices for future invitations to tender and use them as a quantitative criterion when awarding contracts.

E5-2 – Actions and resources related to resource use and circular economy

Within the scope of the certified environmental management systems at EnBW AG and numerous investments, we use standard Plan-Do-Check-Act processes to identify which action should be taken to, among other things, conserve resources and avoid waste. This includes action derived from audits. We provide training on environmental issues to employees in the relevant specialist departments on an annual basis, to raise awareness and instruct them in the careful management of resources.

Above and beyond the legal regulations in KrWG, we take further action to promote the conservation of resources and a circular economy. Based on the findings from a feasibility study we carried out in 2024, we have identified applications for a pilot project to develop circular economy metrics. We are not only continuously refining this project but also currently evaluating how we can implement the findings in practice. For example, we have initiated innovative projects at four locations where batteries recovered from electric vehicles can be used as battery storage systems, so-called **second-life batteries**, in power plants. These batteries stabilize the electricity grid and their reuse extends their service life, which in turn reduces the environmental impact and also the consumption of resources. These battery storage systems should be completed in the second half of 2025. We already placed a second-life battery system into operation in 2022.

In the area of conventional generation, **byproducts generated in our power plants** such as fly ash, bottom ash, slag and gypsum can be reused in the construction industry, which contributes to the conservation of resources and a circular economy and thus helps to reduce resource consumption. We also recover and recycle ferrous and non-ferrous metals from the slag produced at incineration plants. These measures make a contribution to conserving resources.

As well as the measures taken within their certified environmental management systems, some of our subsidiaries also take the following action: One of VNG's subsidiaries is gradually increasing its use of **sustainable biomethane** by comprehensively certifying its portfolio in accordance with REDcert, SURE and ISCC. Furthermore, the grid operator is examining whether its main resource **steel** that it uses in the construction of power lines and facilities can be purchased from suppliers who offer more environmentally friendly steel. When disposing of components from power lines and facilities, the materials are always sent for recycling. These measures help to reduce the consumption of resources.

The main actions taken by EnBW Kernkraft include **cleaning waste to remove pollutants** and the **evaluation and improvement of processes**. Cleaning waste to remove pollutants reduces the amount of waste that must be disposed of because of its pollutant load and increases the possibility of either recycling or reusing this decontaminated waste. This is carried out throughout the whole dismantling process. EnBW Kernkraft evaluates and improves its processes to ensure that a higher proportion of the waste can be recycled or reused. It uses internal and external audits to identify how its processes can be improved.

The **recycling of transformer oil** and larger **grid operating equipment** is an established practice at our electricity grid operators to minimize the consumption of resources. They also use prefabricated and standardized components. This applies in particular to local substations, while their application is currently being tested at transformer stations. Grid operating equipment is designed to have a long service life to reduce the use of resources. We carry out regular inspections and maintenance work to ensure this is the case.

E5-3 – Targets related to resource use and circular economy

Development and implementation of targets

In measure 6 of our EnBW Sustainability Agenda (p. 33⁷), we have made the circular economy a fixed component of our business model. In this context, we are developing general Group-wide targets related to resource use and circular economy. These targets should be measurable and also outcome-oriented, so that we can track the effectiveness of the policies and action effectively. We place great importance here on integrating voluntary and mandatory (required by legislation) targets. When planning the construction of various technical facilities (such as grid-related equipment), we already take the potential service life, maintenance costs, recycling and disposal issues and the disposal regulations or licensing requirements into account when selecting which resources to use.

Resource inflows, including resource use and circular economy

In accordance with KrWG, our primary objective is to use raw materials or the products produced from them in chronologically sequential steps as long, often and efficiently as possible and only to recover energy from them at the end of their product life cycle. These kinds of policies for the cascading use of materials, which flow from higher to lower levels of added value, are not yet considered standard in the interfaces between procurement and usage, such as with respect to multiple cycles of recycling. The link between the two will be developed in future. Amendments to the building code can allow for the use of recycled raw materials such as recycled concrete and reduce the use of new concrete. Maintenance policies and the concept of continuous maintenance can help to extend the service life of plants and minimize the need to procure primary materials (steel, copper, aluminum, glass-fiber-reinforced plastic, concrete). The reuse of used or generally reconditioned parts also reduces production volumes.

TransnetBW has already defined specific targets that make a significant contribution to the reuse and recycling of materials and to amending construction standards. More specifically, these targets include the reuse of at least 80% of the soil extracted during the expansion of the grids at all times, even when construction volumes increase. The underlying soil management policies are designed to avoid declaring the soil as waste. Another target involves carrying out a comparison of our own construction standards against the guidelines published by the German Sustainable Building Council by 2026. Our target is to achieve QNG certification (German Sustainable Building Certification) by 2030. These targets will help to increase the proportion of soil material that is reused and promote the use of recycled materials in buildings.

Waste management and legal regulations

EnBW AG and its subsidiaries manage their waste in compliance with the statutory regulations in the German Circular Economy Act (KrWG). This means that waste is preferably avoided, prepared for reuse or recycled before its disposal is even considered. All stages of the waste hierarchy according to section 6 KrWG are applied within the EnBW Group.

Waste management at EnBW Kernkraft takes place at its own recycling centers, where it is, for example, prepared for proper treatment, separated into different materials and allocated according to potential recycling options.

Our wind power plants are operated in accordance with the licensing requirements, which in some cases include environmental thresholds. We have defined the level of corporate ambition to be achieved by our electricity grids but have not yet defined any specific environmental thresholds.

E5-4 – Resource inflows

Evaluation and management of resource inflows

We automatically evaluate the quality of our supply chain and our suppliers based on sector and company risks. When working with suppliers with a higher level of risk, we request additional information on their sustainability performance so that we can evaluate resource inflows in greater detail. The material resources include wind power plants, solar panels, gas turbines and conventional power plant technology. In relation to our grids, pipes, cables and associated technical services play a key role.

E5-5 – Resource outflows

Resource outflows and circular economy

Resource outflows mainly comprise byproducts and waste, which are primarily generated in the thermal power plants. The byproducts include fly ash, gypsum and slag, which are valuable basic resources for the construction industry and therefore will remain within the circular economy. In accordance with the applicable laws, we classify our waste based on its type and toxicity. It is then recycled or disposed of using appropriate methods in order to minimize risks associated with all waste materials. Gesellschaft für nukleares Reststoffrecycling (GNR, the company for the recycling of residual nuclear material) operates residual material treatment centers at the locations in Neckarwestheim and Philippsburg. These treatment centers decontaminate, among other things, materials from the dismantling of EnBW's nuclear power plants by removing nuclear residues (freeing them of any radioactive adhesions) and feed them back into the material cycle after measurement reports verifying compliance with the legal thresholds have been completed. This reduces the amount of radioactive waste to just a single-digit percentage of the total amount of waste generated during the dismantling process.

Waste streams and materials

The material waste streams at the EnBW Group contain materials such as non-metallic minerals, metals, plastics and biomass. Alongside the general commercial and municipal waste generated at our company, the conventional power plants at EnBW AG are responsible for the largest waste streams in the company. This waste includes, in particular, sludge mixtures from the treatment of cooling tower make-up water and the treatment of wastewater from flue gas desulfurization systems, as well as fly ash, bottom ash, slag and filter dust from combustion processes. Stadtwerke Düsseldorf also generates comparable waste from conventional power plants and its waste incineration plant, including dusts, slag and ashes. The business activities at Netze BW and TransnetBW associated with the expansion of the grids generate, in particular, construction and demolition waste, and oil and lubricant waste. The companies MSE Mobile Schlammwässerung and RBS wave must also dispose of the sewage sludge that they generate.

Alongside typical construction and demolition waste, EnBW Kernkraft generates residual radioactive materials and waste that is strictly monitored in accordance with the legal regulations. One resource outflow associated with the disposal of radioactive waste occurs in accordance with the German Act on Reorganization of Responsibility for Nuclear Disposal. In this case, EnBW Kernkraft must correctly package the radioactive waste and transfers ownership of it to a third party (BGZ) commissioned by the German government. This waste outflow is documented in the Waste Flow Tracking and Product Control System (AVK), which has been approved by the authorities. EnBW Kernkraft also submits monthly and annual reports to the supervisory authorities. The radioactive waste that is handed over for disposal to the third party commissioned for this task by the German government mainly comprises the following waste streams: activated and contaminated metals, ion exchange resins, evaporator concentrates, mixed waste, activated and contaminated demolished concrete, activated concrete structures and combustion residues.

Waste and resource outflows¹

	Unit	2024	2023
Waste for recovery			
Total waste for recovery ²	t	844,702	923,231
Hazardous waste for recovery (preparation for reuse) ³	t	1,199	–
Non-hazardous waste for recovery (preparation for reuse) ³	t	108,173	–
Hazardous waste for recovery (recycling) ³	t	27,784	–
Non-hazardous waste for recovery (recycling) ³	t	378,942	–
Hazardous waste for recovery (other recovery processes) ³	t	29,685	–
Non-hazardous waste for recovery (other recovery processes) ³	t	298,916	–
Waste for disposal			
Total waste for disposal	t	28,183	37,330
Hazardous waste for disposal (incineration) ³	t	1,391	–
Non-hazardous waste for disposal (incineration) ³	t	7,432	–
Hazardous waste for disposal (landfill) ³	t	2,118	–
Non-hazardous waste for disposal (landfill) ³	t	12,718	–
Hazardous waste for disposal (other types of disposal) ³	t	4,149	–
Non-hazardous waste for disposal (other types of disposal) ³	t	374	–
Total amount of radioactive waste³	t	1,149	–
Total amount of waste generated²	t	872,885	960,561
Total amount of non-recycled waste^{3,4}	t	466,155	–
Percentage of non-recycled waste^{3,4}	%	53	–
Waste recovery rate	%	97	96

¹ Due to the first application of ESRS, the disaggregation of the data for 2024 is significantly more granular.

² The figure for the previous year has been restated.

³ No figures for previous year because collected for first time in 2024.

⁴ The amount of non-recycled waste includes all waste that according to Directive (EU) 2022/1288 is not recycled in accordance with the definition of the term "recycling" and thus also includes waste prepared for reuse.

Methodologies used to measure and classify the waste

Data on the waste generated by the EnBW Group is collected via direct measurements using calibrated scales, waste certificates provided by waste disposal companies and internal software that records waste data. Our waste is classified in accordance with the directive establishing a European Waste Catalogue, which was transcribed into national law in Germany in the Waste Catalogue Ordinance (AVV). Waste is predominately assigned based on its origin and is then classified based on its material properties. All information about the waste must be taken into account when classifying it. The hazardousness of the waste is determined by analyzing its contents in detail. This hazard assessment is crucial because it defines the registration and verification obligations that must be complied with by the producer of the waste and all parties involved in its disposal.

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” economic activities:

- An economic 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 economic 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.

We fulfill all reporting requirements with respect to the currently valid version of the EU taxonomy. Alongside the information on revenue, capex and opex required by the Taxonomy Regulation, we also report on other taxonomy KPIs such as adjusted EBITDA and expanded capex (capex including the proportion for entities accounted for using the equity method). The formulations and terms contained in the EU taxonomy are still 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.

Implementation of the EU Taxonomy Regulation in the EnBW Group

We have accompanied and supported the development and introduction of the EU 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 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, insofar as it was possible to report on them and any uncertainties with respect to the interpretation of the criteria had been clarified. We reported on the obligatory key performance indicators revenue, capex and opex as well as voluntarily publishing information on 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).

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

[Online ↗](#)

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. 231 ff.](#)⁷. The templates for the activities in the areas of nuclear energy and fossil gaseous fuels are presented below ([p. 235 ff.](#)⁷).

Economic activities examined for the EU Taxonomy Regulation



Sustainable Generation Infrastructure

- Onshore wind
- Offshore wind
- Solar
- Run-of-river
- Biomass
- Pumped storage
- District heating
- Electricity generation from gas
- Combined heat and power



System Critical Infrastructure

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



Smart Infrastructure for Customers

- E-mobility

Based on the EnBW business model, all activities are reported under the EU environmental objective “climate change mitigation.”

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 water grids are allocated to the environmental objective “climate change mitigation” because our assessment showed that they do not fulfill the criteria for making a substantial contribution to any of the other environmental objectives, especially “sustainable use and protection of water and marine resources.”

The taxonomy alignment of the economic activities listed above was derived – as in previous years – 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.

Substantial contribution to climate change mitigation

Firstly, each taxonomy-eligible economic 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.

The **technical screening criteria for the EU taxonomy** can be found here.

[Online](#) ➔

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 on this page.

Further information on the **EnBW Declaration of Human Rights** can be found on the Internet.

[Online ↗](#)

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. 62 f.⁷]). Further information on this subject can be found under “Occupational safety” [p. 100⁷] and in S2-1 [p. 203⁷].

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. 137 f.⁷]. 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 [p. 34.⁷]. 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.

<p>4.1 Electricity generation via photovoltaic technology</p> <p>→ Construction and operation of solar parks to generate electricity</p>	<ul style="list-style-type: none"> • 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 CO₂eq/kWh, even when analyzed over the entire life cycle. 	<ul style="list-style-type: none"> • The majority of the components for photovoltaic and wind energy power plants are designed for a very long service life and are recyclable. At the end of their useful lives, many of the materials such as steel, aluminum and copper have a residual value and can be reused or recycled. • 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.
<p>4.3 Electricity generation from wind power</p> <p>→ Construction and operation of wind farms to generate electricity</p>		
<p>4.5 Electricity generation from hydropower¹</p> <p>→ Construction and operation of run-of-river power plants to generate electricity</p>	<ul style="list-style-type: none"> • Run-of-river power plants make a material 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 2.659 g CO₂eq/kWh lie significantly below the taxonomy threshold of a maximum of 100 g CO₂eq/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. 	<ul style="list-style-type: none"> • Prior to the process for reissuing existing permits in accordance with water law, a preliminary assessment at the very least must be carried out to determine whether a full environmental impact assessment is required. Depending on the results of this assessment, it may be necessary to subsequently complete a full environmental impact assessment. • The obligatory implementation of the requirements in the European Water Framework Directive is key, both when applying for 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.

¹ The KPIs for activities 4.5 and 4.10 and for 4.13 and 4.20 are combined in each case.

4.9 Transmission and distribution of electricity

→ Construction and operation of transmission and distribution grids for electricity

- 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.
- A waste management plan is in place that ensures maximal reuse or recycling at end of life in accordance with the waste hierarchy.
- Relevant legal regulations are complied with when constructing overground power lines.
- Compliance with the 26th Federal Immission Control Ordinance (BlmSchV) 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.

4.10 Storage of electricity¹

→ Construction and operation of pumped storage power plants for the storage of electricity

- There are no other criteria that must be assessed with respect to a substantial contribution to climate change mitigation for activities related to pumped storage power plants.
- 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. This includes compliance with the requirements in the European Water Framework Directive and implementation of corresponding mitigation measures to improve water protection.
- A waste management plan is in place that ensures maximal reuse or recycling at end of life in accordance with the waste hierarchy.

4.13 Manufacture of biogas and biofuels for use in transport and of bioliquids

→ Manufacture of biogas for feeding into the gas grid and operation of CHP power plants with bioenergy

- 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.
- 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, we believe that the responsible authorities have determined that there is no significant negative impact on the environment.
- 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 mitigation is ensured by compliance with the legal regulations. In addition, the best available technology is used for any replacement investment.

4.14 Transmission and distribution networks for renewable and low-carbon gases

→ Construction and operation of gas grids

- 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 criteria for energy-efficient components are complied with by always using the best available technology for the new construction and repair of the gas grid. This includes primarily pipeline systems, fittings and leak monitoring systems for the early detection and minimization of gas losses.
- Environmental impact assessments are carried out in accordance with the legal regulations.

4.15 District heating/cooling distribution

→ Construction and operation of district heating grids

- 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 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 for the new construction and repair of the district heating grids. In particular, this includes pipelines, fittings and leakage monitoring systems.
- Environmental impact assessments are carried out in accordance with the legal regulations.

¹ The KPIs for activities 4.5 and 4.10 and for 4.13 and 4.20 are combined in each case.

4.20 Cogeneration of heat/cool and power from bioenergy¹

→ Operation of biogas CHP power plants to generate electricity and heat

- 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.
- As is the case for the manufacture of biogas and biofuels, structural safety measures 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.
- 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 mitigation is ensured by compliance with the legal regulations. In addition, the best available technology is used for any replacement investment.

4.29 Electricity generation from fossil gaseous fuels

→ Construction and operation of gas power plants to generate electricity

- Direct GHG emissions of the activity averaged over 20 years are 160 to 549 kg CO₂eq/kW depending on the scenario and are thus lower than 550 kg CO₂eq/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.
- Preliminary assessments are carried out to determine whether the activity is subject to an environmental impact assessment and any subsequent EIAs are carried out in a project-specific manner in accordance with the Environmental Impact Assessment Act (UVPG).
- 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.

4.30 High-efficiency co-generation of heat/cool and power from fossil gaseous fuels

→ Construction and operation of CHP power plants

- 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 CO₂eq/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.
- 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/m³ of water.
- The water passing through the grid complies with the requirements of the Drinking Water Ordinance, whereby compliance is regularly monitored by the authorities. We consider these regulations to be stricter than the criteria defined in the EU taxonomy.
- Environmental impact assessments are carried out in accordance with the legal regulations.

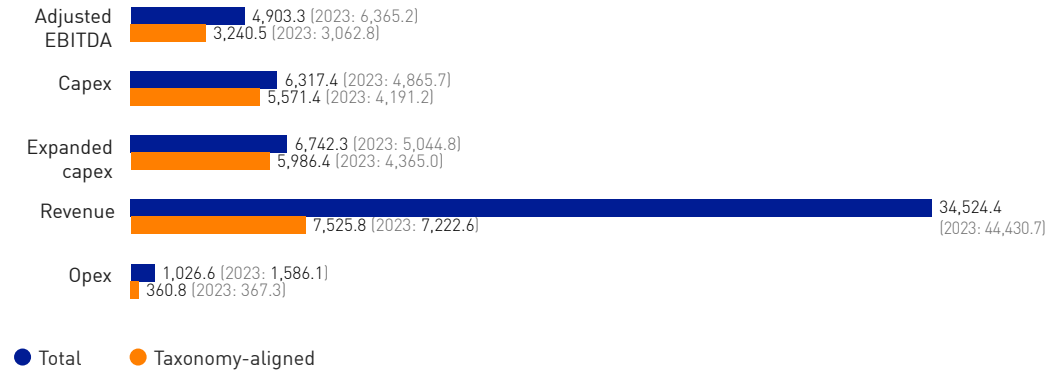
6.15 Infrastructure enabling low-carbon road transport and public transport

→ Construction and operation of charging infrastructure for e-vehicles

- There are no criteria that must be assessed with respect to a 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 catalog of activities subject to an environmental impact assessment in Annex 1 of the UVPG: Our interpretation is that legislators assume that these activities do not per se do any significant harm to ecosystems and biodiversity. Nevertheless, 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, expanded capex, revenue and opex accounted for by the taxonomy-aligned economic activities:

Proportion of taxonomy-aligned economic activities of the EnBW Group
in € million



The following proportions were determined:

KPIs for the taxonomy-aligned business activities of the EnBW Group 2024

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	4,903.3	3,240.5/66.1	85.7/1.7	1,577.1/32.2
Capex	6,317.4	5,571.4/88.2	7.7/0.1	738.3/11.7
Expanded capex	6,742.3	5,986.4/88.8	7.7/0.1	748.2/11.1
Revenue	34,524.4	7,525.8/21.8	865.3/2.5	26,133.3/75.7
Opex	1,026.6	360.8/35.1	3.0/0.3	662.8/64.6

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

Proportion of taxonomy-aligned adjusted EBITDA in the segments 2024

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
Sustainable Generation Infrastructure	2,633.1	1,395.6/53.0	85.7/3.3	1,151.8/43.7
System Critical Infrastructure	2,243.1	1,838.5/82.0	0.0/0.0	404.6/18.0
Smart Infrastructure for Customers	323.9	6.4/2.0	0.0/0.0	317.5/98.0

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
Sustainable Generation Infrastructure	4,647.6	1,739.8/37.4	51.2/1.1	2,856.6/61.5
System Critical Infrastructure	1,772.0	1,350.0/76.2	0.0/0.0	422.0/23.8
Smart Infrastructure for Customers	239.5	-27.0/-11.3	0.0/0.0	266.5/111.3

Proportion of taxonomy-aligned expanded capex in the segments 2024

in € million/in %	Total	Proportion of taxonomy-aligned business activities	Proportion of taxonomy-eligible business activities	Proportion of taxonomy non-eligible business activities
Sustainable Generation Infrastructure	2,241.1	1,940.4/86.6	7.7/0.3	293.0/13.1
System Critical Infrastructure	3,817.7	3,730.4/97.7	0.0/0.0	87.3/2.3
Smart Infrastructure for Customers	599.8	315.6/52.6	0.0/0.0	284.2/47.4

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
Sustainable Generation Infrastructure	1,755.2	1,517.5/86.5	2.9/0.2	234.8/13.4
System Critical Infrastructure	2,754.5	2,664.2/96.7	0.0/0.0	90.3/3.3
Smart Infrastructure for Customers	458.2	183.3/40.0	0.0/0.0	274.9/60.0

The proportion of adjusted EBITDA for the Group accounted for by taxonomy-aligned activities of 66.1% was significantly higher than the figure in the previous year of 48.1%. The adjusted EBITDA from taxonomy-aligned activities was €3,240.5 million and thus also higher than in the previous year. While the proportion of adjusted EBITDA for the Sustainable Generation Infrastructure segment accounted for by taxonomy-aligned activities was only 37.4% in the previous year due to extraordinary effects, it stood at 53.0% in the 2024 financial year. The proportion of adjusted EBITDA for the System Critical Infrastructure segment accounted for by taxonomy-aligned activities rose to 82.0%, which was mainly attributable to a significant rise in income from the use of the grids as a result of returns on increased investment activity. 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 in the development phase.

The capex for taxonomy-aligned activities was €5,571.4 million and the proportion of capex accounted for by taxonomy-aligned activities was 88.2%, which was around 33% higher (about €1.4 billion) than the figure for the previous year.

More than two thirds of this increase (around 71%) was due to higher investment in the activity 4.9 "transmission and distribution of electricity." This included a significant increase in investment made by our Group subsidiary TransnetBW as part of the Network Development Plan Electricity. Around 11% 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. Our investment in e-mobility accounted for around 10% of this increase.

The proportion of expanded capex accounted for by taxonomy-aligned activities in the Sustainable Generation Infrastructure segment was 86.6% (previous year: 86.5%). The activities in the Renewable Energies area are fully taxonomy-aligned as in the previous year. This segment also contains investment in our fuel switch projects. The proportion in the System Critical Infrastructure segment of 97.7% was also at the same level as in the previous year (96.7%) and is relatively high because

the electricity, gas and water grids, which account for almost the entire segment, comply with the EU taxonomy criteria. In the Smart Infrastructure for Customers segment, the proportion of expanded capex accounted for by taxonomy-aligned activities was 52.6%. This figure was higher than in the previous year (40.0%) due to greater investment in e-mobility.

Revenue from taxonomy-aligned activities of €7,525.8 million in 2024 was higher than the level in the previous year. This development was mainly driven by higher income from the growth in the e-mobility business and higher revenues in the System Critical Infrastructure segment. The proportion of total revenue accounted for by taxonomy-aligned activities increased in comparison to 2023 to 21.8% because Group revenue from trading activities that are not taxonomy-aligned decreased.

The opex for taxonomy-aligned activities of €360.8 million was slightly lower than the figure in the previous year. Expenditure on maintenance and repair services was almost unchanged in comparison to 2023.

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. 89 f.⁷), 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. 42⁷) 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 €0.9 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	2024	2023
Additions to property, plant and equipment ¹	4,900.3	3,929.4
of which additions as part of a capex plan	(496.1)	(348.7)
Additions to intangible assets	236.1	81.7
Additions to right-of-use assets from leases	417.7	162.0
Additions to property held as a financial investment	0.0	0.0
Additions resulting from business combinations	17.3	18.1
Total	5,571.4	4,191.2

¹ This includes additions to provisions recognized for the decommissioning and dismantling of property, plant and equipment in the reporting period of €48.3 million (31/12/2023: €12.4 million).

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. 79 f.⁷ and in note 1 of the notes to the consolidated financial statements.

Composition of the revenue numerator

in € million	2024	2023
Revenue from contracts with customers	7,032.7	6,792.0
Other revenue	493.1	430.6
Total	7,525.8	7,222.6

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	2024	2023
Maintenance and repair costs ¹	359.4	365.9
Short-term leases (not recognized as right-of-use assets)	0.7	0.9
Research and development costs	0.7	0.5
Total	360.8	367.3

¹ 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 (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. 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. 81 ff.](#)⁷.

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

in € million	2024	2023
Capex numerator according to EU taxonomy	5,571.4	4,191.2
Additions to entities accounted for using the equity method	415.0	173.8
Total	5,986.4	4,365.0

S1: Own workforce

SBM-3 – Material impacts and their interaction with strategy and business model

All people in our own workforce are included in the scope of our disclosures under ESRS 2. Alongside people who are in an employment relationship with us (“employees”), the disclosures also cover non-employees who are either people with contracts with us to supply labor (“self-employed people”) or people provided by undertakings primarily engaged in “employment activities.” As part of our materiality assessment and the associated focus on stakeholders, we developed an understanding of how people in our own workforce who work in particular contexts or carry out certain tasks could be exposed to more dangers than others (p. 135 ff.⁷).

Health: We place huge importance on the physical, mental and social health and well-being of our own workforce. Our comprehensive range of services that cover all the segments help create a working environment that promotes the well-being and health of our own workforce. We integrate these services into our modern working world in Group-wide projects. These include preventative medical services, vaccinations, physiotherapy and psychological counseling.

Occupational safety: Our business activities in the area of electricity and heating generation and distribution can have potential negative impacts in the form of work-related health hazards or work accidents due to various factors such as extreme working conditions or handling hazardous materials. In particular, these impacts could arise in relation to the operation of coal power plants, fast-charging parks, grids, hydropower plants, biogas plants, wind power plants and the dismantling of nuclear power plants.

Diversity, social dialog, training and skills development: Our positive impacts comprise a comprehensive range of initiatives, campaigns and education and further training opportunities. We encourage dialog with our employees by actively involving them in shaping our work culture. We have various tools for training and skills development and have established a digital learning platform to support the training process. By promoting and considering the issues of diversity, equity and inclusion, we have a positive influence on our own workforce and also on the prevention of discrimination and unequal treatment.

Gender equality: There could be negative impacts for anyone with respect to equal treatment and opportunities. We strive to promote equal opportunities and avoid discrimination. Failing to achieve gender equality and equal pay for equal work could, however, have a negative impact within our own operations on our own workers.

S1-1 – Policies related to own workforce

In order to create the conditions that give our own workforce at EnBW and our company itself the opportunity for growth, development, a future and thus success, we have developed policies within our HR strategy 2025 “Mensch im Mittelpunkt,” which is anchored in the corporate strategy, to address the identification, assessment, management and further improvement of material impacts we have on our own workforce. Our managers should not just place expectations on their employees but also inspire them and lead their teams with conviction and by example into a more complex world. Our HR policies support employees in this process of change by, for example, developing new forms for cooperation and via 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 (measure 9: “Diversity and education,” p. 33⁷). The following policies address the material impacts we identified:

Health

To promote the physical, mental and social health of employees, minimize health risks and create a safe working environment, we have established the occupational medicine and health management division, which is split into the occupational medicine department (AMD – Arbeitsmedizinischer Dienst) and company healthcare management department (BGM – Betriebliches Gesundheitsmanagement). These two areas are closely interlinked with one another and report directly to the Board of Management. The AMD is responsible for providing comprehensive advice on all areas of occupational health and safety to employees, the employer, managers, the works council and safety officers. This includes, among other things, preventative medical services, vaccinations, screening and aptitude tests, physiotherapy and psychological counseling. The BGM follows a strategic approach to systematically and sustainably implement action to develop working conditions that promote health and strengthen personal healthcare resources – with the focus on improving the well-being of employees and their ability to work. We address various facets of healthy nutrition, keeping active during the working day, health education and mental health across the company. The holistic goal is to maintain and promote the health, productivity and success of our own workforce and thus of the company as a whole. Various actions are planned, managed and monitored for this purpose.

Occupational safety

In the area of occupational safety, we strive to prevent accidents and work-related illness and create a safe working environment. We have developed internal rules in the form of obligatory Group guidelines and Group standards for this purpose that not only incorporate the legal requirements found, for example, in the Occupational Safety and Health Act, Hazardous Substances Ordinance, Industrial Safety and Health Ordinance and Workplace Ordinance and their associated technical rules and specific ordinances but also define our own safety standards at EnBW. The Group guideline “Occupational safety and health protection” is particularly relevant in this context. It describes the responsibilities and tasks related to occupational safety and defines the associated processes. The Board of Management of the EnBW Group has overall responsibility for occupational safety. The occupational safety and preventative fire protection department reports directly to the Chairman of the Board of Management and is responsible for corporate governance with respect to occupational safety, hazardous materials and preventative fire protection. In accordance with Group guidelines, it is the obligation and responsibility of managers to ensure and monitor the implementation of occupational safety requirements in their area. Workplaces are continuously inspected to monitor compliance with the legal requirements and to monitor any derived actions. 30.7% of employees in the EnBW Group are covered by a certified occupational health and safety management system according to ISO 45001 or by a nationally recognized and externally tested system (“Technical Safety Management System,” “SCC Standard” in Germany or the “Safe Enterprise Program” in the Czech Republic). The Group Occupational Safety Working Group (AK KAS – Arbeitskreis Konzernarbeitsschutz) has the task of regulating issues uniformly across the companies within the Group and has the power to make binding decisions in accordance with the company’s rules of procedure. It is headed by the Chairman of the Board of Management of EnBW AG.

Social dialog

We promote social dialog and actively take employee issues into account in the development of our HR strategy. People-centered transformation is one of the strategic focus points of our HR strategy 2025 and has been put into action through our BestWork policy. The aim of BestWork is to sustainably improve and transform the working world for our employees so that it is fit for the future and can optimally support cross-team collaboration. We want to improve both the quality of our work and the satisfaction of our employees in equal measure. A special focus is being placed on developing 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 a first step, the human resources, corporate real estate management, IT and digital office departments and especially our own employees all cooperated to discuss where – and, above all, how – we will all work together in the future. Our employees were thus at the forefront of the decision-making processes within our BestWork policy to shape how we can work together to optimum effect. In a second step, we used feedback from our employees to redesign and reorganize the office areas and technical equipment to meet their needs. This policy is the responsibility of the HR strategy and transformation department, which reports to the Chief Human Resources Officer, and was laid down in the company agreements “BestWork” and “BestWork Space.” They apply, above

all, to EnBW AG and the companies for which EnBW AG is responsible for managing human resources, and are continuously monitored and improved through employee surveys and certain metrics that measure the use of the services.

Diversity, equal opportunities and inclusion

Our diversity strategy is one of the strategic focus points of our HR strategy 2025. It places a special focus on diversity, equity and inclusion (DE&I) and serves as a compass to guide us on the path to a more diverse and inclusive EnBW. It is firmly anchored in the EnBW Sustainability Agenda as measure 9 (p. 33⁷) and also enshrined in our EnBW Code of Conduct (p. 46⁷) through our commitment to non-discrimination. Under the motto “diversity is the future,” we are fostering a diverse workforce that welcomes all people irrespective of their gender, age, interculturality, sexual orientation, disability, social background, religion and ideology, while also ensuring that the workforce is made up of people from all professional backgrounds and people engaged in various working models and organizations. Our policy for a diverse workforce involves promoting DE&I at all stages of the careers of our employees and actively integrating workers from different backgrounds. The aim of the diversity strategy is to strengthen the sustainability, innovativeness and competitiveness of EnBW by establishing open, innovative and resilient teams and an inclusive corporate culture. It is put into practice by the HR strategy and transformation department and applies, above all, to EnBW AG and the companies for which EnBW AG is responsible for managing human resources. The Chief Human Resources Officer has overall responsibility. Our commitment to non-discrimination is enshrined in the EnBW Code of Conduct that is binding across the entire EnBW Group.

Training and skills development

The growth and success of our company is closely linked to the skills and competencies of every single person. Therefore, another main focus of our HR strategy 2025 is the continuous training and development of our employees. The aim is to secure and promote individual and collective effectiveness and also the employability of people in the long term. Our personal development strategy aims to promote the professional and personal development of our own employees using various development tools and approaches. The guiding principle is our intention to integrate this development into our business activities as far as possible and to harmonize individual and collective development goals with our business and departmental goals. Our policy encompasses internal and external learning and training opportunities, as well as individual development plans for employees, and applies above all to EnBW AG and the companies for which EnBW AG is responsible for managing human resources. The Chief Human Resources Officer has overall responsibility. In particular, our company agreements “Promotion of professional and private training and qualification measures,” “Development dialog” and “Idea management” provide all of our employees with a framework for training and skills development. The HR department is responsible for creating the development tools and training opportunities and making them available to employees.

Human rights and work standards

Exercising our human rights due diligence is a key component of our corporate strategy and plays a role in all decision-making processes. We describe our obligations and processes for complying with the international frameworks for human rights and working standards relevant to our own workforce under S2 (p. 202 ff.⁷).

S1-2 – Processes for engaging with own workforce and workers' representatives about impacts

With the aim of taking the perspectives of our workers into account in our decisions and corporate activities for managing actual and potential impacts on our own workforce, we engage with our employees both directly and indirectly via workers' representatives using various dialog formats, to include them in decisions or activities that have an impact on employee matters. We have developed initiatives and processes to promote the involvement of employees and take their views into account. In particular, these formats and processes include:

- 1. Surveys:** We conduct an employee survey every year called **EnMAB**. It includes questions on occupational safety, equal opportunities and the ability to change, as well as open-ended fields for comments, and is primarily designed to measure the satisfaction and engagement of employees and find out how they perceive strategic themes. Findings from the surveys are used as the basis for developing targeted action. To find out about the psychological stress workers may experience in the workplace, EnBW AG and participating subsidiaries also conducted a separate survey as a risk assessment of psychological stress (GB Psych) in 2024, which will be carried out every three years (p. 193 ff.⁷).
- 2. Dialog:** This includes discussion formats for the Board of Management of EnBW AG, the works council and workers that are held up to four times a year, such as the "EnBW Aktuell" event or works meetings. The Board of Management not only provides information on certain themes, such as offshore activities or training, but is also available to answer questions from employees.
- 3. Employee appraisals:** These are discussions between managers and employees, especially in the form of employee appraisals, that are held several times a year depending on the employee's needs. Annual reviews are held with employees to align the employee's goals and targets with actual corporate needs and also the perspectives of all involved. Discussions in the context of employee development focus on the individual's development targets – based around the company or departmental targets – and creating individual development plans for employees.
- 4. Suggestion scheme:** All employees can contribute to the improvement of company matters and processes. Suggestions for improvement can be submitted using the company suggestion scheme (WIN). The company suggestion scheme is defined in the company agreement "Idea management" and is available to employees at all times.
- 5. Working groups:** We have set up working groups that include representatives for workers' interests' (such as the Health Working Group or Inclusion Team) and whose composition is such that all relevant and affected employees are represented. These working groups meet several times a year.
- 6. Works council structures:** The Group works council represents the interests of employees in the Group and has prime responsibility for issues relevant to the entire Group. To ensure that the works council can appropriately and effectively represent employees on different matters, the collective bargaining agreement specifies different themes and sectors that must be reflected in the works council structures.

The company agreements negotiated and agreed between the company and the individual works councils that are responsible for representing employee interests play a key role in this area. Works councils and central works councils are established within the EnBW Group in accordance with the Works Constitution Act (BetrVG). A Group works council has also been set up. Company agreements concluded with the individual works councils who are responsible for representing employee interests in each case regulate, for example, working time models, forms of mobile working, the payment of a profit sharing bonus and other remuneration benefits.

Further information on the **whistleblower system** can be found in the section **“Compliance whistleblower system and suspected breaches.”**

S1-3 – Processes to remediate negative impacts and channels for own workforce to raise concerns

EnBW has processes to remediate negative impacts on its own workforce and has established channels that people in its own workforce can use to raise their concerns and have them addressed. The whistleblower system at EnBW AG provides people within the company and also external parties with the opportunity to report grievances and potential violations using various channels. Please refer to the disclosures under “Compliance whistleblower system and suspected breaches” (p. 48⁷) for information on the EnBW whistleblower systems. EnBW encourages its employees and external persons to report potential violations of human rights or environmental rules and any other concerns via the company’s internal complaints procedure when they are observed or arise. These complaints are processed and the findings make a significant contribution to the continuous development and optimization of existing due diligence obligations and to minimizing risks and the rapid implementation of corresponding remedial action.

S1-4 – Taking action on material impacts and effectiveness of those actions

In order to prevent, mitigate and improve material negative impacts that affect our own workforce and achieve material positive impacts, we take both comprehensive Group-wide action and also company-specific action.

Health

Our actions to maintain and promote the health of our employees focus on the physical, mental and social health dimensions. The measures and tasks of the AMD apply across the Group and include:

- Occupational healthcare and aptitude tests
- Consultations with company doctors
- Operational integration management
- Legally prescribed tours of workplaces to ensure occupational health and safety and participation in inspections and occupational health and safety committees
- Vaccinations
- Manager check-ups, voluntary check-ups, medical advice for travel
- Physiotherapy services
- Psychological services

Health centers have been established at the locations in Karlsruhe, Philippsburg, Obrigheim, Neckarwestheim, Stuttgart, Heilbronn, Biberach and Esslingen. To provide the best possible assistance to employees who have long-term or recurring illnesses, we offer them an operational integration management (OIM) service.

The BGM develops and offers additional measures that are designed to improve the health of employees and positively impact the workforce. These include advice on healthy nutrition and keeping active in the workplace, psychological support, health education and training, stress management courses and assistance with general health problems.

In 2023, EnBW AG launched a health program called “BestWork Health” as part of the BestWork initiative, which was transferred to the BGM in 2024 so that the health-related issues are not only managed at the level of the individual but more effectively at a team and organizational level in the Group. EnBW has held mental health days over the last few years, which have led to the development of the “Lead healthily” learning module for managers in the Group. A pilot project to train mental health first aiders has also been launched at EnBW AG, Netze BW and EnBW Kernkraft. These first aiders can provide support to people in emotionally difficult situations and act as a first port of call for those in need of assistance.

In May 2024, a survey on psychological stress in the workplace (GB Psych) was carried out. The results were grouped and evaluated anonymously and are being used to develop specific action. We plan to repeat this survey every three years in future. The results from GB Psych show that the need for action can vary greatly depending on the team. Therefore, measures are being developed at a team level between the managers responsible and their employees, while the company provides managers with support in the form of recommendations for action, workshops and consultation sessions.

In 2024, we also organized the EnBW Health Days, with a particular focus on training and power plant locations. In 2025, we plan to offer new services to promote physical and mental health, such as sport and activity weekends, workshops and a roadshow at various locations to raise awareness for the range of services we have available.

We also measure the effectiveness of the actions described above, acceptance of them among employees and how well known they are to employees in our employee surveys.

Occupational safety

Our preventative actions to protect workers against work-related risks include risk assessments, safety inspections, briefings and training courses. Managers and occupational safety specialists monitor and analyze near accidents and accidents and, where necessary, derive appropriate action in response. Clear guidelines and a fire protection organization help to support occupational safety and preventative fire protection. We ensure that first aiders and an effective emergency management plan are in place should there be an accident or emergency. Regular training courses and briefings on occupational safety and special training courses for managers are key to ensuring that it is safe to work at EnBW.

In the area of conventional generation at EnBW AG, we initiated the Safe program in 2024 that is designed to continuously improve occupational safety and a culture of safety for the area of generation. Key elements of this program are manager training courses, standardizing the role of safety officers, implementing the Quentic software and managing third-party employees. By developing and implementing measures in these areas, we aim to improve safety standards and make processes more efficient.

In 2024, we made further improvements to the Quentic software, which was being used by 31 Group companies in the 2024 reporting year. It now gives users the option of reporting unsafe situations and personal injuries via the EnBW News app on a smartphone. The Quentic software can also generate Power BI assessments for specific employees and departments, such as a qualification dashboard that shows which employees have completed which e-learning courses and tests.

We installed emergency telephones at our German administrative locations in 2024 to improve the level of security for our workers. At the same time, we have developed and rolled out an e-learning module to ensure that all employees receive training on how to use the emergency telephones. These measures help us to strengthen the culture of safety and ensure that assistance is provided quickly and effectively in the event of an emergency.

In the area of generation, the “100 days without accidents” campaign continued in the reporting year and its goal was achieved a total of eleven times at different locations.

We monitor and evaluate the effectiveness of the actions described above, their acceptance by employees and how well they are known, in particular via our employee surveys and by means of our key performance indicator Lost Time Injury Frequency (LTIF) (p. 100⁷).

Social dialog

To help us implement our BestWork policy as part of our people-centered transformation, we have initiated a series of measures to support its introduction and management. We already introduced new digital services to support location-independent cooperation within teams in 2023. This decision has had an impact on the workspaces at our locations. Depending on how many workers are working together from these offices or from other locations, it makes sense to organize the available workspaces accordingly. Under the motto "CooperationSpaces," we placed our focus in 2024 on measures to optimize the design of the workspaces and technical equipment for the form of cooperation selected by each team and for hybrid collaboration. We have also launched a module for managers within our training and development program dedicated to hybrid and virtual cooperation and leadership within the scope of BestWork.

We guarantee the effectiveness of our measures by continuously monitoring the use of our services and through employee surveys (e.g., by monitoring trends in the "attendance rate").

Diversity, equal opportunities and inclusion

An overarching objective for EnBW is to create and maintain a working environment that promotes the motivation, satisfaction and well-being of all workers, supports their professional development and fosters a culture of diversity, equal opportunity and inclusion. The measures in our DE&I strategy, such as idea workshops, motivational talks and workshops, help to promote equal opportunities, prevent discrimination and unequal treatment and foster an inclusive corporate culture. The following actions have so far been introduced as part of our diversity strategy and are implemented on an ongoing basis:

Training courses to expand diversity skills: Diversity training courses, such as internal awareness-raising measures and anti-discrimination training, take place on our digital learning platform in various languages.

Employee networks: We promote and support the engagement of our employees in internal diversity networks, such as the Women's Network, Pride Network and People-of-Color Network and actively take their perspectives into account when making decisions. We also support diversity as members of the "Charta der Vielfalt" (Diversity Charter) and "Chef:innensache" (female leadership) initiatives and participate every year in Christopher Street Days. We support collaborations with networks such as Femtec and w.one.

Programs to promote diversity: One of our programs to promote diversity is our multi-stage career integration program that has been preparing refugees, for example, for work by providing them with specialized work and linguistic skills since 2016. This program will continue as a social initiative in future that serves as an additional tool for recruiting young talent.

Workplace design: The diversity department is cooperating with disabled employee representatives and the IT and corporate real estate management departments on a pilot project to develop inclusive workplaces (for example, by installing technical aids and designing all-gender toilets).

A welcoming and trust-based culture: Alongside the development of diverse teams, we also place great importance on benefiting from the career experience and knowledge of older employees. Another priority for us is the inclusion of employees with disabilities and enabling barrier-free working with the support of our disabled employee representatives. We enshrined our commitment to the inclusion of disabled people in an inclusion agreement in 2022 between the central works council (GBR) and its members, the central council of representatives of our disabled employees (GSBV) and its individual representatives and the companies in our Group.

We measure the effectiveness of the actions described above, acceptance of them among employees and how well known they are to employees in our employee surveys.

Training and skills development

We view continuous learning as part of our corporate activities because our growth relies on the skills of our employees. We strive to offer effective, integrated and intuitive learning opportunities that allow employees to play an active role in their own development. Our digital learning infrastructure and various HR development tools take these factors into account. We offer both self-initiated and structured development programs so that we cater for different learning preferences. Our aim is to create a learning ecosystem within EnBW in which all kinds of employees can participate and interact in order to learn. We are gradually shaping this transformation using our digital learning platform and through the integration of other HR development products. Our employees can take advantage of various services for their professional and personal training and skills development and utilize a variety of HR development tools. These include:

- **LernWerk:** A digital platform for employees to organize their own development independently with access to internal and external learning content and opportunities for networking and sharing knowledge.
- **LernGPT@LernWerk:** A secure platform for AI training with additional learning formats for various target groups.
- **360° Feedback:** A structured feedback tool based on the “EnBW Guide” competency model for self-assessment and third-party assessment for guided development.
- **Development dialog:** Various dialog formats for structuring development-based discussions between employees and managers – supported by LernWerk.
- **Mentoring@EnBW program:** A program that brings together employees and managers as mentors and mentees for a self-managed mentoring partnership within a structured support framework.

With respect to the proportion of women in management positions, we are continuing to develop measures to achieve and stabilize our targets (p. 196⁷). One example is the CareerCompass – an advisory program that provides employees who have leadership potential with advice on assessing their competence, career path and developing their perspectives. NextStep is an individual advisory service for employees who want to change careers and continue developing within the Group. The “Leadership Development Journey” (LDJ) program is aimed at managers of all levels and provides them with numerous opportunities to develop new and strengthen their existing management skills, especially in the areas of dialog-oriented leadership and cooperation. Employees are able to self-manage how they use these development tools on their own initiative, while their manager takes on the role of being their development partner.

You can find further information on the [Climate Transition Plan](#) online.

[Online ↗](#)

“Just Transition” is a key aspect of our Climate Transition Plan. Our aim is to ensure we leave nobody behind or force them out as we transition into a low-carbon and environmentally sustainable company. As an operator of system-relevant infrastructure, we have a particular responsibility to ensure that the security of supply continues to be guaranteed as we progress on our path toward climate neutrality and the ever increasing use of renewable energies. At the same time, we need to remain economically stable so that we can secure existing jobs and create new career opportunities for our employees.

In accordance with the German Coal Phaseout Act, we have developed the framework conditions for a socially responsible phaseout of coal-fired generation in cooperation with the union ver.di and the works councils. We are already implementing some specific measures in the area of human resources. They include a commitment to prevent redundancies and offer semi-retirement and severance packages. We also place great importance on forward-looking human resources planning, which includes retraining measures and identifying new positions within the EnBW Group for employees affected by these changes. Employees from the area of conventional generation are already bringing their technical expertise to other areas of the company, such as in our offshore wind projects.

We measure the effectiveness of the actions described above, acceptance of them among employees and how well known they are to employees in our employee surveys. We believe that annual, anonymous employee surveys, from which we derive the People Engagement Index (PEI) as a key performance indicator (p. 99 f.⁷), are an important tool for seizing opportunities early in the areas of employee development and employee loyalty.

S1-5 – Targets related to managing material negative impacts and advancing positive impacts

Our targets for mitigating negative impacts and advancing positive impacts for people in our own workforce cover the following main areas:

Further information on **LTIF** is available in the section “**The EnBW Group.**”

Health and occupational safety

The actions described in the section on occupational safety are designed to prevent accidents and work-related illness. The most important target for the EnBW Group is to ensure there are no fatal accidents. We report on the number of fatal accidents and also the days of absence per accident so that we can measure the severity of the accidents.

We use our **key performance indicators** in the area of occupational safety and the targets defined annually for the LTIF for companies controlled by the Group, LTIF overall, LTIF energy and LTIF overall (according to the new definition) to measure the number of LTI (Lost Time Injuries) according to the definition on p. 39⁷. Within our occupational health strategy, we have set ourselves the target of achieving an LTIF overall (Lost Time Injury Frequency) of ≤ 3.3 by 2030. This target underlines our commitment to the continuous improvement of occupational safety and the protection of our workers.

Diversity, equal opportunities and inclusion

We strive to create an inclusive corporate culture that promotes and appreciates diversity. Our actions in this area include promoting women into management positions, targeted awareness-raising measures with respect to diversity and removing barriers for employees with disabilities.

The Board of Management has set the goal for EnBW AG of further increasing the proportion of women at the highest two 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 15.4% in the previous year to 17.4% in the reporting period. In upper management, the proportion of women increased from 24.7% in the previous year to 25.5% in the reporting period, which meant that the set target was achieved again at the second level.

Some of our subsidiaries have defined different targets. For example, TransnetBW has defined a target for the proportion of women in management positions of more than 20% by 2025 and more than 25% by 2030. In addition, it wants to increase the proportion of women in the company to more than 33% by 2025 and more than 37% by 2030. Another target is to increase the proportion of female applicants to more than 35% by 2030. VNG had set itself the target of increasing the proportion of women at the first management level to 10% and at the second management level to 30% by 31 December 2024. The stated targets had already been achieved.

We are working to develop a Group-wide target for the proportion of women in management functions.

Training and skills development

We use key performance indicators such as the **PEI (People Engagement Index)** to measure HR development. This helps us to better tailor our HR work to the needs of the organization and our employees. The Board of Management of EnBW AG defines a target value for the PEI every year. The target value for 2030 is 77 to 83 points (p. 39⁷) and applies to all of the companies participating in the survey, which means some individual companies are able to set their own targets.

Further information on **PEI** can be found in the section “**The EnBW Group.**”

TransnetBW GmbH has set itself a permanent target for the PEI of > 78 . It has also set other targets in the area of education and training such as a training completion quota of consistently $> 90\%$ (apprentices and trainees) and a further training quota of consistently > 30 hours/year per employee.

As part of its leadership journey program “Lead our future” that was launched in 2023, Stadtwerke Düsseldorf (SWD) reports on measurable, outcome-oriented and time-bound targets for all managers at SWD. An important measure with the following aim was derived from the last employee survey: accelerating cross-departmental individual and joint growth for strong management and a culture of leadership and cooperation through networking, building trust and joint development. The specific target was for 300 managers to have completed the leadership journey by the end of 2024 with the aim of continuously improving the employee satisfaction index in the area of “Leadership and cooperation.”

Engaging with workers and tracking achievement of the targets

We take the interests of our employees into account when defining our targets using the described dialog formats. Furthermore, we also consider the actual operational necessities and existing needs, regulatory requirements and competitive environment. If participatory rights are affected, we cooperate indirectly via the employee representatives on the works councils ([p. 191](#)). We track the achievement and effectiveness of our stated targets using key performance indicators (KPIs) and by regularly conducting employee surveys. In addition, we use the previously described dialog formats to constantly gather feedback and identify opportunities for improvement, which are then evaluated and put into action.

At the present time, there are no other time-bound, measurable, quantitative targets. We track and evaluate the effectiveness of our policies and actions with respect to our material impacts in the area of health, social dialog, diversity, equal opportunities and inclusion using internal surveys, indicators and HR performance indicators.

S1-6 – Characteristics of the undertaking's employees

The main characteristics of our own employees are presented in table form. Except for the employee turnover ratio, the data refers to the situation on the reporting date of 31 December of the respective financial year. The employee turnover ratio refers to a particular time period (financial year). In some cases the figures for the reporting date and time period have been subdivided into male, female and diverse or by country or region.

	Unit	31/12/2024	31/12/2023
Total number of employees¹	Head count	30,391	28,630
of which male	Head count	21,534	20,490
of which female	Head count	8,855	8,137
of which other	Head count	2	3
Total number of employees in Germany	Head count	27,005	25,586
of which male	Head count	19,304	18,514
of which female	Head count	7,699	7,069
of which other	Head count	2	3
Total number of employees outside Germany	Head count	3,386	3,044
of which male	Head count	2,230	1,976
of which female	Head count	1,156	1,068
of which other	Head count	0	0
Number of permanent employees	Head count	29,305	27,704
of which male	Head count	20,850	19,909
of which female	Head count	8,453	7,792
of which other	Head count	2	3
Number of temporary employees	Head count	1,086	926
of which male	Head count	684	581
of which female	Head count	402	345
of which other	Head count	0	0
Number of on-call workers	Head count	0	0
of which male	Head count	0	0
of which female	Head count	0	0
of which other	Head count	0	0
Number of full-time employees	Head count	26,936	25,461
of which male	Head count	20,685	19,749
of which female	Head count	6,249	5,709
of which other	Head count	2	3
Number of part-time employees	Head count	3,455	3,169
of which male	Head count	849	741
of which female	Head count	2,606	2,428
of which other	Head count	0	0
Total number of employees who have left the undertaking²	Head count	2,396	–
Total employee turnover ratio	%	8.0	9.3
of which male ²	%	5.9	–
of which female ²	%	2.1	–
of which other ²	%	0.0	–
Employee turnover ratio in Germany²	%	7.7	–
of which male ²	%	5.9	–
of which female ²	%	1.8	–
of which other ²	%	0.0	–
Employee turnover ratio outside Germany²	%	11.0	–
of which male ²	%	6.5	–
of which female ²	%	4.5	–
of which other ²	%	0.0	–

¹ Number of employees excluding apprentices/trainees and inactive employees.

² No figures for previous year because collected for first time in 2024.

S1-7 – Characteristics of non-employees in the undertaking's own workforce

The main characteristics of non-employees are presented in table form. Data on the number of non-employees was recorded on the reporting date in head count.

	Unit	31/12/2024	31/12/2023
Total non-employees¹	Head count	942	–
Number of leased workers ²	Head count	608	585
Total self-employed people ^{1,2}	Head count	334	–

1 No figures for previous year because collected for first time in 2024.

2 Not included in the number of employees.

S1-8 – Collective bargaining coverage and social dialog

84.6% of employees are covered by workers' representatives. We do not have an agreement for employees to be represented by a European works council.

	Unit	31/12/2024	31/12/2023
Percentage of employees covered by workers' representatives	%	84.6	83.3

S1-9 – Diversity metrics

The proportion of female managers in the top management level Group-wide is 18.2%. The top management level includes the first and second management levels below the Board of Management.

	Unit	31/12/2024
Number of managers in the first level below the Board of Management¹	Head count	380
of which male ¹	Head count	311
of which female ¹	Head count	69
of which other ¹	Head count	0
Percentage of male employees ¹	%	81.8
Percentage of female employees ¹	%	18.2
Percentage of other employees ¹	%	0.0
Number of employees < 30 years¹	Head count	5,154
Number of employees ≥ 30 years and ≤ 50 years¹	Head count	15,117
Number of employees > 50 years¹	Head count	10,120

1 No figures for previous year because collected for first time in 2024.

S1-13 – Training and skills development metrics

The average number of training hours per employee is presented below. With respect to the other metrics for S1-13, we have utilized the transition rules in ESRS 2 Appendix C.

	Unit	31/12/2024
Training hours per employee¹	Hours	44.8
of which male ¹	Hours	43.7
of which female ¹	Hours	47.2
of which other ¹	Hours	60.3

1 No figures for previous year because collected for first time in 2024.

S1-14 – Health and occupational safety metrics

	Unit	31/12/2024	31/12/2023
Health and occupational safety			
Percentage of employees covered by an occupational safety management system ¹	%	30.7	–
Percentage of employees covered by a certified occupational safety management system ¹	%	19.2	–
Number of work-related fatalities (employees)	Cases	0	0
Number of work-related fatalities (non-employee workers)	Cases	0	0
Number of LTI ² (employees)	Number	180	157
LTIF overall ³ (employees)	Number of LTI per million working hours	4.0	3.7
Number of cases of recordable work-related ill health (employees) ¹	Cases	15	–
Number of days lost to work-related injuries, fatalities or ill health (employees)	Days	2,615	2,222

1 No figures for previous year because collected for first time in 2024.

2 Lost Time Injury (recordable work-related accidents).

3 Lost Time Injury Frequency (rate of recordable work-related accidents).

S1-16 – Remuneration metrics (pay gap)

The unadjusted gender pay gap for the 2024 financial year was 20.5%, which means that women earn on average 20.5% less than men. We intend to report on the adjusted gender pay gap in the 2025 report. In contrast to the unadjusted figure, the adjusted gender pay gap takes other factors into account in the calculation, such as full-time/part-time status, age, duties, extra pay for difficult working conditions and dirty work and shift bonuses.

	Unit	31/12/2024
Gender pay gap between female and male employees^{1,2}	%	20.5

1 No figures for previous year because collected for first time in 2024.

2 Determined based on gross annual pay.

S1-17 – Incidents, complaints and severe human rights impacts

	Unit	31/12/2024
Number of reported incidents of discrimination including harassment ¹	Cases	3
Number of complaints ¹	Number	19
Total amount of fines, sanctions and compensation related to discrimination ¹	€	0
Number of serious incidents related to human rights ¹	Incidents	0
Total amount of fines, sanctions and compensation related to human rights ¹	€	0

¹ No figures for previous year because collected for first time in 2024.

We publish more **performance indicators for employees** on our website.

[Online ↗](#)

Other performance indicators

Employees¹

	31/12/2024	31/12/2023 ²	Change in %
Smart Infrastructure for Customers	5,703	5,711	-0.1
System Critical Infrastructure	12,811	11,635	10.1
Sustainable Generation Infrastructure	7,955	7,563	5.2
Other	3,922	3,721	5.4
Total	30,391	28,630	6.2
Number of full-time equivalents ³	28,597	26,943	6.1

¹ Number of employees excluding apprentices/trainees and inactive employees.

² The figures for the previous year have been restated.

³ Converted into full-time equivalents.

S2: Workers in the value chain

SBM-3 – Material impacts and their interaction with strategy and business model

Our business activities as one of the largest integrated energy companies in Germany and Europe influence the lives of people and the environment in different countries and areas. We describe the interaction between our material impacts and our strategy and business model under ESRS 2 [p. 128 ff.⁷]. Our disclosures also cover all workers in the value chain who could potentially be affected by our material impacts. Our strategic consideration of impacts on value chain workers is reflected in, among other things, measure 10: “Human rights (especially supply chain)” in the strategic theme “Culture of sustainability” in the EnBW Sustainability Agenda [p. 34⁷].

During our materiality assessment, which takes our stakeholders into consideration, we assessed the workers in our value chain, developing an understanding for how some workers who work in certain fields or carry out certain tasks could be exposed to more dangers than others [p. 135 ff.⁷]. As a result, we have identified material matters, especially in the upstream value chain, that can have impacts on the workers employed there. Our value chain covers various types of workers who are active at different stages of production, processing and supply. These include:

- Workers who work at our locations but do not belong to our own workforce in the sense of S1, such as craftsmen or other service providers.
- Workers employed by companies in our upstream value chain: This includes employees of our suppliers and subcontractors who work in upstream processes such as the mining of raw materials (coal, gas) or the production of components for our electricity and heating power plants (onshore and offshore wind, photovoltaic power plants).
- Workers employed by our joint ventures.
- Particularly vulnerable groups, especially in the upstream value chain, such as union members, migrant workers, women and young workers, who could be especially affected by our negative impacts due to geographical and contextual factors.

Occupational health and safety: EnBW’s business activities are associated with negative impacts as a result of potential risks to the occupational health and safety of value chain workers. These impacts vary depending on the business area, whereby ensuring compliance with occupational health and safety standards and mitigating negative impacts on the health of workers is the main focus of our actions. In the area of electricity and heating generation using coal and gas power plants, direct business partners could be exposed to danger with respect to occupational health and safety due to hazardous substances if there is non-compliance with occupational health and safety standards. This can result in acute injuries, long-term impairment of health and secondary diseases. In the area of wind, solar and grid projects, there are potential negative impacts arising from inadequate occupational safety at the production sites of suppliers.

Working conditions, equal treatment and opportunities for all, other work-related rights: There can be material negative impacts for our value chain workers, especially in the raw material and mining regions for coal and gas. In these countries and regions, workers can be exposed to danger due to inadequate working conditions such as a lack of or restricted freedom of association or a lack of a works council, insufficient occupational and personal protection in the form of discrimination, violence or harassment in the workplace, inadequate remuneration and restricted or a lack of diversity and equal opportunities. It is also possible that child labor and forced labor may occur in these countries. In relation to coal procurement from Colombia for our own power plants, there could be potential negative impacts for the workers there, especially as a result of violence and criminality in the mining regions, despite engaging the services of private security companies.

Social dialog: EnBW is actively engaged in various corporate initiatives with the aim of being able to better understand and mitigate sector-specific impacts. Our memberships in econsense, the Responsible Commodities Sourcing Initiative (RECOSI), SolarPower Europe and the Energy Sector Dialog help us develop a common understanding for the impacts on workers in our own value chain and throughout the whole energy industry and support the development of targeted action to achieve positive impacts. These memberships help us to share knowledge and experience within the sector to improve the working conditions and well-being of workers and promote general standards of safety that will remain valid in the long term. The continuous cooperation made possible by these corporate initiatives and multi-stakeholder dialog formats supports the development of innovative solutions that can bring about sustainable positive impacts.

S2-1 – Policies related to value chain workers

Exercising due diligence with respect to human rights and protecting people, especially workers, within our value chain are guiding principles at EnBW and are firmly anchored in our corporate strategy. We have identified material impacts on workers in the upstream value chain, especially in the area of procurement and purchasing. As part of our **policy for exercising due diligence with respect to human rights**, we have developed the following binding guidelines and processes that address the identification, assessment, management and further improvement of the material impacts we have on these workers:

Further information on the **EnBW Declaration of Human Rights** can be found on the Internet.

[Online ↗](#)

EnBW Declaration of Human Rights: Our overarching policy for the protection of human rights is defined in our EnBW Declaration of Human Rights. We have been a member of the United Nations (UN) Global Compact since 2010 and are committed to respecting human rights and internationally recognized labor standards in accordance with the UN Guiding Principles on Business and Human Rights and the OECD Guidelines on Multinational Enterprises. Our guidelines in this context are based on recognized international standards:

- The Universal Declaration of Human Rights
- The International Covenant on Civil and Political Rights
- The International Covenant on Economic, Social and Cultural Rights
- The core labor standards of the International Labour Organization (ILO)
- The UN Guiding Principles on Business and Human Rights
- The OECD Guidelines for Multinational Enterprises

Our Declaration of Human Rights describes our human rights responsibilities and expectations with respect to our own workforce (S1), the workers in our value chain, including suppliers and business partners (S2), anyone directly or indirectly affected by our business activities (S3) and our consumers and end-users (S4). We expect our business partners to conduct business activities carried out in the name of EnBW in compliance with this declaration. In accordance with our Supplier Code of Conduct, we expect our business partners to report to EnBW any potential human rights or environmental violations and any breaches of the principles laid out in the Supplier Code of Conduct or other compliance breaches in connection with their business relationship with EnBW or their supply chain. In the reporting year, we did not receive any information about incidents of non-compliance in our downstream or upstream value chain. The main focus is placed on renouncing child labor, forced labor and discrimination, freedom of association, the right to collective bargaining, compliance with statutory working hours and protecting the rights of local population groups. The Declaration of Human Rights is binding for EnBW and all companies in which it holds a controlling interest. Majority shareholdings and stakes in joint ventures over which EnBW has no controlling influence are requested to apply the Declaration of Human Rights accordingly. The Board of Management of EnBW has the overriding responsibility for the implementation of the human rights strategy in compliance with the Declaration of Human Rights. In order to comply with standards and the law, EnBW has introduced measures to identify and analyze impacts at an early stage so that we can take counter-measures. Please also refer to our actions under S2-4.

Further information on the EnBW **Supplier Code of Conduct (SCoC)** can be found on the Internet.

[Online ↗](#)

Supplier Code of Conduct (SCoC): Our activities to promote better working conditions for workers in the parts of our upstream value chain related to procurement mainly focus on our direct cooperation with suppliers. We take joint responsibility with them for a sustainable supply chain by taking sustainability criteria into account in the procurement process, to minimize the negative impacts of our business activities on people, affected communities and the environment as much as possible. The Supplier Code of Conduct forms the basis for our business relationships and is thus an obligatory part of contracts with our business partners. Business partners in the sense of the SCoC are all companies outside of the EnBW Group that supply goods and services to EnBW. We not only expect our business partners to comply with the SCoC themselves but also to communicate it to their own suppliers and business partners and to take reasonable measures to ensure that they are complied with by their own suppliers and subcontractors. EnBW believes that compliance with human rights and ensuring good and safe working conditions are the fundamental prerequisites for a responsible business relationship. The SCoC mainly focuses on occupational health and safety, the prevention of child and forced labor, equal opportunities and the prohibition of discrimination, adequate remuneration, compliance with working hours, appropriate disciplinary action, freedom of association and the right to collective bargaining, complaints mechanisms and the protection of indigenous peoples. Purchasing is responsible for the Supplier Code of Conduct and monitors its use and compliance with it, although the Board of Management is ultimately responsible for the SCoC. The purchasing department evaluates the quality of supply chains and suppliers based on risks in the sector and the country, in some cases using automated processes. We develop specific measures for suppliers that pose a higher risk.

Further information on the EnBW **rules of conduct** can be found on the Internet.

[Online ↗](#)

Our **rules of conduct governing the responsible procurement of hard coal and other raw materials** provide us with guidelines with respect to value chain workers and affected communities and form the basis for our cooperation with suppliers and business partners in the procurement of raw materials. We expect our suppliers and business partners to accept these rules, and we place great importance on continuous improvement processes. These rules mainly focus on compliance, integrity and anti-corruption, human rights, working conditions (including the prohibition of child labor, forced labor and human trafficking), environmental protection and procedural requirements for the implementation of corporate due diligence obligations. The rules apply to direct suppliers and business partners for the procurement of raw materials at EnBW and include an obligation for them to ensure that their own suppliers and business partners also comply with them. The application of the rules of conduct governing the responsible procurement of hard coal and other raw materials is monitored by the sustainability department. The entire Board of Management has ultimate responsibility for the rules of conduct. Status reports on the implementation of the rules of conduct are regularly provided to the committee for the responsible procurement of hard coal and other raw materials (AVB).

Further information on the **policy statement (LkSG)** can be found on the Internet.

[Online ↗](#)

Policy statement (LkSG): In order to comply with the regulations in the German Supply Chain Due Diligence Act (LkSG), we have established processes and responsibilities for systematically and regularly analyzing, addressing and reporting annually on our human rights risks and environmental risks (in the sense of LkSG) in our supply chain. Based on these activities, we are able to confirm in our policy statement that we exercise due diligence with respect to human rights and the environment in the sense of LkSG. The policy statement covers the negative impacts on workers in the upstream value chain, both related to our own operations and affected communities, and also along our supply chain. Building on the values and principles that we have set out in the EnBW Declaration of Human Rights, this policy statement describes how we meet our due diligence obligations pursuant to LkSG and specifies the prioritized risks (in the sense of LkSG) we have identified. It is binding for EnBW and all Group companies in EnBW's own business area over which EnBW exercises a decisive influence, whereby decisive influence is determined by the binding application of the EnBW Group guidelines. Majority interests and stakes in joint ventures over which EnBW has no decisive influence are asked to apply the substance of the principles contained therein while maintaining a sense of appropriateness. Subsidiaries whose procurement processes are handled by central purchasing exercise due diligence with respect to human rights in line with our central processes and guidelines. If they are not already integrated into our central processes, those subsidiaries that have been subject to LkSG since 1 January 2024 are currently developing their own governance structures and processes as well as guidelines for complying with the statutory requirements with respect to human rights due diligence that are in line with the governance structures and processes at EnBW AG. An internal information platform has been set up to ensure uniform implementation across the Group. The Board of Management of EnBW has overall

responsibility for the implementation of the guidelines, the design of the process and its supervision. In addition, it determines who sits on the EnBW supervisory committee (Human Rights Committee). The Human Rights Committee comprises the Heads of Sustainability and Head of Compliance from the different areas. It coordinates the operational implementation of the strategy in cooperation with the Human Rights Steering Committee. It defines uniform guidelines with respect to human rights due diligence and monitors compliance with them. Both of these bodies monitor and coordinate the implementation of the core elements of corporate due diligence.

S2-2 – Processes for engaging with value chain workers about impacts

Workers at all stages of our value chain are taken into account indirectly through **dialog formats**, memberships and partnerships, which we use to examine and improve our approach and level of ambition together with other companies and stakeholders. These include the Energy Sector Dialog, RECOSI, econsense and SolarPower Europe. We enter into dialog by holding discussions several times a year within these formats, where we focus, in particular, on issues such as fair working conditions and respecting occupational safety and human rights.

We engage directly with workers during **on-site visits and audits**. On-site discussions are held every one to two years within our procurement process for raw materials with selected business partners (those with a high risk disposition and of major strategic importance for EnBW). These discussions are held as necessary and act as an important source of information about the situation faced by workers in the value chain. In the procurement of raw materials such as coal and gas, we remain in dialog with workers, suppliers, NGOs and government representatives in the procurement countries both directly and indirectly via RECOSI. EnBW employees make on-site visits to help us improve our internal understanding of the conditions at the production sites and in the mining areas.

When procuring technical or other components, our purchasers and category managers hold **discussions with direct suppliers** when and where necessary. During this dialog with suppliers, we discuss, where required, potential solutions for any impacts that have been identified, including tracking the origin of individual components and the working conditions in the production countries. In particular, we focus on workers exposed to greater safety risks at work. This dialog is held several times a year, depending on the business unit and procurement category.

The **EnBW Human Rights Steering Committee** has the operational responsibility for taking the views of workers in the value chain into account. The Human Rights Committee informs the central works council of EnBW about the progress that has been made with the implementation of the LkSG requirements and seeks their opinion where necessary. We evaluate the effectiveness of our cooperation with value chain workers in our dialog formats, where we focus on preparing progress reports.

Netze BW also conducts on-site audits and construction site inspections as part of its business activities in the area of underground and grid construction in Germany. Shareholdings, such as naturenergie, VNG and Stadtwerke Düsseldorf (SWD), also use whistleblower systems to take the perspectives of workers in their value chains into account.

S2-3 – Processes to remediate negative impacts and channels for value chain workers to raise concerns

Alongside our materiality assessment, we carry out risk analyses within the framework of LkSG at least once a year and also at other times where warranted to identify negative impacts on workers in the value chain at an early stage. The following events could trigger an event-driven risk analysis:

- Findings from the evaluation of reports from the complaints procedure
- Substantiated knowledge of actual evidence indicating that an indirect supplier may have violated a human rights or environmental obligation
- Significant changes within EnBW AG's business activities that are expected to lead to a change in the risk situation in the sense of LkSG

The aim is to improve transparency along the supply chain, and in the area of supplier management, we have established a semi-automated business partner evaluation process for this purpose. It serves to systematically identify negative impacts on human rights and the environment and evaluate them at an early stage so that we can use the findings to develop appropriate prevention measures. We have created internal guidelines for the development of mitigation measures to help us derive appropriate action from these analyses and we involve corporate initiatives, such as RECOSI, to help us improve the effectiveness of the procedures and measures.

Our suppliers undertake to comply with our SCoC. In 2022, we started training a group of selected category managers in the purchasing department on due diligence with respect to human rights and the environment. This was followed in 2023 with awareness-raising measures, a leadership campaign and other communication measures that were continued in the 2024 reporting year.

We examine the effectiveness and progress of the actions implemented to mitigate identified negative impacts on an annual basis and where warranted. As part of this process, the Human Rights Committee reports to the Board of Management at least once a year, and more often if occasion demands, on the implementation of human rights due diligence. The Economic Committee of EnBW also receives regular updates. Furthermore, our processes are examined on a regular basis by the audit department to ensure that they comply with the statutory regulations.

Channels for raising concerns

Workers in the value chain can use the various channels within our whistleblower systems to express their views to EnBW. These systems are accessible to persons within the company and also external parties, irrespective of whether they are impacted personally. Please refer to the disclosures under "Compliance whistleblower system and suspected breaches" (p. 48ff.⁷) for information on the EnBW whistleblower systems.

Information on the reporting channels at EnBW is disseminated in various ways. The SCoC contains information on the accessibility, scope of responsibility and implementation of the complaints procedure at EnBW AG, which business partners are required to pass on to employees, subcontractors and suppliers using an appropriate method. Furthermore, the reporting channels and the "rules of procedure for the complaints mechanism" are available on the EnBW website and can be accessed by any workers in the value chain.

S2-4 – Taking action on material impacts on value chain workers, and effectiveness of those actions

In order to prevent, mitigate and improve material negative impacts on value chain workers and achieve positive material impacts, we take both Group-wide action and also company-specific action. Our actions to protect workers in the upstream value chain against negative impacts on their occupational health and safety, working conditions, equal treatment and opportunities and other work-related rights include the following activities:

Selection, evaluation and classification of suppliers: We take action to develop and implement appropriate procurement strategies and purchasing practices. All business partners with whom EnBW concludes direct contracts for the purchase of raw materials are checked with respect to their human rights due diligence as part of a business partner audit. In the area of supplier management, we have integrated an automated process that allows us to directly consider any human rights impacts in the selection of suppliers and take appropriate preventative measures. This requires suppliers to submit a self-assessment in advance 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 rights, the fight against corruption, data protection and quality management.

In the prequalification process for the underground and grid construction procurement category at Netze BW, suppliers from the construction and service sectors are required to submit a self-assessment and undertake comprehensive training on occupational health and safety and on labor law issues such as minimum wage and working time provisions. The requirements in Netze BW's prequalification process are themselves also continuously reviewed in the form of company audits and on-site inspections at construction sites.

Supplier development and dialog formats: In the context of our supplier dialog, our buyers are in regular contact with suppliers, and with their key suppliers in particular, to discuss relevant compliance, environmental and social issues. In 2022 and 2023, we initiated a multi-stakeholder discourse on the subject of forced labor in China to develop an awareness of the problem, on the one hand, and solutions on the other, together with relevant actors and experts. This initiative is part of our extensive engagement in this area, which includes dialog with suppliers, NGOs and government representatives on human rights and environmental issues. We also continued this engagement in the 2024 financial year. Furthermore, we are an active member (e.g., as the head of working groups) of corporate initiatives such as econsense and industry initiatives such as RECOSI and SolarPower Europe. In addition, EnBW was a co-initiator of the German government's Energy Sector Dialog in 2023 and is an active member of this initiative. The aim of this multi-stakeholder forum is for actors from different backgrounds (companies, NGOs and unions) to develop a common understanding of sector-specific impacts and draw up measures to mitigate impacts in selected key focus areas of the sector.

For 2025, naturenergie plans to use digital platforms to track and evaluate implemented actions in order to continuously check their effectiveness. This includes improving the working conditions at suppliers, promoting occupational safety by monitoring accident rates in the value chain and using evaluations of supplier audits to improve transparency. Based on its own supply chain analysis, VNG takes its own prevention and remedial measures with respect to its value chain.

We review the effectiveness and progress of our management of material negative impacts and associated actions at regular intervals and as occasion demands so that we can adapt structures, processes and actions if necessary. This process is accompanied by selective dialog with various internal and external stakeholders – internally in our internal Human Rights Steering Committee as well as externally in corporate, industry and multi-stakeholder initiatives and through participation in events. This general and focused discourse on potential impacts in our value chains enables us to continuously learn, identify gaps in our exercising of corporate due diligence and improve measures aimed at respecting human rights and protecting the environment in all our business areas and vis-à-vis our suppliers and business partners in the supply chain. Subsidiaries with links to central purchasing implement the SCoC in order to mitigate the impacts on workers in their value chain on an ongoing basis. Subsidiaries with their own procurement departments analyze their supply chains and from 2025 will plan specific actions to mitigate impacts.

In the reporting year, no severe human rights issues and incidents connected to value chain workers were reported to EnBW AG via the whistleblower system.

S2-5 – Targets related to managing material negative impacts and advancing positive impacts

At the present time, EnBW does not have any time-bound, measurable quantitative targets with respect to identified impacts. We track the effectiveness of our policies and actions with respect to our material impacts on value chain workers as part of our annual LkSG process, as described in S2-4. The overriding goal is placed on exercising our human rights due diligence and, in this context, the continuous review and evaluation of our impacts along the value chain and the implementation of preventative or, if necessary, remedial measures. Furthermore, we plan to remain actively engaged in sector and corporate initiatives to promote positive impacts for workers.

S3: Affected communities

SBM-3 – Material impacts and their interaction with strategy and business model

We describe the interaction between our material impacts and our strategy and business model under ESRS 2 (p. 128 ff.⁷). Our strategic consideration of the impacts on affected communities is reflected in, among other things, the strategic theme “Culture of sustainability” in the EnBW Sustainability Agenda (measure 11 “Stakeholder management in local communities,” p. 34⁷).

The business activities of EnBW can impact various communities, including communities that live near to our operating locations or communities that live further away but are still impacted by the activities at these locations (e.g., the construction of wind farms). These groups are directly influenced by construction and operating activities, which usually requires the company to engage more intensively and communicate with them. Communities along the value chain and at the end points of the value chain of the EnBW Group are also considered affected communities, such as people who live near to coal mining regions. As part of our materiality assessment, we developed an understanding of which communities are impacted more strongly or who could be under more threat in dialog with the internal representatives of the respective stakeholder groups. They include:

- 1. Residents:** People who live or work near to power plants, wind farms, solar power plants or other energy infrastructure and locations.
- 2. Local authorities:** Cities and communities in which EnBW implements or plans projects.
- 3. Local companies:** Companies who are active in the region and could potentially benefit from or be affected by construction projects, energy supplies or other services provided by EnBW.
- 4. Environmental groups and NGOs:** Organizations who advocate for environmental protection and possibly raise concerns about or give support to EnBW projects.
- 5. Employees and their families:** People who are directly or indirectly impacted by working at EnBW.
- 6. Indigenous peoples:** There is some involvement between EnBW and indigenous peoples in coal mining regions in Colombia and in connection with the construction of wind power plants in Sweden.

Land-related and security-related impacts: Our economic activities can pose a threat to affected communities in the near vicinity of our locations caused by a loss of ecosystems and biodiversity, which can also result in a loss of cultural ecosystem services for residents, such as the pollution of air. There are also potential health impacts caused by conventional generation and the dismantling of nuclear power plants, as well as potential impacts due to the mining of raw materials. In the case of hard coal mining and the production of natural gas for electricity generation, this can result in pollution of soil, air or water.

Adequate housing, rights of indigenous peoples: Within our supply chain there are potentially negative impacts for indigenous peoples arising from only partially consensual resettlement and unlawful dispossession of land, as well as from interference with the natural basis of life due to pollution of water, soil or air during, for example, the mining of raw materials.

S3-1 – Policies related to affected communities

Our principles and guidelines for the protection of affected communities are part of our policy for exercising due diligence with respect to human rights and the environment in our own operations and along our value chain described in S2 [p. 203 ff.⁷]. Affected communities also come under the scope of our policy statement in accordance with LkSG described in S2 [p. 204 ff.⁷]. The processes and responsibilities it describes for identifying our material impacts with respect to human rights and the environment also apply equally to affected communities. The same applies to the rules for exercising our human rights due diligence described in S2 [p. 203 ff.⁷]. Specific guidelines cover the following aspects with respect to affected communities:

EnBW Declaration of Human Rights: EnBW respects the rights of the local population situated close to EnBW locations and project areas that may be affected by EnBW activities. In order to keep any harm to the local population to a minimum, we conduct social and environmental impact analyses in advance of planned projects wherever necessary and involve the local population in the planning process by consulting with them beforehand. EnBW tries to avoid having to resettle any part of the population as a matter of principle. We also expect our business partners to take a responsible and mindful approach to dealing with local population groups that may be affected by their business activities.

Supplier Code of Conduct (SCoC): These guidelines formulate our expectations of our business partners with respect to their compliance with social standards, human rights and environmental standards when carrying out economic activities that have an impact on affected communities. In particular, we expect our business partners to honor and respect the culture, traditions and religion of indigenous peoples and not to harm them through their activities. In accordance with our SCoC, we expect our business partners to report to EnBW any potential human rights or environmental violations and any breaches of the principles laid out in the Supplier Code of Conduct or other compliance breaches in connection with their business relationship with EnBW or their supply chain.

Rules of conduct governing the responsible procurement of hard coal and other raw materials: Due to the special risks associated with the mining of raw materials, we expect our business partners to take preventative measures to protect human rights, especially – but not only – with respect to the avoidance and mitigation of negative impacts on health, food security, access to productive resources such as land and water and ensuring the economic livelihoods of local population groups, and to comply with international standards for protecting the rights of indigenous population groups, especially regarding free, prior and informed consent and the right to appropriate compensation in the event of a loss of property due to relocation, or if the use of natural resources that support the livelihoods of the local population should be restricted.

Furthermore, we are developing a Group policy in a new stakeholder committee comprising representatives from the sustainability, communication, portfolio development and grids areas of the company that will ensure comprehensive engagement with our stakeholders. This policy will consolidate all our policies and guidelines for dealing with affected communities (measure 11 of the EnBW Sustainability Agenda, p. 34⁷).

In accordance with our disclosures in S2 [p. 203 ff.⁷], our Board of Management has the overriding responsibility for compliance with and monitoring our human rights and environmental due diligence obligations. The Human Rights Committee coordinates the operational implementation of the strategy in cooperation with the Human Rights Steering Committee.

S3-2 – Processes for engaging with affected communities about impacts

In order to keep any harm to the local population to a minimum, we conduct social and environmental impact analyses in advance of planned projects as occasion or the project demands. We involve the local population in the planning process directly by carrying out consultations with them in advance and also indirectly by consulting our internal experts in the specialist departments. This process is organized decentrally on a project and location-specific basis. One focus is dialog with citizens at events held in the local area or virtually. These events are designed to provide information to and encourage the participation of citizens. In addition, we provide dialog platforms so that interested parties can ask questions and access information on themes relevant to our business such as renewable energies and sustainability. We also organize public hearings involving project managers, authorities and the public (e.g., according to BImSchG or the Land Use Planning Act) during the application phase and construction phase for wind farms (onshore), photovoltaic power plants and power lines. Public information events such as information evenings and conferences are used to present planned projects and answer questions. When completing offshore projects, we consult the local fishing industry and ferry operators and reach specific agreements with them to minimize potential negative impacts. We are required to take affected communities into account in order to comply with legal regulations and safety measures (such as legal regulations on specific limits, environmental impact assessments or approval processes). The Board of Management has the overriding responsibility for processes designed to take affected communities into account. Please refer to our disclosures on our dialog with stakeholders (p. 52 ff.⁷).

Furthermore, we take the rights of indigenous peoples affected by our own operations to free, prior and informed consent, according to the IAO convention no. 169, into account and hold discussions and negotiations with affected indigenous peoples in good faith. We organize on-site visits every one to two years and hold direct discussions on an equal footing with official representatives of affected indigenous peoples to ensure that we are aware of their customs, traditions, regulations and legal systems and take these into account. In EnBW's upstream value chain, the Wayuu are the largest indigenous group in Colombia and are impacted by coal mining in the Guajira region in the north of Colombia. Although EnBW did not purchase any coal from the Guajira region in 2024, we were actively engaged in discussions with producers, the Wayuu community and representatives of local communities. These meetings were held as part of an on-site visit to Colombia. The main focus of the trip was the impact of coal mining on the natural habitats of the Wayuu and ensuring that regular dialog takes place between all participants on an equal footing. We also hold consultations and maintain dialog with Sámi villages in Sweden. The aim of this dialog is to take account of the interests of Sámi, especially with respect to reindeer herding, when constructing new wind power plants.

For further information on human rights and environmental matters in the procurement of raw materials, please refer to the processes and responsibilities (dialog formats, on-site visits and dialog with suppliers) described in S2-2, which also apply to affected communities, including indigenous peoples, to an equal extent.

S3-3 – Processes to remediate negative impacts and channels for affected communities to raise concerns

We have established processes to address negative impacts in the value chain quickly and specifically. To enable internal and external persons to report potential violations, we have established a comprehensive complaints procedure (p. 48 ff.⁷). If we identify negative impacts on affected communities, the EnBW Human Rights Committee becomes involved. It will then work with relevant specialist departments and business units to develop targeted action to resolve the issue. As part of our risk analyses within the framework of the Supply Chain Due Diligence Act, we prioritize any actual or potential negative impacts on affected communities based on criteria such as the severity, likelihood of occurrence and extent of the contributions to the cause and derive appropriate and proper action based on the findings. Affected communities near to our own locations can utilize our complaints procedure or they are contacted directly during on-site audits. Please refer to our disclosures for S2-3 for information on our actions to avoid negative impacts with respect to the procurement of raw materials and purchasing.

Further information on this subject can be found in the [BAFA report](#), which has been published on the company website.

Online [↗](#)

Channels for raising concerns

Affected communities are able to use the various channels within our whistleblower systems to present their views. These systems are accessible to persons within the company and also external parties, irrespective of whether they are impacted personally. For information on EnBW's whistleblower systems, please refer to the explanations under "Procedures to prevent, detect and address allegations or incidents" (p. 48 ff.⁷). The reporting channels and the rules of procedure for the complaints mechanism are made available on the EnBW AG website and can be accessed by affected communities.

S3-4 – Taking action on material impacts on affected communities and effectiveness of those actions

In order to prevent, mitigate and improve material negative impacts on affected communities and achieve material positive impacts, we take the following action.

Land-related and security-related impacts

Our actions to protect affected communities against a loss of ecosystems and biodiversity and against health-related impacts caused by our business activities in our own operations and also along our upstream value chain include the following activities:

Management systems / certifications: In terms of our obligations with respect to due diligence, our Group guidelines on occupational health and safety (p. 189 ff.⁷) help to ensure that the safety standards at our operating locations are complied with to mitigate negative impacts. They obligate our own workers to diligently manage hazardous substances and diligently cooperate with third-party companies. In addition, environmental management systems have been established and certified according to ISO 14001 at all material Group companies. Please refer to, for example, E2 for further information on our environmental management system (p. 161 f.⁷).

Local measures / project-specific measures: We implement project-related measures both throughout the Group and in specific companies to protect local affected communities. These activities include public consultations, discussions with municipal councils and local authorities on the planning and monitoring of projects and the appointment of site managers who can be contacted by these communities. We offer consultations for citizens, information events and information markets in individual locations so that we can actively get involved with, access the knowledge of and understand the needs of potentially affected parties. We cooperate directly with local authorities and citizens on the construction and operation of wind farms and photovoltaic power plants. These projects give local communities the opportunity to benefit from renewable energies via funding programs and participation models and participate financially via the EnBW citizen participation platform (p. 54 f.⁷).

Adequate housing, rights of indigenous peoples

Our actions to protect communities, especially indigenous peoples, against only partially consensual relocation and the unlawful dispossession of land include the following activities:

Selection, evaluation and classification of suppliers: We have measures in place for developing and implementing appropriate procurement strategies and purchasing practices. All business partners with whom EnBW concludes direct contracts for the purchase of raw materials are carefully audited as part of a comprehensive business partner audit. In particular, the audits focus on negative impacts that will affect larger groups of people or vulnerable population groups, such as indigenous peoples.

Local measures / project-specific measures: We hold discussions several times per year with our suppliers, potentially affected parties and relevant government representatives in the various procurement countries on human rights and environmental matters either via RECO SI or directly during on-site visits. We place special importance on supporting indigenous peoples. EnBW works together with Sámi villages in Sweden and supports them by paying for the transport of reindeers, the construction of pens and other necessary measures.

Further information on the responsible procurement of coal can be found in the **"Procurement"** section.

Dialog formats: As a member of the Energy Sector Dialog, we participate in the development of preventative and corrective measures for sectors with special human rights risks. RECOSI carries out on-site audits of the coal producers and obligates the audited companies to introduce defined improvement measures. As part of its membership of RECOSI, EnBW procures the majority of its coal via direct contracts with companies that have been audited by independent third parties in accordance with the Bettercoal Code.

We plan to establish a continuous quality assurance system to ensure the effectiveness of our actions and formats as part of our Group guidelines for comprehensive stakeholder engagement and stakeholder management in affected communities. Our aim is to develop stakeholder and communication policies for more than 90% of the existing, Group-wide projects by the end of 2026. We can also have a positive impact through our engagement in the Energy Sector Dialog and corporate initiatives such as econsense and RECOSI, as well as through our stakeholder dialog and other stakeholder formats. Please refer to our disclosures in S2-3 (p. 206⁷) for information on how we assess the effectiveness and progress of our management of material negative impacts and our associated actions. Furthermore, we plan to remain actively involved in sector and corporate initiatives to promote positive impacts on affected communities.

In the reporting year, no severe human rights issues and incidents connected to affected communities were reported to EnBW AG via the whistleblower system.

S3-5 – Targets related to managing material negative impacts

At the present time, EnBW does not have any time-bound, measurable quantitative targets with respect to the identified impacts. We track the effectiveness of our policies and actions with respect to our material impacts on affected communities as part of our annual LkSG process, as described in S3-4. The overriding goal is placed on exercising our human rights due diligence and, in this context, the continuous review and evaluation of our impacts along the value chain and the implementation of preventative or, if necessary, remedial measures. Furthermore, we plan to remain actively engaged in sector and corporate initiatives to promote positive impacts for workers.

S4: Consumers and end-users

SBM-3 – Material impacts and risks and their interaction with strategy and business model

We describe the interaction between our strategy and business model and the subsequent impacts under ESRS 2 (p. 128 ff.⁷). Our strategic consideration of impacts on consumers and end-users is reflected in, among other things, the strategic theme “Energy of change” in the EnBW Sustainability Agenda (measure 4: “Customer solutions,” p. 33⁷).

In our double materiality assessment, we identified material themes in the downstream value chain that could have positive and negative impacts on our consumers and end-users – the around 5.5 million customers whom we supply with electricity, gas, water and heating together with products and services related to energy and infrastructure. The B2C area covers retail customers, small commercial enterprises, the housing industry and agriculture, while the B2B area encompasses major commercial enterprises and industrial companies, as well as redistributors, municipal utilities, local authorities and public entities. Our material impacts affect consumers and end-users of services. They can have a potential negative effect on their right to privacy, to have their personal data protected, to freedom of expression and to non-discrimination. In addition, products that are hazardous to people can have impacts on consumers and end-users.

Data protection: There may be direct and indirect digital attacks on our technologies associated with customers in the course of our economic activities. Such incidents could result in a loss or theft of data, which in turn could lead to violations of the General Data Protection Regulation (GDPR) because they endanger sensitive customer data. Numerous advisory and awareness services and process controls are in place to guarantee adherence to legal data protection requirements in the Group. Our processes for complying with data protection laws are described under S4-1.

Our economic activities in the area of telecommunications help companies, municipalities and authorities to further develop their approaches to cybersecurity. In the process, we promote, among other things, greater data security and support companies, authorities and organizations to safeguard their digital infrastructure. Our services help protect systems against cyberattacks and strengthen trust in digital technologies.

Health and safety: We pay special attention to ensuring our products are safe. Despite all of our preventative measures, however, there is still a risk of fire associated with home storage systems. We identified a negative impact in our own operations related to home storage systems for solar electricity for the customers of our home storage systems because of incidents relating to battery storage systems. We carefully investigated these incidents and introduced comprehensive action to prevent them. In this context, we have identified the risk “Market ramp-up of battery storage solutions” (p. 124⁷).

The negative impacts described here are connected with individual incidents that could be related to the exchange of data between EnBW and consumers and end-users or to certain end products. Our double materiality assessment helped us to develop an understanding for which consumers and end-users would be impacted and to what extent.

S4-1 – Policies related to consumers and end-users

Data protection and data security

Data protection is essential for consumers and end-users. Our main priority is the protection of all personal data, such as contractual data, payment data, billing information and meter readings. Our corporate guidelines on data protection define our central principles for compliance with data protection law, govern the processing of personal data and describe the data protection management system (DPMS). The objective is to create a uniform and appropriate level of data protection Group-wide and integrate data protection into all relevant processes. They also define the Group-wide data protection organization. Our approach to data protection is based on European and national regulations, especially the General Data Protection Regulation (GDPR) and the German data protection law (BDSG). The corporate Guidelines are binding for EnBW AG and all German companies that are controlled by EnBW AG, except for the Independent Transmission Operators (ITOs). The ITOs have established their own data protection guidelines and systems. Majority shareholdings over which EnBW AG has no controlling influence are also requested to apply these corporate guidelines accordingly. A combination of centralized and decentralized organizational structures was chosen to help achieve these objectives. The EnBW Board of Management holds overall responsibility and is the primary decision-making instance for defining and implementing the data protection strategy and achieving data protection targets in line with the Group strategy. The managing directors/management boards of Group companies and the heads of the business units must ensure implementation in their respective organizational units of the measures defined by the Group data protection department. The central Group data protection department is responsible for the design of the data protection organization. We have also appointed decentralized data protection managers to support the Group-wide implementation of the DPMS. The corporate guidelines are supplemented by a corporate data protection standard that provides a framework for the development of tasks and processes in the relevant specialist areas and companies.

Product safety

We pay special attention to product safety when it comes to home storage systems. Our subsidiary SENEK is responsible for the safety of these products and strives to achieve this by maintaining high safety and quality standards. We use SENEK.SmartGuard as our first line of protection and provide this software to all customers free of charge. It checks the operating data of all storage systems for any abnormal behavior. This ensures that we can detect even the smallest deviations in individual battery cells immediately so that we can carefully inspect the affected battery storage system where necessary. The entire management board at SENEK has overall responsibility in this area. All home storage systems have the CE mark to confirm that they comply with the applicable European regulations and minimum standards for such products and fulfill the respective testing and safety standards. All systems are certified in accordance with the UN 38.3 standard to guarantee their safety during transport, especially with respect to the possible risks of overheating, short circuits or mechanical damage. In addition, the home storage systems comply with the requirements of relevant standards, such as DIN EN 62133, DIN EN 62619 and DIN EN 62281. These cover electrical safety requirements and the long-term stability and general functionality of the systems. These standards ensure that the home storage systems function safely and reliably throughout their entire service life, with respect to both their electrical output and their physical safety. In November 2023, SENEK made the decision to replace the storage systems in one of its product generations with a new battery technology based on lithium iron phosphate (LFP). Affected SENEK customers with V2.1, V3 or Home 4 systems with 3.0 or 4.0 battery modules are able to exchange their batteries for the latest LFP battery technology free of charge. These modules stand out thanks to their long service life, improved performance and improved level of safety. Users of home storage systems are provided with all relevant safety and technical documents to ensure the systems can be installed, operated and maintained safely.

Further information on the **Declaration of Human Rights** can be found on the Internet.

[Online ↗](#)

Human rights impacts on consumers and end-users

Exercising our human rights due diligence is a key component of our corporate strategy and plays a role in all decision-making processes. We describe our obligations and processes for complying with the international frameworks for human rights and working standards under S2 (p. 202 ff.⁷). They also cover consumers and end-users. In the reporting year, we did not receive any information about incidents of non-compliance in our downstream value chain.

S4-2 – Processes for engaging with consumers and end-users about impacts

We utilize a variety of dialog formats to engage with consumers and end-users during decision-making processes so that we can take their views and feedback into account. The member of the Board of Management responsible for the remit of “System Critical Infrastructure and Customers” has overall responsibility in this area. Important tools are the studies and surveys carried out twice a year. In particular, we survey household customers of EnBW by, for example, holding around 2,000 interviews as part of the customer satisfaction survey to determine the key performance indicator Customer Satisfaction Index. Our “Powerhelden” (power heroes) customer test panel, which has around 2,600 participants including customers supplied by other companies, provides us with further insights and offers consumers and end-users a platform for participating in surveys, discussions and product tests. By providing us with their feedback and views, they can help to actively shape and optimize our products, services and processes. External service providers support us in the completion of some of these surveys. The satisfaction of our customers with various services is also measured using additional feedback surveys via specific contact channels, especially during direct contact with customers, for example, when they conclude contracts on the EnBW website. Special studies are carried out several times per month (on average) to test the user friendliness of our apps and acceptance for our products. Another key approach is to enter into direct dialog with consumers and end-users or their legal representatives. When this is not possible, we cooperate with consumer protection organizations or other credible proxies who understand the concerns of end-users. Associations and societies also provide us with a platform for entering into dialog and engaging with bodies representing the interests of consumers and end-users.

Further information can be found on the Internet.

[Online ↗](#)

We continuously engage with our consumers and end-users on the issue of data protection via our customer service hotlines or directly via our data protection officers. The whistleblower systems safety are also available for submitting complaints, while consumers and end-users can send us their questions about the processing of personal data and our data protection practices online, via e-mail or by telephone.

Furthermore, consumers and end-users can use various channels, such as the website, to ask SENEK about the safety of their products at any time. They can likewise find further information on the website in, for example, our press releases. FAQs and guides related to safety issues are also available. Consumers and end-users can use the SENEK service hotlines to contact the company directly with their questions, especially in the event of a product defect. The entire management board at SENEK has overall responsibility in this area.

S4-3 – Processes to remediate negative impacts and channels for consumers and end-users to raise concerns

Handling complaints and conflicts

To ensure that we can systematically record and process complaints, we have established a structured complaints management system. Customers can raise their concerns via various channels, including a free hotline and an online form, or via e-mail or post. Every complaint is documented through one of the available channels. We have added FAQ pages to our website and created special pages where necessary to provide more information on certain topics. The complaints are entered into a central system once they have been documented on receipt and passed on to the responsible specialist department. The responsible department checks the complaint, analyzes the facts of the case and collects any further relevant information and data. The findings from the analysis are used to offer a solution to the customer within a certain period of time. Internal experts and external partners are consulted if necessary. The effectiveness of these communication channels is regularly

examined using internal audits and customer satisfaction surveys. We use the feedback provided by customers to continuously improve our processes and confirm they are user friendly.

Depending on the type of problem, our customer service department can offer a range of different solutions. If necessary or in the case of specialized complaints, we can also develop individual solutions. If we are unable to find a satisfactory solution to the complaint during this first stage, we inform the customer about the next steps and the option of involving an external arbitration body.

Reports on the performance of the reporting channels and a summary of any ongoing complaints are sent to management on a weekly basis. These reports create transparency about any action that has already been taken and their positive impacts. Our ongoing cooperation with arbitration bodies and escalating unresolved complaints to a higher level within the company ensure that conflicts are dealt with efficiently and in the interests of the customer.

Procedure for handling complaints related to data protection

Compliance with the General Data Protection Regulation (GDPR) and the German data protection law (BDSG) is particularly important to us. We carefully examine and process all of the complaints related to data protection in accordance with the legal regulations. Regular reports are submitted to the Board of Management and supervisory bodies to ensure transparency and control. Managers are obligated to report any data protection violations without delay as soon as they possess concrete evidence related to such an incident. All other employees are asked to communicate any information of this kind to internal or external points of contact. These reports must be documented and processed by the responsible department, which will initiate appropriate countermeasures if necessary. We have an established reporting system for reporting any data protection breaches. It allows internal and external parties to contact the Group data protection department or our data protection officers directly via e-mail or telephone.

A key aspect for complying with the legal requirements with respect to data protection is the awareness-raising measures and training provided to employees who are entrusted with the task of processing personal data. It is important to empower managers and employees to independently implement legal requirements when handling personal data. All employees must complete an e-learning course every two years, while the Group data protection department offers in-person courses and training events for relevant target groups and specialist departments if these are necessary. In particularly sensitive areas, managers or the Group data protection department may specify that employees must complete additional e-learning courses. We offer in-person training courses several times a year and examine and update the content on a yearly basis. Every three years, the specialist departments and companies are required to select certain employees to participate in these training courses. The training courses are then obligatory for these employees.

Exchange program

In November 2023, SENEK made the decision to replace the storage systems in one of its product generations with a new battery technology based on lithium iron phosphate (LFP). SENEK was responsible for identifying all affected customers, collecting their personal data and also informing all of its specialist partners. Once the customer has registered for the exchange program, SENEK initiates the subsequent steps to exchange the batteries and documents the whole process. Affected SENEK Customers with V2.1, V3 or Home 4 systems with 3.0 or 4.0 battery modules are able to exchange their batteries for the latest LFP battery technology free of charge.

Channels for raising concerns

Consumers and end-users are able to use the various channels within our whistleblower systems to present their views to EnBW. These systems are accessible to persons within the company and also external parties, irrespective of whether they are impacted personally. Information on the reporting channels at EnBW is disseminated in various ways. Please refer to the disclosures under "Compliance whistleblower system and suspected breaches" (p. 48ff.⁷) for information on the EnBW whistleblower systems.

S4-4 – Taking action on material impacts on consumers and end-users, and approaches to managing material risks related to consumers and end-users, and effectiveness of those actions

In order to prevent, mitigate and improve material negative impacts on consumers and end-users, achieve material positive impacts and prevent and avoid risks, we take the following action. Please refer to our disclosures under S4-2 and S4-3.

Cooperation with municipalities, authorities and companies in the area of cybersecurity

Our spin-off EnBW Cyber Security helps companies, municipalities and authorities to develop their cybersecurity policies and find and implement the right security strategy for them. It takes the customer's IT and OT security into account in its entirety to find ways to make it more secure. The overall aim is to make critical public infrastructure more resilient. Employees use various technologies to ensure that the networks and customer data are secure. This is achieved by analyzing the customer's current situation, eliminating weaknesses and monitoring the IT and OT infrastructures in our own Cyber Defense Center.

Data protection

The objective of our data protection activities is to create a uniform and appropriate level of data protection Group-wide to avoid the risk of criminal, administrative or civil proceedings, orders from the authorities or affected data subjects, a loss of reputation or undesired interventions in the company's business processes. Data protection officers and managers at a Group and subsidiary level provide ongoing support to business areas and companies to help them comply with legal and internal Group regulations. The Group data protection department provides them in turn with information, advice and training for this task. We carry out a risk assessment every year to evaluate our data protection risks. A data protection impact assessment is also carried out where necessary when we introduce new processes or new IT systems that handle personal data. You will find further information in the disclosures in the section "Data protection" (p. 51⁷).

Any collaborations with external service providers, such as sending out mail or for market research, are subject to strict data protection standards. Before we commission a third party to provide services, they must declare and verify their data protection qualifications by submitting a self-assessment. The responsible departments and companies must generally give greater priority to reliability and legal compliance than to potential cost benefits when selecting disposal service partners.

Safety measures and replacement

Product safety is the main priority when it comes to our home storage systems, which we strive to achieve by maintaining high safety and quality standards. The storage systems from SENEK have an integrated battery management system with an automated, software-based fault detection feature that continuously monitors voltage, temperature and charging state to prevent overcharging, deep discharging and overheating. The systems are also equipped with safety switches and a throttle to provide additional protection against electrical and thermal incidents. Specialized monitoring systems and the customer support department help us to analyze problems remotely and in some cases resolve them directly. When a system deviates from its normal state, it is automatically switched to a safe, restricted operating mode. We then carry out a technical assessment before placing the system back into normal operation or, if necessary, replacing any affected components. SENEK only works with selected, certified and appropriately trained specialist partners to install and repair these systems to guarantee the highest quality standards. To avoid the negative impacts we have identified, SENEK started replacing V2.1, V3 or Home 4 systems with 3.0 or 4.0 battery modules in place in 2024, exchanging the impacted modules that used lithium-ion batteries with safer systems using lithium iron phosphate batteries (LFP). In the second quarter of 2024, SENEK invited affected customers to start registering for the free exchange of their impacted battery storage systems from the third quarter of 2024. SENEK is also offering customers a voluntary goodwill payment of €7.50 per week until the affected system has been replaced, as long as the system is actually in use. Around 50% of the approximately 100,000 affected systems installed by

end customers had been replaced by 31 December 2024. This battery exchange program should be largely completed by the summer of 2025.

In the reporting year, no serious problems or incidents related to the human rights of consumers and end-users were reported to EnBW AG via the whistleblower system.

S4-5 – Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities

At the present time, EnBW does not have any time-bound, measurable, quantitative targets with respect to the identified impacts and risks. However, we do have overriding qualitative targets in this context. The overriding qualitative targets include supporting customers of EnBW Cyber Security in developing their cybersecurity strategies, creating a uniform and appropriate level of data protection Group-wide and integrating data protection requirements into all relevant processes. In the area of product safety, our overriding target is to maintain high standards of safety and quality. Due to the fact that we already have existing qualitative targets, we do not have any concrete plans to develop quantitative targets at the current time.

Please refer to our disclosures in S4-3 (p. 216f.⁷) for information on how we assess the effectiveness and progress of our management of the material negative impacts and associated actions.

G1: Business conduct

In our materiality assessment, we identified the themes of political engagement and lobbying activities and corruption and bribery as material.

Our lobbying activities could have a positive impact via our own operations on society and the environment if we, for example, support laws with a positive impact on people and the environment. However, our lobbying activities in support of, for example, the expansion of the generation infrastructure and the grids could also have negative impacts for people and the environment.

With respect to corruption and bribery, we have identified both a positive and negative impact due to our own operations. We have various channels for reporting compliance violations or suspected incidents that could help us to quickly identify potential misconduct and thus avert any associated damage to third parties. However, insufficient training and prevention measures could have a negative impact on people and the environment. To minimize the impact, EnBW has established various training courses and a compliance management system (CMS) in which the prevention, detection and sanctioning of corruption is firmly anchored. Our Code of Conduct defines how we deal with business partners, office holders and public authorities. The rules make an important contribution to protecting the integrity of the EnBW Group and its workers in business transactions.

G1-1 – Corporate culture and business conduct policies

The disclosures on our business conduct policies can be found under “Corporate Governance” (p. 43 ff.⁷), “Compliance management systems” (p. 45 f.⁷), “Training courses on policies and for the prevention and detection of corruption and bribery” (p. 47 f.⁷), “Protection of whistle-blowers” (p. 49⁷) and “Procedures for handling reports” (p. 49 f.⁷).

G1-3 – Prevention and detection of corruption and bribery

The disclosures on preventing and detecting corruption and bribery can be found under “Training courses on policies and for the prevention and detection of corruption and bribery” (p. 47 f.⁷), “Procedures to prevent, detect and address allegations or incidents” (p. 48⁷), “Compliance whistleblower system and suspected breaches” (p. 48 ff.⁷), “Procedures for handling reports” (p. 49 f.⁷) and “Independence of investigators and involvement of the Supervisory Board” (p. 50⁷).

G1-4 – Confirmed incidents of corruption or bribery

The disclosures on incidents of corruption and bribery can be found under “Compliance whistleblower system and suspected breaches” (p. 48 ff.⁷) and “Cases of corruption and bribery” (p. 50 f.⁷).

G1-5 – Political influence and lobbying activities

The disclosures on political influence and lobbying activities can be found under “Political influence and lobbying activities” (p. 55 f.⁷).

Memberships

A selection of the main memberships held by EnBW AG and its subsidiaries is listed below:

- Arbeitgeberverband der Elektrizitätswerke Baden-Württemberg e.V. (AGV E-Werke)
- Arbeitgeberverband energie- und versorgungswirtschaftlicher Unternehmen e.V. (AVEU)
- Arbeitsgemeinschaft Fernwärme - der Energieeffizienzverband für Wärme, Kälte und KWK e.V. (AGFW)
- Bitkom-Bundesverband Informationswirtschaft, Telekommunikation und neue Medien e.V.
- Bundesverband der Energie- und Wasserwirtschaft e.V. (BDEW)
- Bundesverband Neue Energiewirtschaft (bne)
- Bundesverband Solarwirtschaft e.V. (BSW)
- Bundesverband Energiespeicher Systeme e.V. (BVES)
- Bundesverband WindEnergie e.V. (BWE)
- Bundesverband Windenergie Offshore (BWO)
- Copenhagen School of Energy Infrastructure (CSEI)
- Deutsches Aktieninstitut e.V. (DAI)
- Deutsch-französisches Büro für die Energiewende e.V. (DFBEW)
- Deutsches Institut für Normung e.V. (DIN)
- Econsense - Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e.V.
- Energiedialog 2050 e.V.
- Eurelectric
- European Energy Forum (EEF)
- European Network of Transmission System Operators for Electricity (ENTSO-E)
- European Distribution System Operators (E.DSO)
- European Geothermal Energy Council (EGEC)
- Florence School of Regulation (FSR)
- Forum für Zukunftsenergien e.V.
- International Council on Large Electric Systems (CIGRE)
- Renewables Grid Initiative e.V. (RGI)
- Responsible Commodities Sourcing Initiative (RECOSI)
- Smart Grids-Plattform Baden-Württemberg e.V. (SmartGridsBW)
- Transmission System Operator Security Cooperation (TSC)
- VDE Forum Netztechnik/Netzbetrieb (FNN)
- Verband der Automobilindustrie e.V. (VDA)
- Verband für Energie- und Wasserwirtschaft Baden-Württemberg e.V. (VfEW)

Transparency and lobby register

In our political engagement, we ensure that our interactions with actors and organizations are responsible and transparent and have thus been entering our lobbying activities in the following registers for many years.

EnBW AG

- EU Transparency Register (Register number: 13324391892-74)
- Lobby Register for the German Bundestag (Register number: R002297)
- Transparency Register Baden-Württemberg ([Link](#))
- Lobby Register for the State of Bavaria (Register number: DEBYLT0309, [Link](#))
- Lobby Register for the State of Hess ([Link](#))
- Lobby Register for the State of Saarland ([Link](#))

naturenergie holding AG

- Lobby Register for the German Bundestag (Register number: R004432)

NetCom BW GmbH

- Transparency Register Baden-Württemberg ([Link](#))

Netze BW GmbH

- Lobby Register for the German Bundestag (Register number: R002143)

Plusnet GmbH

- EU Transparency Register (Register number: 52429869691-38)

Stadtwerke Düsseldorf AG

- Lobby Register for the German Bundestag (Register number: R005537)

terranets** bw GmbH**

- Lobby Register for the German Bundestag (Register number: R002787)

TransnetBW GmbH

- Lobby Register for the German Bundestag (Register number: R003033)
- EU Transparency Register (Register number: 687627626720-47)

VNG

VNG Gasspeicher GmbH

- Lobby Register for the German Bundestag (Register number: R000208)

ONTRAS Gastransport GmbH

- Lobby Register for the German Bundestag (Register number: R001190)
- EU Transparency Register (Register number: 582808718534-59)

VNG AG

- Lobby Register for the German Bundestag (Register number: R002373)
- EU Transparency Register (Register number: 157405242660-26)

VNG Handel & Vertrieb GmbH

- Lobby Register for the German Bundestag (Register number: R005566)

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. In the 2024 financial year, we are using the European Sustainability Reporting Standards (ESRS) as a recognized framework for our non-financial declaration in accordance with section 315c (3) in combination with section 289d HGB for the first time. We are complying with the requirements by including the sustainability statement as a separate section of the management report and using incorporation by reference where it makes sense. We fulfill the disclosure requirements in the standards with respect to the impacts, risks and opportunities identified in our double materiality assessment by providing information about policies, results and actions, performance indicators and opportunities and risks.

Non-financial declaration of the EnBW Group and EnBW AG

Description of the business model		p. 22 ff. ⁷				
ESRS 2 IRO-1: Materiality assessment		p. 135 ff. ⁷				
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Environmental issues	TOP Environment goal dimension	97 ff. ⁷	39 ⁷	-	112 ⁷	118 ⁷
	E1: Climate change	145 ff. ⁷	151 ff. ⁷	-	-	
	E2: Pollution	161 ff. ⁷	164 ⁷	-	-	
	E3: Water and marine resources	167 ff. ⁷	168 ⁷	-	-	
	E4: Biodiversity and ecosystems	170 ff. ⁷	173 ⁷	-	-	
	E5: Resource use and circular economy	174 ff. ⁷	176 ⁷	-	-	
	EU taxonomy	179 ff. ⁷	-	90 ⁷	110 ⁷	
Employee issues	TOP Employees goal dimension	99 ff. ⁷	39 ⁷	99 ff. ⁷	113 ⁷	118 ff. ⁷
	S1: Own workforce	188 ff. ⁷	196 ff. ⁷	-	-	
Social issues	In dialog with our stakeholders	52 ff. ⁷	-	-	-	119 ⁷
	G1: Business conduct	220 ff. ⁷	-	-	-	
Respect for human rights	Procurement	62 ff. ⁷	-	-	-	118 ff. ⁷
	S1: Own workforce	188 ff. ⁷	196 ff. ⁷	-	-	
	S2: Workers in the value chain	202 ff. ⁷	208 ⁷	-	-	
	S3: Affected communities	209 ff. ⁷	213 ⁷	-	-	
	S4: Consumers and end-users	214 ff. ⁷	219 ⁷	-	-	
Fighting corruption and bribery	Compliance and data protection	45 ff. ⁷	-	-	-	119 ⁷ and 122 ⁷
	G1: Business conduct	220 ff. ⁷	-	-	-	

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. 22 ff.⁷).

Our reporting is based on the International Integrated Reporting Framework, while we also focus on the Sustainable Development Goals from the United Nations. These are also used as the basis for the non-financial declaration. Due to the new Communication on Progress (COP) guidelines, we will publish a separate report with respect to the requirements in the UN Global Compact.

Information on the diversity concept can be found in “S1: Own workforce” (p. 188ff.⁷) and in “Declaration of corporate management” (p. 251f.⁷).

BDO AG Wirtschaftsprüfungsgesellschaft has audited the consolidated financial statements and the combined management report with reasonable assurance. The non-financial declaration as part of the sustainability statement – except for the content included in the general section of the management report which was incorporated into the report using references – was audited with limited assurance by BDO AG Wirtschaftsprüfungsgesellschaft.

Reported disclosure requirements pursuant to ESRS 2 IRO-2

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GOV-1 – The role of the administrative, management and supervisory bodies	129 f. ⁷
GOV-2 – Information provided to and sustainability matters addressed by the undertaking’s administrative, management and supervisory bodies	130 f. ⁷
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ESRS 2 SBM-1 40(d)(iii): Involvement in activities related to controversial weapons	x		x		Immaterial	
ESRS 2 SBM-1 40(d)(iv): Involvement in activities related to cultivation and production of tobacco			x		Immaterial	
ESRS E1-1 14: Transition plan to reach climate neutrality by 2050				x	Material	35 ff. 145 ff.
ESRS E1-1 16(g): Undertakings excluded from Paris-aligned benchmarks		x	x		Material	145
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ESRS E1-5 38: Energy consumption from fossil sources disaggregated by sources (only high climate impact sectors)	x				Material	155
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ESRS E1-9 66(a): Disaggregation of monetary amounts by acute and chronic physical risk		x			Use of the phased transitional provision	
ESRS E1-9 66(c): Location of significant assets at material physical risk						
ESRS E1-9 67(c): Breakdown of the carrying value of its real estate assets by energy-efficiency classes		x			Use of the phased transitional provision	
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ESRS E3-1 14: Sustainable oceans and seas	x				Immaterial	
ESRS E3-4 28(c): Total water recycled and reused	x				Immaterial	
ESRS E3-4 29: Total water consumption in m ³ per net revenue on own operations	x				Immaterial	
ESRS 2 SBM-3 – E4 16(a)i:	x				Material	170 ⁷
ESRS 2 SBM-3 – E4 16(b):	x				Material	170 ⁷
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ESRS E4-2 24(b): Sustainable land / agriculture practices or policies	x				Material	171 ⁷
ESRS E4-2 24(c): Sustainable oceans / seas practices or policies	x				Immaterial	
ESRS E4-2 24(d): Policies to address deforestation	x				Material	171 ⁷
ESRS E5-5 37(d): Non-recycled waste	x				Material	177 f. ⁷
ESRS E5-5 39: Hazardous waste and radioactive waste	x				Material	177 f. ⁷
ESRS 2 SBM-3 – S1 14(f): Risk of incidents of forced labor	x				Immaterial	
ESRS 2 SBM-3 – S1 14(g): Risk of incidents of child labor	x				Immaterial	
ESRS S1-1 20: Human rights policy commitments	x				Material	190 ⁷
ESRS S1-1 21: Due diligence policies on issues addressed by the fundamental International Labour Organization Conventions 1 to 8			x		Material	190 ⁷
ESRS S1-1 22: Processes and measures for preventing trafficking in human beings	x				Immaterial	
ESRS S1-1 23: Workplace accident prevention policy or management system	x				Material	189 ⁷

Disclosure Requirement and related datapoint	SFDR reference	Pillar 3 reference	Benchmark regulation reference	EU climate law reference	Material/Immaterial	Page
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ESRS S1-14 88(b) and (c): Number of fatalities and number and rate of work-related accidents	x		x		Material	200 [↗]
ESRS S1-14 88(e): Number of days lost to injuries, accidents, fatalities or illness	x				Material	200 [↗]
ESRS S1-16 97(a): Unadjusted gender pay gap	x		x		Material	200 [↗]
ESRS S1-16 97(b): Excessive CEO pay ratio	x				Immaterial	
ESRS S1-17 103(a): Incidents of discrimination	x				Material	201 [↗]
ESRS S1-17 104 (a): Non-respect of UNGPs on Business and Human Rights principles and OECD guidelines	x		x		Immaterial	201 [↗]
ESRS 2 SBM-3 – S2 11(b): Significant risk of child labor or forced labor in the value chain	x				Material	202 f. [↗]
ESRS S2-1 17: Human rights policy commitments	x				Material	203 ff. [↗]
ESRS S2-1 18: Policies related to value chain workers	x				Material	203 ff. [↗]
ESRS S2-1 (19): Non-respect of UNGPs on Business and Human Rights principles and OECD guidelines	x		x		Immaterial	203 ff. [↗]
ESRS S2-1 (19): Due diligence policies on issues addressed by the fundamental International Labour Organization Conventions 1 to 8			x		Material	203 ff. [↗]
ESRS S2-4 36: Human rights issues and incidents connected to its upstream and downstream value chain	x				Material	207 f. [↗]
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ESRS S3-1 17: Non-respect of UNGPs on Business and Human Rights, ILO principles or and OECD guidelines	x		x		Immaterial	210 [↗]
ESRS S3-4 36: Human rights issues and incidents	x				Material	212 f. [↗]
ESRS S4-1 16: Policies related to consumers and end-users	x				Material	215 f. [↗]
ESRS S4-1 17: Non-respect of UNGPs on Business and Human Rights and OECD guidelines	x		x		Immaterial	215 f. [↗]
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ESRS G1-1 10(d): Protection of whistle-blowers	x				Immaterial	49 f. [↗]
ESRS G1-4 24(a): Fines for violation of anti-corruption and anti-bribery laws	x		x		Material	50 f. [↗]
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Disclosures incorporated by reference pursuant to ESRS BP-2

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	20(b), 20(c), 22(c)	Corporate governance	43 ff. ⁷
	22(d)	Performance management system	38 ff. ⁷
ESRS 2 GOV-2	26(a)	Management and supervision	43 ff. ⁷
	26(a)	EnBW Sustainability Agenda 2.0	33 ff. ⁷
	26(b)	Interdependencies	42 ⁷
ESRS 2 GOV-5		Report on opportunities and risks	114 ff. ⁷
ESRS 2 SBM-1	40(a)i, 42	Business model	22 ff. ⁷
	40(a)i	Customers and sales brands	30 ⁷
	40(b)	Revenues	80 ⁷
	40(g)	Strategy	31 f. ⁷
	40(g)	EnBW Sustainability Agenda 2.0	33 ff. ⁷
ESRS 2 SBM-2	45(a)	In dialog with our stakeholders	52 ff. ⁷
ESRS 2 SBM-3	46	EnBW Sustainability Agenda 2.0	33 ff. ⁷
	48(a), 48(d)	Report on opportunities and risks	114 ff. ⁷
	48(f)	Assessment of the robustness of our business model against the background of climate change	23 f. ⁷
ESRS 2 IRO-1	53(c), 53(e)	Report on opportunities and risks	114 ff. ⁷
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	53(c)	Classification of opportunities and risks	120 ⁷
	53(c)	Expansion of major project	122 ⁷
	53(c)	Fluctuations in energy yield in the North Sea and Baltic Sea	122 ⁷
	53(c)	Market ramp-up of battery storage solutions	124 ⁷
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ESRS E1 SBM-3		Assessment of the robustness of our business model against the background of climate change	23 f. ⁷
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ESRS E1-3	28	Interdependencies	42 ⁷
	28	Measure 1 EnBW Sustainability Agenda 2.0	33 ⁷
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	28	Measure 3 EnBW Sustainability Agenda 2.0	34 ⁷
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	28	Measure 5 EnBW Sustainability Agenda 2.0	33 ⁷
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S3 SBM-3	8(a)	Measure 11 EnBW Sustainability Agenda 2.0	34 ⁷
S3-1	18	Measure 11 EnBW Sustainability Agenda 2.0	34 ⁷
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S3-3	27(b)	Compliance whistleblower system and suspected breaches	48 ff. ⁷
S3-4	32(c)	In dialog with citizens	54 f. ⁷

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	7	Compliance management systems	45 f. ⁷
	10(c)	Training courses on policies and for the prevention and detection of corruption and bribery	47 f. ⁷
	10(c)	Protection of whistleblowers	49 ⁷
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G1-3	21	Training courses on policies and for the prevention and detection of corruption and bribery	47 f. ⁷
	16	Procedures to prevent, detect and address allegations or incidents	49 ⁷
	16	Compliance whistleblower system and suspected breaches	48 ff. ⁷
	16	Procedures for handling reports	49 f. ⁷
	16	Independence of investigators and involvement of the Supervisory Board	50 ⁷
G1-4	22	Compliance whistleblower system and suspected breaches	48 ff. ⁷
	22	Cases of corruption and bribery	50 f. ⁷
G1-5		Political influence and lobbying activities	55 f. ⁷

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 2024 financial year.

Task Force on Climate-related Financial Disclosures (TCFD)

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Governance	<ul style="list-style-type: none"> Corporate management Materiality analysis Investment guidelines 	Corporate governance	43 ff. ⁷
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		Strategy, goals and performance management system	35 ⁷
	Climate protection initiatives	The EnBW Group	90 ⁷
		In dialog with our stakeholders	53 ⁷
	Overall assessment by the management	Strategy, goals and performance management system	35 ff. ⁷
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	Environment goal dimension: Key performance indicators and other performance indicators		

Key performance indicators for the EU taxonomy

Revenue

EnBW economic activity	2024		Substantial contribution criteria								No significant harm to other EU objectives (DNSH)						Proportion of taxonomy-aligned (A.1.) or taxonomy-eligible (A.2.) revenue, 2023 in %	Category enabling activity E/-	Category transitional activity T/-
	Code ¹	Revenue in € million	Proportion of revenue in %	Climate change mitigation Y; N;N/EL ⁴	Climate change adaptation Y;N;N/EL ⁴	The sustainable use and protection of water and marine resources Y;N;N/EL ⁴	The transition to a circular economy Y;N;N/EL ⁴	Pollution prevention and control Y;N;N/EL ⁴	The protection and restoration of biodiversity and ecosystems Y;N;N/EL ⁴	Climate change mitigation Y;N ⁴	Climate change adaptation Y;N ⁴	The sustainable use and protection of water and marine resources Y;N ⁴	The transition to a circular economy Y;N ⁴	Pollution prevention and control Y;N ⁴	The protection and restoration of biodiversity and ecosystems Y;N ⁴	Minimum social safeguards Y;N ⁴			
A. Taxonomy-eligible activities																			
A.1 Environmentally sustainable activities (taxonomy-aligned)																			
Electricity generation via photovoltaic technology	CCM 4.1	57.5	0.2	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	0.1	-	-
Electricity generation via wind power	CCM 4.3	490.3	1.4	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	1.0	-	-
Transmission and distribution of electricity	CCM 4.9	4,846.4	14.0	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	10.6	E	-
Storage of electricity ²	CCM 4.10	1,536.8	4.5	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	3.4	E	-
Production of biogas and biofuels for the transport sector and liquid biofuels ³	CCM 4.13	76.4	0.2	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	0.3	-	-
District heating/cooling distribution	CCM 4.15	3.2	0.0	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	0.0	-	-
Electricity generation from fossil gaseous fuels	CCM 4.29	0.0	0.0	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	0.0	-	T
High-efficiency co-generation of heat/cool and power with electricity from fossil gaseous fuels	CCM 4.30	0.0	0.0	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	0.0	-	T
Construction, expansion and operation of systems to extract, treat and supply water	CCM 5.1	224.7	0.7	Y	N/EL	N	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	0.5	-	-
Infrastructure for low-carbon road traffic and public transport	CCM 6.15	290.5	0.8	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	0.4	E	-
Revenue from environmentally sustainable activities (taxonomy-aligned) (A.1)		7,525.8	21.8	21.8	0.0	0.0	0.0	0.0	0.0	-	Y	Y	Y	Y	Y	Y	16.3		
of which enabling activities		6,673.7	19.3	19.3	0.0	0.0	0.0	0.0	0.0	-	Y	Y	Y	Y	Y	Y	14.4	E	-
of which transitional activities		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	Y	Y	Y	Y	Y	Y	0.0	-	T
				EL;N/EL ⁴	EL;N/EL ⁴	EL;N/EL ⁴	EL;N/EL ⁴	EL;N/EL ⁴	EL;N/EL ⁴										
A.2 Taxonomy-eligible but non-aligned activities (taxonomy non-aligned activities)																			
Production of biogas and biofuels for the transport sector and liquid biofuels ³	CCM 4.13	2.2	0.0	EL	N/EL	N/EL	N/EL	N/EL	N/EL	-	-	-	-	-	-	-	0.0	-	-
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	CCM 4.30	863.1	2.5	EL	N/EL	N/EL	N/EL	N/EL	N/EL	-	-	-	-	-	-	-	1.3	-	-
Revenue from taxonomy-eligible but non-aligned activities (taxonomy non-aligned activities) (A.2)		865.3	2.5														1.3		
A. Revenue from taxonomy-eligible activities (A.1+A.2)		8,391.1	24.3														17.5		
B. Taxonomy non-eligible activities																			
Revenue from taxonomy non-eligible activities		26,133.3	75.7																
Total		34,524.4	100.0																

¹ Climate Change Mitigation: CCM; Climate Change Adaptation: CCA; Water: WTR; Circular Economy: CE; Pollution Prevention and Control: PPC; Biodiversity and ecosystems: BIO.

² Including 4.5 Electricity generation from hydropower.

³ Including 4.20 Combined heat/cooling and power plants with bioenergy.

⁴ Y - Yes; N - No; E - taxonomy-eligible activity; N/EL - taxonomy non-eligible activity.

Capex

EnBW economic activity	2024		Substantial contribution criteria							No significant harm to other EU objectives (DNSH)							Proportion of taxonomy-aligned (A.1.) or taxonomy-eligible (A.2.) capex, 2023 in %	Category enabling activity E/-	Category transitional activity T/-	
	Code ¹	Capex	Proportion of capex	Climate change mitigation	Climate change adaptation	The sustainable use and protection of water and marine resources	The transition to a circular economy	Pollution prevention and control	The protection and restoration of biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	The sustainable use and protection of water and marine resources	The transition to a circular economy	Pollution prevention and control	The protection and restoration of biodiversity and ecosystems	Minimum social safeguards				
	in € million	in %	Y; N;N/EL ⁴	Y;N;N/EL ⁴	Y;N;N/EL ⁴	Y;N;N/EL ⁴	Y;N;N/EL ⁴	Y;N;N/EL ⁴	Y;N ⁴	Y;N ⁴	Y;N ⁴	Y;N ⁴	Y;N ⁴	Y;N ⁴	Y;N ⁴	Y;N ⁴				
A. Taxonomy-eligible activities																				
A.1 Environmentally sustainable activities (taxonomy-aligned)																				
Electricity generation via photovoltaic technology	CCM 4.1	144.1	2.3	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	1.5	-	-
Electricity generation via wind power	CCM 4.3	751.9	11.9	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	17.6	-	-
Transmission and distribution of electricity	CCM 4.9	3,343.9	52.9	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	48.5	E	-
Storage of electricity ²	CCM 4.10	76.1	1.2	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	0.8	E	-
Production of biogas and biofuels for the transport sector and liquid biofuels ³	CCM 4.13	30.3	0.5	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	0.2	-	-
Transmission and distribution networks for renewable and low-carbon gases	CCM 4.14	353.0	5.6	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	5.5	-	-
District heating/cooling distribution	CCM 4.15	34.8	0.6	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	0.6	-	-
Electricity generation from fossil gaseous fuels	CCM 4.29	385.3	6.1	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	5.2	-	T
High-efficiency co-generation of heat/cool and power with electricity from fossil gaseous fuels	CCM 4.30	110.8	1.8	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	2.0	-	T
Construction, expansion and operation of systems to extract, treat and supply water	CCM 5.1	28.5	0.5	Y	N/EL	N	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	0.6	-	-
Infrastructure for low-carbon road traffic and public transport	CCM 6.15	312.7	4.9	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	3.7	E	-
Capex from environmentally sustainable activities (taxonomy-aligned) (A.1)		5,571.4	88.2	88.2	0.0	0.0	0.0	0.0	0.0	-	Y	Y	Y	Y	Y	Y	Y	86.1		
of which enabling activities		3,732.7	59.1	59.1	0.0	0.0	0.0	0.0	0.0	-	Y	Y	Y	Y	Y	Y	Y	53.0	E	-
of which transitional activities		496.1	7.9	7.9	0.0	0.0	0.0	0.0	0.0	-	Y	Y	Y	Y	Y	Y	Y	7.2	-	T
				EL;N/EL ⁴	EL;N/EL ⁴	EL;N/EL ⁴	EL;N/EL ⁴	EL;N/EL ⁴	EL;N/EL ⁴											
A.2 Taxonomy-eligible but non-aligned activities (taxonomy non-aligned activities)																				
Production of biogas and biofuels for the transport sector and liquid biofuels ³	CCM 4.13	0.9	0.0	EL	N/EL	N/EL	N/EL	N/EL	N/EL	-	-	-	-	-	-	-	-	0.0	-	-
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	CCM 4.30	6.8	0.1	EL	N/EL	N/EL	N/EL	N/EL	N/EL	-	-	-	-	-	-	-	-	0.1	-	-
Capex from taxonomy-eligible but non-aligned activities (taxonomy non-aligned activities) (A.2)		7.7	0.1															0.1		
A. Capex from taxonomy-eligible activities (A.1+A.2)		5,579.1	88.3															86.2		
B. Taxonomy non-eligible activities																				
Capex from taxonomy non-eligible activities		738.3	11.7																	
Total		6,317.4	100.0																	

1 Climate Change Mitigation: CCM; Climate Change Adaptation: CCA; Water: WTR; Circular Economy: CE; Pollution Prevention and Control: PPC; Biodiversity and ecosystems: BIO.

2 Including 4.5 Electricity generation from hydropower.

3 Including 4.20 Combined heat/cooling and power plants with bioenergy.

4 Y - Yes; N - No; E - taxonomy-eligible activity; N/EL - taxonomy non-eligible activity.

Opex¹

EnBW economic activity	2024		Substantial contribution criteria							No significant harm to other EU objectives (DNSH)							Proportion of taxonomy-aligned (A.1.) or taxonomy-eligible (A.2.) opex, 2023 in %	Category enabling activity E/-	Category transitional activity T/-	
	Code ²	Opex	Proportion of opex	Climate change mitigation	Climate change adaptation	The sustainable use and protection of water and marine resources	The transition to a circular economy	Pollution prevention and control	The protection and restoration of biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	The sustainable use and protection of water and marine resources	The transition to a circular economy	Pollution prevention and control	The protection and restoration of biodiversity and ecosystems	Minimum social safeguards				
	in € million	in %	Y; N;N/EL ⁵	Y;N;N/EL ⁵	Y;N;N/EL ⁵	Y;N;N/EL ⁵	Y;N;N/EL ⁵	Y;N;N/EL ⁵	Y;N ⁵	Y;N ⁵	Y;N ⁵	Y;N ⁵	Y;N ⁵	Y;N ⁵	Y;N ⁵	Y;N ⁵				
A. Taxonomy-eligible activities																				
A.1 Environmentally sustainable activities (taxonomy-aligned)																				
Electricity generation via photovoltaic technology	CCM 4.1	37.6	3.7	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	-0.1	-	-
Electricity generation via wind power	CCM 4.3	72.5	7.1	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	3.4	-	-
Transmission and distribution of electricity	CCM 4.9	204	19.9	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	16.8	E	-
Storage of electricity ³	CCM 4.10	8.4	0.8	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	0.9	E	-
Production of biogas and biofuels for the transport sector and liquid biofuels ⁴	CCM 4.13	16.9	1.6	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	1.0	-	-
District heating/cooling distribution	CCM 4.15	1.1	0.1	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	0.0	-	-
Electricity generation from fossil gaseous fuels	CCM 4.29	0.0	0.0	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	0.0	-	T
High-efficiency co-generation of heat/cool and power with electricity from fossil gaseous fuels	CCM 4.30	0.0	0.0	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	0.0	-	T
Construction, expansion and operation of systems to extract, treat and supply water	CCM 5.1	20.1	2.0	Y	N/EL	N	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	1.2	-	-
Infrastructure for low-carbon road traffic and public transport	CCM 6.15	0.2	0.0	Y	N/EL	N/EL	N/EL	N/EL	N/EL	-	Y	Y	Y	Y	Y	Y	Y	-0.1	E	-
Opex from environmentally sustainable activities (taxonomy-aligned) (A.1)		360.8	35.1	35.1	0.0	0.0	0.0	0.0	0.0	-	Y	Y	Y	Y	Y	Y	Y	23.2		
of which enabling activities		212.6	20.7	20.7	0.0	0.0	0.0	0.0	0.0	-	Y	Y	Y	Y	Y	Y	Y	17.6	E	-
of which transitional activities		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	Y	Y	Y	Y	Y	Y	Y	0.0	-	T
				EL;N/EL ⁵	EL;N/EL ⁵	EL;N/EL ⁵	EL;N/EL ⁵	EL;N/EL ⁵	EL;N/EL ⁵											
A.2 Taxonomy-eligible but non-aligned activities (taxonomy non-aligned activities)																				
Production of biogas and biofuels for the transport sector and liquid biofuels ⁴	CCM 4.13	0.5	0.0	EL	N/EL	N/EL	N/EL	N/EL	N/EL	-	-	-	-	-	-	-	-	0.0	-	-
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	CCM 4.30	2.5	0.2	EL	N/EL	N/EL	N/EL	N/EL	N/EL	-	-	-	-	-	-	-	-	0.1	-	-
Opex from taxonomy-eligible but non-aligned activities (taxonomy non-aligned activities) (A.2)		3.0	0.3															0.2		
A. Opex from taxonomy-eligible activities (A.1+A.2)		363.8	35.4															23.3		
B. Taxonomy non-eligible activities																				
Opex from taxonomy non-eligible activities		662.8	64.6																	
Total		1,026.6	100.0																	

¹ Figures may not add up due to rounding differences.

² Climate Change Mitigation: CCM; Climate Change Adaptation: CCA; Water: WTR; Circular Economy: CE; Pollution Prevention and Control: PPC; Biodiversity and ecosystems: BIO.

³ Including 4.5 Electricity generation from hydropower.

⁴ Including 4.20 Combined heat/cooling and power plants with bioenergy.

⁵ Y - Yes; N - No; E - taxonomy-eligible activity; N/EL - taxonomy non-eligible activity.

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 change mitigation	21.8	2.5
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 change mitigation	88.2	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 change mitigation	35.1	0.3
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

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	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	YES
5.	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
6.	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	7,525.8	21.8	7,525.8	21.8	-	-
8.	Total applicable KPI	34,524.4	100.0	34,524.4	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	7,525.8	100.0	7,525.8	100.0	-	-
8.	Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI	7,525.8	100.0	7,525.8	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	863.1	2.5	863.1	2.5	-	-
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	2.2	0.0	2.2	0.0	-	-
8.	Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI	865.3	2.5	865.3	2.5	-	-

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	67.1	0.2
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.	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	26,066.2	75.5
8.	Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI	26,133.3	75.7

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	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	YES
5.	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
6.	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	385.3	6.1	385.3	6.1	-	-
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	110.8	1.8	110.8	1.8	-	-
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	5,075.4	80.3	5,075.4	80.3	-	-
8.	Total applicable KPI	6,317.4	100.0	6,317.4	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	385.3	6.9	385.3	6.9	-	-
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	110.8	2.0	110.8	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 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	5,075.4	91.1	5,075.4	91.1	-	-
8.	Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI	5,571.4	100.0	5,571.4	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	6.8	0.1	6.8	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.	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	0.9	0.0	0.9	0.0	-	-
8.	Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI	7.7	0.1	7.7	0.1	-	-

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	0.0	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.	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	738.3	11.7
8.	Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI	738.3	11.7

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	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	YES
5.	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
6.	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	360.8	35.1	360.8	35.1	-	-
8.	Total applicable KPI	1,026.6	100.0	1,026.6	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	360.8	100.0	360.8	100.0	-	-
8.	Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI	360.8	100.0	360.8	100.0	-	-

Template 4 Taxonomy-eligible but not taxonomy-aligned economic activities¹

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	2.5	0.2	2.5	0.2	-	-
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	0.5	0.0	0.5	0.0	-	-
8.	Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI	3.0	0.3	3.0	0.3	-	-

¹ 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	0.0	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.	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	662.8	64.6
8.	Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI	662.8	64.6