Report on opportunities and risks

Principles of the integrated opportunity and risk management system

Opportunity and risk map

Strategic / sustainability		Operative			Financial		Compliance
Strategy	**Sustainability**	**Business activity**	**Infrastructure**	**Implementation of growth fields**	**Financial management**	**Corporate financing**	**Compliance**
Sustainable Generation Infrastructure 🔵 🟠	Climate change 🔵 🟠	Business processes	Plants / grids / storage / IT	Renewable Energies 🔵 🟠	Market prices	Capital market	Corruption 🟠
Market developments / social trends 🔵	Environmental protection 🟠	Operating activities	Information security / confidentiality	Gas / biogas business	Liquidity management	Ratings	Antitrust law
System Critical Infrastructure	Weather / natural events 🔵	Products / contracts	Crime / sabotage / terrorism	E-mobility / digitalization	Earnings management		Data protection
Smart Infrastructure for Customers	HR 🟠	Operational projects		Expansion of the grids	Investment management		Fraud
	Occupational safety / health protection 🟠	Approvals / licenses / patents					Taxes and levies
	Human rights 🟠	Legislation / regulation / litigation 🔵					
	Social issues 🟠						
	Reputation 🔵 🟠						

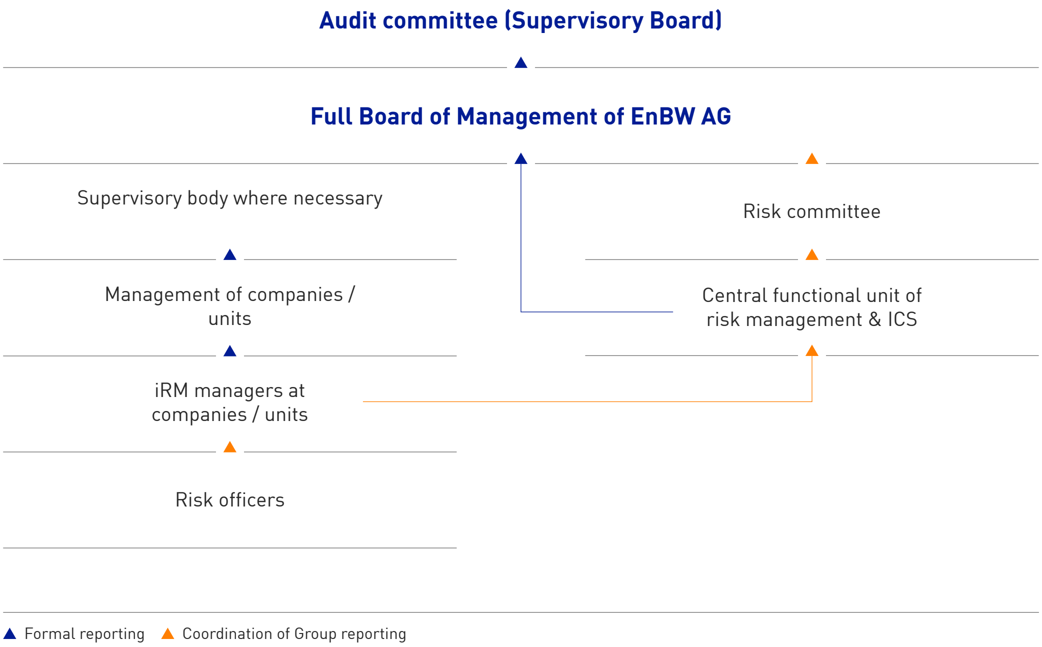
🔵 Task Force on Climate-related Financial Disclosures (TCFD) 🟠 Corporate Social Responsibility (CSR)

The integrated opportunity and risk management system (iRM) of EnBW is based on the internationally established COSO II framework as a standard for risk management systems that span entire companies. 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, the opportunity and risk map that is well known throughout the Group is utilized. The risk map is used to explicitly consider possible 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.

We constantly improve and enhance the maturity of our integrated opportunity and risk management system. In 2020, we already expanded and improved the quantitative assessment of opportunities and risks using a question-based collection method. Building on this, we developed and implemented an approach to assess the risk-bearing capacity in the reporting year. This is 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 company's individual risk-bearing capacity, i.e., the risks that EnBW can tolerate without jeopardizing its ability to continue as a going concern. This can be used as a management instrument and fulfills the requirements of the auditing standard IDW PS 340 n. F.

Structure and processes of the integrated opportunity and risk management system

Structure and process of the iRM system



The structures and processes of the iRM are well-known throughout the Group. The central risk management & ICS functional unit is responsible for specifying methods, processes and systems for the whole Group, determining the opportunity and risk position of the Group and for reporting. The central steering body is the risk committee, which – with the involvement of specially selected units/companies – is responsible for clarifying relevant issues from various Group perspectives, as well as for determining the top opportunities/risks.

The iRM is tested annually by the Group auditing department with a focus on different main themes each year and the results of the test are then presented to the Supervisory Board in the form of a so-called effectiveness report. All opportunities and risks are initially assessed with the help of the iRM relevance filter before and after consideration has been taken of both implemented and envisaged management instruments. In the process, they are allocated to one of seven relevance categories on the basis of quantitative and qualitative criteria for each of the four dimensions: "strategic/sustainability," "operational," "financial" and "compliance."

The internal reports are submitted on a quarterly basis in standardized form. In the case of any significant changes, a special report is immediately issued. The opportunities and risks can have an impact on our key financial performance indicators adjusted EBITDA?, value spread? and debt repayment potential? (p. 46↗). The possible effects on the key non-financial performance indicators (p. 46 f.↗) are discussed with those responsible in the specialist areas.

Opportunities and risks are evaluated within the medium-term planning period. Insofar as a financial valuation of the opportunities and risks is possible, they are allocated to relevance classes 0 to 4 if they have a value in the range of less than €0.2 million up to less than €50 million within the medium-term planning period. From relevance class 5 and above, which corresponds to a financial valuation of more than €50 million and a probability of occurrence of over 50%, opportunities and risks are generally included in the Group report on opportunities and risks. The so-called top opportunities / risks and long-term opportunities and risks that are of particular importance are then added. The top opportunities / risks are determined using global opportunity and risk trends, value drivers along the value added chain and quantitative characteristics such as relevance classes and monetary limits.

Any opportunities and risks with a probability of occurrence of up to 50% are subject to an individual review to determine whether they should be taken into account in the next planning session. Opportunities and risks with a probability of occurrence of over 50% are generally taken into account in the planning process and, as far as possible, appropriate accounting measures are taken in the consolidated financial statements in accordance with IFRS.

Opportunities and risks are generally evaluated in relation to the current planning period. This is carried out using quantitative methods involving stochastic modeling based on appropriate probability distributions. The resulting distributions enable us to derive the risk dimensions in each case, such as the expected level for the opportunity and risk and the variation in the expected level.

To ensure that possible extreme scenarios for individual opportunities or risks can be identified, risk ranges are selected that are appropriate to such extreme scenarios. For this purpose, the confidence level for the stochastic modeling of risks for the reporting year was raised from 67% to 98% as of the reporting date of 31 December 2021. This represents larger financial ranges in order to cover possible extreme scenarios with a higher probability. The calculation methods and distribution functions for opportunities and risks were not changed in the process.

Relevance filter for classifying opportunities and risks

Strategic / sustainability Achievement of strategic targets, sustainability targets, e.g., climate protection, environmental protection, reputation	**Operative** Achievement of business targets, functional processes, retaining added value, customer / external effects	**Financial** Achievement of financial targets, generally in accordance with medium-term planning or approved (project) budgets	**Compliance** Compliance with legal / official regulations and internal regulations	
Relevance class 5 One strategic / sustainability target for the EnBW Group is not achieved	• One key operational target for the EnBW Group is not achieved • The value added is massively disrupted across the company / business units / functional units	≥ €50 million (relevance threshold for functional units and EnBW Group)	Breach of legal / official regulations and / or internal regulations with negative consequences for the EnBW Group	Group reporting level
Relevance class 6 Several or all strategic / sustainability targets for the EnBW Group are not achieved	• Several or all operational targets for the EnBW Group are not achieved • Value added throughout the whole Group is massively disrupted	≥ €250 million	Breach of legal / official regulations and / or internal regulations with serious negative consequences for the EnBW Group	Group reporting level

Structure and processes of the accounting-related internal control system

Principles

An accounting-related internal control system (ICS) has been established at EnBW that is designed to ensure proper and reliable financial reporting. In order to guarantee that this ICS is effective, the appropriateness and functionality of the Group-wide control mechanisms are tested regularly at the level of the individual companies and at a Group level.

If any existing weaknesses are identified in the control system and are considered relevant to the financial statements, they are remedied. This accounting-related ICS methodology is based on the COSO II standard.

Once the control mechanisms have reached a standardized and monitored degree of maturity, and no material control weaknesses can be identified, the accounting-related ICS is deemed to be effective. The materiality of control weaknesses is measured as the probability of occurrence and the extent to which there could be a potential misstatement in connection with those financial statement items concerned. The accounting-related risk management system defines measures for identifying and assessing risks that jeopardize the preparation of compliant financial statements as part of the accounting-related ICS.

Despite having established an ICS, there is no absolute certainty that it will attain its objectives or that it will be complete. In individual cases, the effectiveness of the ICS can be impaired by unforeseeable changes in the control environment, fraud or human error.

Structure

The accounting-related ICS at EnBW is organized at both a centralized and decentralized level. All key companies, business units and functional units have an ICS officer. These officers monitor the effectiveness of the ICS and evaluate any control weaknesses that may arise. A report on the effectiveness of the ICS is prepared on an annual basis. The ICS officer at Group level assists the companies/units with the implementation of standardized procedures and also consolidates collected data.

Process

Standardized procedures are used to ensure completeness and consistency in the preparation of the financial statements and financial reporting. The accounting-related ICS defines controls designed to ensure compliance with the accounting policies used by the Group, as well as procedures and deadlines for the individual accounting and consolidation processes. During the Group consolidation process, the rigorous implementation of the four-eye principle is observed, while random samples and deviation analyses improve quality. An annual control cycle monitors whether the documentation is up to date and also checks the appropriateness and functionality of the controls. In addition, it identifies and evaluates any control weaknesses that may arise.

A risk-based selection process defines the companies/units, significant items in the financial statements and processes including their associated control measures that are relevant.

The defined processes and controls are recorded in a central documentation system. The effectiveness of the various control activities is then assessed. If any control weaknesses are identified, their effect on the financial statements is evaluated. The results are reported at both company or unit level and at Group level. Furthermore, the Group auditing department performs ICS reviews as part of its risk-oriented audit planning.

Non-financial declaration

As part of the non-financial declaration, we closely analyze the related opportunities and risks in the areas of compliance, social engagement and procurement, as well as in the customers and society, environment and employees goal dimensions. In order to guarantee that the requirements for a non-financial declaration are fulfilled, the established iRM methods and the associated process are used. In this context, the iRM also identifies opportunities and risks relating to climate protection and thus provides important impetus for the implementation of the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). You can find further information on this subject on p. 145↗.

Risks associated with the non-financial declaration

The non-financial declaration describes, among other things, the fundamental opportunities and risks connected with the EnBW business model and the activities based upon it that could have a possible impact on one of the individual issues. Material individual risks with a very high probability of a serious negative impact in relation to any of the following issues do not exist at EnBW.

Compliance

The observance of relevant legal regulations and internal company rules forms the basis of our business activities. Managing compliance risks at EnBW (with a main focus on corruption, antitrust and data protection risks) is the task of the compliance management system, which comprises regular risk assessments of this type. Risks related to fighting corruption and bribery are addressed on p. 49 ff.↗ in a cross-segment manner.

Social engagement

There are no risks in the area of social engagement. In fact, we take our social responsibility for civic and social engagement seriously (p. 55 f.↗).

Procurement

Sustainable procurement – purchasing: In the area of procurement, risks cannot be excluded due to increasing levels of complexity and the large number of suppliers. Purchasing utilizes an active risk management system, counters procurement risks and implements the necessary measures for safeguarding against and avoiding risk. These risks are managed using defined processes and, especially in this area, through the prequalification process (p. 62 ff.↗).

Raw materials procurement – coal and gas: In the area of raw materials procurement and thus in the associated supply chain, there are above all potential human rights and environmental risks. In the procurement of raw materials, a multistage process is used to check whether human rights and environmental standards are being observed. All coal suppliers and also potential suppliers are regularly subjected to a screening process. The activities carried out for the procurement of coal are currently being implemented for gas procurement. Other measures that form part of the assessment are carried out in direct cooperation with the compliance department.

In coal mining and the production of natural gas, there are possible human rights risks related to the working and living conditions of people in the coal mining regions and natural gas producing regions. In addition, there are environmental risks for the immediate environment in each of these mining and gas producing regions. An increase in civil society activity in this context can in turn result in an increase in reputational risk. We are in constant contact with representatives from civil society and keep them informed about the advances made and challenges faced in all sustainability topics (p. 64 ff.↗).

Customers and society goal dimension

Reputation: All opportunities and risks, as well as non-financial issues, can have a positive or negative impact on reputation and thus on the key performance indicator Reputation Index (p. 92↗). The reputation management department thus identifies opportunities and risks related to reputation, develops measures to protect and improve reputation, advises the Board of Management and management and provides recommendations for action.

Customer proximity: Risks exist especially in connection with the competitive pressure both from direct competitors within the energy industry and, to an increasing extent, competitors from other sectors that have already entered the energy market or will do so shortly. This is associated with the risk of a negative impact on the customer base and sales volumes. It is also accompanied by very volatile market prices in the area of procurement. Opportunities exist above all through the provision of a broader range of customer-specific products and services such as offering hardware bundles ? and product options, as well as through processes more oriented to the customer. EnBW also continued to expand its range of electromobility, sustainable energy industry services and energy solutions in 2021 and targeted its sales activities in this direction (p. 92 ff.↗).

Environment goal dimension

Expansion of renewable energies: Risks generally exist in the approval and auction process. These risks can result in delays to the further expansion of renewable energies. Due to the fact that the auctions are held on equal terms, we continue to expect a high level of competition. We measure the expansion of renewable energies with our key performance indicator "installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE" (p. 97 f.↗).

CO_2 intensity / climate protection: Risks generally exist in the area of environmental protection due to the operation of power generation and transmission plants with possible consequences for the air, water, soil and nature. The importance of climate protection is taken into account in, for example, the key performance indicator CO_2 intensity (p. 99↗).

We counter these risks using, among other things, an environmental management system certified according to DIN EN ISO 14001, which has been established at key subsidiaries (p. 97↗). We take the safety of the population and the protection of the environment very seriously. In this context, risks also exist due to external circumstances, such as extreme weather conditions. We counter these risks using comprehensive organizational and procedural measures to reduce their impact. We ensure that the risks posed by crisis and emergency situations are mitigated quickly, effectively and with a coordinated approach through regular crisis management exercises and other measures. Through our diverse range of activities in the areas of environmental, nature and species protection, we also utilize the opportunity – beyond our core activities – to make a substantial contribution to improving environmental protection. Thanks to the positive public perception of these activities, they can also have a positive impact on our key performance indicator Reputation Index (p. 92↗).

At the same time, EnBW also faces potential risks due to the ongoing process of climate change. For example, more frequent extreme weather conditions leading to highly fluctuating water levels or limits being placed on emissions locally could have a negative impact, particularly on the operation of power plants and thus the security of supply (electricity grids). The operation of hydropower plants can be restricted by both a lack of, or also an abundance of, water. The output from thermal power plants that must be cooled could possibly be impacted by temperature limits on discharged water. Increasing volatility in the availability of wind, water and sun presents challenges in terms of planning certainty for the operation of power plants and the sale of volumes of electricity (p. 40 ff.↗). For this reason, the top opportunity/top risk of wind fluctuations has been reported since the Integrated Annual Report 2016, although these opportunities/risks have no material effect on non-financial issues. In addition, there is uncertainty due to increasing environmental restrictions for the realization of projects for sustainable energy generation and for the operation of power plants. These risks are managed and mitigated in internal processes using targeted control measures.

Alongside changes in physical climate parameters and other developments relating to or governed by environmental factors, regulatory guidelines and the potential changes associated with them, as well as changes in the market, also flow into the risk evaluation process. However, there are also opportunities such as changing customer needs (p. 92 ff.↗) and an increasing demand for climate-friendly products such as e-mobility. These opportunities and risks are regularly and systematically identified Group-wide. The recommendations from the Task Force on Climate-related Financial Disclosures (TCFD)? are continuously implemented and are communicated in the report on opportunities and risks. Building on the risk map, special focus is placed on sustainability aspects – especially climate protection targets – and they are anchored more deeply in the risk evaluation process. We closely examine the significance of sustainability and climate protection themes for the business model and implement measures and set targets to orientate our opportunity and risk management system even more towards climate-related opportunities and risks.

Employees goal dimension

Engagement of employees: Due to the persistent level of competition on the labor market, especially for qualified and highly qualified specialists, there is a fundamental risk when recruiting employees that the company will not be able to secure a sufficient number of employees with the necessary qualifications at the right time. The more intensive measures to strengthen the company's reputation as an employer, the growing interest in jobs in the energy sector and the possibility of tapping into the international job market lessen this risk to some extent. We believe that regular anonymous employee surveys, from which we derive the People Engagement Index (PEI) as a key performance indicator, are an important tool for seizing opportunities early in the areas of employee development and employee loyalty (p. 104↗).

Occupational safety: Risks generally exist in the areas of occupational safety and health protection in our business activities. We counter these risks using comprehensive organizational and procedural measures, such as workplace-specific hazard analyses, to protect employees as well as possible against any adverse consequences. We also view these measures as an opportunity to preserve the capacity of our employees to do their work and to maintain the position of EnBW as an attractive employer. Occupational safety is measured in the employees goal dimension in the form of the key performance indicator LTIF for companies controlled by the Group and LTIF overall (p. 107f.↗).

Classification of opportunities and risks

The individual evaluations of the top opportunities/risks tell us – based on their level of opportunity/risk – what effects they could have with a high probability of occurrence on our key performance indicators in the finance goal dimension: adjusted EBITDA, debt repayment potential and value spread, which will replace the key performance indicator ROCE from the 2022 financial year onwards. The risks are described after the implementation of risk limitation measures. The financial effects based on a 98% confidence level break down as follows:

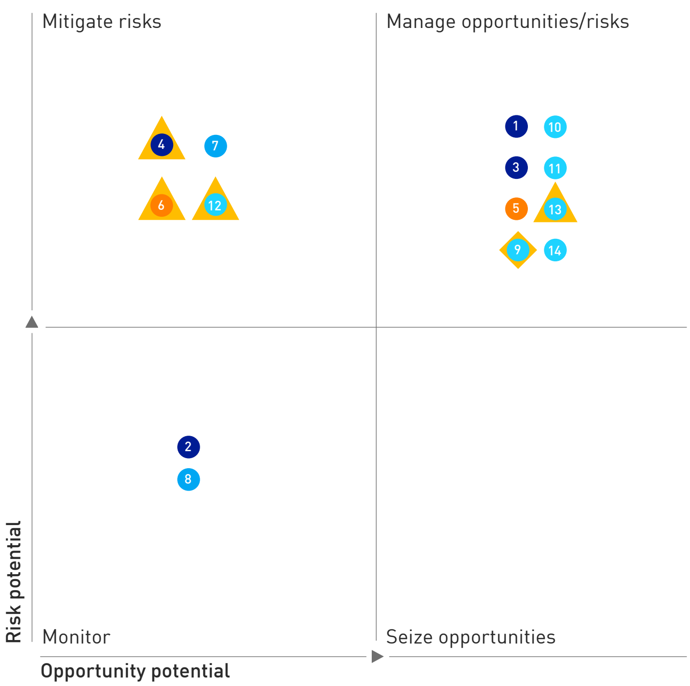
Classification of the level of opportunity/risk

	Adjusted EBITDA	Net debt
Low	< €100 million	< €350 million
Moderate	≥ €100 million to < €350 million	≥ €350 million to < €1,200 million
Significant	≥ €350 million to < €600 million	≥ €1,200 million to < €2,000 million
Material	≥ €600 million	≥ €2,000 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 31/12/2021



Top opportunities/risks

Cross-segment

1. Market prices of financial investments
2. Discount rate applied to pension provisions
3. Margins / liquidity requirements
4. Supplier failure due to cyberattacks

Smart Infrastructure for Customers

5. Competitive environment
6. Risks to the procurement and supply chain in the sales environment

System Critical Infrastructure

7. Recognition of costs for high-voltage direct current (HVDC) transmission technology
8. Year-end balance on the EEG bank account

Sustainable Generation Infrastructure

9. Fluctuations in energy yield in the North Sea and Baltic Sea
10. Hedging
11. Power plant optimization
12. Credit risk in energy trading
13. Availability and contribution margin losses in the power plant portfolio
14. Dismantling of nuclear power plants

▲ New opportunity / new risk ◆ Task Force on Climate-related Financial Disclosures (TCFD)

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

The following top opportunities / risks were new in 2021:

- Supplier failure due to cyberattacks
- Risks to the procurement and supply chain in the sales environment
- Credit risk in energy trading
- Availability and contribution margin losses in the power plant portfolio

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, remote and they 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 expires, the state capital and EnBW are still striving to reach an amicable settlement. The court proceedings have been suspended several times, namely from January 2015 until the end of 2016 and from April 2018 until the end of January 2019, to give the parties the opportunity to reach an amicable settlement. Unfortunately, it was not possible to reach such an agreement due to a difference of opinion on the valuation. Therefore, there continues to be a risk in 2022 of losing the water grid without receipt of adequate compensation.

Financial opportunities and risks

❶ **Market prices of financial investments:** The financial investments managed through the asset management system ? are subject to risks that arise from price losses and other losses in value as a result of the volatile financial market environment. Following a clear recovery on the stock markets in 2021, we expect volatile, sideways movement in 2022. However, uncertainty with respect to future developments remains high as higher inflation in the wake of the coronavirus pandemic caused by, for example, a sharp increase in the cost of energy and raw materials, has become a major issue. To improve the opportunity/risk ratio of the portfolio, greater focus is currently being given to sustainability criteria in our investments. There is a moderate level of opportunity and risk in 2022 and a significant level of opportunity and moderate level of risk in this area in 2023. This will have an impact on net debt ? and thus on the key performance indicator debt repayment potential ?.

❷ **Discount rate applied to pension provisions:** There is a general 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 2021, the discount rate was 1.15%, which was up 0.40 percentage points on the rate at the end of 2020 (0.75%). Against the background of the expected development of interest rates in future, we identify a significant level of opportunity and moderate level of risk in 2022 and a material level of opportunity and significant level of risk in this area in 2023. This will have an impact on net debt and thus on the key performance indicator debt repayment potential.

❸ **Margins / liquidity requirements:** Due to unforeseeable developments, especially margin payments, unutilized project funds, tax issues or financial market crashes, the Group's liquidity planning is subject to an inherent degree of uncertainty. Persistently high prices for energy and CO_2 allowances and the high level of volatility on the commodity markets are resulting in higher margin requirements.

Sharp increases in prices and high volatility in energy trading on the commodity markets (EEX/ICE) have led to high cash inflows and outflows as part of margining processes, which are beyond the normal margin requirements. In 2021, this led to the higher utilization of liquidity to cover margins in the short term, also on intraday trading platforms ?. These effects cannot be excluded in the future. In general, there is also a risk of additional liquidity requirements if the rating agencies downgrade the credit rating of EnBW. The risk can be covered by existing credit lines. There is a material level of opportunity and risk in 2022 and 2023 with an impact on net debt and thus on the key performance indicator debt repayment potential, as well as on the key performance indicator value spread ? via capital employed ?.

4 **Supplier failure due to cyberattacks:** There is an increasing global risk of cyberattacks on computer systems. As EnBW has many suppliers and third-party service providers, it could be directly or indirectly impacted by these attacks and thus suffer damage. This could not only result in a high level of economic damage but also a loss of reputation. There is a moderate level of risk with an impact on the key performance indicator adjusted EBITDA ? in 2022 and 2023 and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow ? and on the key performance indicator value spread via the adjusted EBIT ?.

Compliance opportunities and risks

Compliance risk assessments focus, in particular, on assessing risks and defining appropriate preventative measures in the compliance risk areas of corruption, antitrust law and data protection.

Risks for which we derive measures for fighting corruption and bribery primarily exist in sales activities relating to local authority/political business activities when dealing with public officials. Important preventative measures, especially training and advisory services, are described on p. 51 f.↗.

In addition there are antitrust risks in the sales activities of some subsidiaries that could result in fines and damage to reputation and also have significant strategic implications. This risk is countered by the joint preventative measures of the compliance and legal departments.

The incorrect handling or illicit disclosure or use of personal data poses data protection risks. These risks exist in view of the digital transformation of many business activities. Advisory and awareness services and process controls are in place to guarantee adherence to legal data protection requirements in the Group. Company-specific measures are coordinated via the compliance and data protection department.

Smart Infrastructure for Customers segment

Financial opportunities and risks

5 **Competitive environment:** There is a risk that the volatile competitive situation for all EnBW brands in the electricity, gas and energy solutions business, combined with the historically high procurement prices on the market (for electricity and gas) could have a considerable impact on sales activities. In addition, there is a risk that further insolvencies among competitors could also have a negative impact on results of operations. Opportunities currently exist, for example, in the expansion of the range of electromobility products and services, sustainable energy industry services and energy solutions, and through aligning sales activities more towards these products and services. There is a low level of opportunity and risk with an impact on the key performance indicator adjusted EBITDA in 2022 and 2023 and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow and on the key performance indicator value spread via the adjusted EBIT.

6 **Risks to the procurement and supply chain in the sales environment:** As a result of the current situation on the procurement markets, unexpected price spikes are being experienced on the spot markets for procurement ?. There is a risk that the planned contribution margins will not be achieved. As EnBW holds reserve supplies for B2C customers, insolvencies of other energy suppliers could also pose a financial risk if more customers than planned have to be provided with a basic supply of energy at higher procurement prices. There is a low level of opportunity and risk with an impact on the key performance indicator adjusted EBITDA in 2022 and 2023 and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow and on the key performance indicator value spread via the adjusted EBIT.

System Critical Infrastructure segment

Strategic opportunities and risks

7 **Recognition of costs for high-voltage direct current (HVDC) transmission technology:** TransnetBW plans to set up new connections using high-voltage direct current transmission technology (HVDC) ? with other transmission system operators. In addition, a regulation stipulating the use of underground cabling applies to the SuedLink project. In both projects, there are currently general risks of potential delays and additional costs, as well as a low level of risk that the necessity for these transmission lines might no longer be confirmed in a new Network Development Plan ?. In 2023, there is a low level of risk with an indirect impact on the key performance indicator value spread via the adjusted EBIT.

Financial opportunities and risks

8 **Year-end balance on the EEG bank account:** The EEG ? bank account is a separately managed bank account in accordance with section 5 of the German Compensation Mechanism Ordinance (AusglMechV) and is kept separate from other areas of activity. In accordance with AusglMechV, a deficit or surplus on the account balance can have a temporary positive or negative effect on the calculation of the net debt ? of EnBW, respectively. As of the reporting date of 31 December 2021, there was a surplus of €1,565.2 million on the EEG bank account of our subsidiary TransnetBW (reporting date of 31 December 2020: €–629.3 million). We expect the EEG account to develop positively throughout 2022 and have a positive bank balance at the end of the year. There is a significant or material level of opportunity with an impact on net debt and thus on the key performance indicator debt repayment potential.

Sustainable Generation Infrastructure segment

Financial opportunities and risks

9 **Fluctuations in energy yield in the North Sea and Baltic Sea:** There is a general opportunity or risk for 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 taken into account in the planning. There is a moderate level of opportunity and risk with an impact on the key performance indicator adjusted EBITDA in 2022 and 2023 and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow ? and on the key performance indicator value spread via the adjusted EBIT.

Further information on **financial instruments** can be found in the notes to the consolidated financial statements in note (25) "Accounting for financial instruments."

10 **Hedging ?:** When selling generated electricity volumes, EnBW is exposed to the risk of falling electricity prices and the risk of the unfavorable development of fuel prices in relation to electricity prices. The concept underlying our hedging strategy not only limits risk but also seeks to exploit opportunities. The hedging instruments utilized in 2021 were forwards, futures and swaps. The EnBW Group has exposure to foreign exchange risks from procurement and the hedging of prices for its fuel requirements, as well as from gas and oil trading business. Opportunities and risks generally exist with an impact on the key performance indicator adjusted EBITDA in 2023 and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow and on the key performance indicator value spread via the adjusted EBIT.

⑪ **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 ?. We currently identify a high level of volatility in the impact of opportunities and risks that is dependent on the development of market prices. There is a moderate level of opportunity and risk with an impact on the key performance indicator adjusted EBITDA in both 2022 and 2023 and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow and on the key performance indicator value spread via the adjusted EBIT.

⑫ **Credit risk in energy trading:** There is a risk that trading partners will fail to fulfill their financial obligations or be unable to fulfill them on time. Our credit management department counters this risk by carefully monitoring credit lines, conducting stress tests and introducing measures to reduce its impact. There is a significant level of risk with an impact on the key performance indicator adjusted EBITDA in 2022 and thus an indirect impact on the key performance indicator debt repayment potential via the retained cash flow and on the key performance indicator value spread via the adjusted EBIT.

⑬ **Availability and contribution margin losses in the power plant portfolio (previously: Availability of nuclear power plants):** There is a general risk that exogenous and endogenous factors will have an influence on the availability of power plants. We try to counter these risks using preventive measures. Depending on the duration of interruptions to the operation of the power plants and prices on the energy trading market, this could have a positive or negative impact on the operating result. There is a low level of opportunity and significant level of risk in 2022 and a low level of opportunity and risk in this area in 2023. 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 and on the key performance indicator value spread via the adjusted EBIT.

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. It was already necessary to recognize an impairment loss on the power plants and increase the provisions for onerous contracts at the six-monthly reporting date in 2021 due to tighter requirements with respect to climate protection and stricter climate legislation. In the area of electricity procurement agreements, there are opportunities due to increasing consolidation on the market. We anticipate further impairment losses on the offshore wind farms due to the fact that they will have fewer and fewer operating years with EEG funding in the future.

Operative opportunities and risks

⑭ **Dismantling of nuclear power plants:** For long-term major projects such as the remaining operation and dismantling of a nuclear power plant, there is a general risk that delays and additional costs may arise over the course of time due to changed framework conditions. Moreover, there is also an opportunity to make lasting cost savings due to synergies over the course of time and due to learning effects for subsequent dismantling activities. During the project planning stage, opportunities and risks were identified that could result in reduced or additional costs or adjustments to the term of the project. There is a low level of opportunity and moderate level of risk in 2022 and 2023 with an impact on net debt and thus on the key performance indicator debt repayment potential.

Changes compared to the 2020 financial year

The opportunity "Compensation for the phasing out of nuclear energy" has materialized. The compensation that was contractually agreed with the German government was paid at the beginning of December 2021.

The risk "Obligation to pay EEG cost allocations for power plants" has reduced in comparison to the 2020 financial year and is thus no longer included in the top opportunities / risks.

The risk associated with the reorganization and return transport of reprocessing waste from France that was previously reported as part of the risk "Dismantling of nuclear power plants" has decreased significantly following the conclusion of an agreement with the contractual partner in France. The risk "Dismantling of nuclear power plants" has thus been reduced by the risk associated with the return of waste.

In comparison to the 2020 financial year, the following opportunities/risks have also been eliminated due to their lack of materiality and will thus no longer be reported:

- Effects of the pandemic on certain business areas
- Political and economic environment in Turkey
- Compliance with data protection regulations

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

Key performance indicators

Financial performance indicators
- A Adjusted EBITDA
- B Debt repayment potential
- C Value spread

Strategic performance indicators

Overall share of adjusted EBITDA:
- D Smart Infrastructure for Customers
- E System Critical Infrastructure
- F Sustainable Generation Infrastructure

Non-financial performance indicators
- G Reputation Index
- H EnBW/Yello Customer Satisfaction Index
- I SAIDI (Electricity)
- J People Engagement Index (PEI)
- K LTIF for companies controlled by the Group / LTIF overall
- L Installed output of RE and share of generation capacity accounted for by RE
- M CO_2 intensity

Top opportunities/risks	A	B	C	D	E	F	G	H	I	J	K	L	M
Cross-segment													
1. Market prices of financial investments		●											
2. Discount rate applied to pension provisions		●											
3. Margins / liquidity requirements		●	●										
4. Supplier failure due to cyberattacks	●	●	●	●	●	●							
Smart Infrastructure for Customers													
5. Competitive environment	●	●	●	●			○	○	○	○			
6. Risks to the procurement and supply chain in the sales environment	●	●	●	●				○					
System Critical Infrastructure													
7. Recognition of costs for high-voltage direct current (HVDC) transmission technology			●										
8. Year-end balance on the EEG bank account		●											
Sustainable Generation Infrastructure													
9. ◆ Fluctuations in energy yield in the North Sea and Baltic Sea	●	●	●			●						○	○
10. Hedging	●	●	●			●							
11. Power plant optimization	●	●	●			●							○
12. Credit risk in energy trading	●	●	●			●							
13. Availability and contribution margin losses in the power plant portfolio	●	●	●			●	○						
14. Dismantling of nuclear power plants		●											

● Direct effect

○ Potential/long-term effect

◆ Task Force on Climate-related Financial Disclosures (TCFD)

Overall assessment by the management

Due to the comprehensive range of preventative measures and countermeasures to counteract the effects of the coronavirus pandemic that were implemented at an early stage, the pandemic has only had a minor impact on the EnBW Group up to now. However, the economic recovery has had a global impact on supply and demand along the supply chains and on the markets for raw materials. This has led to a sharp increase in prices, also in the energy sector, and resulted in risks in the form of higher energy procurement costs for the sale of electricity and gas. In the energy trading business, the sharp increase in prices has resulted in high short-term cash outflows for stock exchange transactions. The increasing threat of cyberattacks around the world poses a growing risk of, for example, restrictions in supply chains or even of supplier failures. In addition, there are planning uncertainties in the area of sustainable energy generation, especially with respect to our wind power plants due to natural fluctuations in the wind yield.

The development of the war between Russia and Ukraine and the sanctions imposed on Russia as a result are being continuously analyzed and evaluated with respect to their potential impact on the EnBW Group using various different scenarios. In particular, the procurement of raw and other materials, the increased need for liquidity as a result of rising energy prices and the even greater risk of cyberattacks have a significant impact on the overall risk position. These effects could have an impact on the following top opportunities/risks: 1 Market prices of financial investments, 3 Margins / liquidity requirements, 4 Supplier failure due to cyberattacks, 5 Competitive environment, 6 Risks to the procurement and supply chain in the sales environment, 10 Hedging, 11 Power plant optimization and 12 Credit risk in energy trading. Nevertheless, we do not believe that the current situation endangers the company's ability to continue as a going concern, even if deliveries of Russian coal and gas are halted.

Further information on **financial instruments** can be found in the notes to the consolidated financial statements in note (25) "Accounting for financial instruments."

No risks currently exist that might jeopardize the EnBW Group as a going concern.