Integrated Annual Report 2019

Excluding the notes and the declaration of corporate management

EnBW

+++ In light of recent events +++

Dear Reader,

We are currently facing unprecedented challenges due to the corona pandemic. Overcoming this crisis will require solidarity, understanding and a collective effort from all of us.

Just like all energy companies, we have a special responsibility during this time and it is something we are all too willing to take on. As an operator of critical infrastructure, we know how to handle these types of challenges and already began to prepare ourselves at an early stage for the possibility that this outbreak would become a serious pandemic: We have phased contingency plans in place that are practised on a regular basis. An expert task force is working closely together with all specialist departments at our company and with external bodies. While many employees are keeping our day-to-day business running by working from home, the operational teams responsible for our power plants, grid control centres, the supply of water and the disposal of waste are ensuring that our energy supply system is also working safely and reliably during this difficult time.

Furthermore, we are endeavouring within the scope of our capabilities to provide support to our partners using the expertise we have in the technical management of crisis situations. We want to remove any additional burden on our customers by restoring the connections to any cut-off electricity or gas supplies and we are also available to help our customers in any other way we can to the very best of our abilities.

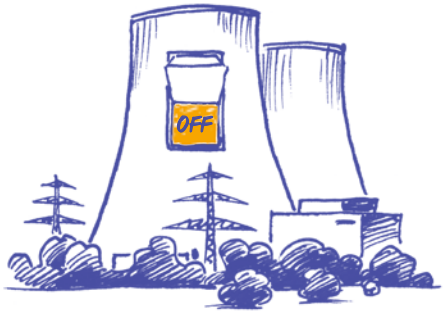
I can assure you that EnBW remains stable and secure.

Best regards,

Frank Mastiaux
Chairman of the Board of Management

EnBW at a glance

Shaping the Energiewende



Switched off:

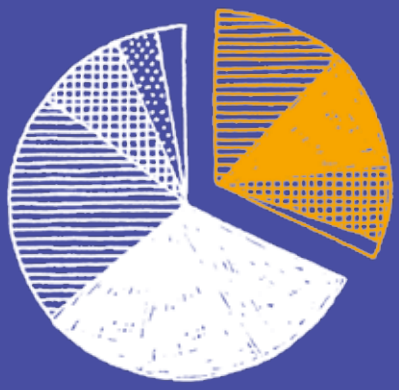
Philippsburg nuclear power plant Block 2

Switched on:

EnBW Hohe See and EnBW Albatros offshore wind farms as well as onshore wind farms and photovoltaic parks from Valeco

Generation mix

Installed output in MW 2019



32% renewable energies

Thermal power plants	
Brown and hard coal	4,461
Nuclear power	2,933
Gas	1,165
Pumped storage	545
Other	347

Renewable energies	
Wind	1,660
Pumped storage (with natural flow of water)	1,507
Run-of-river	1,006
Other	225

5.5 million
B2C and B2B customers 2019

23,293
employees 2019

€2.4 billion

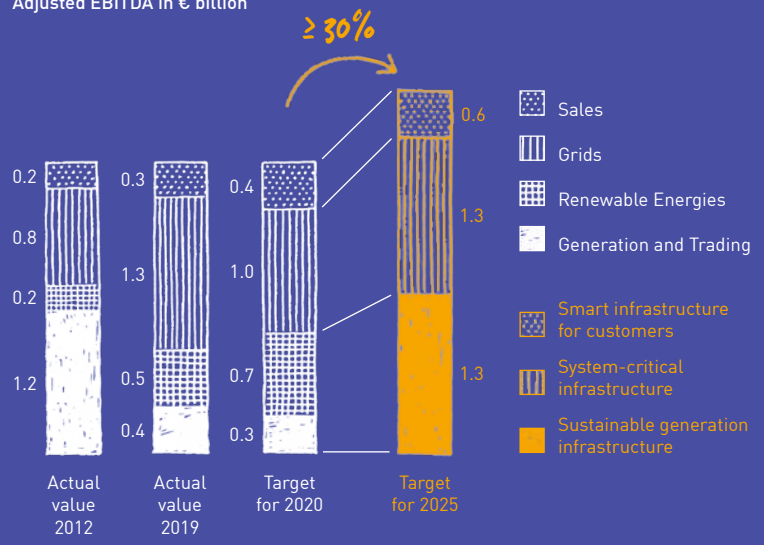
adjusted EBITDA in 2019

What sets us apart

- EnBW 2020 strategy largely implemented: realignment and repositioning of the business portfolio has been achieved
- EnBW 2025 strategy: The path to becoming a sustainable and innovative infrastructure partner
- Stable shareholder structure
- Leading position in important sustainability ratings in the energy sector
- First German company to issue a green hybrid bond

Realignment and growth

Adjusted EBITDA in € billion



Expansion of the telecommunications business

We have strengthened our business in the nationwide telecommunications market with the acquisition of the broadband and fibre optic company Plusnet.

Expansion of electromobility

At the end of 2019, we were the largest operator of quick-charging infrastructure in Germany.

Up to **1,000**

quick-charging stations are planned across the country by the end of 2020.

62.4 billion kWh

of electricity was transmitted via the grids operated by our subsidiaries in 2019.

Performance indicators of the EnBW Group

Financial and strategic performance indicators

in € million	2019	2018	Change in %
External revenue[1]	18,765.0	20,815.4	-9.9
TOP Adjusted EBITDA	2,432.5	2,157.5	12.7
TOP Share of adjusted EBITDA accounted for by Sales in € million/in %[1]	294.3/12.1	268.4/12.4	9.6/–
TOP Share of adjusted EBITDA accounted for by Grids in € million/in %	1,311.2/53.9	1,176.9/54.5	11.4/–
TOP Share of adjusted EBITDA accounted for by Renewable Energies in € million/in %	482.8/19.8	297.7/13.8	62.2/–
TOP Share of adjusted EBITDA accounted for by Generation and Trading in € million/in %[1]	383.8/15.8	430.8/20.0	-10.9/–
Share of adjusted EBITDA accounted for by Other/Consolidation in € million/in %	-39.6/-1.6	-16.3/-0.7	-142.9/–
EBITDA	2,245.2	2,089.6	7.4
Adjusted EBIT	944.7	957.5	-1.3
EBIT	596.7	875.8	-31.9
Adjusted Group net profit[2]	786.8	438.3	79.5
Group net profit[2]	734.2	334.2	119.7
Earnings per share from Group net profit in €[2]	2.71	1.23	119.7
Retained cash flow	1,240.7	999.1	24.2
TOP Internal financing capability in %[1]	82.6	92.2	–
Total investment[1]	3,315.2	1,786.4	85.6
Net financial debt	6,021.6	3,738.4	61.1
Coverage ratio ALM in %	48.1	51.8	–
TOP Return on capital employed (ROCE) in %	5.2	6.5	–
Weighted average cost of capital before tax in %	5.2	6.3	–
Average capital employed	19,315.1	16,053.3	20.3
Value added	0.0	32.1	-100.0

Non-financial performance indicators

	2019	2018	Change in %
Customers and society goal dimension			
TOP Reputation Index	52.8	51.3	2.9
TOP EnBW/Yello Customer Satisfaction Index	116/157	120/152	-3.3/3.3
TOP SAIDI (electricity) in min./year	15	17	-11.8
Employees goal dimension			
TOP Employee Commitment Index[3]	66	62	6.5
TOP LTIF for companies controlled by the Group[4]/LTIF overall[5]	2.1/3.8	2.3/3.6	-8.7/5.6
Environment goal dimension			
TOP Installed output of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE in %	4.4/31.8	3.7/27.9	18.9/–
TOP CO_2 intensity in g/kWh	419	553	-24.2

Employees[6]

	31/12/2019	31/12/2018	Change in %
Employees	23,293	21,775	7.0
Full-time equivalents[7]	21,843	20,379	7.2

1 The figures for the previous year have been restated.
2 In relation to the profit/loss attributable to the shareholders of EnBW AG.
3 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered (except ITOs)).
4 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered except for companies in the area of waste management as well as external agency workers and contractors).
5 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered except external agency workers and contractors).
6 Number of employees excluding apprentices/trainees and inactive employees.
7 Converted into full-time equivalents.

Dear Reader,

We have embarked on the path to transform ourselves from a conventional energy company into a strong partner for energy and infrastructure.

To be a partner for energy and infrastructure, we believe that we must focus on people's living environments and adopt an integrated approach to sectors such as energy, transport, telecommunications and the development of cities and districts. This includes, amongst other things, themes like the supply of energy and the expansion of broadband and electromobility.

Besides significantly strengthening the grid and sales businesses, our EnBW 2020 strategy primarily focussed on making renewable energies one of the main pillars of the company. We now have a broad portfolio of wind farms, hydropower plants and solar parks. We were able to successfully conclude some major projects in the past year, especially in the offshore wind sector, and also start new ones in the area of photovoltaics. A lot has changed in the process: the way we work, the requirements of our customers and the conditions on the market. This is why the title of this year's Integrated Annual Report of EnBW is dedicated to the transformation in the area of renewable energies.

In our updated EnBW 2025 strategy, we will now concentrate on switching over to growth. The first steps in this direction have already been taken. We are significantly expanding the installed output from our renewable generation, driving forward electromobility and will be building liveable residential districts.

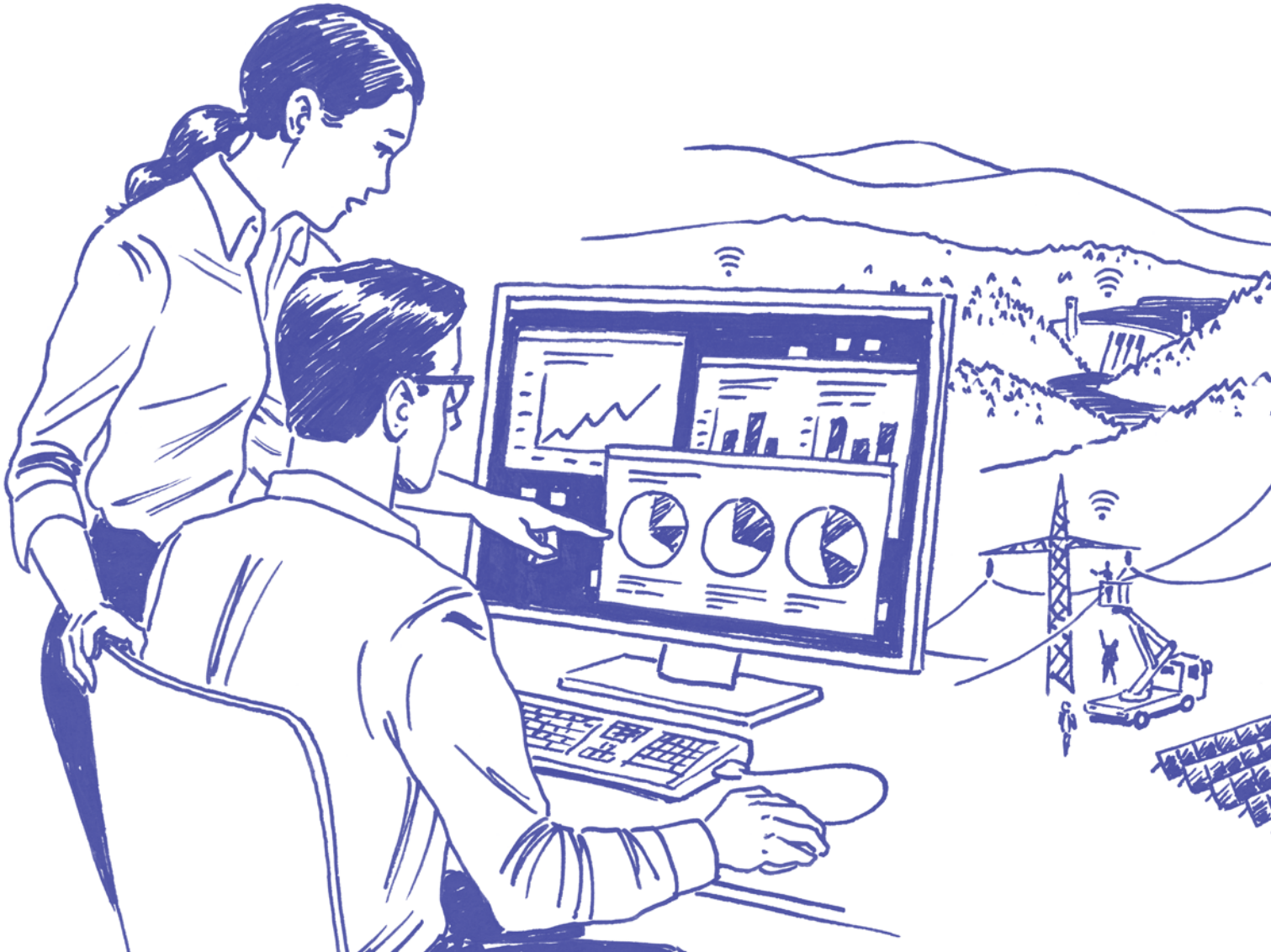
We will realise these plans with a strong team behind us – while keeping our main focus on people. This is why we not only want to push forward EnBW as an organisation but also support every single employee in their own personal development. This will help us create the right conditions to promote future growth.

This Integrated Report will take you on a journey through our transformation in the area of renewable energies.

Best regards,

Your EnBW

Playing an active role in shaping the Energiewende



EnBW is transforming itself from a conventional energy company into a sustainable and innovative partner for energy and infrastructure. In the process, we are linking the transport sector with the energy world, for example, as part of the forward-looking and citizen-centred development of cities and districts.

We accept our responsibility for the climate as we do this and are playing an active role in shaping the future of energy. While we continue to push forward the expansion of renewable energies, our grid subsidiaries ensure they can be successfully integrated into the electricity grid. This is promoting the development of so-called smart grids at the same time, which will guarantee that even more renewable energy power plants can be connected to the grid in the future.

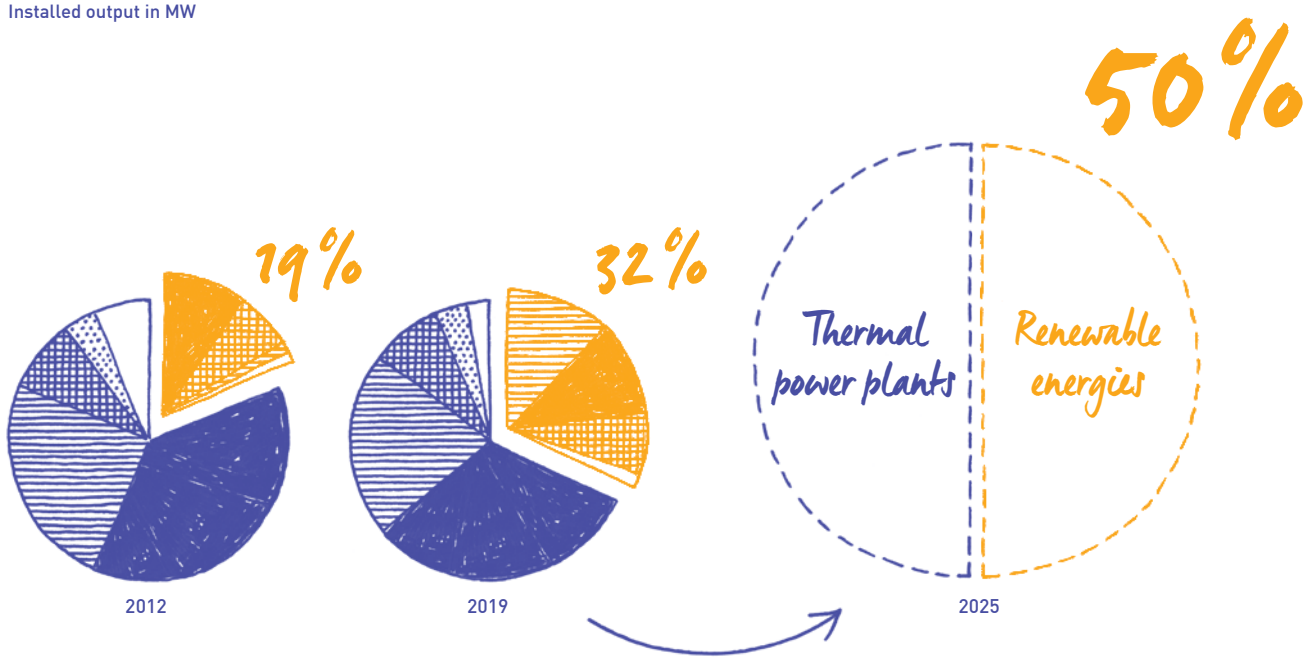
The transformation in the renewable energy sector is in full progress.

EnBW was the first major energy company to announce the gradual phasing out of its coal-fired generation back in 2013. Through the EnBW 2020 strategy, we have developed renewable energies into one of the main pillars of the company and simultaneously reduced conventional generation by more than 40%. Furthermore, we have simplified structures and processes, transformed our corporate culture and increased our innovative strength. We are now well equipped for the challenges of the future as a result. EnBW can grow in new markets, deliver competitive services and respond proactively and flexibly in a rapidly changing business environment.

For us, climate protection is not just a trend, but has been an established part of our activities for many years.

Transformation of the EnBW generation portfolio

Installed output in MW



Thermal power plants	2012	2019
Brown and hard coal	5,021	4,461
Nuclear power	3,333	2,933
Gas	1,154	1,165
Pumped storage	545	545
Other	820	347

Renewable energies	2012	2019
Wind	218	1,660
Pumped storage (with natural flow of water)	1,311	1,507
Run-of-river	882	1,006
Other	116	225

Wind power is now the most important renewable energy source in Germany.

Some 118 gigawatts (GW) of output from renewable energies were installed in Germany in 2018, which covered almost 38% of the gross electricity consumption. 59 GW of this installed output was accounted for by wind energy, 45 GW by solar energy, 5.6 GW by hydropower and 8.4 GW by biomass.

Since 2000, the fixed remuneration offered by the German Renewable Energies Act (EEG) has enabled strong growth in wind power plants in Germany. However, the reform to the EEG in 2017 has put the brakes on this upward trend: The act introduced upper limits to the expansion of renewable energies, the bureaucratic burden and costs for the development of wind farms has increased and the approval times for new power plants have since lengthened dramatically – due to, amongst other things, an increase in the cases of legal action taken against already issued approvals across Germany. The expansion of wind power has collapsed as a result.

We are ardent supporters of the Energiewende and want to continue to use our expertise as an investor, developer and operator of wind and photovoltaic power plants even under these difficult conditions. Today, we are already the third-largest project developer for onshore wind power in Germany and we want to further expand this area and also our engagement in offshore wind power. This is why we are working together with selected international partners to target new growth opportunities abroad. This strategy of selective internationalisation has already shown initial success in France and Sweden.

Photovoltaic power plants will play an increasingly important role in EnBW's future portfolio.

Technical improvements and a significant reduction in prices for solar modules are opening up interesting perspectives. Under certain conditions, photovoltaic power plants can already be operated today without EEG funding. This is why we have decided to make photovoltaics another pillar of our renewable energies alongside onshore and offshore wind power.

In the future, the market, customers and technology development will dictate the direction of the Energiewende to a much greater extent.

The energy world is becoming decentralised and digital, urban and oriented towards citizens. New and agile competitors are now already entering all of the business fields covered by EnBW. The growing dynamism and increasing competition on the energy markets clearly illustrate the importance of being willing to change, having innovative strength and achieving a high pace of change. To this end, we have introduced the "Next Level EnBW" initiative to not only take our Group as an organisation but also personally every single employee at EnBW to a whole new level. The initiative aims, amongst other things, to accelerate the pace of change, promote innovative strength and increase quality with a clear focus on customer centricity, internationalisation, new business and internal cooperation.

The power behind the transformation: water, wind and sun

In our EnBW 2020 strategy, we set ourselves the target of increasing the proportion of our generation accounted for by renewable energies to over 40% by the end of this year.

Today, the Renewable Energies and Grids segments already account for a combined share of over 70% of the operating result. In contrast, earnings from conventional generation have fallen by 80% between 2012 and 2020. We have thus successfully completed the desired transformation of our portfolio in the last few years. We will also continue to focus on the expansion of renewable energies and will invest more than 5 billion euros in corresponding activities in Germany and selected foreign markets up to 2025.

We have long been committed to the use of hydropower.

With around 1,000 MW of installed output from run-of-river power plants and around 2,000 MW from pumped storage and storage power plants, more than 10% of our electricity is generated using the power of water. There are hardly any suitable sites left for new, large hydroelectric and pumped storage power plants in Germany today. Against this background, we are expanding and modernising existing power plants, such as the Forbach power plant in the Black Forest. A concept to turn the existing plant into a modern and highly efficient pumped storage power plant has been developed for the Rudolf-Fettweis Plant. We are also represented on international markets in the area of hydropower. In Switzerland, for example, our Group is one of the leading operators of hydropower plants via participation models.

Wind energy will also continue to play a decisive role in the future.

EnBW has more than tripled its onshore wind power capacities since 2012. We were able to increase capacities by a total of 204 MW in 2017. In 2019, we could achieve little expansion in Germany. In France, we were able to expand our onshore portfolio with the acquisition of Valeco. In the area of offshore wind power, we have constructed the two wind farms EnBW Baltic 1 and EnBW Baltic 2 in the Baltic Sea over the last few years. We completed our third offshore project in 2019: The neighbouring wind farms EnBW Hohe See and EnBW Albatros have a total capacity of 609 MW and are thus the largest offshore project to be built in Germany to date. The 87 wind turbines can supply on aggregate around 710,000 households with electricity and thus save around 1.9 million tonnes CO_2 per year. The project represented the largest investment in the history of EnBW with construction costs of around 2.3 billion euros.

Despite the challenging conditions, we will continue to push forward the expansion of wind power with other planned onshore and offshore projects. Between 2020 and 2025, we want to increase our wind power capacities to 4,500 MW. We are planning, for example, to construct the EnBW He Dreiht wind farm in the North Sea with an output of 900 MW – for the first time without state subsidies.

Selective internationalisation

EnBW has gathered valuable expertise in the planning, construction, operation, maintenance, servicing and direct distribution of wind turbines over the last few years. We aim to use these skills to open up new markets and exploit opportunities for growth internationally.

Turkey

We entered into cooperation with our Turkish partner Borusan back in 2009 and have since developed around 500 MW of generation capacity in the area of onshore wind power.

USA

We believe that the North American market offers great opportunities for the expansion of offshore wind energy. Our own representative offices in Jersey City and Boston will ensure close contact with local cooperation partners. In Morro Bay (California), on the West Coast of the USA, the team is developing the world's first floating offshore wind farm in a joint venture.

Sweden

Sweden is one of the key European markets for the expansion of onshore wind energy. We have already been represented in Scandinavia via our subsidiary Connected Wind Services (CWS) since 2016. And we have been active in Sweden via EnBW Sverige and its subsidiaries since 2018 and currently operate seven wind farms with a total output of 105 MW, while a further 11 MW is currently under construction.

France

In 2019, we acquired the French developer and operator of wind and solar projects Valeco. It has installed output of 276 MW of onshore wind power and 56 MW of solar power, as well as a project pipeline of 1,700 MW.

Taiwan

In cooperation with the Australian investor Macquarie Capital and the Taiwanese industrial company Swancor, we have been developing three offshore wind farm projects since the beginning of 2018. The projects involve the construction of wind turbines with a potential total output of up to 2,000 MW.

Germany's largest solar park Weesow-Willmersdorf

A solar park with an output of 180 MW is currently being constructed in Werneuchen (Brandenburg).

We will produce 180 million kWh of electricity per year on an area equivalent to around 225 football pitches.

This corresponds to the annual consumption of 50,000 households.

On Easter Monday 2019, more than half of the electricity demand across Germany of 61 GW was already covered by solar energy.

This demonstrates that the solar market is an attractive proposition. The latest generation of photovoltaic modules work more efficiently than previous technologies. In addition, the price of modules has fallen significantly in recent months. Furthermore, we are able to realise long-term and major projects in Germany and other European markets economically due to our trading and marketing expertise. This vindicates our decision to make photovoltaics the third pillar of our strategy for renewable energies.

We are demonstrating at the solar park in Brandenburg that it is possible to construct solar projects even without state funding.

For example, we are one of the first companies to construct a solar park whose electricity production costs are lower than those of a new conventional power plant. Therefore, we are financing our latest solar park – Weesow-Willmersdorf in Brandenburg – for the first time without EEG funding. We are thus reinforcing our role as a pioneer in the development, construction, operation and marketing of major solar parks.

As part of our solar strategy, however, we will still continue to rely on solar parks with EEG funding. Companies who claim the lowest level of state funding for the production of solar electricity will have the best chance of having their bid for EEG funding accepted. Our precise planning is paying dividends: In Germany-wide auctions, EnBW has been the fourth most successful company since 2015 – behind three companies that specialise solely in solar power.

The company plans to develop a solar energy portfolio of 600 MW across Germany by 2025. In addition, we are also looking at sites abroad.

Dirk Güsewell

"We started looking at the bigger picture at an early stage."

Interview with Dirk Güsewell, Head of Portfolio Development Generation, EnBW.

How long has EnBW been actively involved with renewable energies?

Dirk Güsewell: The foundations for our growth in the area of renewable energies certainly lie in the significant upgrading of this business field as part of our EnBW 2020 strategy. As part of this strategy, we were the first major energy company to start resolutely aligning ourselves to the opportunities offered by the Energiewende back in 2013. Following initial success in Germany, the decision to extend our business activities and teams geographically is the logical continuation of our aspiration to achieve further growth through the expansion of renewable energies using the expertise we have gained.

What has happened since then?

Dirk Güsewell: Our strategy has developed further since then but still remains basically unchanged. Today, we are one of the market leaders in Germany with our offshore and onshore wind farms and open-field photovoltaic power plants, while we are excellently positioned for growth in France with Valeco and are also represented by teams in Sweden, North America and Taiwan. Our aim is to increase the earnings contribution from this business field by 500 million euros by 2020, compared to 2012, and thus more than double it. Although the market conditions have become more challenging, we are also working to achieve further growth in later years.

How is EnBW able to build both the first solar park and first wind farm without state funding?

Dirk Güsewell: This is possible due to really impressive advances in the electricity production costs for these technologies across all value-added stages. Our contribution is that we possess the required long-standing experience in planning, construction and operation and have a good overview of the market at all value-added stages. And we perhaps also started looking at the bigger picture earlier than other competitors. Incidentally, we believe that this is a fantastic development that will give the Energiewende new impetus and momentum in the future.

What does selective internationalisation mean?

Dirk Güsewell: We can generate value through growth abroad – above and beyond the potential offered by our home market of Germany. In addition, internationalisation represents an opportunity for us – both for cultural development and for the acquisition of new talent. This internationalisation is "selective" in the sense that we choose our target markets very deliberately so that we will be able to take up a prominent position on these markets.

Cultural change for new energy

Using the "ONE EnBW" programme, we were able to simplify our structures and processes, implement efficiency measures that saved 1.4 billion euros up to 2019 and open up new business fields.

The EnBW 2020 strategy also had an impact internally: The Group is now an organisation that has quick decision-making paths and is oriented to the market and customers.

The flexibility and innovative strength of the new EnBW are reflected in the design of its working worlds: spacious areas enable agile forms of independent working and promote a culture of open discussion and network-based learning. Events such as the interactive management forum – a biannual event for the top three management levels – are a symbol of this new team culture. At the Group-wide Innovation Campus, every employee at EnBW is given the opportunity to become an intrapreneur, contribute their own ideas and develop them further within the Group.

The market, customers and technology are already dictating the rapid pace of the Energiewende today: other young and agile competitors are entering the market and customers are demanding individual and digitally networked solutions. New technologies demand that all project developers constantly examine the market for any new opportunities. We are preparing ourselves for this "sprint logic" with the EnBW 2025 strategy: Targeted coaching of employees and selective external recruiting will allow the company to anticipate market developments. New, agile management models and forms of cooperation will increase the pace at which we work in the Group. This will enable us to keep on shaping a faster and more complex energy world together with our employees.

Volker Reinhard

"We are supplementing our long-standing core expertise with new skills."

Interview with Volker Reinhard, Head of HR, Generation Sector, EnBW.

What changes have taken place in the area of generation at EnBW?
Volker Reinhard: EnBW was characterised by the operation of large, labour-intensive coal, nuclear and hydropower power plants. Our activities were mainly focused in Baden-Württemberg. Today, our wind and solar power plants are distributed across Germany, which is why we have established branches in Trier, Erfurt, Hamburg and Berlin. A lot has also changed from a structural perspective. Generation used to be organised as its own company but today the project planning, construction and operation of power plants is combined in business units. Agile working methods support the project work and are set up in parallel to the line organisation.

What new skills does EnBW require in the area of renewable energies?
Volker Reinhard: In the case of specialist tradesmen, the basic training requirements for employees have remained almost the same. In contrast, our project work has changed fundamentally. We have to adapt much more quickly today to numerous modern technologies and further training has now become much more significant than in the past. Specialist skills are required, in particular, for the realisation of large wind, solar or hydropower projects. This ranges from the logistical organisation of these major projects through to special geological expertise for the deep foundations required by wind turbines. This is why we are always pleased to find employees who already have experience in these areas. As we have already gained a very good level of knowledge at our site in Hamburg over the last few years, we are also able to use this very high level of expertise to provide relevant training ourselves. In addition, EnBW remains in contact with colleges and universities to assess what qualifications we will need in the future. An important factor is the geographical mobility of our employees, not only within Germany but also increasingly internationally.

What does the "Next Level EnBW" initiative mean for the area of generation and especially for renewable energies?
Volker Reinhard: We have set ourselves the following goal as part of "Next Level EnBW": We want to be proactive and flexible from both a strategic and organisational perspective to ensure that we have a presence on all relevant markets. This includes selective internationalisation. We will also organise our portfolio so that it is stable and sustainable. As larger power plants will play a more important role in the future, we will keep a close eye on current and future generation technologies – such as floating wind turbines. This will enable us to continue to operate profitably and add our own value to Group earnings.

Why should people apply to work at EnBW?
Volker Reinhard: A job at EnBW offers many exciting challenges and will leave you wanting even more. I believe that there has never been such a good opportunity to help fight climate change than to find a meaningful vocation in the generation of renewable energies. And EnBW is amongst the frontrunners in this field. In this way, we can try to make the world that little bit better.

Asking the Experts: "How has your job changed?"

We built EnBW Baltic 1 back in 2011, while EnBW Hohe See and EnBW Albatros were completed in 2019. What has changed during this time?

Stefan Kansy (Head of New Construction Projects at EnBW): EnBW Baltic 1 was the first commercial offshore wind farm in Germany to be placed into operation. The offshore wind farm EnBW Baltic 2 – which was completed in 2015 – surpassed EnBW Baltic 1 in all dimensions. The planning and logistical challenges faced in the construction of our third offshore wind farm project EnBW Hohe See/Albatros were even higher: Each of the 87 wind turbines is three times larger than the ones at Baltic 1, the turbines are located 100 km from the coast in the North Sea instead of 16 km out in the Baltic Sea and the total capacity of Hohe See/Albatros is twelve times that of Baltic 1. This clearly illustrates how dynamically the skills at EnBW have developed in the project planning for large offshore wind farms.

There are now an increasing number of interdisciplinary projects. What does "working beyond departmental boundaries" mean to you?

Thorsten Jörß (Head of Project Development for Photovoltaics): A large EnBW team ranging from technicians and purchasers through to lawyers participates in the development and implementation of a solar park project. That makes agile working models essential. We are constantly searching for new PV sites across Germany throughout the year. If the regional conditions are favourable, we begin the detailed planning work. However, we can only implement our plans if we are successful in the corresponding EEG auction. And we all work together to achieve this goal.

How has your job working with local authorities in Baden-Württemberg changed in the last few years?

Rico Goede (EnBW Local Authority Consultant): Citizens today want to be a part of the Energiewende. At the same time, our customers and the local authorities are still concerned about their own autarchy. Involving mayors and town councils in the planning process at an early stage helps to gain acceptance for the project amongst citizens and thus secure the long-term success of the project. This is why our relationship management department accompanies the process of political decision-making at the local level from the very beginning. At the same time, we also examine the local PV market at an early stage of the planning.

The Energiewende is also changing the role played by our customers. Mr Reitze, why are local authorities becoming electricity producers?

Armin Reitze (Mayor of Leibertingen): The municipality of Leibertingen wanted to make its contribution to pushing forward the Energiewende. EnBW discussed our proposals with us and implemented them to our satisfaction. The new solar power plants barely disturb anybody here. Photovoltaic plants are only permitted on certain sites such as on land with a low agricultural yield. There are many sites of this type in the Swabian Alb region. And the impact on nature due to soil sealing is limited.

"The majority of the bonds that we issue on the market in future will be green bonds."

Ingo Peter Voigt

Interview with Ingo Peter Voigt, Head of Finance, M&A and Investor Relations, and Peter Berlin, Director for Capital Markets, both at EnBW.

How has the financing strategy at EnBW changed over the last few years?

Ingo Peter Voigt: As part of our strategic repositioning through EnBW 2020, we did not just significantly intensify the expansion of renewable energies but also focussed on other aspects of sustainable supply and sustainable business, such as restructuring and expanding the grids and investing in e-mobility. Accordingly, we also rigorously updated our financing strategy and made it more sustainable. EnBW has raised 1.5 billion euros solely through the issuing of green bonds in the last two years. Our message is clear: The majority of the bonds that we issue on the market in future will be green bonds.

What are green bonds?

Peter Berlin: Bonds are "green" when they finance investment in sustainability goals. There has been strong demand on the markets for this type of bond. Our green bonds especially address a wider group of investors who invest in sustainable products out of conviction.

How does EnBW use the proceeds from green bonds?

Ingo Peter Voigt: We have used the proceeds from the green bonds in the area of offshore wind power, primarily for the wind farms EnBW Hohe See and EnBW Albatros which were completed at the turn of the year. In addition, we are investing in onshore wind, e-mobility and photovoltaic projects.

Peter Berlin

How does EnBW ensure transparency with respect to the use of the funds?

Ingo Peter Voigt: Issuers of green bonds have to guarantee in advance that the funds raised will be invested in green projects and subsequently provide their investors with annual verification of the sustainable use of the funds and a report on the impact on the environment.

Peter Berlin: Which standards apply to green bonds and what the word "sustainable" actually means must, therefore, be defined clearly and understandably for all market participants. The first standards were set by the European Commission with their guidelines on climate-related reporting for companies. Other guidelines are based on the proposals by the Technical Expert Group on Sustainable Finance and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) appointed by the Financial Stability Board of the G20.

Ingo Peter Voigt: EnBW participated in and actively contributed to the relevant working groups at a very early stage. At the same time, we also integrated the results into our own form of reporting. It is for this reason that it was relatively easy for us to establish the institutional framework for the issuing of green bonds and to have it certified by renowned sustainability rating agencies. This guarantees to all investors that the green bonds issued by EnBW are sustainable.

Our future has already begun

The Energiewende has long since arrived in urban areas. This has given a whole new dynamic to the transformation of supply systems, in which renewable energies are also playing an important role.

The focus in future will be on how to network previously separate infrastructures such as energy, transport, telecommunications and urban development.

Efficient and effective infrastructure will be an important theme for all stakeholders, whether private consumers, industrial customers or local authorities. EnBW is making this kind of intelligently networked infrastructure available to its customers.

We are a strong partner for the careful planning, reliable operation and sustainable development of complex infrastructure. Through the smart networking of our products and services, we ensure, for example, a high level of energy self-sufficiency and mobility within new districts. Carefully planned infrastructure guarantees sustainability and efficiency in the provision of electricity, heating and cooling.

Renewable energies will be integrated into district development locally, regionally and supraregionally to enable a sustainable supply of green energy: The local generation of electricity using combined heat and power plants, solar power plants and biogas plants makes environmental sense. Virtual power plants will handle the marketing of the energy produced.

Ideas for the future

We already embarked on the path to the future long ago with our new products and business models. The following selection of EnBW innovations from the area of renewable energies shows the direction in which we are headed.

EnBW Asset RADAR

EnBW Asset RADAR (Reporting and Data Analytics for Renewables) uses artificial intelligence to identify technical faults on wind power plants at an early stage and helps avoid any subsequent damage. Savings of several millions of euros were achieved using EnBW Asset RADAR in 2018.

Sun and wind forecasts

Energy supply companies are increasingly dependent on wind and sunshine forecasts due to the expansion of renewable energies. EnBW is participating in an EU project that aims to improve the quality of weather forecasts.

Offshore kites

Flying systems could enable the harnessing of upper atmospheric layers with their energy-rich and stable wind speeds for electricity generation. EnBW is participating in a project to develop a fully automated high-altitude wind power plant.

Green gases

Since the beginning of 2019, the EnBW subsidiary ZEAG has been generating green hydrogen at the "Harthäuser Wald" wind farm. Energiedienst already opened a hydrogen electrolysis plant in Wyhlen that is operated using hydropower in 2018.

Floating solar power plants

The EnBW subsidiary Erdgas Südwest is realising the largest floating photovoltaic power plant in Germany on the Maiwald quarry lake in Renchen. If the green electricity is not consumed on-site at the gravel plant, it flows into the public grid. The operator is thus able to save around 560,000 kg of CO_2 per year.

Floating wind power plants

Floating platforms could be used to exploit the wind power potential in deeper waters. In cooperation with partners, EnBW is developing various different concepts that would be suitable for opening up new international offshore wind energy regions.

Contents

Front cover pages:

Playing an active role in shaping the Energiewende

Combined management report of the EnBW Group and EnBW AG

Fundamentals of the Group

Business report

Condensed financial statements of the EnBW Group

Corporate bodies

Service

Rear cover pages:

Navigation

The integrated management of EnBW comprises financial and non-financial goals in the dimensions:

TOP Our key performance indicators are labelled with this symbol.

The cross-references take you to further information within this report or to the definition of terms in the glossary in the service section at the end of the report. You will also find the financial terms here.

Note

We have also published an online version of the Integrated Annual Report 2019 at www.enbw.com/report2019.

The full set of financial statements of the EnBW Group 2019 including the notes to the consolidated financial statements and the declaration of corporate management 2019 of the EnBW Group and EnBW AG, as well as the corporate governance report 2019 are not included in this Integrated Annual Report 2019. Together with the unqualified auditor's report, they form part of the Integrated Annual Report 2019 – Extended Version, which is available exclusively in PDF format on our website at www.enbw.com/report2019-downloads. All financial publications for the 2019 financial year can be found there.

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

The Board of Management

"The infrastructure and energy world of the future will be sustainable and green, decentralised and digital, urban and cooperative. We are already well on the way towards getting there."

Frank Mastiaux

Dr. Frank Mastiaux

born 1964 in Essen
- Chairman of the Board of Management
- Chief Executive Officer since 1 October 2012
- appointed until 30 September 2022
- lives in Stuttgart

"We want to grow sustainably in the next phase of our strategy. Our financing activities will consistently adhere to our corporate strategy, which is why the majority of our bonds will be green bonds in future."

Thomas Kusterer

Thomas Kusterer

born 1968 in Pforzheim

- Member of the Board of Management
- Chief Financial Officer since 1 April 2011
- appointed until 31 March 2024
- lives in Ettlingen

Dr. Hans-Josef Zimmer

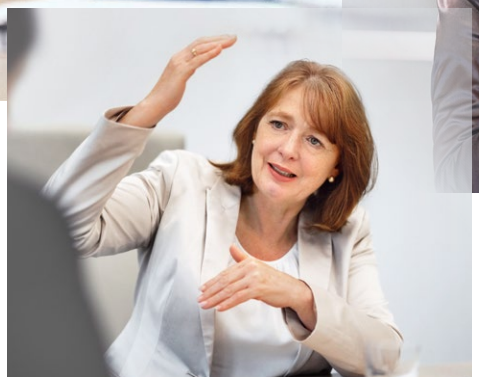
born 1958 in Merzig
- Member of the Board of Management
- Chief Technical Officer since 1 January 2012
- appointed until 31 May 2021
- lives in Steinfeld (Pfalz)

"EnBW plans to invest more than five billion euros by 2025 in the further expansion of renewable energies."

Hans-Josef Zimmer

"The ideas, motivation and drive of our employees will help us to switch over to growth. As we do this, we will be breaking new ground – and the focus will be on people."

Colette Rückert-Hennen



Colette Rückert-Hennen

born 1961 in Leverkusen-Opladen

- Member of the Board of Management and Director of Personnel
- Chief Human Resources Officer since 1 March 2019
- appointed until 28 February 2022
- lives in Karlsruhe

Letter to shareholders

Frank Mastiaux
Chairman of the Board of Management

Dear Sir or Madam, Dear Shareholders, Employees and Friends of EnBW,

We have been transforming ourselves from a conventional energy company into a strong and innovative partner for energy and infrastructure for the last eight years. We have learned to consider the central themes and trends of our time, such as climate protection, the mobility transition, digitalisation and urbanisation, as opportunities to secure the future viability of our company. We have made the ability to change into one of our key skills.

A successful and eventful 2019 financial year

We developed the EnBW 2020 strategy in 2013 with the target of reaching the same level of earnings in 2020 as in 2012: an adjusted EBITDA of €2.4 billion. The strategy has been rigorously implemented since then and we have already achieved our earnings target for 2020 one year early. In 2020, we will conclude the fundamental transformation of the business portfolio to meet the requirements of a new energy world. The fact that the earnings contributions made by the individual segments have been completely transformed in comparison to 2012 demonstrates how profoundly we have changed over the last few years. We have also been able to improve in the non-financial goal dimensions: The good reputation of EnBW amongst important stakeholders has once again improved, while customer satisfaction and supply reliability are at a high level. The trust placed in the competitiveness and future viability of the company by our employees has increased and occupational safety has also improved further. The expansion of renewable energies is continuing according to plan, while the CO_2 intensity of our own generation of electricity has fallen.

We initiated many new things and continued with others – across all segments – in 2019. Here are some examples:

In the Sales segment, we have now achieved growth two years in a row after considerable repositioning efforts. Our subsidiary Senec is one of the top 3 suppliers on the German market for home storage systems for solar power plants. By expanding our public charging network for electromobility and through collaborations with renowned partners, we currently have the most comprehensive charging infrastructure for e-cars in Germany. In Baden-Württemberg, municipal utilities, suppliers and local authorities worked together under our leadership to establish a core charging network for electric vehicles. The acquisition of the broadband provider Plusnet in 2019 was a major step in building a strong position for ourselves on the nationwide telecommunications market in Germany.

The Grids segment is continuing to expand the transmission grids, converting them into smart grids and integrating various measures for electromobility in the process. A new participation model for the transmission grids that enables local authorities to acquire shares in Netze BW and thus play a part in the economic success of our electricity and gas grids has lifted the quality of our partnerships with local authorities to a whole new level.

In the Renewable Energies segment, the acquisition of the French developer of wind and solar projects Valeco is moving us forward and opens up potential for international growth. We have also completed the largest offshore wind project to be built in Germany to date – EnBW Hohe See and EnBW Albatros with a total output of 609 MW. In addition, we made the decision in 2019 to take on the construction of the largest solar park in Germany with an output of 180 MW without state funding. To finance this and other investments, we issued green hybrid bonds with a total volume of €1 billion in 2019 – the first German company to do so.

In the Generation and Trading segment, we continued to push forward the transformation of our portfolio. The proportion of CO_2-intensive power plants has fallen by around 40% since 2012. In 2019, we had our bid accepted for the construction of a new gas turbine power plant as special technical equipment for grids and the Philippsburg 2 nuclear power plant was shut down for good on New Year's Eve.

Please allow me at this point to comment on energy policy: We are following the deviations of the Coal Phase-out Act from the recommendations made by the Coal Commission with some concern. The law is now detrimental to climate protection and detrimental to a sustainable Energiewende, especially in southern Germany. Therefore, we are calling on the German government to return to the recommendations made by the Coal Commission and also to improve the planning of the expansion of renewable energies.

Switching over to growth

Following our realignment and repositioning phase, we have now switched our priority and are on track for growth. We have set ourselves the target of an operating result of €3.2 billion in 2025. The acquisitions of Valeco and Plusnet in 2019 were already the first steps in this direction. As part of our EnBW 2025 strategy, we are transforming ourselves into a sustainable and innovative infrastructure partner for our customers and other stakeholders. In the process, we are also branching out beyond the traditional boundaries of the energy sector to open up new growth areas for our core expertise – the safe and reliable construction and operation of critical infrastructure. Urban infrastructure is a good example of one of these growth fields. We understand this to be the smart networking of energy, transport, telecommunications, security and more in the public sphere. However, we aren't going to just approach this from a technical perspective – we want to create liveable districts for people.

We are striving to make the business activities at EnBW even more sustainable in future – an ambitious goal for which the security of supply must be addressed during its realisation. As in the previous strategy period, the achievement of these targets will require the outstanding performance of the whole team at EnBW and plenty of creativity, while always placing the focus on the customer. We have already achieved this once.

Yours sincerely,

Dr. Frank Mastiaux
Chairman of the Board of Management

Report of the Supervisory Board

Lutz Feldmann
Chairman of the Supervisory Board

The Supervisory Board dutifully and comprehensively performed all of the tasks incumbent on it in the 2019 financial year as required by law and the Articles of Association. It regularly advised the Board of Management on its management of the company and continuously accompanied and monitored all important management measures for the Group. In the process, the Supervisory Board was involved in all decisions of fundamental importance to the company and the Group.

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

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

In the 2019 financial year, the Supervisory Board dealt extensively with verbal and written reports and proposals for resolutions issued by the Board of Management at its seven ordinary meetings on 15 February 2019, 27 March 2019, 7 May 2019, 11 July 2019, 27 September 2019, 7 November 2019 and 4 December 2019, an extraordinary meeting on 7 March 2019 and through two written resolution procedures. Furthermore, it requested reports and information from the Board of Management on individual topics, which were comprehensively provided in a timely manner in each case. The discussions and resolutions at the plenary meetings of the Supervisory Board focused on the following key issues:

- In-depth consultations and discussions with the Board of Management about long-term strategic planning (with a focus on offshore and onshore wind power and critical infrastructure)
- Consultation on the personnel strategy
- Consultation on the implementation status of the sales strategy
- Consultation on the results of the negotiations with the commission on "Growth, Structural Change and Employment" of the German Federal Ministry for Economic Affairs and Energy (so-called "Coal Commission")
- Consultation on issues relating to the sustainable procurement of hard coal from Colombia and Russia
- Consultation on climate protection activities by the company
- Approval for the acquisition of all shares in the Valeco Group (development, construction and operation of wind and solar energy), France, by EnBW France GmbH
- Approval for the acquisition of all shares in Plusnet GmbH and indirectly in its subsidiaries by EnBW Telekommunikation GmbH
- Consultation on the expansion of the quick-charging infrastructure for electromobility
- Approval for the submission of bids as part of the EU tender process "Special technical equipment for grids" for the site in Marbach and for a project budget in the event that the bid was accepted (as it has been in the meantime)
- Approval of the scheduled sale of the remaining 6% shareholding in EWE Aktiengesellschaft
- Approval for the conclusion of an LNG procurement contract with Novatek Gas & Power Asia Pte. Ltd.
- Approval for the realisation of the Weesow-Willmersdorf solar park
- Consultation on opening up Netze BW GmbH for indirect investment by local authorities of up to 24.9% and approval for the measures under corporate law required for this purpose
- Consultation on the financing strategy, including in particular the approval for the issuing of two green hybrid bonds with a total volume of €1 billion in 2019
- Approval of financing measures for Pražská energetika a.s. (PRE)
- Regular consultation on the development of the financial ratings of EnBW AG
- Approval for the amendment to the plan for the allocation of responsibilities proposed by the Board of Management due to Dr. Bernhard Beck stepping down from the Board of Management and Colette Rückert-Hennen being appointed to the Board of Management
- Appointment of Colette Rückert-Hennen as the Director of Personnel of EnBW AG
- Consultation on the reform of the German Corporate Governance Code and the impact of the law for the implementation of the second shareholder rights directive ("ARUG II")
- Amendment to the rules of procedure for the Supervisory Board
- Consultation on corporate governance and the issuing of the annual declaration of compliance
- Regular reporting on the operation, safety and, where relevant, dismantling of the nuclear power plants
- Consultation on the status of the projects to construct the waste material processing centres and waste storage facilities in Philippsburg and Neckarwestheim, as well as approval for the amendment of the budget for the projects
- Approval of the measures for the corporate financing of TransnetBW GmbH by EnBW AG in connection with the new grid construction projects SuedLink and ULTRANET
- Regular reporting on major investment projects, including EnBW Hohe See and EnBW Albatros, as well as other projects that form part of the generation strategy (renewable and conventional generation)
- Consultation on the current status and strategic issues related to the engagement of EnBW in Turkey as part of the joint venture Borusan EnBW Enerji yatirimlari ve Üretim A.S., with a focus on, amongst other things, the impacts of the political events and developments in Turkey
- Approval to finance the Saros wind project of Borusan EnBW Enerji yatirimlari ve Üretim A.S. (JV)
- Approval of the budget for the 2020 financial year and acknowledgement of the medium-term planning for the period 2021 to 2022 consisting of the Group earnings, finance, investment and personnel plans, as well as the result (HGB) and liquidity planning of EnBW AG
- Defining the level of the short-term variable remuneration for the Board of Management for 2018 and the long-term variable remuneration for the Board of Management for 2016 (performance period 2016 to 2018)
- Defining the targets for the short and long-term variable remuneration for the Board of Management for 2020
- Consultation on the annual compliance and data protection report and the agenda for the following period
- Regular reporting on the development of market prices for electricity, fuels and CO_2
- Regular reporting on the key indicators for occupational safety and health protection and exceptional events in the EnBW Group
- Approval of the proposals made at the Annual General Meeting, including the election of the auditor for the 2019 financial year and for the (by-)election of members of the Supervisory Board

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

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

Work of the committees

In order for the Supervisory Board to perform its functions efficiently, the committees it set up once again met regularly in the past financial year. The respective members of the committees are listed on p. 133 of the Integrated Annual Report 2019. The Chairpersons of the committees regularly reported comprehensively on the work of the committees at each subsequent plenary meeting of the Supervisory Board.

Corporate governance

The Supervisory Board also paid close attention to the various issues relating to corporate governance in the 2019 financial year. These issues are described in detail in the corporate governance report. The corporate governance report is part of the (Group) declaration on corporate management, which the company has published on its website (www.enbw.com/corporate-governance) in accordance with section 289 f (1) sentence 2 and section 315 d sentence 2 of the German Commercial Code (HGB).

Audit of the annual and consolidated financial statements

Following a thorough examination by the audit committee, the Supervisory Board undertook a detailed review of the annual financial statements and consolidated financial statements as of 31 December 2019 that were audited and issued with an unqualified audit opinion by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, and of the combined management report including the non-financial declaration for the 2019 financial year.

The final results of its own reviews did not lead to any reservations on behalf of the Supervisory Board. It approved the audit results of the independent auditor and endorsed the annual financial statements prepared by the Board of Management as of 31 December 2019 – which have thus been ratified – and the consolidated financial statements as of 31 December 2019, as well as the combined management report including the non-financial declaration for the 2019 financial year.

Reference to the complete version of the report of the Supervisory Board

Further details on the topics "Work of the committees", "Corporate governance", "Audit of the annual and consolidated financial statements" and "Personnel changes at the level of the Board of Management and Supervisory Board" can be found in the full version of the Report of the Supervisory Board made available to the public on the company's website at www.enbw.com/corporate-governance.

Karlsruhe, 20 March 2020

The Supervisory Board

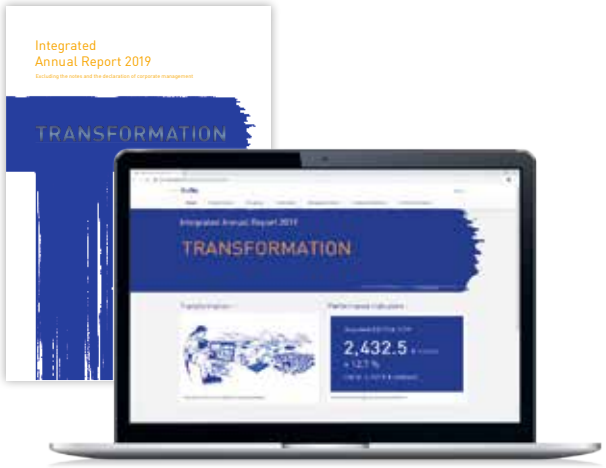
Lutz Feldmann
Chairman

About this report

Integrated reporting

In this Integrated Annual Report – as in previous years – we also take ecological and social aspects of the company's activities into account as well as economic aspects. We have published an Integrated Annual Report based on the recommendations of the International Integrated Reporting Council (IIRC) since the 2014 financial year, with the aim of achieving a holistic representation of the performance of the company. Based on the concepts behind integrated reporting, we strive for the comprehensive integrated management of the company through the implementation of the EnBW 2020 strategy and the subsequent EnBW 2025 strategy. By presenting financial and non-financial corporate goals in the dimensions of finance, strategy, customers and society, employees and environment, we are seeking to promote integrated thinking within the company and emphasise the importance of being comprehensively oriented towards performance and our stakeholders. We measure the achievement of our goals using key performance indicators. Our ambitions are underlined by the work and membership of Thomas Kusterer, member of the Board of Management of EnBW, in the IIRC as well as in the EU Technical Expert Group on Sustainable Finance (TEG) (Glossary, from p. 139). The "Building Public Trust Award 2019", which we received from PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft for the Integrated Annual Report in 2018, confirms our commitment in this area. More about integrated reporting at EnBW can be found at www.enbw.com/integrated-reporting.

The Integrated Annual Report 2019



www.enbw.com/report2019

The Integrated Annual Report 2019 presents financial and non-financial corporate goals in the following dimensions:

Finance · Strategy · Customers and society · Employees · Environment

This promotes integrated thinking within the company and emphasises the importance of being comprehensively oriented towards performance and our stakeholders.

TOP We measure the achievement of our goals using key performance indicators.

Overview of financial publications 2019

Integrated Annual Report 2019

The report contains the combined management report of the EnBW Group and EnBW AG, as well as the condensed version of the consolidated financial statements without the notes to the financial statements. It is available in print and in PDF format. Selected content from this report and additional information on aspects of sustainability can be found in the online report at www.enbw.com/report2019.

Integrated Annual Report 2019 – Extended Version

The extended version of the Integrated Annual Report 2019 comprises the full set of financial statements of the EnBW Group including the notes to the consolidated financial statements and the Declaration of Corporate Management. This document is exclusively available in PDF format.

Declaration of Corporate Management 2019

of the EnBW Group and EnBW AG including the Corporate Governance Report 2019. This document is contained in the Integrated Annual Report 2019 – Extended Version but is also available separately in PDF format.

Financial statements of EnBW AG 2019

This report is published in PDF format and contains the annual financial statements of EnBW AG.

All documents relating to the financial statements for the 2019 financial year can be found at www.enbw.com/report2019-downloads.
We publish the quarterly statements and the six-monthly financial report at www.enbw.com/financial-publications.

Together with existing legal requirements for strengthening non-financial reporting by companies in their management reports and Group management reports (CSR Directive Implementation Act), the reporting principles and elements of the IIRC create the foundations for integrated reporting. The Integrated Annual Report 2019 of EnBW contains the combined management report of the EnBW Group and EnBW AG in accordance with the regulations found in commercial law. The full consolidated financial statements including the notes to the consolidated financial statements and the (Group) declaration of corporate management including the corporate governance report are not included in this report and they are available to download at www.enbw.com/report2019-downloads.

The contents of this Integrated Annual Report exclusively serve to provide information and do not constitute an offer or an investment recommendation. Please take this into consideration and also refer to the other important notes on p. 144.

Important aspects of reporting

Main elements of reporting in 2019

Topic	Further development	Page reference
Business model	› Adapting the business model according to the ongoing strategic development	page 32 ff.
Strategy	› Ongoing strategic development: continuing the EnBW 2020 strategy and the achievement of its goals, introduction of the EnBW 2025 strategy	page 41 ff.
Materiality analysis	› Stabilising the materiality analysis process › Closely linked to the process for developing the company's strategy	page 51 f.
Interdependencies	› Presenting the interrelationships between key performance indicators	page 46 f.

In our concise and transparent reporting, we aim to meet the increased needs of stakeholders for more information. We use our regular materiality analysis process to ensure that all of the key issues from the past financial year are included in the Integrated Annual Report. We are introducing the new EnBW 2025 strategy in parallel to the existing EnBW 2020 strategy. In this context, we will continue to report transparently on the achievement of the goals for the EnBW 2020 strategy.

Through the participation of the EnBW Chief Financial Officer on the international Task Force on Climate-related Financial Disclosures (TCFD) (Glossary, from p. 139), EnBW actively supports the strengthening of climate-related risk reporting by companies (www.enbw.com/responsibility). An overview of the contents for this complex range of topics can be found in the index on TCFD recommendations on p. 122.

We will also strive in future years to continuously improve our integrated reporting. Our plans for 2020 thus include the continuous further development of the content of this report in accordance with the requirements for a non-financial declaration and the disclosures recommended by the TCFD .

Basis for the presentation of the report

The information about the net assets, financial position and results of operations of the EnBW Group is based on the requirements of the International Financial Reporting Standards (IFRS), and, where applicable, German commercial law and German accounting standards (GAS). We have fully integrated the non-financial declaration pursuant to sections 298 b and 315 b HGB into the combined management report based on our integrated reporting. Internal control mechanisms ensure the reliability of the information presented in this report. Furthermore, this Integrated Annual Report is based on the recommendations for reporting principles and reporting elements contained within the IIRC framework.

The selection of topics and the level of detail given to them in this Integrated Annual Report is based, as in previous years, on their materiality. The materiality analysis process pays particular attention to the key themes discussed internally in the management bodies and addressed in the external communication (p. 51 f.) and is anchored within the strategy process.

This report was created in accordance with the GRI standards: "Core" option. The reporting of sustainability issues has been based since the 2017 financial year on the GRI standards, including the Electric Utilities Sector Supplement. Further information on the GRI Content Index can be found at www.enbw.com/gri-index. Further information on the fulfilment of other sustainability standards is available on our website at www.enbw.com/performance-indicators. Our sustainability reporting also complies with the Communication on Progress requirements for the UN Global Compact and is based to an increasing extent on the UN Sustainable Development Goals (www.enbw.com/green-bond). These two framework standards, as well as the UN 2030 Agenda for Sustainable Development, have been used as the basis for the non-financial declaration.

All data and calculation methods used for this Integrated Annual Report are based on German and international standards for financial and sustainability reporting. The responsible specialist units applied representative methods in each case for the collection of all data and information for the reporting period. The reporting period comprises the 2019 financial year.

We took into account all relevant information up to 4 March 2020. Along with EnBW AG, with its headquarters in Karlsruhe, Germany, the group of consolidated companies of EnBW for financial reporting also includes all of its key subsidiaries. The reporting limits for the non-financial performance indicators correspond to the scope of consolidation for financial reporting, unless otherwise stated. In addition, we have also taken other issues into account in various chapters of this Integrated Annual Report, especially against the background of the legal requirement for a non-financial declaration, in order to provide a holistic representation of the performance of the company. The index for the non-financial declaration of the EnBW Group and EnBW AG is presented on p. 121.

As we were preparing the Integrated Annual Report 2019, our aim was to write the text in a concise and understandable way and thus to make it easy to read and more personal. It is for this reason that we have generally used the term "we" and only sporadically the name "EnBW" when we are reporting on our company. The EnBW Group is meant in both cases. For statements about EnBW Energie Baden-Württemberg AG, we have explicitly used either the full name or the short form EnBW AG.

Independent auditing and evaluation

At the Annual General Meeting of EnBW Energie Baden-Württemberg AG on 8 May 2019, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft was elected as the new auditor and Group auditor. The condensed financial statements for the 2019 financial year that form part of the Integrated Annual Report do not include the notes to the consolidated financial statements or the (Group) declaration of corporate management 2019 which includes the corporate governance report 2019. The full set of consolidated financial statements – including the notes to the consolidated financial statements – and the management report for the company and the Group are included in the extended version of the Integrated Annual Report 2019 and were all audited by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft for the 2019 financial year. As in the previous year, a complete audit of the non-financial declaration was carried out in accordance with an extension of the auditing mandate made by the Supervisory Board. Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft arrived at the overall conclusion that the entire audit did not lead to any reservations and issued an unqualified audit opinion. The high level of integration in the whole reporting process is underlined by this audit of the complete Integrated Annual Report with reasonable assurance. The full set of consolidated financial statements and the combined management report for the company and the Group for the 2019 financial year, as well as the unqualified audit opinion issued by the auditor, are accessible to the public on the website of EnBW Energie Baden-Württemberg AG at www.enbw.com/report2019-downloads.

Combined management report

of the EnBW Group and EnBW AG

Fundamentals of the Group

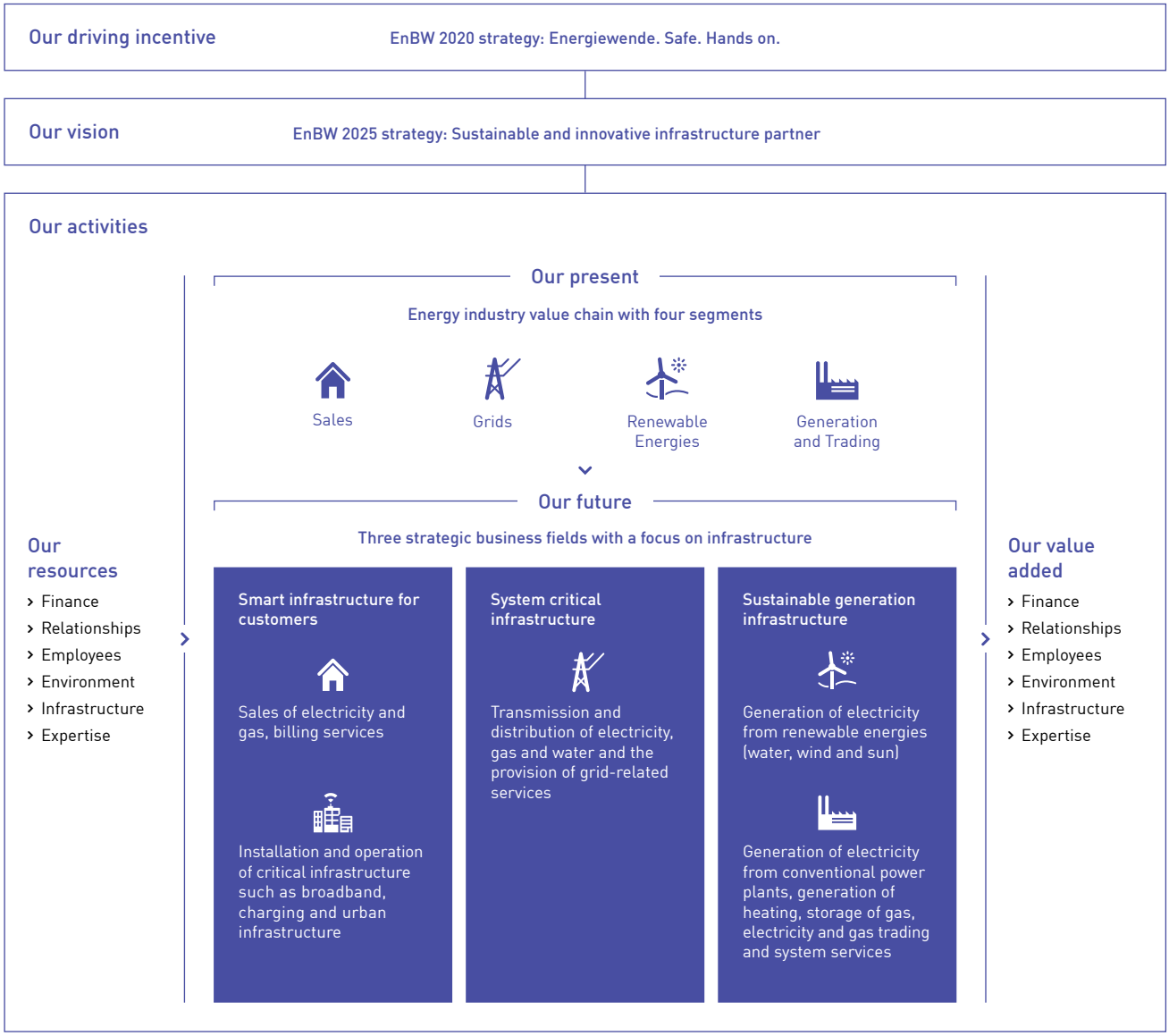
Business report

Fundamentals of the Group

Business model

Business principles

Business model



As an integrated energy company, EnBW is active in the four segments Sales, Grids, Renewable Energies and Generation and Trading and is transforming into a sustainable and innovative infrastructure partner. We draw on a variety of resources – from finance through to expertise – for our corporate activities. As a result of the efficient application of these resources, we create value for ourselves and our stakeholders. In response to the Energiewende in Germany, we developed our **EnBW 2020 strategy** in 2013 with the guiding principle "Energiewende. Save. Hands on." The main focus of this strategy was the transformation of the business portfolio. The aim was to compensate for the fall in earnings in the Generation and Trading segment with growth in the three other segments: Sales, Grids and Renewable Energies. The resolute implementation of the EnBW 2020 strategy is now on the home straight and has significantly strengthened the future viability of the company.

In view of the permanent change to the framework conditions in the energy industry, we will continue to push forward the strategic development of EnBW and its business portfolio. The new planning horizon is 2025 and our vision is to become a sustainable and innovative infrastructure partner for our customers and other stakeholders. In the **EnBW 2025 strategy**, the focus will be increasingly placed on the aspect of infrastructure within our existing business fields. In addition, we want to exploit new opportunities for growth outside of the energy sector. Our transformed business portfolio will be combined within three strategic business fields from 2021: The Sales segment and the new infrastructure businesses – also outside of the energy sector – will become the new strategic business field "Smart infrastructure for customers", while the Grids segment will become the business field "System critical infrastructure". Finally, the strategic business field "Sustainable generation infrastructure" will be formed from the existing "Renewable Energies" and "Generation and Trading" segments. The aim is to develop a balanced business portfolio that has diverse potential for growth, a high proportion of stable, regulated business and an attractive risk-return profile. You can find more about the further development of the EnBW strategy in the chapter "Strategy, goals and performance management system" from p. 41 ff.

An important component of the further development of our business portfolio is **digitalisation,** which is having a greater and greater influence on the way we think and act in our company. We are pushing forward numerous digitalisation initiatives and are focussing here on three main areas: products and processes, technologies, and people and organisation. In 2019, we focussed mainly on products and processes and, in particular, on the development of new, digital approaches for the existing business and new, digital business models.

The year 2019 was characterised by political and social debate on **climate change.** In the Green Deal, the EU wants to introduce comprehensive measures and legal obligations for achieving climate neutrality by 2050. The German federal government also announced in 2019 its aim to become climate neutral by the middle of the century. The Climate Action Plan 2050 that was passed by the German government in October 2019 represented a step in this direction with corresponding intermediate and sector targets. In this context, we have closely examined the significance of sustainability and climate protection themes for our business model and want to support international and national targets for a climate neutral economy in the development of our future measures and goals.

Assessment of the robustness of our business model in terms of climate protection

We have been analysing the robustness of our business model for many years – with an increasing focus on the recommendations issued by the Task Force on Climate-related Financial Disclosures (TCFD) (Glossary, from p. 139) in the last few years. We take account of the special requirements of the Energiewende and its effect on the expansion of renewable energies, supply reliability, electricity consumption, grid stability and the supply of heating in our strategic considerations. In particular, we examine the **climate protection requirements and their impact on the business model**. Accordingly, evaluating the different ways the Energiewende could possibly develop, including the opportunities and risks for our business over the coming years, will be a main focus of our market analyses (p. 104).

The **future development of the European electricity and gas markets** plays a major role here. We draw up consistent future scenarios based on all of the different aspects of the Energiewende mentioned above. Major drivers of these scenarios are how much economic growth there will be in the long term and the political and corporate ambitions for protecting the climate in the energy markets. The various risks associated with the transition to a low-carbon economy are reflected within the scenarios. Relevant parameters include estimates on the development of demand, changes to the power plant portfolio, the development of the transmission grids, and prices and price structures for fuel – as well as other relevant market trends such as in the areas of renewable energies and electromobility. On this basis, possible future paths for the long-term development of, amongst other things, the wholesale market prices for electricity and gas as well as CO_2 prices are derived for the scenarios with simulated calculations using computer models. The simulations also take into account physical risks such as uncertainties about meteorological influences on the electricity market in the future due to the availability of wind and sunlight.

Various parameters and assumptions are used to assess the robustness of the business model with respect to climate protection. These include international climate protection targets, especially limiting the rise in temperature to a level acceptable for the global ecosystem, as well as targets for complying with maximum greenhouse gas concentrations (Glossary, from p. 139), such as the IEA 450 ppm (parts per million) scenario. The targets have been defined based on science but can be translated into global carbon budgets for acceptable levels of CO_2 emissions and can thus be used to define a framework for the future size of the markets for fossil fuels. These **scenarios** not only provide information on the market prices for electricity and gas but also enable us to assess the robustness of our strategic planning, for example, with respect to the size of relevant markets for renewable energies or the infrastructures for electromobility. The scenarios and the assumptions on which they are based are updated at regular intervals, whereby the debate about ambitious climate protection targets plays a decisive role.

Value added

Value added for EnBW and its stakeholders

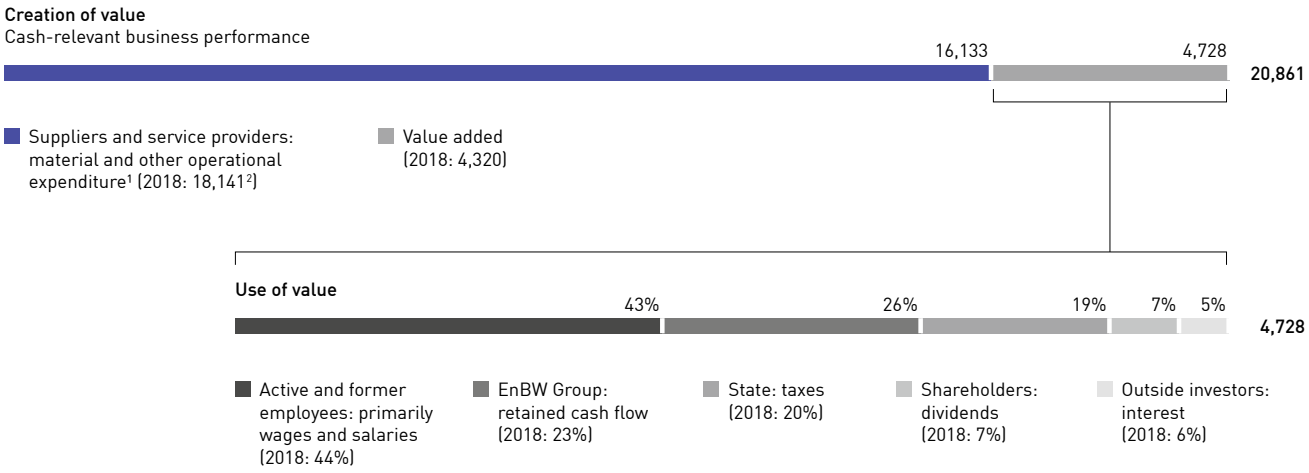
The aim of our corporate activities is to add value in the short, medium and long term. Value added reflects corporate success, as well as competitiveness and future viability, and does not only depend on the company itself but also on the business environment, relationships with stakeholders (p. 51 ff.) and the application of a variety of different resources. As a result of the efficient use of these resources within the scope of our activities, we create 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. This is closely associated with our reputation, that is, the public opinion our stakeholder groups hold about EnBW (p. 81). Information on the interdependencies between the key performance indicators can be found on p. 46 f.

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 dialogue with our stakeholders is summarised in the chapter "In dialogue with our stakeholders" (p. 51 ff.).

We define value added as our cash-relevant business performance in the past financial year minus cash-relevant expenses. 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 22.7% (previous year restated: 19.2%). 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 all stakeholder groups, the retained cash flow is available to the company for future investments without the need to raise additional debt (p. 77).

Value added of the EnBW Group
in € million



1 Includes interest and dividends received, as well as the dedicated financial assets contribution.
2 The figure for the previous year has been restated.

Value added for EnBW and its stakeholders

Resources

Finance
A constantly solid financial structure (equity, debt, positive cash flow levels) for financing our business activities

Relationships
Our customers are the central focus of our philosophy and actions. We actively promote dialogue with our stakeholders and thus build trust and social acceptance.

Employees
The expertise, experience and diversity of our employees contribute to the success of the company, supported by an effective and efficient HR policy.

Environment
Using the natural resources wind, water, sun, biomass and geothermal energy to generate energy

Infrastructure
We are one of the most important energy companies in Germany and Europe thanks to our power plants, electricity and gas grids and gas storage systems.

Expertise
We develop models for new future business fields through our research and innovation activities.

As a result of the efficient use of our resources within the scope of our activities in the 2019 financial year, we create value for ourselves and our stakeholders.

Value added

	For EnBW	For our stakeholders
Finance	› TOP Securing profitability › TOP High level of financial discipline › TOP Increasing Group value	› Appropriate dividends for our shareholders › Paying interest punctually to our third-party lenders › Wages, salaries and pensions for active and former employees › Tax payments to the state
Relationships	› TOP Increasing share of result from "Customer proximity"/Sales › TOP Increasing customer satisfaction: "Customer proximity" › TOP Improving reputation › Customer loyalty: strengthen trust in EnBW as a partner and supplier	› TOP Increasing customer satisfaction: "Customer proximity" › TOP Maintaining supply reliability (SAIDI) › Engaging in social issues through activities for our end customers, business partners, local authorities and their citizens
Employees	› TOP Increasing employee commitment (ECI) › TOP Improving occupational safety (LTIF) › Always having the right employees with the right skills in the right place	› TOP Measuring employee identification with the company based on the Employee Commitment Index (ECI) › Engagement in the area of diversity › Offering trainee and degree places › Multi-stage career integration programme for refugees and migrants
Environment	› TOP Expanding renewable energies (RE) › TOP Increasing Group value › TOP Reducing CO_2 intensity › Improving the carbon footprint › Safe dismantling of nuclear power plants	› TOP Expanding and integrating RE for customers and society › TOP Reducing CO_2 intensity › Energy-efficient products for our customers › Responsible handling of resources › Sustainable and responsible procurement
Infrastructure	› TOP Expanding renewable energies (RE) › TOP Increasing Group value › TOP Reducing CO_2 intensity › Driving the Energiewende › Opening up new business fields	› TOP SAIDI: Supply reliability for our customers (maintained by investments in upgrading grids and expanding transmission grids through our grid subsidiaries) › TOP Reducing CO_2 intensity › TOP Investing in the expansion of RE for customers and society › Contracting third-party companies and suppliers
Expertise	› TOP Securing profitability and increasing share of result from "Customer proximity"/Sales by identifying new sources of revenue › Early identification of medium to long-term market opportunities and trends	› New smart products for the benefit of our customers › EnBW as a provider of venture capital for the development of the portfolio

Overview of the segments, page 36 f. | In dialogue with our stakeholders, page 51 ff. | Research, development and innovation, page 56 ff. | The EnBW Group, page 68 ff.

Our operating segments

Overview of the segments

Sales

Tasks

Sale of electricity, gas, energy industry services and energy solutions; energy supply and energy-saving contracting; cooperations with local authorities; collaboration with municipal utilities; telecommunications

Significant events in 2019

- Strengthening of the telecommunications business with the acquisition of the broadband company Plusnet
- EnBW customers switch over to the new sales and billing system EnPower
- Further partnerships with trading partners and filling station operators for the expansion of the charging infrastructure for electromobility
- Conclusion of the funded project SAFE to establish a core charging and quick-charging network in Baden-Württemberg with EnBW as the head of the consortium
- As the largest operator of quick-charging stations in Germany, EnBW places its first quick-charging park into operation at the junction of the A7 and A8 motorways
- Introduction of a transparent and uniform kWh charging tariff at more than 30,000 charging points in Germany, Austria and Switzerland

Sales in 2019

73.6 billion kWh gas (B2C/B2B)

35.3 billion kWh electricity (B2C/B2B)

Number of B2C and B2B customers 2019

Around **5.5** million

Key figures in 2019

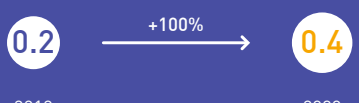
4,394 employees (as of 31/12/2019)

€294.3 million adjusted EBITDA in 2019

€389.4 million investment in 2019

12.1 % share of adjusted EBITDA in 2019

Development of adjusted EBITDA (in € billion)



Grids

Tasks

Transmission and distribution of electricity and gas as well as expansion of HVDC connections; provision of grid-related services; water supply; guaranteeing the security of supply and system stability

Significant events in 2019

- Start of the preliminary work for the ULTRANET converter station in Philippsburg
- Further preparations for SuedLink as part of the approval process
- "EnBW connects" participation model offers local authorities in Baden-Württemberg the opportunity to acquire a share of Netze BW for the first time
- Invitation to tender for special technical equipment for grids by TransnetBW
- Completion of the first section of the European gas pipeline EUGAL
- End of the "E-Mobility Avenue" project from Netze BW to examine charging behaviour and the effects on the electricity grid; start of two follow-up projects "E-Mobility-Carré" and "E-Mobility-Chaussee"

Grid lengths in 2019

144,000 km
Electricity transmission and distribution grid

25,000 km
Gas transmission and distribution grid

Transmission volumes in 2019

62.4 billion kWh electricity

34.2 billion kWh gas

Key figures in 2019

9,254 employees (as of 31/12/2019)

€1,311.2 million adjusted EBITDA in 2019

€1,230.9 million investment in 2019

53.9 % share of adjusted EBITDA in 2019

Development of adjusted EBITDA (in € billion)

Renewable Energies

Tasks

Project development and management, construction and operation of renewable energy power plants

Significant events in 2019

- Completion and commissioning of the offshore wind farm EnBW Hohe See with an output of 497 MW
- Completion of the offshore wind farm EnBW Albatros with an output of 112 MW; commissioning in January 2020
- Acquisition of the French project developer and operator of wind farms and solar parks Valeco
- Investment decision for the Weesow-Willmersdorf solar park with an output of more than 180 MW and without EEG funding
- Opening of a representative office in Taiwan for developing offshore wind farm projects as part of selective internationalisation
- Opening of two offices in Jersey City and Boston in the USA to participate in the expansion of offshore wind power on the East Coast of the USA

Generation portfolio in 2019[1]

8,858 GWh
generation

2,615 MW
installed output

Key figures in 2019

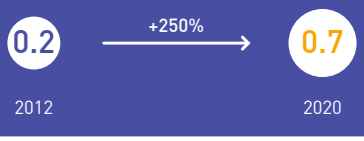
1,384 employees
(as of 31/12/2019)

€482.8 million
adjusted EBITDA in 2019

€1,552.6 million
investment in 2019

19.8%
share of adjusted EBITDA in 2019

Development of adjusted EBITDA (in € billion)



Generation and Trading

Tasks

Advisory services, construction, operation and dismantling of thermal power plants; storage of gas; trading of electricity and gas, provision of system services; operation of reserve power plants; gas midstream business, district heating; waste management/environmental services; direct distribution of renewable energy power plants

Significant events in 2019

- Final decommissioning of Block 2 of the Philippsburg nuclear power plant on 31 December 2019
- Approval for the dismantling of Block 2 of the Philippsburg nuclear power plant
- Extension of the inspection of Block II of the Neckarwestheim nuclear power plant for maintenance work
- Inauguration of the dismantling infrastructure at the site in Philippsburg
- EnBW has its bid for the construction of a gas turbine power plant in Marbach am Neckar as special technical equipment for grids accepted
- Official inauguration of the combined gas heat and power plant in Stuttgart-Gaisburg
- Conclusion of a gas procurement contract with Gazprom
- Conclusion of an LNG procurement contract with Novatek

Generation portfolio in 2019[1]

38,788 GWh
generation

11,172 MW
installed output

Key figures in 2019

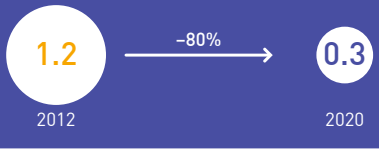
5,499 employees
(as of 31/12/2019)

€383.8 million
adjusted EBITDA in 2019

€98.3 million
investment in 2019

15.8%
share of adjusted EBITDA in 2019

Development of adjusted EBITDA (in € billion)



1 The sums stated for the generation and installed output in the Renewable Energies and Generation and Trading segments are not identical to the totals for the EnBW Group. Several power plants are allocated to the Sales segment. The total generation of the EnBW Group is 47,807 GWh, of which 9,988 GWh or 20.9% is generated from renewable energy sources. The total installed output of the EnBW Group is 13,849 MW, of which 4,398 MW or 31.8% is from renewable energy power plants. The totals for generation and installed output for the Group are illustrated in detail on p. 88.

Sales segment

The Sales segment encompasses sales of electricity and gas, as well as the provision of energy industry services such as billing services, energy supply, energy saving contracting (Glossary, from p. 139) and new energy solutions. In this area, we exploit our broad energy industry and process-based expertise, as well as our existing relationships with our customers. Against the background of advancing digitalisation, we are optimising, amongst other things, our customer processes and expanding our digital range of products (p. 81 f.). The expansion of the quick-charging infrastructure for electromobility (Glossary, from p. 139) and our activities in the telecommunications business are part of our strategy to develop our company into a provider of smart and sustainable infrastructure.

Grids segment

The Grids segment encompasses the transmission and distribution of electricity and gas, the provision of grid-related services and the supply of water by our grid subsidiaries. Value added in the Grids segment is based on the existing infrastructure and process know-how. Furthermore, value added is anchored in the numerous close relationships with local authorities and citizens. The grid business will be expanded further in the course of the Energiewende and will thus contribute to supply reliability. At the level of the transmission grids, this includes the construction of the two north-south connections SuedLink and ULTRANET by our subsidiary TransnetBW and its partners. Partnerships will also play a more important role in the distribution grid in future as our grid companies efficiently manage our customers' grid installations and facilities and prepare them to meet the new requirements.

Renewable Energies segment

Activities in the area of power generation from renewable energies are combined under the Renewable Energies segment. We are expanding renewable energies significantly, above all in the areas of onshore and offshore wind energy as well as photovoltaics and biogas. The principle of partnership plays a central role in this context and we offer potential investors such as local authorities and private citizens, whom we attract with the aid of targeted models, the chance to participate in renewable energy projects. The value we add in this segment encompasses project development, construction and efficient operation, as well as the repowering (Glossary, from p. 139) of the plants in the future.

Generation and Trading segment

The Generation and Trading segment encompasses electricity generation, the storage of gas, the trading of gas and electricity, the gas midstream business, the provision of system services (Glossary, from p. 139) for the operators of transmission grids, the operation of reserve power plants, district heating, environmental services and the dismantling of power plants. This business is primarily based on the generation of electricity and heat from our coal, gas, pumped storage and nuclear power plants and our operational and optimisation expertise. Electricity generation from fossil fuel power plants remains under pressure. The power plants operating on the market, as well as those power plants transferred to the grid reserve, make a significant contribution here to the security of supply in Germany. We support our customers in the integration of their power plants into the market using our services and expertise, such as in the area of direct distribution.

Group structure and business radius

EnBW is organised 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 192 fully consolidated companies, 22 companies accounted for using the equity method and 3 joint operations. Further information on the organisational structure can be found in the chapter "Corporate governance" under "Management and supervision" on p. 48 f.

Baden-Württemberg

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

Germany, Europe and developing markets

We also operate throughout the rest of Germany and abroad. The acquisition of the French project developer and operator of wind farms and solar parks Valeco in June 2019 was another step in continuing our strategy of **selective internationalisation** in the area of renewable energies. We are also represented by our subsidiaries Connected Wind Services in Denmark and EnBW Sverige in Sweden. In Turkey, we are active in the renewable energies sector with our Turkish partner Borusan. Our first activities in Taiwan and the USA round off our strategy for selective internationalisation.

The acquisition of the telecommunications company Plusnet based in Cologne in June 2019 enabled us to further expand our portfolio in the **broadband business** across Germany (Glossary, from p. 139). Our subsidiary NetCom BW will continue to have its main focus in this business in Baden-Württemberg.

Our **most important participating interests** in relation to the value added chain and their contribution to the result of the EnBW Group include the following groups of companies:

Energiedienst (ED), based in Laufenberg, Switzerland, has around 900 employees and is an ecologically oriented German-Swiss listed company with various subsidiaries that is active in South Baden and Switzerland. ED exclusively generates green electricity primarily using hydropower. Alongside the supply of electricity, this group of companies offers its customers smart, networked products and services, including photovoltaic plants, heat pumps, electricity storage systems, electromobility and e-car sharing.

Pražská energetika (PRE), based in Prague, Czech Republic, has almost 1,600 employees and its core business activities include the sale of electricity and gas, the distribution of electricity in Prague, the generation of electricity from renewable energies and the provision of energy services. PRE is the third largest electricity supplier in the Czech Republic and the operator of a reliable distribution grid. As part of its activities, PRE promotes the use of modern technological solutions and advises on the implementation of innovative technologies and achieving energy savings.

Stadtwerke Düsseldorf (SWD) is one of the largest municipal energy supply companies in Germany. With around 3,200 employees, 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 providing 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 and property.

VNG is based in Leipzig and has around 1,200 employees. It is a horizontally and vertically integrated corporate group with more than 20 companies in six countries and a broad portfolio of services in the gas and infrastructure sectors. Along the gas value added chain, VNG concentrates on its business areas of Gas Trading & Sales, Gas Transport and Gas Storage. Using this core expertise as a basis, VNG is increasingly placing its focus on new business fields. These include, amongst others, biogas, digital infrastructure and district solutions (Glossary, from p. 139). ONTRAS Gastransport operates and markets the second largest German gas transmission grid as an independent transmission system operator.

Customers and sales brands

We supply **around 5.5 million customers** with energy and provide them with energy solutions and energy industry services. We are one of the leading providers of energy and environmental services in Germany. Another focus is the development of our cooperation with municipal utilities and local authorities. The supply of district heating and drinking water is also part of the range of services we offer.

EnBW and its subsidiaries 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 customers, as well as redistributors, municipal utilities, local authorities and public entities.

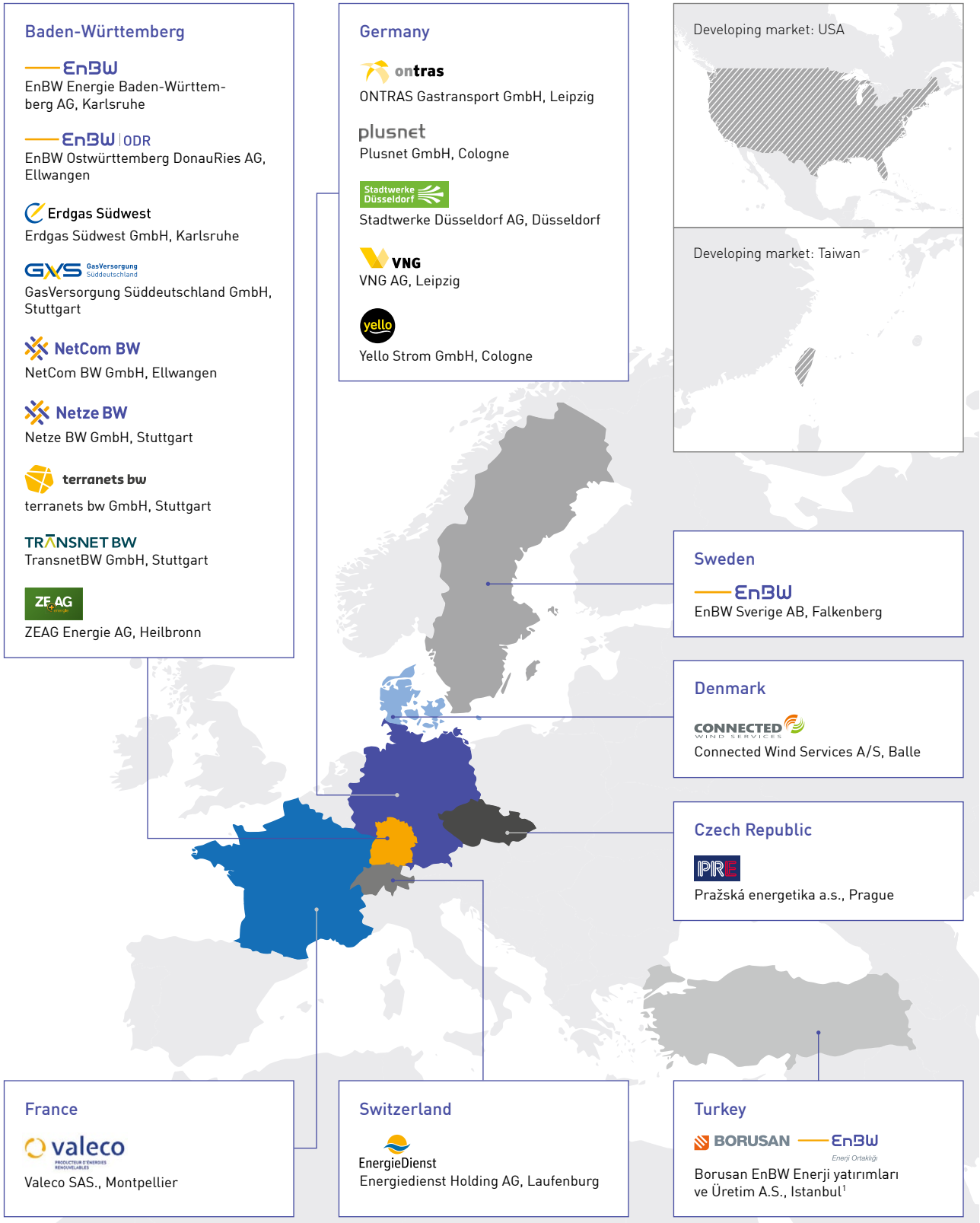
With our sales brands, we are close to our customers and consistently oriented to their needs. As an active partner for the energy system of the future, we sell electricity, gas, district heating, energy industry services, energy solutions and drinking water in the B2C sector under the **EnBW brand** (www.enbw.com). These products and services focus on Baden-Württemberg. We primarily sell electricity and gas, as well as solutions and digital services related to energy, to retail and commercial customers throughout Germany through the **Yello brand** (www.yello.de).

In addition, some of our subsidiaries are active in the B2B sector under the **GVS brand** and in the B2C and B2B sectors under the **Erdgas Südwest, ODR** and **ZEAG brands.**

Under the **NaturEnergie brand** (www.naturenergie.de), ED sells green electricity across Germany and gas to retail customers in South Baden. In Switzerland, the ED Group provides electricity to business customers. PRE sells electricity, gas, energy services and mobile communication services to retail and commercial customers in Prague and the surrounding region under the **PRE brand** (www.pre.cz). 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** (www.yello.cz), primarily via online channels to households and commercial customers. SWD supplies retail and commercial customers in the B2C sector, as well as customers in the agricultural sector, with electricity, gas, heating and drinking water under the **Stadtwerke Düsseldorf brand** (www.swd-ag.de). In the B2B sector, the range of services is directed at business and industrial customers and marketed across Germany, with a focus on North Rhine-Westphalia. The company goldgas, a subsidiary of VNG, sells gas and electricity – especially to private households, commercial customers and property management companies in Germany – under the **goldgas brand** (www.goldgas.de).

Selected companies

Selected EnBW companies in Baden-Württemberg, Germany, Europe and developing markets



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 (37) "Additional disclosures". The full set of consolidated financial statements is published at www.enbw.com/report2019-downloads. Further information: www.enbw.com/shareholdings.

Strategy, goals and performance management system

Strategy

Business environment

The energy sector is undergoing a period of profound change. This process of change is dependent on numerous factors and often does not progress linearly, thus making it difficult to predict. An important element of the Energiewende in Germany is the phasing out of nuclear electricity generation by 2022. The goal of decarbonising the economy is setting the political and regulatory agenda. The German government wants to end coal-fired power generation in Germany by 2038 at the latest. Renewable energies and smart grids will be the focus of future decentralised energy systems. Beyond the energy industry, the willingness in society to try and prevent the emission of greenhouse gases (Glossary, from p. 139) is growing in all aspects of life. To achieve this, cross-sector concepts (Glossary, from p. 139) are needed, such as the linking of energy and infrastructure themes, which are accelerated by digitalisation and new technologies. New value added chains and modified customer behaviour are creating room for innovative business models and new players on the market. The onus is thus on energy supply companies to quickly and flexibly develop a future-oriented business portfolio for their companies.

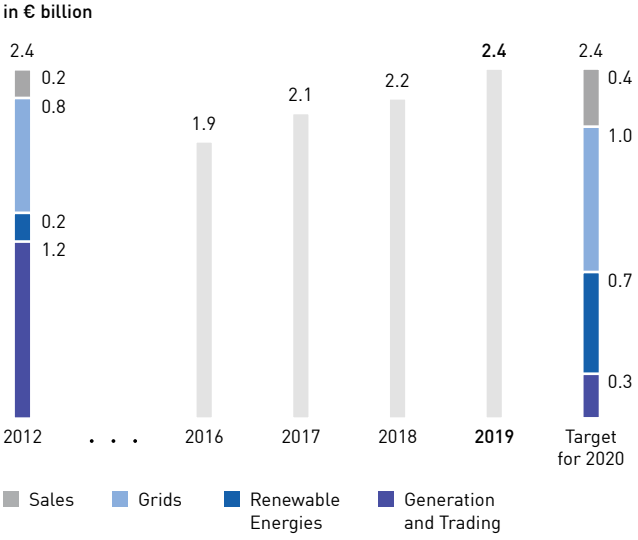
EnBW 2020 strategy largely implemented

The EnBW 2020 strategy is guided by the principle "Energiewende. Safe. Hands on." It describes our positioning and how we differentiate ourselves from our competitors. Sustainability is an integral component of our Group strategy so that we can guarantee the creation of economic, ecological and social value added for our stakeholders. We associate the concept of sustainable economic development with our aspiration to conduct our business activities in a responsible way (p. 52).

We aim to more than double the share of our generation capacity accounted for by renewable energies from 19% (based on the reference year of 2012) to over 40% in 2020. We have increased the capacities of our onshore wind farms significantly in Germany and selected foreign markets, while the same is true for the growth field of offshore wind energy. By investing extensively in grid expansion, we are making a substantial contribution to the infrastructure required by the energy system and thus to the security of supply. The overall share of adjusted EBITDA accounted for by the regulated grid business and renewable energies has increased from around 40% (reference year of 2012) to more than 70% in 2019 and has thus already reached the target value for 2020. This will improve the risk-return profile of our company. Innovative products and services will become another important pillar of the company's business. By generating an adjusted EBITDA of €2.4 billion in 2019, we were already able to achieve our earnings target for 2020 early.

To implement our strategy, we planned total investment of €14.1 billion (reference year of 2012) by 2020. In order to obtain the financial headroom required for such extensive investments, we have significantly extended our divestiture programme – involving divestitures, cash inflow from participation models, the disposal of assets and subsidies – through our EnBW 2020 strategy to around €5.1 billion (based on the reference year of 2012). We realised investments of €14.8 billion and divestitures of €5.1 billion in the period up to and including 2019. The overfulfilment of our investment target was primarily due to the accelerated growth investment used for the acquisitions of Valeco and Plusnet.

Transformation of the portfolio and development of adjusted EBITDA up to 2020



We developed our EnBW 2020 strategy back in 2013 in the wake of the profound changes impacting the energy industry as part of the Energiewende. We have rigorously and sustainably implemented this strategy since then. In view of the upcoming planning horizon, the following is now clear: The improvements in efficiency, the transformation of the business portfolio and the growth initiatives designed to place the company on new foundations ready for the future have largely been implemented or are on the home straight. We will now make the switch from "realignment and repositioning" to "growth" in the EnBW 2025 strategy.

The EnBW 2025 strategy: The path to becoming a sustainable and innovative infrastructure partner

Ongoing strategic development

Holistic focus on stakeholders

Multi-dimensional goal system

Finance | Strategy | Customers and society | Employees | Environment

Integrated corporate strategy

EnBW 2020 strategy "Energiewende. Safe. Hands on."	›	EnBW 2025 strategy "Making and shaping the infrastructure world of tomorrow."
Realignment and repositioning	›	Growth
Energy supply company	›	Infrastructure provider
Four segments › Sales › Grids › Renewable Energies › Generation and Trading	›	Three strategic business fields › Smart infrastructure for customers › System critical infrastructure › Sustainable generation infrastructure

After the first phase of the Energiewende was characterised above all by political and regulatory measures, the changes in the energy sector will now be increasingly driven by market developments and shaped by cost reductions and technical advances. Under the motto "Making and shaping the infrastructure world of tomorrow", the EnBW 2025 strategy will increasingly place the company's focus onto the infrastructure aspects of existing business fields – for example, networking small decentralised power plants to form virtual power plants (Glossary, from p. 139) or the networking of the energy sector (Glossary, from p. 139) with neighbouring sectors such as transport or communications infrastructure. Furthermore, we will use our core expertise to exploit new growth opportunities above and beyond the energy sector. Our core expertise – what we do well and do better than many others – lies in the safe and reliable construction, operation and management of critical infrastructure in the energy sector, such as efficient, low-carbon power plants or transmission and distribution grids that meet the requirements of an energy industry based on renewable energies. This distinctive expertise can be transferred to other infrastructure sectors. Our dedication and commitment have already enabled us to make significant progress in, for example, the broadband business (Glossary, from p. 139), the expansion of quick-charging infrastructure (Glossary, from p. 139) as the basis for electromobility and in the area of urban infrastructure. Urban infrastructure, as we understand it, involves the smart networking of energy supply, heating, telecommunications, mobility, traffic management and parking space management, as well as security in the public sphere. We are developing our company into a modern and flexible organisation. Performance, creativity, freedom for independent action, quick decisions made as closely oriented to the business as possible and a consistent focus on the customer and their needs will define the requirements for independent action in the future.

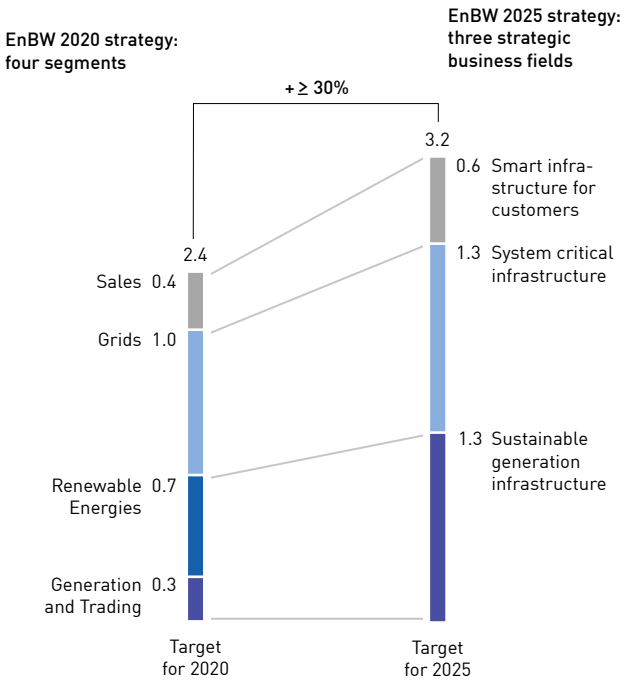
We are transforming ourselves into a sustainable and innovative infrastructure partner for our customers and other stakeholders. Following the successful implementation of the EnBW 2020 strategy, we will combine our business portfolio from 2021 – in accordance with the rationale behind the EnBW 2025 strategy – within **three strategic business fields:**

- In the strategic business field **Smart infrastructure for customers,** we will develop new and digital business models, launch them onto the market and scale them up – even beyond the traditional energy industry value chain. The main focus will be placed here on the expansion of the quick-charging infrastructure, activities in the areas of telecommunications and broadband and other fields such as urban infrastructure.

- In the strategic business field **System critical infrastructure,** our grid subsidiaries for electricity and gas will further expand the transmission grids into an important cornerstone of our earnings alongside the distribution grids. In addition, we will upgrade the electricity distribution grids so that they are ready to meet the requirements of the future and ensure they are optimally prepared for the demands that will be placed on them by electromobility. We want to significantly develop and expand the business involving grid-related services – the operation of grids for third parties, payment and billing services and charging networks for electromobility – especially in partnership with local authorities and public utilities.
- In the strategic business field **Sustainable generation infrastructure,** we will be dominant in renewable energies – with offshore and onshore wind power as our spearhead. We will also continue with our strategy of selective internationalisation and the expansion of the portfolio of major photovoltaic projects, enabling us to specifically target the expansion of low-carbon generation. In addition, we will build on our strong position in the gas business, especially in the area of green and synthetic gases. In contrast, we will gradually withdraw from coal-based conventional generation while preserving value at the same time. The last nuclear power plants operated by EnBW will be decommissioned in 2022.

Realignment and growth

Adjusted EBITDA in € billion



Following the successful implementation of the EnBW 2020 strategy, there will be a smooth transition between the strategy periods: We already strengthened our business activities in the area of renewable energies in 2019 with the acquisition of the French project developer and operator of wind farms and solar parks Valeco. We also took a significant step in building a strong position for ourselves on the nationwide telecommunications market in Germany in 2019 with the acquisition of Plusnet. Both transactions will contribute to the EnBW 2025 growth strategy.

The central goal of the EnBW 2025 strategy is to increase adjusted EBITDA to €3.2 billion, whereby all three strategic business fields should make a significant contribution to this increase in earnings.

EnBW is planning to invest around €12 billion in total between 2021 and 2025. The main focus of the investment will be on the expansion of the grids, especially the central SuedLink and ULTRANET projects of our grid subsidiary TransnetBW for the future energy supply in Germany, the expansion of renewable energies, such as the realisation of the EnBW He Dreiht offshore wind farm, and the further development of smart infrastructure for customers, for example, in the areas of broadband, telecommunications and electromobility. In accordance with the EnBW 2025 growth strategy, 80% of our overall investment will be accounted for by growth projects.

This **growth strategy** will be financed by the retained cash flow and, where necessary, through the use of external funds. By using sustainable financing instruments, we are taking account of our transformed business portfolio and have gained access to new groups of investors who place importance on the sustainable use of their investments. We will continue to strive to maintain a balanced financing structure, solid financial profile and thus solid investment-grade ratings (Glossary, from p. 139).

Goals and performance management system

Performance management system

The management of the company comprises financial, strategic and non-financial goals and, as well as the finance and strategy goal dimensions, includes the dimensions customers and society, employees and the environment. The centrepiece 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. In the quarterly performance reviews conducted at a Board of Management level, 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 terms of external communication, the PMS feeds into the integrated reporting of the financial and non-financial performance of the company based on the reporting framework of the International Integrated Reporting Council (IIRC). This Integrated Annual Report 2019 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	2019	Target for 2020	Target for 2025
Finance	Secure profitability	Adjusted EBITDA in € billion	2.4	2.3–2.5	3.2
	High level of financial discipline	Internal financing capability in % Debt repayment potential in %	82.6 –	≥ 100 –	–[1] > 14[1]
	Increasing Group value	ROCE in %	5.2	8.5–11	6.5–8
	The EnBW Group, page 68 ff. | Forecast, page 96 ff. | Report on opportunities and risks, page 100 ff.				
Strategy	Share of result accounted for by "Customer proximity"/ Sales	Share of overall adjusted EBITDA in € billion/in %	0.3/12.1	0.4/15.0	0.6/20.0 (Smart infrastructure for customers[2])
	Share of result accounted for by Grids	Share of overall adjusted EBITDA in € billion/in %	1.3/53.9	1.0/40.0	1.3/40.0 (System critical infrastructure[2])
	Share of result accounted for by Renewable Energies	Share of overall adjusted EBITDA in € billion/in %	0.5/19.8	0.7/30.0	1.3/40.0 (Sustainable generation infrastructure[2])
	Share of result accounted for by Generation and Trading	Share of overall adjusted EBITDA in € billion/in %	0.4/15.8	0.3/15.0	
	The EnBW Group, page 70 f. | Forecast, page 97 | Report on opportunities and risks, page 100 ff.				
Customers and society	Reputation	Reputation Index	53	55	58 to 62
	Customer proximity	EnBW/Yello Customer Satisfaction Index	116/157	> 136/> 159	125 to 136/ 148 to 159
	Supply reliability	SAIDI (electricity) in min./year	15	< 25	< 20
	The EnBW Group, page 81 ff. | Forecast, page 98 f. | Report on opportunities and risks, page 103				
Employees	Employee commitment	Employee Commitment Index (ECI)[3]	66	65	≥ 66
	Occupational safety	LTIF for companies controlled by the Group[4]	2.1	≤ previous year	2.1
		LTIF overall[5]	3.8	–	3.5
	The EnBW Group, page 83 ff. | Forecast, page 99 | Report on opportunities and risks, page 103 f.				
Environment	Expand renewable energies (RE)	Installed output of RE in GW and the share of the generation capacity accounted for by RE in %	4.4/31.8	5.0/> 40	7.5 to 8.0/> 50
	Climate protection	CO_2 intensity in g/kWh	419	-15% to -20% (reference year 2015: 609 g/kWh)	-10% to -20% (reference year 2020)
	The EnBW Group, page 87 ff. | Forecast, page 99 | Report on opportunities and risks, page 104				

1 Following the transition to the growth strategy, the key performance indicator internal financing capability will be replaced by the new key performance indicator debt repayment potential from 2021. Therefore, no target value has been defined for the internal financing capability for 2025. To ensure EnBW achieves its ratings target, the target value will be examined annually based on the requirements of the rating agencies.

2 The four segments of Sales, Grids, Renewable Energies and Generation and Trading will become the three strategic business fields of Smart infrastructure for customers, System critical infrastructure and Sustainable generation infrastructure from 2021.

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

4 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered except for companies in the area of waste management as well as external agency workers and contractors).

5 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered except for external agency workers and contractors).

TOP Definition and target values for the key performance indicators

We safeguard the implementation of our strategy by means of a holistic goal and performance management system. This system reflects the overall performance of the company and strengthens integrated thinking within it. 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, employees and environment. A number of specific targets have been defined in each goal dimension, whose achievement is continuously measured using key performance indicators. Linked with this goal system and the centrepiece of our corporate management is the performance management system (PMS). Quantitative target values are currently set for the key performance indicators for the 2020 strategy horizon and have now also been set for the first time for 2025. The key performance indicators are the same as those used in the previous year, although two key indicators will be reported for LTIF from 2019.

The financial and strategic key performance indicators within the PMS are the adjusted EBITDA, the shares of the adjusted EBITDA accounted for by the segments, the internal financing capability and ROCE.

- The **adjusted EBITDA** is the earnings before the investment and financial results, income taxes and amortisation 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**, are derived directly from it (p. 70 and 97). The operating result in 2020 will return to the average level achieved before the Energiewende. The overall share of earnings accounted for by the regulated grid business and renewable energies is around 70%. In 2025, we aim to achieve an operating result of €3.2 billion.
- The **internal financing capability** is the key performance indicator for the Group's ability to finance its activities internally: It describes the adjusted retained cash flow in relation to the adjusted net (cash) investment (p. 78 and 97 f.). After covering ongoing costs and dividend payments, the adjusted retained cash flow is available to the company for net investment without the need to raise additional debt. Since the 2017 financial year, we have adjusted the retained cash flow to take account of the extraordinary effect of the reimbursement of the nuclear fuel rod tax (Glossary, from p. 139) (adjusted retained cash flow) and since 2019 we have also adjusted the net (cash) investment to take into account the accelerated growth investment used for the acquisitions of Valeco and Plusnet that already contribute to the EnBW 2025 growth strategy. As it will not be possible to exclusively finance this growth phase using funds from our internal financing capability, we will manage our creditworthiness from 2021 using the **debt repayment potential** (retained cash flow in relation to the net debt). The key performance indicator internal financing capability will be retained until 2020.
- **ROCE (return on capital employed)** is the ratio of adjusted EBIT including the adjusted investment result to the average capital employed. It should exceed the capital costs and is used for determining the value added, reflecting the development of the company's value from a financial point of view (p. 79 f. and 98). Due to the sharp fall in interest rates, the cost of capital (WACC) has reduced from 8.7% in 2012 to 5.2% in 2019. We do not expect any changes to the interest rate environment up to 2025.

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).

- 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 the 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. 81 and 98). We aim to continuously improve our reputation.
- The key performance indicator **Customer Satisfaction Index** assesses the average satisfaction of private end consumers of 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 the surveyed customers with customised solutions and products (p. 81 f. and 98). Climate protection measures will make energy more expensive for customers in the next few years. Despite the new skills, offers and services that EnBW has developed, this will in all likelihood negatively impact the perception of the energy sector. The target value for the Customer Satisfaction Index in 2025 is thus below the level in 2020.
- **SAIDI** serves as the key performance indicator of supply reliability. It expresses the average length of supply interruption in the electricity distribution grid experienced annually by each connected customer. SAIDI 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. 83 and 98). Maintaining the quality of supply to our customers is of central importance to us in the further development of the grids of our grid subsidiaries. The reliability of the supply in the grid areas operated by our grid subsidiaries builds on our comprehensive investment in grids and facilities as well as our system expertise.

The Employee Commitment Index (ECI) and LTIF (Lost Time Injury Frequency) are utilised as performance indicators in the employees goal dimension.

- The **ECI** expresses the degree to which employees identify with EnBW. It is compiled using employee surveys and is based on standardised questions that address the degree to which employees identify with the company, including satisfaction with their employer-employee relationship, attractiveness of the employer, identification with the company, motivational climate, competitiveness and future viability. The ECI is generally compiled every two to three years for all companies with more than 100 employees (excluding the ITOs) (Glossary, from p. 139) as part of a full survey carried out by an external, independent service provider. Representative random sample surveys are completed in the periods between the full surveys – as was also the case in 2019 (p. 83 f. and 99). We want to further strengthen the commitment of our employees to EnBW and their trust in the future viability of the company.
- **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. The calculation of the LTIF overall generally 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. External agency workers and contractors are not taken into account in either performance indicator (p. 86 f. and 99). The number of accidents at work and the resulting days of absence should remain consistently stable or fall.

The key performance indicators in the environment goal dimension are the installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE and CO_2 intensity.

- The **installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE** are measures of the expansion of renewable energies and refer to the installed output of the power plants and not to their weather-dependent contribution to electricity generation (p. 87 and 99). We aim to double the share of the generation capacity accounted for by renewable energies by 2020 compared to 2012 (19%) and increase this figure further by 2025.
- The emissions of CO_2 from own generation of electricity for the Group, as well as the volume of electricity generated by the Group without the contribution made by the nuclear power plants, form the basis for the calculation of the key performance indicator **CO_2 intensity** (Glossary, from p. 139). This performance indicator is calculated as the ratio between the emissions and the generated volume of electricity and thus specifically describes the amount of CO_2 released per kilowatt hour. By discounting the electricity generated by nuclear power plants, the performance indicator will not be influenced by the phasing out of nuclear energy in the coming years (p. 88 and 99). We are actively contributing to climate protection by reducing the CO_2 intensity of our own generation of electricity (excluding nuclear power) by 15% to 20% by 2020 compared to the reference year 2015.

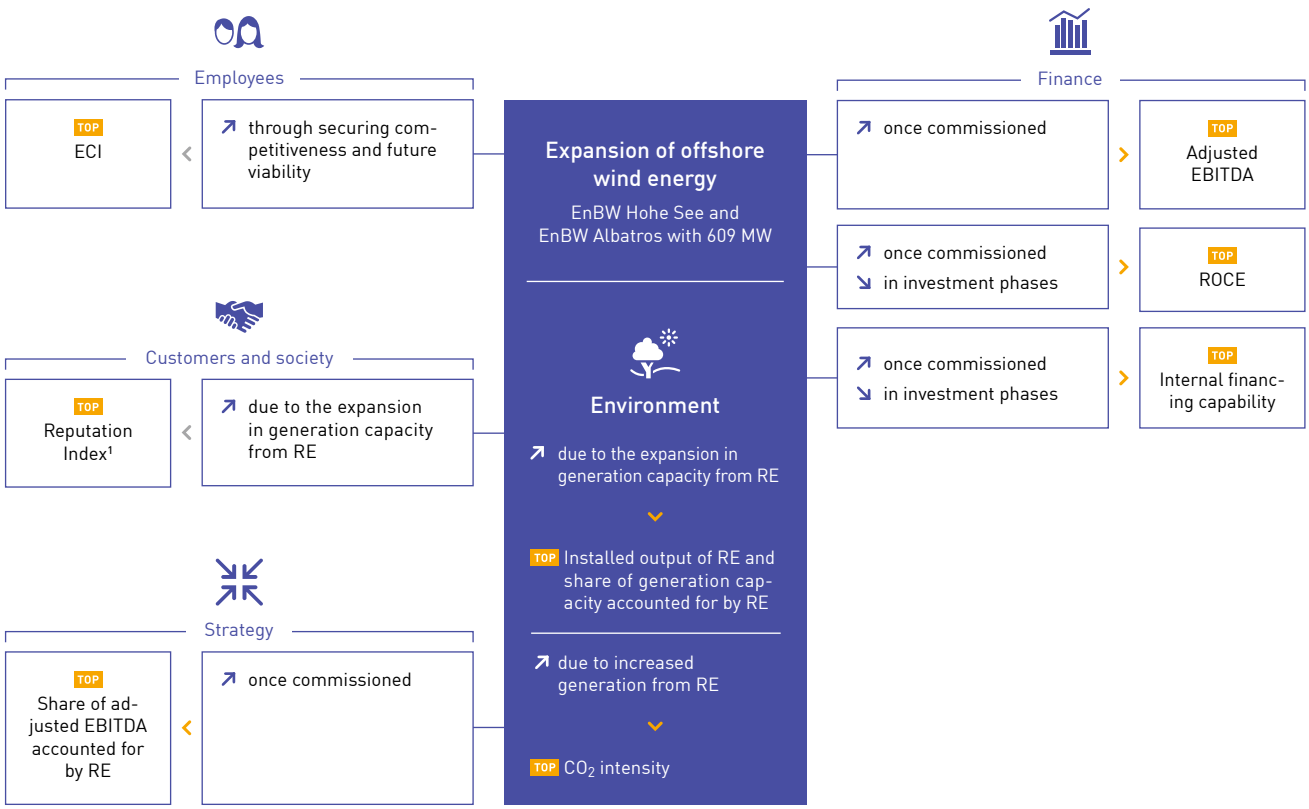
TOP Interdependencies between the goal dimensions, targets and key performance indicators

We are convinced that in order to give a comprehensive portrayal of the company, it is not only necessary to describe the economic, ecological and social context but also to illustrate and provide an analysis of interdependencies in this report. Linking together the various goal dimensions is an important element of integrated reporting. At the same time, this type of reporting encourages a holistic corporate management approach within EnBW. In order to illustrate these interdependencies, the key performance indicators for the goal and performance management system are used. The basic assumption for illustrating interdependencies is that a change in one key performance indicator can also lead, in many cases, to changes in one or more other key performance indicators. Reciprocal relationships thus exist between the key performance indicators – in the most extreme case, all of the key performance indicators can even influence each other.

In order to illustrate the interdependencies in 2019, we have selected two themes: the **expansion of offshore wind energy** using the EnBW Hohe See and EnBW Albatros wind farms as an example, and the **expansion of the telecommunications business** using the acquisition of Plusnet as an example. The commissioning of the offshore wind farms EnBW Hohe See in 2019 and EnBW Albatros in January 2020 have a direct positive effect on the key performance indicators in the environment goal dimension. The acquisition of Plusnet has a direct effect on the key performance indicator "share of adjusted EBITDA accounted for by Sales" in the strategy goal dimension. In addition, we anticipate that there will be a direct or potential influence on other key performance indicators for both examples.

The key performance indicators that are directly influenced are positioned in the centre of the diagram and should essentially be directly measurable. The interdependencies between the financial and strategy key performance indicators are also essentially directly measurable and are represented in the example diagrams by orange arrows. The interdependencies with the other non-financial key performance indicators are difficult to measure and generally tend to be potential or long term in nature. They are represented by grey arrows. In the 2019 financial year, these interdependencies were not measured individually. They are presented based on internal discussions with the relevant specialist areas and those responsible for the performance indicators. The upward pointing arrows show a positive influence on the key performance indicator, while the downward pointing arrows show a negative influence.

Interdependencies between key performance indicators using the expansion of offshore wind energy as an example

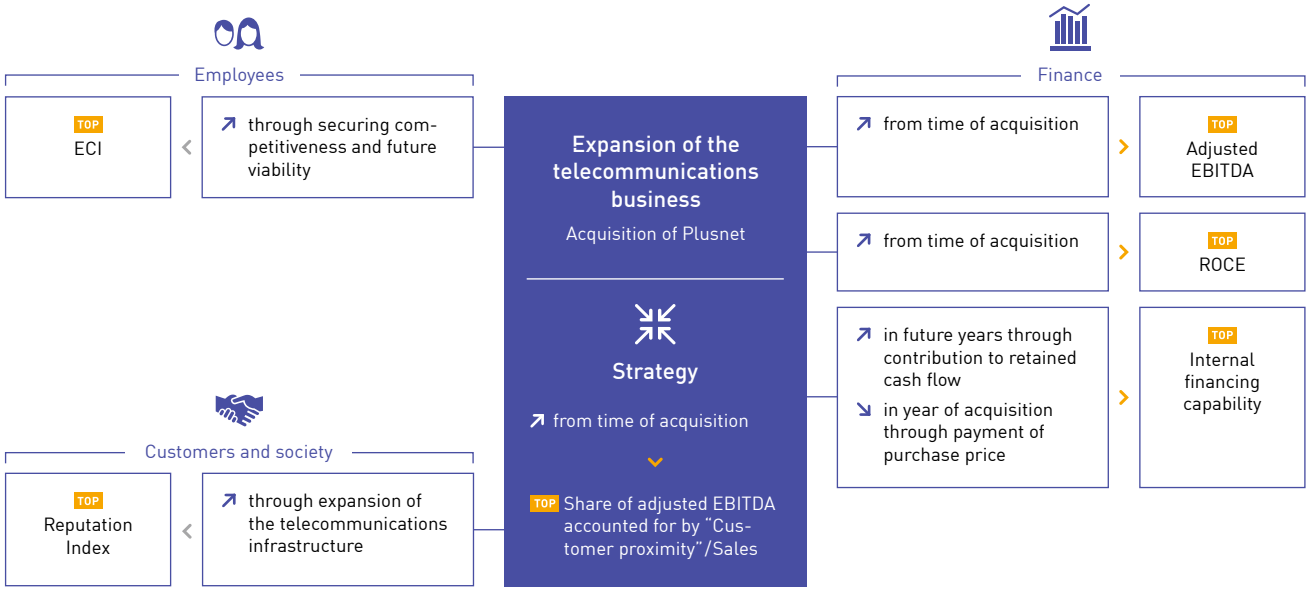


› Direct influence
› Potential/long-term influence

↗ Positive influence on key performance indicator
↘ Negative influence on key performance indicator

1 We also anticipate a potential negative influence on the Reputation Index due to the risk of social opposition with respect to environmental aspects. However, this type of risk is more than compensated for by the overall potential positive influence of the expansion of renewable energies on the Reputation Index.

Interdependencies between key performance indicators using the expansion of the telecommunications business as an example



› Direct influence
› Potential/long-term influence

↗ Positive influence on key performance indicator
↘ Negative influence on key performance indicator

Corporate governance

Corporate management

Good corporate governance is an essential part of the corporate culture at EnBW. We are convinced that responsible and transparent corporate governance strengthens the trust and confidence that customers, capital providers, employees and the general public place in the company, thereby contributing to its long-term success. The Board of Management and Supervisory Board are comitted to managing and supervising the company above and beyond merely fulfilling statutory requirements, but to do it in accordance with recognised 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 meet all the recommendations of the German Corporate Governance Code (DCGK) in the version from 7 February 2017 (www.enbw.com/corporate-governance).

Conformity with the German Corporate Governance Code at EnBW was monitored by Dr. Bernhard Beck up to 30 June 2019 and by Colette Rückert-Hennen from 1 July 2019 as the members of the Board of Management responsible for corporate governance. Colette Rückert-Hennen 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 Corporations Act (AktG) on 4 December 2019. The current declaration of compliance and the declarations from previous years are published at www.enbw.com/declaration-of-compliance. The declaration of compliance is based on the German Corporate Governance Code in the version from 7 February 2017 and not the current version submitted for review and publicaton by the DCGK Commission of the Federal Ministry of Justice and Consumer Protection from 23 January 2020, because this will only come into force after the annual declaration was made. The remuneration report is contained in the management report on p. 110 ff. of this report.

Management and supervision

Board of Management

The Board of Management is jointly responsible for managing Group business. In addition to the role of CEO, the tasks performed by the Board of Management are split into the remits of "finance", "HR, law and compliance, auditing" and "technology". As of 31 December 2019, the Board of Management of EnBW AG consisted of four members. Colette Rückert-Hennen joined the Board of Management as the replacement for Dr. Bernhard Beck on 1 March 2019 and took over responsibility from this point onwards for the areas of personnel, executive management and health management. Since the end of Dr. Bernhard Beck's period in office on 30 June 2019, Colette Rückert-Hennen has also been responsible for the areas of law, auditing, compliance management/data protection, regulatory management and boards/shareholder relations. Thomas Kusterer has been responsible for the area of equity investment management since this point in time.

Allocation of responsibilities at Board of Management level (as of 31/12/2019)

Dr. Frank Mastiaux CEO	Thomas Kusterer Finance	Colette Rückert-Hennen HR, law and compliance, auditing	Dr. Hans-Josef Zimmer Technology
› Corporate development/ sustainability › Strategy/energy industry › Communication/policy › Transformation/IT/ procurement/infrastructure › Innovation management › Sales, marketing and operations › Gas value chain › Escalation: risk management for trading	› Accounting › Tax › Controlling › Finance › Investor Relations › Mergers and acquisitions › Risk management/ICS › Trade › Equity investment management	› HR and executive management › Law › Auditing › Compliance management/ data protection › Regulatory management › Boards/shareholder relationships › Health management	› Generation (renewable, conventional, nuclear) › Waste management/ environmental services › Electricity and gas transmission grids › Distribution grids (electricity and gas) › Grid technology › Research and development › Occupational safety/ environmental protection/ crisis management

www.enbw.com/board-of-management

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 business performance, planning and strategy of the company together with the Board of Management at regular intervals and ratifies the annual financial statements. The Supervisory Board is always involved in decisions of fundamental importance to the company. Legal transactions and measures subject to the approval of the Supervisory Board are defined in its rules of procedure. In order for the Supervisory Board to optimally perform its functions, it has formed the following standing committees: a personnel committee, a finance and investment committee, an audit committee, a nomination committee and a mediation committee in accordance with section 27 (3) MitbestG, a digitalisation committee and an ad-hoc committee.

Further information on the Board of Management and Supervisory Board can be found in this report under the section on "Corporate bodies" (p. 131 ff.) as well as in the Declaration of Corporate Management 2019 of the EnBW Group and EnBW AG including the Corporate Governance Report 2019 and in the Report of the Supervisory Board (www.enbw.com/corporate-governance).

Annual General Meeting

Shareholders exercise their rights with regard to company matters at the Annual General Meeting. The Annual General Meeting passes resolutions on the discharge of Board of Management and Supervisory Board members, the appropriation of earnings and selection of the auditor. Resolutions of the Annual General Meeting only require a simple majority of votes in most cases. Each bearer share is equivalent to one vote. Further information on the Annual General Meeting is available at http://hv.enbw.com.

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 2019 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.

Compliance

Compliance management systems

Natural 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 compliance management systems (CMS) and functions of EnBW 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 CMS is continuously examined and updated internally as part of the audit or by the compliance organisation itself. It covers the directly controlled companies. The department's activities focus on the prevention, detection and sanctioning of corruption, the prevention of violations against competition and antitrust laws, the prevention of money laundering and data protection – which falls under the area of compliance and data protection at EnBW. In the reporting year, there were 29 companies directly integrated into the CMS from a compliance perspective. New companies are integrated into the CMS using a risk-based approach.

Companies indirectly integrated into the CMS of EnBW have their own CMS. Relevant participating interests held by these companies are also integrated into their CMS. Two companies in the ED Group were integrated into the CMS for Energiedienst (ED), while four subsidiaries have independent control over compliance. Seven companies with employees were integrated into the CMS at Pražská energetika (PRE), three at Stadtwerke Düsseldorf (SWD), two at ZEAG and 19 at the VNG Group.

We want to safeguard our commercial success by combating compliance risks – especially corruption and bribery. Preventative risk assessment methods, advisory services and training concepts have been set up at EnBW, the compliance-relevant companies and the ITOs (Independent Transmission Operator) (Glossary, from p. 139).

Activities this year

Face-to-face training courses were held in relevant areas in 2019. The focus across the Group was placed on **training** the large group of employees with assistant or secretarial functions, as well as EnKK. In addition, face-to-face training courses on antitrust law were held in other sensitive areas of the company. The completion of an e-learning course or participation in face-to-face introductory training courses is obligatory for new EnBW employees. All of the indirectly integrated companies held training courses to increase awareness amongst employees. The companies were able to choose whether to use either **face-to-face or online training courses.**

Number of participants in face-to-face compliance training events[1]

1 At EnBW AG and directly integrated companies.

EnBW holds a **compliance day** every year. The event was held on 27 November 2019 in Karlsruhe and provided the around 110 participants with a varied programme including motivational talks and workshops. In line with the motto of "responsibility", the importance of taking independent action with respect to compliance at a company was emphasised.

The integration of the companies that were newly acquired in the reporting period is currently in progress.

The annual **compliance risk assessments** at EnBW investigate the corruption, antitrust, fraud and data protection risks and form the basis for the work relating to compliance and data protection. In 2019, they were carried out at those companies directly and closely integrated into the CMS. The summary of the material compliance risks is contained in the "Report on opportunities and risks" (p. 103 and 106). Such risks are also systematically identified in the indirectly integrated companies and the ITOs.

The **advisory services** offered by the EnBW compliance department are available to companies directly integrated into the CMS and represent another key element of prevention. They were also highly utilised in 2019. These services include a compliance hotline, which can be contacted in person, by e-mail or telephone. In 2019, the compliance hotline received around 1,250 enquiries relating to the key issues of gifts, donations and sponsoring, as well as to further topics such as conflicts of interest and the auditing of business partners. The advisory services dealing with compliance themes at the indirectly integrated companies have also been used to good effect.

Compliance breaches

EnBW and the directly integrated companies have established reporting channels via which internal, and also external, whistle-blowers can report suspected cases while remaining anonymous. Alongside EnBW, the companies ED, PRE, SWD and TransnetBW have also established a whistle-blower system.

In the reporting year, there were nine breaches at directly integrated companies although none of them were material breaches. There was one compliance breach each at terranets bw and TransnetBW in the reporting year, while one suspected case at VNG proved to be well-founded. There were two compliance breaches at PRE. There was no evidence of any cases of corruption.

The EnBW Group faced neither antitrust law penalty procedures nor third-party antitrust lawsuits in the 2019 financial year. Law enforcement agency investigations of individual employees and former members of corporate bodies relating to the so-called Russian deals and sales tax carousel in CO_2 allowance trading (Glossary, from p. 139) were continued in 2019. It is not possible to say at the present time when these proceedings will end.

Data Protection

The EU General Data Protection Regulation (GDPR) has resulted in greater awareness of data protection issues. The resulting demand for advice was covered by the compliance department. The new e-training course developed in 2018 was made obligatory also in 2019 for all employees with access to the e-training course. Employees in sensitive areas were trained accordingly in face-to-face training courses. In addition, the range of information made available online is being improved continuously. As the data subjects have now been afforded more rights by the GDPR, a large number of requests for information were received in 2019.

In dialogue with our stakeholders

Our stakeholders

Continuous and systematic dialogue with our internal and external stakeholders is an important element for determining key issues as part of our business activities. The most important stakeholder groups include shareholders and the capital market, employees, customers, local authorities and municipal utilities, society and environment, suppliers, business partners, the political community and the media. A fundamental aspect of our dialogue with stakeholders is the identification and prioritisation of stakeholder groups relevant to strategically significant and current issues, particularly with regards to the Energiewende and mobility transition.

This dialogue is conducted using a variety of communication channels ranging from conferences to social media platforms. In direct dialogue with our stakeholders, we listen to their interests and their expectations of EnBW. This information is taken into account in the decision-making process for the strategic positioning of the company and when making business decisions. At the same time, we inform important stakeholders about the company's needs and the prerequisites for providing an efficient, reliable and sustainable supply of energy. As part of this dialogue, it is also important for us to listen to critical opinions such as those expressed at events held by our Energy & Climate Protection Foundation. It is our belief that mutual understanding, social acceptance and trust are increased further through this purposeful exchange of insights and perspectives. In addition, it can also help us to identify central developments and key topics at an early stage.

Materiality analysis

We have continuously expanded our processes over the last few years for identifying material topics and linking them simultaneously with the development of the company's strategy. Material aspects are determined via the framework provided by the International Integrated Reporting Council (IIRC), as well as in accordance with the GRI standards for sustainability reporting issued by the Global Reporting Initiative (GRI). Other current developments flow into the determination of future key issues, such as the work of the Task Force on Climate-related Financial Disclosures (TCFD) (Glossary, from p. 139) on climate-related risk reporting.

On the one hand, topics are considered material if they have a significant influence on long-term value added and thus the performance and future viability of our company. Contributions to the strategic orientation as a sustainable and innovative infrastructure partner are of particular importance in this context. On the other hand, aspects reflecting any important economic, environmental and social impacts the organisation may have and that significantly influence the perception of stakeholders are also taken into account.

Material themes are continuously implemented in the functional and business units, as well as in the individual companies of EnBW. In addition, the findings from the materiality analysis flow into, for example, the strategy process and stakeholder management.

The materiality analysis process comprises three steps: the creation of an overview of the themes relevant to strategy and communication, the development of a list of themes relevant from the perspective of sustainability and the derivation of material themes from the reputation analysis. During each step of the process, the themes identified were continuously compared to the key themes that were dealt with by the Supervisory Board in the reporting year. Every step leads to a distinct prioritisation of themes and ultimately to a final list of the top themes that can be allocated to the categories of transformation of the portfolio, growth and sustainability.

The **transformation of the portfolio** is shaped by the following themes:

- **Expansion of renewable energies:** Completion and commissioning of the offshore wind farms EnBW Hohe See in 2019 and EnBW Albatros in January 2020 with a total capacity of 609 MW (p. 70 and 76). In addition, the final investment decision for construction of the Weesow-Willmersdorf solar park in Brandenburg was taken – we will thus realise the first major solar project with an installed capacity of more than 180 MW without EEG funding (p. 99).
- **Supply reliability:** The subsidiaries of EnBW will continue to guarantee a high level of supply reliability in their grid areas and for their customers through the gradual modernisation of the distribution grids for electricity (p. 83).
- **Infrastructure provider:** We are continuously expanding electromobility through the further development of the charging infrastructure (Glossary, from p. 139), also together with national and international cooperation partners (p. 82).
- **Dismantling of nuclear power plants:** The environmentally friendly dismantling of the nuclear power plants is gradually being implemented. The Philippsburg nuclear power plant was shut down for good on 31 December 2019. Our stakeholders are regularly informed about the progress (p. 54 and 67).

The following themes are material in the three strategic business fields in the **growth** category:

- **Smart infrastructure for customers:**
  - We achieved a significant step in the expansion of our telecommunications business with the acquisition of Plusnet (p. 82).
  - We reorganised our IT and process landscape for sales and aligned it to meet the individual requirements of customers in the EnPower digitalisation project (p. 81).
- **System critical infrastructure:**
  - The expansion of the distribution grid for the integration of renewable energies is a key aspect for the success of the Energiewende for us and our grid subsidiaries (p. 43).
  - The transmission system operator TransnetBW is developing the transmission grids to bring wind energy from the north to the south in the SuedLink and ULTRANET grid expansion projects (p. 43).
- **Sustainable generation infrastructure:**
  - We are pursuing the goal of expanding renewable energies in France and exploiting opportunities for growth with the acquisition of the French project developer and operator of wind farms and solar parks Valeco (p. 43).
  - As part of our selective internationalisation strategy, we opened a representative office in Taiwan and two offices in the USA in 2019. The main focus in both countries is the expansion of offshore wind power (p. 38).

Sustainability is an integral component of our Group strategy (p. 41 ff.). The sustainability concept is aligned with the strategic guiding principles of the company and defines areas of action, targets and measures. Areas of action include, amongst others, the expansion of renewable energies, guaranteeing a reliable supply and increasing employee commitment. The concept takes into account external demands for sustainable corporate activities, derived from leading sustainability standards and ratings, as well as the integration of ecological and social aspects into the operating business. This process is oriented towards the strategic principles with respect to sustainability:

- **Sustainable economic development:** We endeavour to conduct all of our activities in a sustainable way, from the responsible procurement of raw materials (p. 60 f.) through to the provision of smart energy solutions for our customers (p. 81 f.). In addition, we are actively involved in the area of sustainable finance, which is exemplified by, amongst other things, the membership of our Chief Financial Officer, Thomas Kusterer, in the Technical Expert Group on Sustainable Finance (TEG) (Glossary, from p. 139) and his position on the Task Force on Climate-related Financial Disclosures (TCFD) (Glossary, from p. 139) (p. 63). As part of the cooperation in these climate protection initiatives, he regularly reports to internal bodies on climate-related opportunities and risks.
- **Climate and environmental protection:** We continue to advocate the setting of a national minimum price for CO_2 emissions in the European Emissions Trading System with moderate increases in price over time. This would provide all those involved with planning security, especially for the expansion of renewable energies. We make an important contribution to climate protection through our significant investment in climate-friendly projects and business models (p. 63 and 74).
- **Commitment to our stakeholders and willingness to engage in dialogue:** We are actively integrating our stakeholders into the energy world of the future – by providing comprehensive information and opportunities for dialogue, such as the Energy & Climate Protection Foundation (p. 51).
- **Customer proximity:** In order to fulfil the needs of our customers to an even better extent, we develop innovative products such as in the area of telecommunications (p. 82) or the supply of climate-friendly gas (p. 56).
- **Commitment to our employees:** We want to ensure that the people at EnBW as well as our company have the opportunity for growth, development and a future (p. 85). We provide our employees with attractive offers, for example, in the areas of healthcare, pension provision and climate-friendly mobility (p. 83 ff.).
- **Regional roots:** Our roots lie in Baden-Württemberg and we recognise our special responsibility to this region – by investing in existing infrastructure (p. 76) and also through our voluntary and charitable work (p. 53 f.).

Sustainability ratings

We maintain close contacts with leading sustainability rating agencies and take their analyses and evaluations of the corporate strategy, the company situation and its business prospects into account in our decision-making process. In the selection of agencies, the main focus is placed on, amongst other things, transparent and plausible evaluations and efficient working processes between the rating agencies, companies, investors and sustainability analysts. EnBW strives to continuously improve its ratings from recognised 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. We were able to maintain our above-average results within the energy sector for important sustainability ratings in 2019.

Current sustainability ratings

	CDP	ISS ESG	MSCI	Sustainalytics
Earnings	B/Management (2019)	B- (2019)/Prime[1]	AA (2019)	77 (2019)/Outperformer
Scale	A to D-	A+ to D-	AAA to CCC	0 to 100
Relative position	"Electric Utilities" sector globally: EnBW achieved a place in the top 25%.	"Utilities/Multi Utilities" sector globally: EnBW achieved a place in the top 10%.	"Utilities" sector globally: EnBW achieved a place in the top 24%.	"Utilities" sector globally: EnBW achieved a place in the top 14%.
Evaluation focus	Climate aspects	Social, governance and environmental aspects	Social, governance and environmental aspects	Social, governance and environmental aspects

1 The ratings were last updated on 21/12/2018. As of 31/12/2019, EnBW still held Grade B- and Prime status.

Further information on the sustainability ratings is available at www.enbw.com/sustainability. Further details on non-financial performance indicators are presented on p. 81 ff., while information on the financial ratings from the rating agencies Moody's, Standard & Poor's and Fitch can be found on p. 72 f.

Social engagement

We are acutely aware of our responsibility towards society. Our commitment to addressing the concerns and interests of society focuses on the target groups of end customers, business partners and local authorities within our primary business sphere of influence in Baden-Württemberg. Support for superordinate social issues is concentrated on the **core areas** of popular sport, education, social issues, the environment and art and culture.

The Group guidelines on corporate sponsoring, memberships, donations and involvement with universities govern the goals, responsibilities, standards, principles and processes for all companies in which EnBW AG holds a majority of either the shares or voting rights. **Donations** are documented on a yearly basis in the donation report that is presented to the Board of Management. In 2019, donations made by the EnBW Group came to €3.6 million, following €2.2 million in the previous year. Donations worth €1.8 million (2018: €604,000) were attributable to EnBW AG. The increase at both an EnBW AG and Group level was mainly attributable to donations made to foundations that are actively involved in our current and also future business fields. In addition, Netzte BW has been requesting that customers submit their electricity meter readings electronically rather than by post since 2018. The postage saved was donated to numerous charitable organisations in the respective communities in 2019.

In 2019, **Pražská energetika (PRE)** supported the Charta 77 Foundation – Barriers Account – and the Jedlička Institute, which provides apprenticeships and social services for physically handicapped young people. **Stadtwerke Düsseldorf (SWD)** has helped schools with the task of guiding young people towards a career for many years. In addition, it participates in interschool competitions such as the "Düsseldorf School Prize" for outstanding school projects focussing on social, health or cultural topics. SWD makes a Christmas donation to four charitable associations in Düsseldorf that are selected each year. Through the VNG Foundation, **VNG** supports the "Network of Warmth" that promotes charitable work in Germany and the internationally renowned children's music project "OPEN WORLD" in Leipzig for German-Russian cultural exchange. The VNG subsidiary ONTRAS Gastransport supports charitable projects from associations and initiatives via its "ONTRAS.Stadtbekannt" programme and has participated in the "Foundation for volunteering and civic involvement in Mecklenburg-West Pomerania" since 2018.

The EnBW Board of Management decided a number of years ago not to send Christmas gifts to business partners but instead to make donations to social projects in Baden-Württemberg. As part of the **Christmas donations** in 2019, a total of €32,000 was given to eight charitable campaigns or campaigns initiated by readers of regional newspapers in Baden-Württemberg.

As part of the EnBW project "We're making it happen" (www.enbw.com/wir-machen-das-schon), EnBW AG also supported social or charitable projects with the **Making it happen bus** in 2019. Further information on this subject can be found at www.enbw.com/macherbus.

EnBW AG regularly offers young artists space in its buildings for their **exhibitions.** The "Jahresgaben" (Annual Gifts) exhibition from release Stuttgart e. V. has been a guest of ours for 20 years. The concept behind this sales exhibition is to give young and well-known artists the opportunity to present their works of art. The artists receive 50% of the sales proceeds for their work, while the other 50% goes to fund the work carried out by release Stuttgart e. V. This association based in Stuttgart is a reputable institution that provides help and advice to people with drug-related problems.

The immigration of refugees into Germany remains a major social, political and economic challenge. We already developed a training concept for refugees in 2015, with the goal of providing sustainable support with an eye to the future for the people affected. We have been running a multi-stage **career integration programme** since 2016. Since the beginning of 2019, 74 participants have been introduced to technical careers in introductory days and work placements during the first stage. A total of 41 participants then took part in the second stage from September 2019 to obtain an introductory qualification. In the third stage, 17 participants from last year's programme have been training for an IHK-certified technical profession in dual vocational training since September 2019.

The **"Let's Volunteer" initiative** was launched in 2019. This initiative supports employees who volunteer in their local communities by giving two employees €1,000 to donate to a charitable association each month.

We also refer you to the details provided in the "Report on opportunities and risks" (p. 103).

Dialogue with citizens

The **expansion of renewable energies** is an important goal that we are pursuing with great commitment. We plan, construct and operate wind farms and photovoltaic power plants in direct partnership with or with the participation of local authorities and citizens. At various sites, we offer free tours for visitors and visitor groups throughout the year.

In the **expansion of the transmission grids** for the purpose of connecting up renewable energies, the central infrastructure projects SuedLink and ULTRANET of our subsidiary TransnetBW are at the focus of public attention. There is a comprehensive range of opportunities for citizens to participate in both projects, e.g. in the form of public events held in the federal states and districts affected by the plans.

In October 2019, we also informed citizens about the expansion plans for the **pump storage power plant** in Forbach as part of a public consultation for citizens. Netze BW held a public information event in April about the planned construction of a new 110 kV **transformer station** in Tiefenbronn and also participated in the public consultations organised by the regional council for the 110 kV **grid expansion projects** in Ellwangen and Rot am See.

In 2020, we have ceased our operations at the **Stöckach site** in the east of Stuttgart and have thus created space for urban development. As a company with majority public ownership and a long history in Stuttgart, EnBW wants to make a contribution to affordable and innovative living. It wants to develop the new Stöckach site (www.der-neue-stoeckach.de) itself. The site will be used to construct up to 800 apartments with a total of at least 60,000 m² of living space, of which up to 40% will be subsidised housing. We plan to create opportunities for social interaction, leisure, local supply structures, health, energy supplies and mobility – supported by technological solutions. The participation of citizens will continue to play a central role in the project: Ideas from a series of workshops for citizens flowed into the urban planning competition that was concluded at the end of 2019.

Alongside economic and technical aspects, the Energiewende and the associated phasing out of nuclear energy also encompass elements of social responsibility. We unequivocally assume responsibility for the safe **dismantling** of the nuclear power plants we operate. Dialogue with the local population includes, for example, the annual information days on the dismantling work – an established platform that we used for the seventh time in 2019. Any interested citizens were invited to attend the events held at the sites in Philippsburg, Neckarwestheim and Obrigheim. In addition, those responsible for the dismantling work were available to answer questions at public meetings of the municipal councils, public hearings and information events. There was also dialogue with many citizens and functionaries who took part in the visitor tours at the nuclear power plants in 2019.

In dialogue with our stakeholders

Selected activities in dialogue with our stakeholders

Stakeholder	Opportunity for dialogue	Main themes	Further information
Shareholders/ capital market	Financial reports	Financial and non-financial performance of the company	www.enbw.com/financial-publications
	Annual General Meeting	Dialogue with shareholders	http://hv.enbw.com
	Telephone conferences/ discussions with analysts and investors	Corporate economic development, positioning on capital market	www.enbw.com/conferencecall www.enbw.com/investor-update
	Bankers' Day and Capital Market Day	Latest developments at EnBW and in the energy sector	www.enbw.com/bankersday www.enbw.com/capital-markets-day
Employees	Employee communication	New social Intranet, Yammer, four events by "EnBW aktuell", "Team" employee magazine	
	Compliance Day	Varied programme on the theme of "Responsibility" with around 100 participants	page 50
	Diversity campaigns	Diversity Week, Diversity Days, women's network meeting, participation in Christopher Street Day	page 84 www.csd-stuttgart.de
	"Let's Volunteer" initiative	Supporting the social engagement of employees	page 54
	"Making it happen" bus campaign	Employees of EnBW support social and charitable projects	page 53 www.enbw.com/macherbus
Customers	Participation in trade fairs and congresses	"Aktionstag Elektromobilität", Hannover Messe, Flotte! The sector meeting place, Intercharge Network Conference, KEA Contracting Congress, EXPO REAL, etc.	
	Platforms for dialogue and discussion with customers	E.g. customer interviews and energy efficiency networks with seven meetings with various themes	
	Customer magazine, customer blog, social media channels, newsletter and local presence	Information on latest news, products, services and events from EnBW	www.twitter.com/enbw www.facebook.com/enbw www.enbw.com/blog
	Customer blog, social media channels, newsletter, Yello campaign "Expect more"	Information on latest news, offers and services from Yello	www.facebook.com/yello.de instagram.com/yello_de https://youtube.com/yellostrom
Local authorities/ public utilities	Meeting of the regional advisory council	Invitation of a total of around 600 local authorities to eleven meetings of the regional advisory council	
	Meeting of the heads of public utilities	Specialist talks on current themes in the energy industry, e.g. e-mobility, district development	
Society/ environment	Climate protection campaigns	Discussion with the "Fridays for Future" movement, 1st Alumni Day for Junge Stiftung, employee campaign "EnBW'ers for climate protection"	www.energie-klimaschutz.de
	Energy on Tour	Educational project on the energy supply of the future for high schools	www.enbw.com/energie-auf-tour
	Tours, information and open days	More than 30,000 visitors to EnBW info centres and events at power plants	www.enbw.com/besichtigungen
	Biodiversity: funding programme "Stimuli for Diversity"	Realisation of further nine funding projects in the reporting year	page 90 www.enbw.com/biodiversitaet
	Stöckach Ideas Room	Information office and campaigns for the future use of the Stöckach site for interested citizens	www.der-neue-stoeckach.de
Suppliers/ business partners	Dialogue on handling coal procurement responsibly	Study on the working and living conditions in the Cesar coal mining region in Colombia, EnBW delegation visits Russia	page 60 f. www.enbw.com/responsible-coal-procurement
	AUGENHÖHEcamp #Companies in Karlsruhe	The Innovation Campus is the host for the unconference for organisations undergoing change	www.augenhoehe-ka.de
Politics/media	Discussion events on energy industry and climate protection topics	Urban Mobility Talks 2019, five debate evenings, cooperation events: "The future of mobility", presentation of the "Berghülen Solar Park" project	www.energie-klimaschutz.de
	EnBW Energy and Business Club (EWC)	Events on the themes: results from the structural change commission and the effects on the sector, expansion of renewable energies	
	Active and transparent communication via the media	Major articles in daily newspapers and magazines such as "Spiegel", "Süddeutsche Zeitung", "taz" or "ZEIT" and via social media channels; presentations at the Handelsblatt Conference and the BDEW Congress	www.enbw.com www.twitter.com/enbw www.facebook.com/enbw

Research, development and innovation

Research and development: Goals, guidelines and processes

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 in many cases to inventions and patents. The portfolio of patents grew by 36 patents (previous year: 25) in 2019; the EnBW Group held 244 patents (previous year: 208) at the end of the year. The patents held by EnBW focus mainly on the areas of smart solutions and electromobility.

Research and development: 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 exploit the wind power potential in deeper waters. In cooperation with partners, we are investigating several different concepts for floating offshore wind farm projects that would be suitable for opening up new international offshore wind energy regions. We signed a technology partnership agreement with the engineering company aerodyn based in northern Germany at the end of 2019. Together, the partners will realise a novel design for floating wind turbines that offers the potential for cost savings because of the way it is constructed. The small-scale test that began in 2020 in Germany has immediately led to a test under real conditions, which will be carried out by the Chinese renewable technologies company Ming Yang from Shanghai. We want to develop another floating platform concept in cooperation with European partners and construct a pilot plant in Europe. The two demonstration projects will help us to identify which type of floating platform is especially suited for future projects.

In addition, we are a member of a consortium that is designing a prototype for an offshore power plant with an output of more than 10 MW and aims to construct it as a pilot plant with funding from the EU. Following the insolvency of Senvion, General Electric has joined the consortium and the project is being continued.

Photovoltaics: The University of Stuttgart has developed a laser process that enables the inexpensive production of non-toxic silicon solar cells with a high level of efficiency. We have been participating in this research project funded by the federal government since August 2017 and founded our subsidiary EnPV in December 2017 to prepare for the commercialisation of the results. EnPV investigated the industrial feasibility of the process in cooperation with factory outfitters in 2019. It is expected that it will then be possible to produce non-toxic PV modules at a cost that is commercially viable in comparison to current market prices. Some outstanding issues relating to individual steps of the patented process will be evaluated in 2020 so that it can be demonstrated in a pilot factory on industrial machines.

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 partners, such as local authorities, in decarbonising their heating networks using geothermal energy. A project in Bruchsal has now come to fruition: The heating supply for a police station from the nearby geothermal power plant was inaugurated on 4 December 2019. We gained our experience in the provision of heating from geothermal energy through partnerships, in which we and our partners planned and constructed the geothermal power plants in Bruchsal (since 2012) and Soultz, France, (since 2016) and still operate them today.

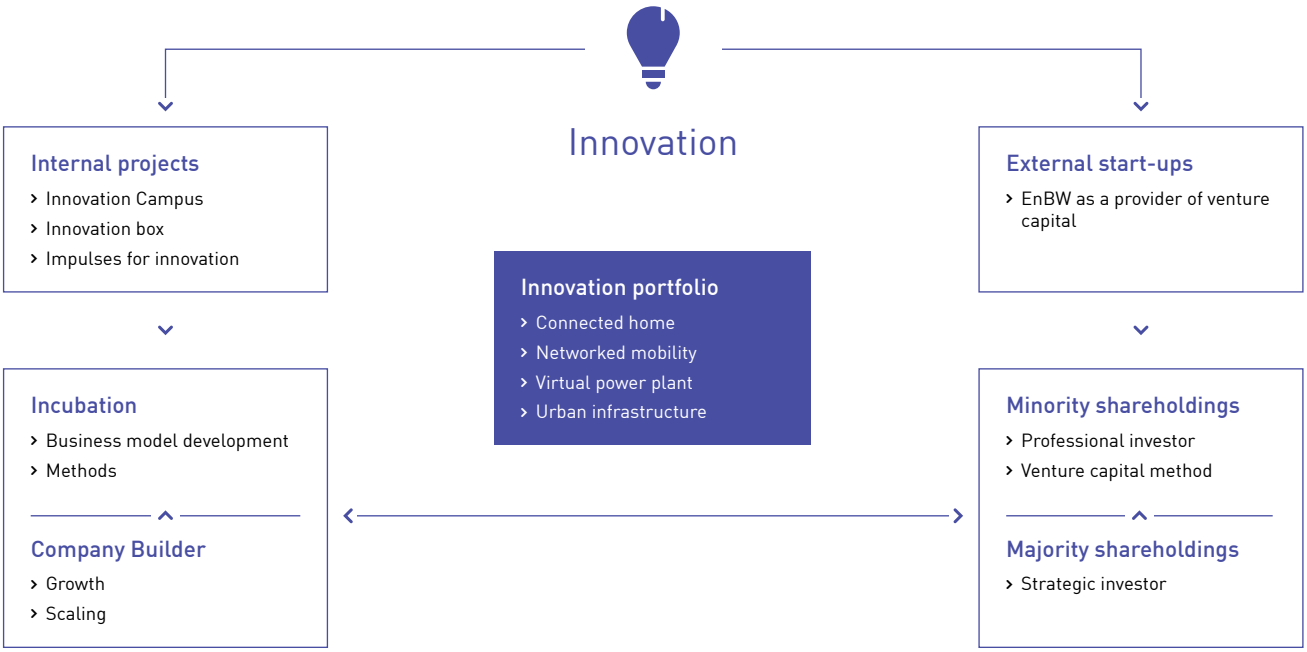
Green gases and hydrogen: We also want to provide our customers with carbon-neutral gaseous energy sources in the long term. The experience gained from various pilot and demonstration projects will help us achieve this. Since the beginning of 2020, our subsidiary ZEAG has been generating green hydrogen with the aid of state funding. It is using a 1 MW PEM electrolyser (PEM = proton exchange membrane) that directly converts electricity from the "Harthäuser Wald" wind farm into green hydrogen. Our subsidiary Energiedienst Holding (ED) already opened an alkaline hydrogen electrolysis plant with an electrical output of 1 MW in Wyhlen in November 2018 – operated with green hydropower. In 2019, ED had its bid to expand the plant to up to 5 MW accepted as part of the "Reallabore" tender process of the German Federal Ministry for Economic Affairs and Energy (BMWi), with the aim of supplying districts, industrial premises and customers with hydrogen produced from electricity for their mobility needs. The project is due to start in 2020.

New technologies for the charging infrastructure (Glossary, from p. 139): Following preliminary studies, we will demonstrate a new method for contactless charging during journeys and test its suitability for everyday use in 2020. To this end, we entered into partnership in December 2019 with the young company ElectReon from Israel, which has developed an induction system for roads. It will be used for the first time on a test track in Baden-Württemberg. We are investigating how to speed up conventional charging without damaging the batteries using a special vehicle and a charging station with a capacity of up to 320 kW.

Load management for electromobility: The "E-Mobility Avenue" project carried out by Netze BW in Ostfildern near Stuttgart ended in October 2019. The aim was to test the impact of the broad use of electromobility on the electricity grid. For this purpose, ten households on one street were provided with e-cars and the required charging infrastructure (Glossary, from p. 139). Netze BW believes that the results demonstrate that the challenges faced by the distribution grid operators as a result of the ramping up of electromobility can be overcome. In particular, the project showed that there is great potential for both smart load management to avoid bottlenecks and the temporary use of different types of battery storage systems to reduce the load on the grid. In addition, it was possible to gain valuable insights into the charging and user behaviour of drivers of electric cars. Follow-up projects in Tamm ("E-Mobility-Carré", p. 58) and a test field in a rural setting ("E-Mobility-Chaussee") have been launched.

Innovation management: Goals, guidelines and processes

The innovation process at EnBW



We develop new business models outside of our core business using the central innovation management department in order to quickly identify new sources of revenue and bring them to the market. The **innovation strategy** focuses on two main approaches: the generation and scaling up of new business models within the company in internal and external projects and investments in external start-ups by EnBW New Ventures.

Alongside the development of new business models and supporting start-up projects during the incubation phase, innovation management also accompanies mature projects during their growth phase with the **Company Builder**. In the reporting year, the focus was primarily placed on professionalising processes and scaling up existing projects. Following the successful development of new business models, the start-up teams then face further challenges in the growth and scaling-up phase. In order to efficiently support the teams and their growth, the Company Builder provides start-ups with additional skills in the form of controlling, sales and marketing experts.

EnBW New Ventures invests in start-ups that develop digital solutions for infrastructures. It focuses on companies who realise value added through scalable business models and new technologies. The aim is to use the total available investment volume of €100 million to secure minority shareholdings of between 10% and 30% in up to 20 start-ups, with an investment period of four to eight years in each case. EnBW New Ventures plays the role of an active investor, supports the start-ups as a business coach or kind of "sparring partner" and is represented on their boards. The start-ups receive access to professional investor expertise via EnBW New Ventures. In addition, commercial cooperation with the operating units at EnBW is also possible.

In future, EnBW will also secure majority shareholdings in quickly growing mature companies with the aim of achieving substantial growth.

Innovation: Selected activities

A successful early start-up from our idea factory is **ChargeHere,** which offers inexpensive charging infrastructure solutions for car parks and large parking facilities to promote the further expansion of electromobility. Instead of equipping every parking space with its own wallbox, the solution from ChargeHere only requires a central switching cabinet from which the charging cables are laid to the individual parking spaces. The concept also enables optimised, dynamic load management and controlled charging of the vehicles. ChargeHere is now in the growth phase and has twelve employees. We are also using ChargeHere to expand the charging infrastructure (Glossary, from p. 139) at our own sites; a total of 264 charging points were installed at six large sites in 2019. ChargeHere is also participating in the iLIME project (smart charging infrastructure management for e-mobility), which is being supported by the Ministry for the Environment, Climate Protection and the Energy Industry, Baden-Württemberg. In cooperation with its partners, ChargeHere is developing a concept in the project for a multi-level smart load management system for e-mobility. The ChargeHere charging solution with dynamic load management has also been used since autumn 2019 at a housing estate with apartment buildings and shared underground parking facilities in Tamm. Around two thirds of the parking spaces in this "NETZlabor E-Mobility-Carré" were equipped with ChargeHere charging points for a practical test to examine the best way to integrate electromobility into an existing grid infrastructure.

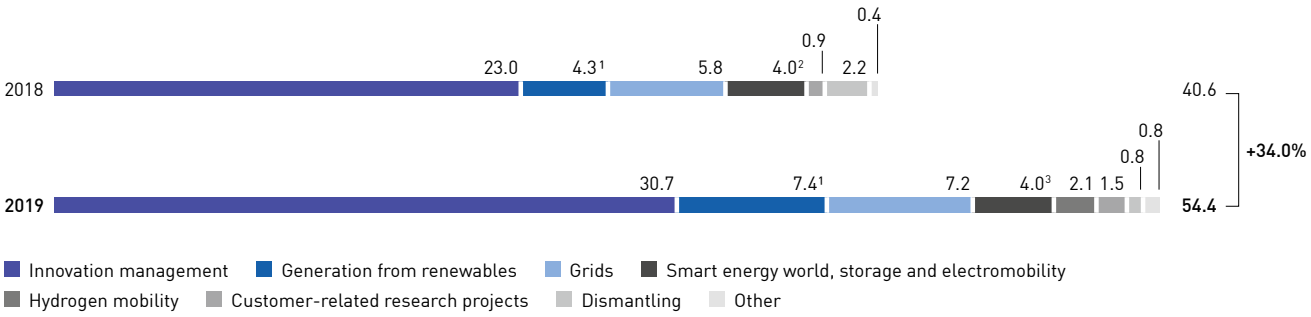
SMIGHT was one of our first start-ups and was able to continue its positive growth in 2019. Originally founded as a supplier of smart, multifunctional street lights, SMIGHT has since changed its business model significantly. As well as recording traffic flows in medium-sized German cities using sensors installed on existing street lights, it is increasingly focusing on the target group of distribution grid operators. A smart electricity sensor has been developed for these customers that supplies real time data about the actual grid load and thus supports the needs-based expansion of the grid. The first major customer was Netze BW, which has equipped 550 local transformer stations with the SMIGHT Grid electricity sensor. This has created 18,000 measurement points. Alongside traffic solutions, the grid sensor business remains a lucrative second pillar for SMIGHT.

The **Virtual Power Plant** (Glossary, from p. 139) is another mature start-up from the Company Builder. It collects and bundles together the renewable energy from smaller decentralised power plants such as wind turbines, photovoltaic plants or biomass power plants via its digital platform. The volumes of electricity that are collected are then sold on the electricity market. At the same time, the Virtual Power Plant also supplies consumers such as commercial customers or our quick-charging stations. It is growing constantly with the addition of new plant operators and cooperation partners. Electricity producers benefit from the fact that they have a competent partner to handle the sale and remuneration of the green energy. The Virtual Power Plant was founded in 2016 and has since developed into an established supplier on the market with around 30 employees and more than 1,000 customers. In 2019, we upgraded the Virtual Power Plant from an innovation project to a Micro Business Unit – a company within the company. Micro Business Units are mature projects that have already generated their first sales with a marketable business model.

Expenditure and personnel

We spent €54.4 million (previous year: €40.6 million) on research, development and innovation in the 2019 financial year. The increase was primarily due to the growth in innovation management; the corresponding sales increased to €11.1 million (previous year: €6.4 million). We received government research grants of €0.9 million (previous year: €2.3 million). There were 81 employees (previous year: 63) in the areas of research, development and innovation in 2019. 236 employees (previous year: 169 employees) were involved in research and development projects as part of their operational work. A further 130 employees (previous year: 110) were involved in innovation projects.

Expenditure on research, development and innovation
in € million



1 Also includes green gases.
2 Includes hydrogen mobility.
3 Excluding hydrogen mobility.

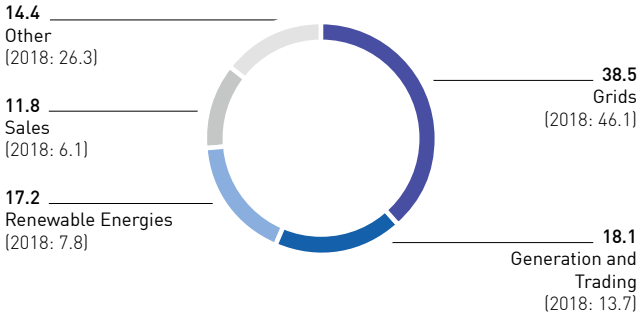
Procurement

Efficient and sustainable procurement processes

Our purchasing department views itself as a **partner for generating added value within the Group.** Its goal is to ensure the supply of materials and services at the best possible quality/cost ratio and thus strengthen the competitiveness of the company. We place great emphasis on the efficient design of our procurement processes for achieving cost-effective purchasing results, as well as on sustainable procurement taking into account the requirements of national laws, EU law and the Group's internal guidelines. In order to manage the procurement processes, a system using various different performance indicators is used. It continually delivers a realistic picture of the current situation in purchasing and enables a comparison of the target and actual situation, as well as the prompt implementation of control measures.

The **procurement volume** of the EnBW Group in 2019 (without ITOs) (Glossary, from p. 139) amounted to around €2.8 billion (previous year: around €2.5 billion).

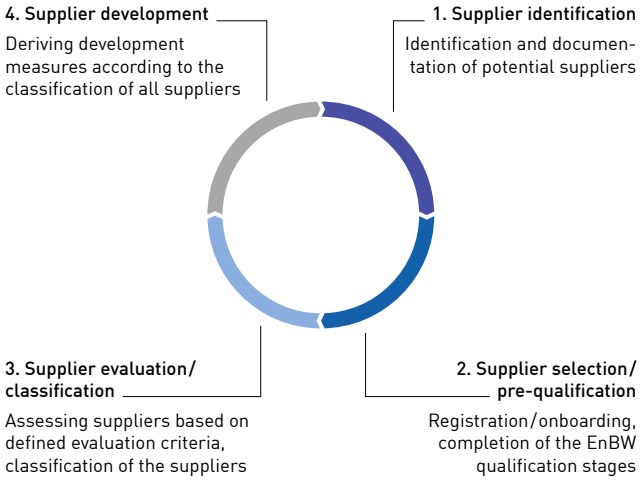
Procurement volumes of the EnBW Group by segment
in %



A large number of suppliers and service providers contribute to the services we render. They play 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 the performance of the suppliers transparent and also makes continuous optimisation in partnership possible. The careful selection of our business partners is a part of our risk management system and supports the observance of legal regulations and internally defined quality standards. Especially with regard to the selective internationalisation of the business, central purchasing is also developing an integrated **supply chain management system** in close cooperation with the business and functional units.

Sustainable procurement begins with the careful selection of business partners. Central purchasing at EnBW AG uses a standardised **pre-qualification process for this purpose.** Suppliers are required to provide a self-assessment via our supplier portal on whether they practise sustainable measures in the areas of data protection, quality management, environmental management, the respect for human rights, the fight against corruption and occupational health and safety. This self-assessment was completed by almost 90% of our suppliers by the end of 2019 (measured by procurement volume). The General Terms of Purchase of the EnBW Group and the additional purchasing regulations regarding occupational safety define other detailed requirements for our suppliers.

Supplier management process



Our **subsidiaries** that are not overseen by central purchasing address non-financial aspects in purchasing using their own mechanisms.

Energiedienst Holding (ED) works together closely with central purchasing at EnBW AG to procure important product groups using joint invitations to tender and framework contracts, as well as in the associated pre-qualification processes. In addition, orders are placed largely with regional suppliers from Germany, Switzerland or neighbouring EU countries.

Purchasing at the companies of **Pražská energetika (PRE)** ensures that suppliers pay social security contributions, settle their tax liabilities and do not engage in money laundering, amongst other things. Potential suppliers must verify their compliance with these aspects by either submitting a sworn declaration or by presenting corresponding certificates when bidding for invitations to tender. The fulfilment of these obligations is also stipulated in supplier contracts.

At **Stadtwerke Düsseldorf (SWD)**, sustainability aspects are anchored in the compliance guidelines, environmental management system manuals and process descriptions. In the area of procurement, SWD pays particular attention to the use of environmentally friendly and sustainable products. It also uses clauses in its supplier contracts as a way to reinforce the fight against corruption and bribery and to ensure observance of labour and social laws.

The fundamental principles for procurement at **VNG** are regulated by a code of conduct, the management handbook and Group guidelines. Aspects such as the prevention of corruption – which is embedded in the compliance management system and environmental protection are – a fixed component of procurement processes.

Responsible raw materials procurement in the coal sector

Origin of coal supplies

Hard coal will continue to play an important role for EnBW as a source of energy to ensure a reliable and economic supply of electricity. A total of 3.16 million t of coal was delivered to our power plants in 2019 (previous year restated: 3.81 million t of coal). This corresponds to a procurement volume of €170 million (previous year: almost €300 million).

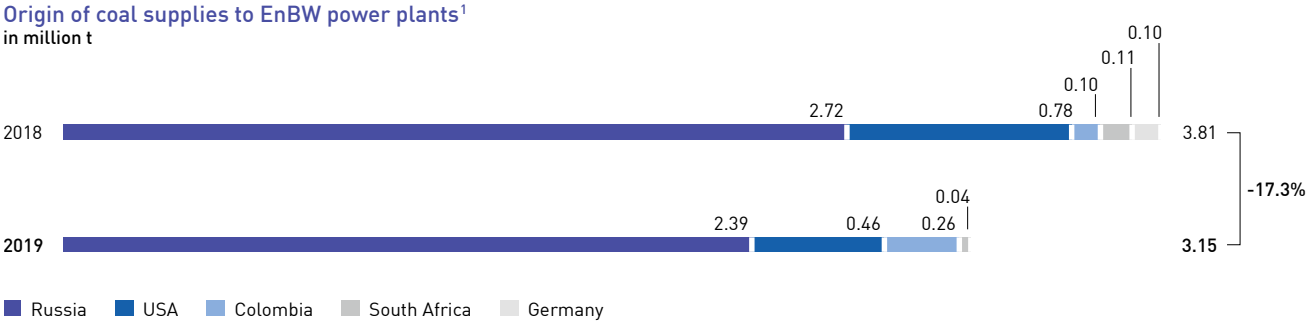
Russia was able to further strengthen its leading position on the generally declining market in Western Europe due to its geographical proximity of the shipping ports. In contrast, Colombian coal has generally become less significant in Western Europe, in particular, because Colombian mining companies have been able to secure higher prices for their coal in America, Asia and the Mediterranean region. Due to these general market developments, we sourced the majority of our coal from Russia and the USA.

We place importance on maintaining a balanced procurement portfolio to avoid becoming dependent on individual producing countries, producers or traders, and the associated price and supply risks. 82% of our coal requirements are covered by contracts held directly with selected producers. The remainder is sourced from contracts concluded with trade intermediaries which generally define a quality standard but not the source of the coal. In addition, we maintain close contacts with other potential producers and traders to avoid any dependency on one single producer.

The Russian coal was sourced from the mining region of the Kuznetsk Basin (Kusbass) and was primarily mined by the producers SUEK and Kuzbassrazrezugol (KRU). The American coal was sourced from underground mines in the Illinois Basin and the northern Appalachians. The main producers were Murray Energy and Consol Energy. The Colombian coal was supplied by the company Drummond. The South African coal was supplied to us as part of a trading contract and was sourced from the Mpumalanga Province.

Further information on our coal procurement is available at www.enbw.com/coal-procurement. The opportunities and risks in relation to procurement and raw materials procurement can be found in the "Report on opportunities and risks" (p. 103).

Origin of coal supplies to EnBW power plants[1]
in million t



1 The figure for the previous year has been restated.

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

In accordance with the Guiding Principles on Business and Human Rights of the United Nations, we strive to procure coal responsibly and thus to fulfil our human rights responsibilities. Due to the special challenges faced in the area of coal procurement, the ongoing CSR performance (Glossary, from p. 139) of current and potential coal suppliers is regularly discussed on the basis of the **EnBW rules of conduct** governing the responsible procurement of hard coal and other raw materials (www.enbw.com/verhaltenskodex) and used to determine any future action, especially requesting further specific information from selected suppliers. The coal suppliers are evaluated on the basis of relevant international standards, such as the UN Global Compact. The latest studies by competitors and international initiatives flow into the evaluation of producers, as do specific information and contributions from civil society organisations.

Our rules of conduct in combination with internal guidelines act as the foundation for our business activities. The annual assessment of coal producers is carried out using the EnBW sustainability index, which covers all areas of the rules of conduct. In addition to regular auditing of the sustainability performance of coal suppliers, a multi-stage auditing process will come into force in the event of suspected breaches of the rules,

which can lead to the termination of the business relationship or exclusion from our procurement process. When new contracts are due to be concluded, the results of the analyses in the sustainability index are discussed with participation from all relevant specialist areas including representatives from the trading, compliance and sustainability departments. Findings from discussions with external stakeholder groups, such as representatives from civil society, legal experts for the individual countries and human rights experts, also flow into these analyses. If any deviations from the minimum standards are identified, corrective measures are implemented in cooperation with the producers for existing supply contracts. In 2019, there were several meetings of these representatives to discuss, in particular, the sustainability performance (Glossary, from p. 139) of the Russian coal producers on the basis of existing findings from the sustainability index, as well as current issues related to the import of raw materials.

Current developments

We have used extended measures to focus particularly on the coal producers from Russia and Colombia in the reporting year.

Russia

Due to the continuous increase in coal imports from Russia, we have also continuously intensified our efforts to fulfil our human rights responsibilities with respect to the Russian coal suppliers over the past three years. In the process, we are able to call on our experience from and the approaches we took in our engagement in Colombia.

We want to obtain better information on the working and living conditions in the mining regions in Russia, continue to strengthen our relationships with stakeholders and clearly communicate our minimum requirements for responsible coal procurement to our coal suppliers. We have thus carried out more in-depth research into the most important coal producers for our Russian coal supplies, sought direct contact with companies with requests for information about selected sustainability issues such as environmental protection and work standards and also carried out a business partner audit of the coal suppliers again in 2019 in cooperation with the compliance department due to enhanced public reporting requirements. In individual cases, we needed to verify the ownership structure and obtain further information about public controversies. For this purpose, we consulted with our competitors in order to increase the level of information on Russian coal producers in the Kusbass region and clarify how we can continue to positively influence the sustainability performance of the producers through dialogue and on-site inspections. Moreover, we are including CSR clauses in all direct business contracts concluded with Russian companies.

In November 2019, EnBW representatives travelled to Moscow and the Kusbass region to discuss sustainability issues with the producers relevant to us, namely SUEK and KRU. We discussed our requirements for occupational safety and compliance and, in particular, environmental protection, resettlement and compensation issues with both governmental and non-governmental players. The itinerary also included a tour of the mines from which we receive our main supplies. This allowed us to gain our own impression of additional measures being taken for water purification and the rules for maintaining an appropriate distance between residential areas and the mines. We were also able to address different solutions for environmental protection and for handling the concerns of residents. There are plans to examine the implementation of further measures in future trips to Russia in 2020 and to revisit the coal suppliers from the Kusbass region from whom we source our coal, so that we can examine the progress being made in respecting human rights along the value added chain.

Colombia

Although imports from Colombia have generally fallen sharply since 2018, we have continued the dialogue with Colombian producers in order to achieve ongoing and long-term improvement in their CSR performance (Glossary, from p. 139). The main focus of the engagement in Colombia was the completion of our previously announced progress and development report. The results presented in this report demonstrate how the Colombian mining companies in the Cesar region have set up and expanded the internal structures for complying with international human rights standards over the last five years. This includes a clear commitment to respecting human rights and internal management systems. The report analyses the most important effects with respect to sustainability along the coal supply chain. The main focus is placed on the areas of occupational safety and health, relationships with unions, resettlement of communities, environmental and health protection and security and combating violence. Overall, the progress and development report shows that the mining companies that were investigated had made progress over the last few years within their sphere of influence, even though there is still a need for these issues to be continuously addressed, also in cooperation with other producers, the government and above all local residents. On the basis of the results of the report, we are working with producers on further plans for action to improve the situation in these mining areas. Some representatives from civil society have criticised the results of the report and terminated their previously constructive dialogue with EnBW about coal procurement. We do not agree with the sweeping accusations that we have played down the severity of the issues and have handled the situation in Colombia uncritically and point instead to the extensive data and facts presented in the report. We are also available for objective dialogue with the NGOs in the future.

Other issues

In addition, we carried out (preliminary) investigations into the sustainability and compliance of producers from various countries with whom we may conclude (liquid) gas contracts in the future. From a sustainability perspective, we have not yet identified any anomalies with those companies with which we currently have an existing contractual relationship that would necessitate a more in-depth investigation into the companies.

Business report

General conditions

Macroeconomic trends

Economies

The global economy slowed down in 2019. The decline in economic growth had an impact on all of the economies relevant to us. The reasons for this slowdown in growth were primarily of a political nature: the trade disputes between the USA and China as well as the EU, uncertainties with respect to the United Kingdom exiting the EU and the threat of military conflict in the Near and Middle East. Structural problems in the automotive industry, which is highly important for the whole economy, also had a negative impact in Germany. In Turkey, the inflow of foreign investment has decreased and the tourism industry has declined due to the increasing political uncertainty.

The economic situation in Europe and Germany is expected to improve slightly in 2020 compared to 2019. This expectation is based on a recovery in foreign demand, primarily from high-growth emerging economies, and easing of the political risks, for example with respect to the trade disputes. The macroeconomic trends are not expected to have a either a particularly positive or negative influence on the business performance of EnBW in 2020.

Development of gross domestic product (GDP)

in %	2020	2019	2018[1]
World	3.4	3.0	3.6
Eurozone	1.4	1.2	1.9
Germany	1.2	0.5	1.5
France	1.3	1.2	1.7
Sweden	1.5	0.9	2.3
Switzerland	1.3	0.8	2.8
Czech Republic	2.6	2.5	3.0
Turkey	3.0	0.2	2.8

1 The figures for the previous year have been restated.

Development of interest rates

Although it appeared for a long time that the US Federal Reserve would increase the base interest rate again, there was a reversal in policy in the summer in the USA. The European Central Bank (ECB) continued its expansive monetary policy against the background of an economic slowdown.

The discount rates applied to company pension provisions and nuclear provisions fell further in 2019 so that the present value of the pension obligations of EnBW, in particular, rose due to interest rate-driven reasons.

The consensus forecast for the ECB interest rate on the main refinancing operations remained unchanged at 0.00%.

Development of the sector and competitive situation

Selection of international, national, regional and new competitors

Established competitors

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

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

New competitors

Commodity suppliers/solution suppliers/start-ups
1&1, bliss.energy, Deutsche Telekom, Fastned, Kesselheld, Lichtblick, NEXT Kraftwerke, Sonnen, stromio

Renewable Energies
BayWa r.e., Encavis, ENERTRAG, PNE Wind, theolia, wpd

Other industries
Daimler, Google, Shell, Tesla, VW/Elli

Financial investors
Capital Stage, KGAL, Talanx

- Main focus on the areas of renewable energies, grids, sales/solutions
- Some specialisation amongst international competitors

- Entry of new market participants increases competition and leads to a deconstruction of the value chain
- New competitors with strong focus/specialisation on one business field

The energy sector is currently experiencing a period of great upheaval. There is particular pressure for change due to the Energiewende. However, digitalisation, sector coupling (Glossary, from p. 139) and the desire of local authorities to become self-sufficient, for example, are also putting the sector under great pressure.

A significant factor is that the energy sector is highly regulated, which means that political policies strongly influence developments in the sector. In particular, this is currently affecting the restructuring of the generation landscape. Most importantly, renewable energies will increase their share of the transport and heating sectors in the long term. The business models of energy supply companies are changing at the same time, while new players from outside the sector are also entering the energy market. This is especially true for the commodity and solutions business. In addition, companies are repositioning themselves along the sector's traditional value chain and specialising in individual business fields.

The RWE subsidiary innogy has been split between E.ON and RWE in a deal that includes asset swaps between the two companies. This is having a major influence on the German and also the European energy market.

Traditional energy supply companies need to re-examine their competitiveness in individual business areas, exploit the potential offered by a changed market environment and align their strategies for the future.

Cross-segment framework conditions

Climate protection

The issue of climate protection is receiving a greater and greater amount of public attention. Clear examples of this can be found in the "Fridays for Future" movement and the results of the European elections.

In Germany, it is anticipated that the national climate targets for 2020 will be missed by a large margin. The climate action package introduced by the German government includes the phase-out of coal power, the introduction of charges for CO_2 emissions in the transport and heating sectors and numerous other measures, such as subsidies to promote electromobility. The aim is to increase the share of gross energy consumption accounted for by renewable energies to 65% by 2030. Despite the new climate protection measures it is, however, still not expected that the 65% target will be achieved – especially in view of the slow expansion of onshore wind energy.

We will continue to advocate the introduction of a minimum CO_2 price in the electricity sector and climate-based reform of the tax, duty and levy systems in order to help steer investment towards climate-friendly technologies.

The EnBW Chief Financial Officer, Thomas Kusterer, is a member of the EU Technical Expert Group on Sustainable Finance (TEG) (Glossary, from p. 139) which is developing a legal framework for sustainable financing opportunities. He is also engaged as a member of the Task Force on Climate-related Financial Disclosures (TCFD) (Glossary, from p. 139) in the development of climate-related risk reporting by companies.

Our strategy of concentrating investment on renewable energies, expanding the grids and developing new and increasingly digitalised business models supports the national climate protection targets and the international efforts for climate protection.

EU Green Deal

The framework conditions for achieving climate neutrality by 2050 are currently being defined at an EU level. At the end of 2018, the European Commission had already presented a revised analysis of possible climate pathways up to 2050. The EU now aims to enshrine the 2050 climate neutrality target, which was announced in its comprehensive Green Deal, into law. In addition, it will continue investigations into the effects of increasing the 2030 climate targets to at least 50% or 55% until autumn 2020 and make corresponding proposals for legislation in 2021. While the climate neutrality target is supported by the European Parliament and all member states except for Poland, and it is, therefore, probable that the legislation will pass quickly, further negotiations on the precise increase to the target for 2030 are expected.

In terms of the framework conditions facing EnBW and other players in the energy industry, further measures are expected as part of the Green Deal in future, such as a revision of the financial instruments and capital market guidelines as well as regulations and measures to decarbonise the gas and transport sectors.

Coal Commission

On 26 January 2019, the Coal Commission presented its final report, on the basis of which the Federal Government prepared a draft law and adopted it in the Federal Cabinet at the end of January 2020. This Act recommends the end of coal-fired power generation in Germany by 2038. German brown and hard coal capacities in the energy industry should be reduced to 15 GW each by 2022 (currently around 42 GW in total) and then to 17 GW in total by 2030. Incentives for the decommissioning of coal power plants should also be created by funding a fuel switch from coal to more climate-friendly energy sources.

The Cabinet decision of the Act deviates from the recommendations of the Coal Commission in some critical points. Due to the "late" decommissioning of brown coal power plants proposed by the law, it is expected that modern hard coal power plants will be removed from the grid relatively early. Negative implications for the operators of hard coal power plants are expected as a result of the intended "early" decommissioning of hard coal capacities without any compensation even for modern power plants.

It is feared that the proposed reform to the Combined Heat and Power Act (KWKG) that was also announced in the legislative package will not deliver sufficient incentives for promoting investment in the conversion of the supply of heating from coal to more climate-friendly fuels. EnBW will advocate that amendments are made to the draft law during the parliamentary process.

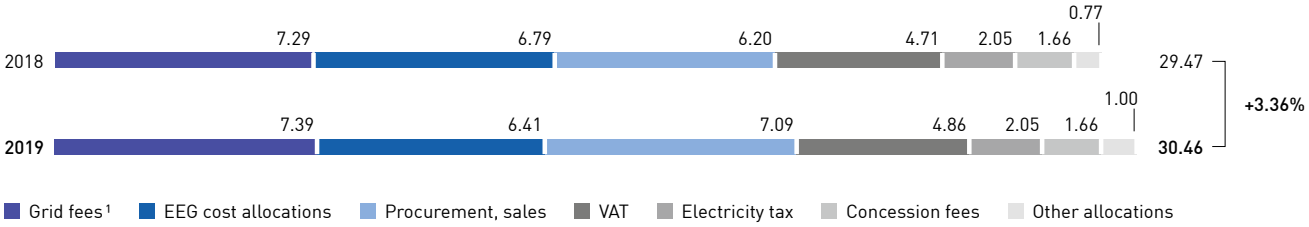
Sales segment

Electricity and gas prices for retail and industrial customers

According to an analysis of electricity prices by the German Association of Energy and Water Industries (BDEW) published in January 2020, the average monthly electricity bill for a household with an annual consumption of 3,500 kWh in 2019 came to €88.84 compared to €85.94 in the previous year. Taxes and levies account for more than half of this amount. EnBW increased the price for the basic supply of electricity by around €37 per year on 1 January 2019. The reason for this was the increased costs for the procurement of electricity. For industrial customers receiving a medium-voltage supply, the average electricity price including electricity taxes increased according to calculations made by BDEW by 2.6%, from 17.96 ct/kWh in the previous year to 18.43 ct/kWh in 2019.

According to calculations by the German Federal Statistical Office, natural gas prices for private households in 2019 rose by 3.9% compared to the previous year; in contrast, the price of gas for industrial customers fell by 7.5%.

Average electricity price for a 3-person household (annual consumption of 3,500 kWh)
in ct/kWh



1 Including metering and metering station operation.
Source: BDEW | As of January 2020

Structural changes

The Climate Action Programme that was introduced by the German government and passed in October 2019 set a target for the provision of one million charging points for electric vehicles by 2030. This will be achieved with the **"Charging Infrastructure Master Plan".** It contains measures for quickly establishing a comprehensive and user-friendly charging infrastructure (Glossary, from p. 139) for up to ten million e-cars by 2030. Furthermore, there are plans to simplify the regulations for the installation of charging infrastructure in the Act on the Ownership of Apartments and the Permanent Residential Right (WEG) and in tenancy law. The aim will be to make it obligatory for landlords to tolerate the installation of charging infrastructure.

In addition, the German government has increased the **subsidies for purely electric cars** with a list price of below €40,000 from €4,000 to €6,000. The subsidy increases to €5,000 for more expensive cars up to a limit of €65,000. Additional government subsidies, such as the tax exemptions for electric company cars that are valid from January 2019, create further incentives to purchase these e-cars.

We are engaged in the expansion of the charging infrastructure for household customers and also for commercial and local authority partners. As part of a programme in the Federal State of Baden-Württemberg to establish a **core charging network for electric vehicles in Baden-Württemberg (SAFE),** a consortium of 81 partners under our leadership has established a comprehensive charging network for e-cars in Baden-Württemberg based on a grid with a mesh size of 10 km by 10 km (p. 82).

Another goal of the German government is to develop a climate-neutral building stock by 2050. Achieving high levels of **energy efficiency in buildings** is a key factor in this area. The Building Energy Act (GEG), which was passed at the end of 2019, brings together various legal requirements for the energy-related properties of buildings. As a consequence, there will be stricter standards for the installation of oil heating systems from 2026 and related to this, a 40% subsidy for exchanging an oil heating system for a more climate-friendly alternative. In addition, the already existing government subsidies will be increased by 10% and a tax incentive to subsidise energy-related renovation measures of 20% of the investment costs will be introduced in 2020. Many new buildings actually already meet these stricter energy-related requirements. Due to the lower heating demands in these buildings, heat pumps can be used as an energy-efficient form of heating and their use in new buildings has been increasing for a number of years. It is also possible to improve the energy efficiency of existing buildings by replacing the heating system. Due to the age structure of heating systems, this replacement rate is set to increase in the coming years. The replacement of a heating system is often also accompanied by a switch in energy source to natural gas, district heating or renewable energy sources. We believe that there are huge opportunities for growth as a result of the dynamics in the heating market.

Grids segment

On 9 July 2019, the German Federal Court of Justice (BGH) decided that the **rates of return on equity for electricity and gas grid operators** for the third regulatory period did not need to be corrected upwards. The Higher Regional Court (OLG) in Düsseldorf had previously annulled the rates of return on equity set by the Federal Network Agency (BNetzA) because they were set too low.

On 10 July 2019, the OLG Düsseldorf annulled the **general sectoral productivity factor** (Xgen) (Glossary, from p. 139) for gas grid operators that was defined by the BNetzA on 21 February 2018. The BNetzA filed an appeal against the judgement with the BGH on 10 October 2019. A decision on the Xgen for electricity grid providers defined by the BNetzA has not yet been handed down by the OLG Düsseldorf.

The reform of the **Grid Expansion Acceleration Act** (NABEG 2.0) was approved on 4 April 2019. The act aims to simplify and accelerate the approval process for the new construction and reinforcement of electricity lines at the high and extra-high voltage level in Germany. EnBW is hoping for improved framework conditions that will allow the transmission system operators (TSO) in particular to implement the urgently required grid expansion measures on time.

On 20 December 2019, the BNetzA completed its examination of the **Network Development Plan Electricity** (NDP Electricity) (Glossary, from p. 139) 2030 that had been drafted by the TSO. The approved NDP will act as the basis for the legally prescribed amendment to the Federal Requirements Plan. An additional HVDC connection (Glossary, from p. 139) to Baden-Württemberg that was planned for the grid area covered by our transmission system operator TransnetBW has been rejected by the regulatory authorities at this point in time as they do not believe that its approval is merited.

Aside from the expansion of the grids, the German TSOs are focussing on other measures to ensure security of supply. This includes an invitation to tender for the construction of 1,200 MW of new power plant capacity as **special technical equipment for grids.** In the tendering process held by TransnetBW for the construction and operation of a 300 MW power plant in south-western Germany, EnBW had its bid accepted in August 2019. The new power plant will be constructed at the EnBW power plant site in Marbach am Neckar. It will be placed into operation from 1 October 2022 in special emergency situations as a "safety buffer" for the supply of electricity and to support grid stability.

On 5 December 2019, the Federal Network Agency confirmed the framework scenario for the **Network Development Plan Gas** (NDP Gas) (Glossary, from p. 139) 2020 to 2030. For the first time, the framework scenario includes a separate presentation of the forecast for demand in Baden-Württemberg because the need for greater capacity here is growing constantly and the grid operated by our subsidiary terranets bw is heavily used. In comparison to the current demand for capacity, it is anticipated that over 30% more capacity will be required by 2030.

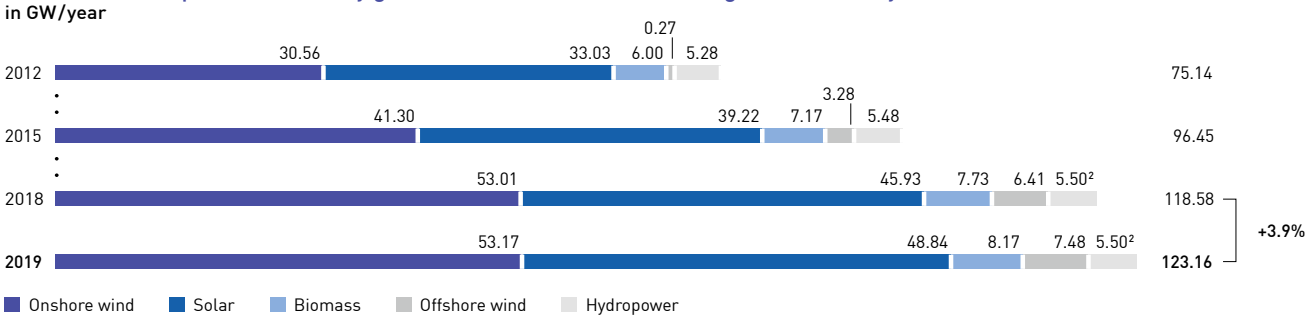
An increasing level of tension is expected overall in the regulated grid business. Investment in the expansion of the grids may reduce the earnings pressure on the grid operators but appropriate returns are necessary in order to continue pushing forward the expansion of the grids and to guarantee the security of supply in Germany. Overall, we anticipate that the grid business of the EnBW grid subsidiaries will be faced with more economically challenging framework conditions in the future.

Renewable Energies segment

Germany

Electricity generation from renewable energies overall in Germany rose significantly in 2019. According to Fraunhofer ISE (www.energy-charts.de) the proportion of total German electricity generation accounted for by renewable energies increased to almost 46% (2018: around 40%). Although there was a small rise in the installed output, this increase in comparison to the previous year is mainly attributable to better weather conditions.

Installed net output for electricity generation from renewable energies in Germany[1]
in GW/year



1 The figures for the previous year have been restated.
2 Correction to the value for hydropower from 4.8 GW to 5.50 GW by EnBW.
Source: Fraunhofer ISE (www.energy-charts.de) | As of 03/01/2020

The climate action package introduced by the German government increases the target for the expansion of **offshore wind power plants** in Germany from 15 GW to 20 GW by 2030. We view this as an important contribution towards achieving the climate targets and an opportunity for us to expand our offshore wind

portfolio beyond the projects we already have in operation and those currently under development.

In 2019, the growth in **onshore wind power capacity** slowed considerably due to the difficult approval conditions. Only around 700 MW of new output was placed into operation, which is around 75% less than in 2018. In the auctions held in 2019, only about half of the output available in the auctions was covered by projects. We were also considerably impacted by this development. In order to achieve the target of 65% generation from renewable energies by 2030, around 4,000 MW of new output will need to be added every year. The climate action package passed by the German government in December 2019 is not expected to accelerate the current slow expansion in onshore wind energy but will instead make this expansion more difficult due to the planned uniform minimum distance regulations. EnBW is campaigning strongly for an improvement in the approval conditions.

Due to the elimination of the 52 GW funding cap and progressively lower costs for PV modules, we anticipate that the **photovoltaic output** in Germany will continue to expand at an increasing rate. The construction of the Weesow-Willmersdorf solar park by EnBW – one of the first major projects without funding in Germany – demonstrates that photovoltaics have now also become economically viable here. The high appeal and availability of open-field photovoltaic plants in Germany was demonstrated by the fact that the auctions in 2019 were significantly oversubscribed.

France

We successfully entered the French market for renewable energies with the acquisition of Valeco in 2019. We expect dynamic growth in renewable energies in France, both in the wind power and photovoltaic sectors. The framework conditions in France, which are mainly centred around auction-based invitations to tender, guarantee continued and reliable funding for renewable energies.

Sweden

Sweden offers very favourable conditions and a competitive environment for renewable energies. In particular, onshore wind energy will play an increasingly important role on the Swedish generation market in the next few years. Since our entry onto the market in 2018, we have consistently expanded our wind power portfolio. The quota-based funding system for renewable energies that currently exists in Sweden means that power plants primarily generate their revenues on the electricity market. The sale of CO_2 allowances (Glossary, from p. 139) could be an additional source of revenue.

Turkey

The current funding mechanism in Turkey for the generation of electricity from renewable sources is valid for power plants that are placed into operation up until the end of 2020. Funding for all other power plants has been switched over to an auction-based system. Under this new system, a total of around 1,000 MW of onshore wind capacity will be awarded, for example, in 2019. We are expanding the wind power portfolio of our joint venture with our Turkish partner Borusan with two projects that are currently under construction. These wind power plants are due to be completed in 2020. We still believe that the Turkish market is an attractive proposition for the future, although we are monitoring the current political and economic developments in Turkey very closely.

Generation and Trading segment

Electricity wholesale market

Despite the significantly higher prices for CO_2 allowances (Glossary, from p. 139), the average spot market price (Glossary, from p. 139) in 2019 was around €7/MWh below the level in 2018. It is important to note in this context that the second half of 2018 was characterised by a sharp increase in prices due to low water levels and the associated bottlenecks in the supply of coal. In contrast, the average price on the forward market (Glossary, from p. 139) in 2019 was around €4/MWh higher than the average price in the previous year due to the increase in CO_2 prices.

Forward market prices (Glossary, from p. 139) reflect the expectation that prices will continue to increase. The reasons for this are the phasing out of nuclear power and the expected decommissioning of coal power plants. A decisive factor for the future development of electricity prices will be the development of fuel and CO_2 prices and the trends in the electricity generation mix.

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

in €/MWh	Average 2019	Average 2018
Spot	37.67	44.47
Rolling front year price	47.79	43.84

Gas market

The spot market price (Glossary, from p. 139) fell considerably in 2019. On the one hand, the global supply of liquefied natural gas (LNG) increased due to new production facilities in the USA and Australia, which led to a noticeable increase in LNG deliveries to north-west Europe, while on the other hand, above-average temperatures led to a much lower demand for heating. The fall in prices on the spot market also had an impact on annual prices.

Negotiations on a new gas transit contract between Russia and the Ukraine will be very significant for the further development of gas prices. In addition, it is possible that the LNG supply to Europe will increase further due to the commissioning of additional LNG facilities in the USA.

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

in €/MWh	Average 2019	Average 2018
Spot	13.51	22.98
Rolling front year price	18.19	20.70

Oil market

Crude oil prices increased from US$55/bbl to US$75/bbl during the course of 2019. Production cuts by OPEC and some non-OPEC countries such as Russia eliminated the oversupply on the global market and supported prices. The conflict between Iran and the USA, combined with the threat made by Iran to block the Strait of Hormuz which is important to the oil trade, and the drone and rocket attacks on important oil facilities in Saudi Arabia also contributed to the higher prices. In contrast, concerns about the global economy and thus the demand for oil also had an effect on the development of the market in 2019. In this context, oil prices were negatively influenced, in particular, by the ongoing trade dispute between the USA and China.

Forward market prices are reflecting the expectation that prices will continue to fall. This expectation is due to fears of an excess supply on the oil market because of, amongst other things, the sharp rise in oil production in non-OPEC countries and lingering concerns regarding the economy and the associated fall in global demand for oil. However, there is also great potential for prices to spike if the ongoing conflict between Iran and the USA and Saudi Arabia escalates in the future.

Development of prices on the oil markets

in US$/bbl	Average 2019	Average 2018
Crude oil (Brent) front month (daily quotes)	64.16	71.69
Crude oil (Brent), rolling front year price (daily quotes)	61.31	68.94

Coal market

Both the front year price and the spot market price fell significantly during the course of 2019. The main reasons for this fall in prices were the oversupplied global market and the considerable decrease in demand in Europe. In Europe, coal-fired electricity generation is being replaced to a large extent by renewable energies and often by cheaper gas-fired electricity generation due to the very low gas prices and relatively high emission allowance prices. In addition, China introduced restrictions on imported coal in the fourth quarter of 2019.

If the described trends continue, coal prices on both the spot market and the forward market (Glossary, from p. 139) will remain under pressure. As by far the largest consumer of coal in the world, China has a dominant influence on the international coal market. The increasing expansion of domestic coal production in China will continue to have a significant effect on coal imports into the country and thus on the global market.

Development of prices on the coal markets

in US$/t	Average 2019	Average 2018
Coal – API #2 rolling front year price	69.54	87.03
Coal – API #2 spot market price	60.75	91.91

CO_2 allowances

Under the European emissions trading system, proof must be provided of the correct number of CO_2 allowances (Glossary, from p. 139) for the corresponding CO_2 emissions from power plants. The reduction in supply (so-called market stability reserve, MSR) for emissions allowances agreed in 2018 resulted in a further increase in the price for EUA certificates (Glossary, from p. 139) in 2019. The number of certificates available in 2019 was reduced by around 400 million, which was almost 50% less.

Further increases in the prices for EUA certificates are expected in the next few years. The largest driver of prices will continue to be the reduction in supply via the MSR.

Development of prices for emission allowances/daily quotes

in €/t CO_2	Average 2019	Average 2018
EUA – rolling front year price	24.88	15.62
CER – rolling front year price	0.21	0.24

Nuclear power

The coalition agreement of the German government sets out the framework for current nuclear power policy. The main targets are the retention of specialist personnel and expertise, quick progress in the search for a final storage site for highly radioactive waste (by 2031) and the rapid commissioning of the final storage site for low- and medium-level radioactive waste (2027 according to the current plans). This should prevent the intermediate storage at the power plant sites becoming, to all intents and purposes, the final storage sites. On the basis of a ruling by the German Federal Constitutional Court from 6 December 2016, operators of nuclear power plants should receive compensation payments for investment in the period between the decision to extend the lives of the nuclear power plants (28 October 2010) and the reversal of this decision (from 16 March 2011), as well as for residual volumes of electricity remaining at power plants that can no longer be distributed. On the basis of the public law contract according to the Act for the Reorganisation of Responsibility in Nuclear Waste Management, EnBW has submitted an application for the approval of the return transport of radioactive waste from the reprocessing centre in France to the intermediate storage site at the Philippsburg nuclear power plant. A precise date for the transport has still not been agreed. On the basis of the same public law, the intermediate storage facility for highly radioactive waste was handed over to the German government on 1 January 2019. The waste storage facilities for low- and medium-level radioactive waste will follow on 1 January 2020. The authorisation to operate the Philippsburg 2 nuclear power plant for the purpose of generating power expired on 31 December 2019.

The EnBW Group

Finance and strategy goal dimensions

Results of operations

Electricity sales increase, gas sales fell compared to the previous year

Electricity sales (without Grids)

in billions of kWh[1]	Sales		Renewable Energies		Generation and Trading		Total (without Grids)		Change in %
	2019	2018	2019	2018	2019	2018	2019	2018	
Retail and commercial customers (B2C)	14.8	14.9	0.0	0.0	0.0	0.0	14.8	14.9	-0.7
Business and industrial customers (B2B)	20.5	21.9	0.0	0.0	0.0	0.0	20.5	21.9	-6.4
Trade	2.0	0.9	2.9	2.4	112.4	96.7	117.3	100.0	17.3
Total	**37.3**	**37.7**	**2.9**	**2.4**	**112.4**	**96.7**	152.6	**136.8**	**11.5**

1 The figures for the previous year have been restated.

In the 2019 financial year, electricity sales were higher than in the previous year. Due to the changed classification of three companies, there was a slight shift in the figures for the previous year for the Sales and Generation and Trading segments. In a persistently challenging competitive environment, electricity sales to retail and commercial customers (B2C) stood at the same level as in the previous year. Sales to business and industrial customers (B2B) fell slightly as a result of the withdrawal from the B2B commodity business under the EnBW and Watt brands. Increased trading activities resulted in an increase in sales. However, the effect of the trading activities on the earnings potential of our company is limited. Adjusted for the effects of changes in the consolidated companies, the increase in electricity sales was 11.2%.

Gas sales (without Grids)

in billions of kWh[1]	Sales		Renewable Energies		Generation and Trading		Total (without Grids)		Change in %
	2019	2018	2019	2018	2019	2018	2019	2018	
Retail and commercial customers (B2C)	17.4	17.1	0.0	0.0	0.0	0.0	17.4	17.1	1.8
Business and industrial customers (B2B)	56.2	50.8	0.0	0.0	0.0	0.0	56.2	50.8	10.6
Trade	0.5	0.3	0.1	0.1	222.8	260.4	223.4	260.8	-14.3
Total	**74.1**	**68.2**	**0.1**	**0.1**	**222.8**	**260.4**	297.0	**328.7**	**-9.6**

1 The figures for the previous year have been restated.

Gas sales decreased in 2019 in comparison to the previous year. Due to the changed classification of three companies, there was a shift in the figures for the previous year for the Sales and Generation and Trading segments. In addition, there was also a reclassification within the Generation and Trading segment. In a challenging competitive environment, gas sales in the retail customer business (B2C) were slightly above the level in the previous year. In the 2019 financial year, sales to business and industrial customers (B2B) exceeded the level in the previous year due to higher sales to existing customers and the acquisition of new customers by individual brands. This was offset to some extent by the withdrawal from the B2B commodity business under the EnBW and Watt brands. Trading activities fell compared to the previous year. However, the effect of the trading activities on the earnings potential of our company is limited. There were no effects due to changes in the consolidated companies.

External revenue lower than previous year especially due to decrease in gas sales

External revenue by segment

in € million[1, 2]	2019	2018	Change in %
Sales	7,679.0	7,347.7	4.5
Grids	3,459.7	3,215.4	7.6
Renewable Energies	653.1	477.5	36.8
Generation and Trading	6,970.1	9,767.8	-28.6
Other/Consolidation	3.2	7.0	-54.3
Total	**18,765.0**	**20,815.4**	**-9.9**

1 The figures for the previous year have been restated.
2 After deduction of electricity and energy taxes.

Adjusted for the effects of the changes in the consolidated companies, external revenue fell by 10.7% or €2.237.4 million in comparison to the previous year. The figures for revenues in the previous year were restated due to the IFRIC agenda decision "Physical settlement of contracts to buy or sell a non-financial item (IFRS 9)". The application of the agenda decision only resulted in a reporting change and had no effect on EBITDA. Due to the changed classification of three companies in the previous year, there was also a slight shift between the segments.

Sales: In the 2019 financial year, external revenue in the Sales segment increased in comparison to the previous year. Adjusted for the effects of the changes in the consolidated companies, this would have been an increase of 2.3% or €173.5 million. This was primarily due to higher gas sales.

Grids: External revenue in the Grids segment in 2019 was higher than the figure in the previous year, especially due to higher earnings from the use of the grids. Adjusted for the effects of the changes in the consolidated companies, this would have been an increase of 8.4% or €266.8 million.

Renewable Energies: Revenue in the Renewable Energies segment in the 2019 financial year exceeded the level in the previous year. This increase was attributable to the commissioning of our EnBW Hohe See offshore wind farm, as well as higher generation volumes from our other offshore and onshore wind farms and our run-of-river power plants due to the weather. Adjusted for the effects of the changes in the consolidated companies, this would have been an increase of 13.0% or €75.0 million.

Generation and Trading: Revenue in the Generation and Trading segment decreased significantly in comparison to the previous year. Adjusted for the effects of the changes in the consolidated companies, there was a decrease in revenue of 28.3% or €2,746.8 million. This decrease was mainly due to a fall in sales and lower prices in the area of gas trading.

Material developments in the income statement

The fall in the cost of materials corresponds to the decrease in gas revenues. The balance from other operating income and other operating expenses in the reporting period increased from €-95.2 million in the previous year to €251.1 million in the reporting year. This increase was mainly attributable to valuation effects from derivatives (Glossary, from p. 139). The financial result improved in 2019 in comparison to the previous year by €284.6 million to €-95.8 million (previous year: €-380.4 million). Higher expenses caused by the drop in the discount rate for nuclear provisions were more than compensated for by the positive effect from the market valuation of securities. The improvement in the investment result was attributable to the revaluation of the shares in EnBW Hohe See, which since 1 October 2019 has no longer been accounted for using the equity method but was instead fully consolidated. Overall, earnings before tax (EBT) stood at €902.2 million in the 2019 financial year, after €596.3 million in the previous year. The complete consolidated financial statements can be found at www.enbw.com/report2019-downloads.

Earnings

The Group net profit/loss attributable to the shareholders of EnBW AG increased from €334.2 million in 2018 by €400.0 million to €734.2 million in the reporting period. Earnings per share amounted to €2.71 in the 2019 financial year compared to € 1.23 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 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 amortisation, adjusted for non-operating effects – as the key reporting indicator for disclosing this information.

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

Adjusted EBITDA by segment

in € million[1]	2019	2018	Change in %	Forecast 2019
Sales	294.3	268.4	9.6	€225 to €300 million
Grids	1,311.2	1,176.9	11.4	€1,300 to €1,400 million
Renewable Energies	482.8	297.7	62.2	€425 to €500 million
Generation and Trading	383.8	430.8	-10.9	€350 to €425 million
Other/Consolidation	-39.6	-16.3	-142.9	–
Total	**2,432.5**	**2,157.5**	**12.7**	**€2,350 to €2,500 million**

1 The figures for the previous year have been restated.

Share of adjusted EBITDA accounted for by the segments

in %[1]	2019	2018	Forecast 2019
Sales	12.1	12.4	5% to 15%
Grids	53.9	54.5	50% to 60%
Renewable Energies	19.8	13.8	15% to 25%
Generation and Trading	15.8	20.0	10% to 20%
Other/Consolidation	-1.6	-0.7	–
Total	**100.0**	**100.0**	

1 The figures for the previous year have been restated.

The adjusted EBITDA increased in 2019 compared to the previous year. This positive earnings performance was within the forecasted range for the 2019 financial year. The first-time application of the leasing standard IFRS 16 led to an increase in adjusted EBITDA of €114.2 million or 5.3%. Adjusted for the effects of the changes in the consolidated companies, the adjusted EBITDA was 8.1% higher than the level in the previous year. Due to the changed classification of three companies, there was a slight shift in the figures for the previous year for the Sales and Generation and Trading segments. All segments achieved a result within their forecasted range for 2019. The share of the adjusted EBITDA accounted for by each of the segments was also within the forecasted range.

Sales: The adjusted EBITDA in the Sales segment increased in the 2019 financial year in comparison to the previous year. Plusnet has been contributing to earnings since the beginning of the third quarter. Adjusted for the effects of the changes in the consolidated companies, earnings stood at almost the same level as in the previous year (-0.5%). Even without these largely unplanned effects, the result still stood in the middle quantile of the forecasted range.

Grids: In the Grids segment, the adjusted EBITDA increased in the 2019 financial year in comparison to the previous year. Adjusted for the effects of changes in the consolidated companies, the increase was 11.3%. The main factor influencing this positive earnings performance was higher revenue from the use of the grids, especially due to the increased investment that is necessary for ensuring the security and reliability of supply of the grids as well as the first-time application of the new leasing standards IFRS 16 in the 2019 financial year..

Renewable Energies: The adjusted EBITDA in the Renewable Energies segment for the 2019 financial year exceeded the level in the previous year. Adjusted for the effects of the changes in the consolidated companies which mainly involved the EnBW Hohe See offshore wind farm and the acquisition of Valeco, the increase was 23.3%. Our EnBW Hohe See offshore wind farm has been contributing to earnings since it was commissioned at the beginning of the fourth quarter. The acquisition of Valeco resulted in a contribution to earnings from the beginning of the third quarter. In addition, better wind conditions at our offshore and onshore wind farms and higher water levels at our run-of-river power plants contributed to the positive earnings performance.

Generation and Trading segment: In the Generation and Trading segment, the adjusted EBITDA fell in the 2019 financial year compared to the previous year. Adjusted for the effects of the changes in the consolidated companies which mainly involved the sale of VNG Norge and its subsidiary VNG Danmark in 2018, the decrease was 4.4%. As forecast, this development was largely attributable to lower out-of-period earnings in comparison to the previous year. In contrast, the higher availability of the nuclear power plants had a positive effect. In addition, we sold our electricity deliveries on the forward market at higher wholesale market prices than in the previous year (Glossary, from p. 139).

Development of non-operating EBITDA influenced by increased allocations to provisions for onerous contracts for electricity procurement agreements

Non-operating EBITDA

in € million	2019	2018	Change in %
Income/expenses relating to nuclear power	-61.9	-132.1	53.1
Income from the reversal of other provisions	48.2	11.8	–
Result from disposals	18.4	89.0	-79.3
Reversals of/additions to the provisions for onerous contracts relating to electricity procurement agreements	-54.8	39.2	–
Income from reversals of impairment losses	4.5	22.1	-79.6
Restructuring	-41.0	-49.1	16.5
Other non-operating result	-100.7	-48.8	-106.4
Non-operating EBITDA	**-187.3**	**-67.9**	**–**

The fall in non-operating EBITDA in comparison to the previous year was due to, amongst other things, allocations to provisions for onerous contracts for long-term electricity procurement agreements. In the previous year, there were higher reversals of provisions. In addition, the sale of VNG Norge and its subsidiary VNG Danmark had a positive effect on earnings in the previous year. The reason for the fall in the other non-operating result was the allocations to risk provisions for a possible obligation to pay EEG cost allocations (Glossary, from p. 139) for the company's own energy deliveries within the EnBW Group.

Significant increase in Group net profit compared to previous year

Group net profit

in € million	2019			2018		
	Total	Non-operating	Adjusted	Total	Non-operating	Adjusted
EBITDA	**2,245.2**	**-187.3**	**2,432.5**	**2,089.6**	**-67.9**	**2,157.5**
Amortisation and depreciation	-1,648.5	-160.7	-1,487.8	-1,213.8	-13.8	-1,200.0
EBIT	**596.7**	**-348.0**	**944.7**	**875.8**	**-81.7**	**957.5**
Investment result	401.3	270.9	130.4	100.9	-50.6	151.5
Financial result	-95.8	-176.0	80.2	-380.4	-18.6	-361.8
EBT	**902.2**	**-253.1**	**1,155.3**	**596.3**	**-150.9**	**747.2**
Income tax	2.1	191.0	-188.9	-128.7	51.9	-180.6
Group net profit/loss	**904.3**	**-62.1**	**966.4**	**467.6**	**-99.0**	**566.6**
of which profit/loss shares attributable to non-controlling interests	(170.1)	(-9.5)	(179.6)	(133.4)	(5.1)	(128.3)
of which profit/loss shares attributable to the shareholders of EnBW AG	(734.2)	(-52.6)	(786.8)	(334.2)	(-104.1)	(438.3)

The increase in impairment losses was primarily attributable to impairment losses on power plants – due to the quicker phase-out pathway for hard coal. The improvement in the non-operating investment result was mainly due to the revaluation of the shares in EnBW Hohe See, which has been fully consolidated in the EnBW consolidated financial statements since 1 October 2019. The company was accounted for using the equity method until this point in time. The increase in the financial result in comparison to the previous year was the result of, amongst other things, the market valuation of securities. In contrast, the development of the discount rate for nuclear provisions had a negative effect.

Financial position

Financial management

Basis and objectives

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

In the operating business, derivatives (Glossary, from p. 139) are generally 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. Proprietary trading is only permitted within narrow, clearly defined limits.

Interest rate risk management involves the management and monitoring of interest-sensitive assets and liabilities. The included companies regularly report on the existing risk position via the rolling liquidity planning. An interest rate risk strategy is developed in an analysis conducted every quarter on an aggregated basis. The purpose is to limit the impact of fluctuations in interest rates and interest rate risks on the results of operations and net assets.

The interest rates on financial liabilities are predominantly fixed. We use interest rate derivatives to keep the relationship between fixed and variable interest rates within predefined limits in order to optimise interest income. The potential risk is determined on the basis of current interest rates and possible changes in these interest rates.

Generally, currency positions resulting from operations are closed by appropriate forward exchange contracts. Overall, 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. Details on the risk management system are presented in note 25 of the notes to the consolidated financial statements at www.enbw.com/report2019-downloads.

We continue to strive to maintain a balanced financing structure, solid balance sheet ratios and solid investment-grade ratings (Glossary, from p. 139).

The ongoing strategic development of our company is designed to continuously increase the operating result (adjusted EBITDA). Our target value for adjusted EBITDA of €2.4 billion in 2020 has been raised to €3.2 billion in 2025. To maintain a good creditworthiness at the same time, we stick to a high level of financial discipline.

Until the transformation of our portfolio has been completed by the end of 2020, the internal financing capability serves as an important performance indicator for the Group. It describes the adjusted retained cash flow in relation to the adjusted net (cash) investment and measures our company's ability to finance its activities internally. In the growth phase post 2020, internal financing capability will be replaced by the debt repayment potential – the ratio of the retained cash flow to net debt. This performance indicator is oriented to the relevant key ratios used by the rating agencies and should allow controlled growth.

Rating and rating trends

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

	2019	2018	2017	2016	2015
Moody's	**A3/negative**	A3/stable	Baa1/stable	A3/negative	A3/negative
Standard & Poor's	**A-/stable**	A-/stable	A-/stable	A-/negative	A-/stable
Fitch	**A-/stable**	A-/stable	A-/stable	A-/stable	A-/stable

In the middle of June 2019, Moody's confirmed its A3 rating for EnBW but lowered the outlook to negative. In its rationale for the negative outlook, the rating agency pointed to the acquisitions of Valeco and Plusnet. Moody's believes that the two acquisitions support the strategic development of our company, however they have come too early. In addition, the low interest rate environment is having a negative effect on the present value of the pension and nuclear provisions. In its regular update, Standard & Poor's (S&P) confirmed its EnBW rating of A- with a stable outlook at the end of July 2019. The EnBW rating from Fitch remains unchanged at A-/stable.

Assessment by the rating agencies

Moody's (14/06/2019)	Standard & Poor's (26/07/2019)	Fitch (28/09/2018)
Leadership position as vertically integrated utility within Baden-Württemberg	Increasing share of operating income from low-risk regulated activities and long-term contracted renewables	Continued evolution towards a more regulated and contracted business profile
Around 50% of EBITDA from low-risk regulated distribution and transmission activities and growing share of renewables under contracts, as EnBW continues to invest in line with its strategy	Well-diversified sources of cash flow	High earnings visibility in grids and renewables partly offset by residual nuclear decommissioning risk; payment of €4.8 bn for transferring responsibility for nuclear waste storage has substantially reduced these risk
Historically balanced financial policy and demonstrated commitment to maintaining a robust credit quality	Geographical diversification in the renewables segment in Taiwan, the U.S. and France	Average forecast credit metrics are generally stronger than peers, with some exceptions with respect to funds from operations (FFO) fixed charge cover
Evolving operating environment in Germany for conventional generation and challenging environment in retail markets	Difficult operating environment in Germany for conventional power generation	If the share of regulated EBITDA exceeds 50% on a sustained basis, Fitch may apply a one-notch uplift to the senior unsecured rating
Certain execution risks relating to large investment programme	Still significant exposure to volatile and commodity-driven wholesale power prices	
Anticipated erosion of financial flexibility following acquisitions of VALECO and Plusnet in 2019	Debt increase following the integration of new acquisitions, in line with the company's strategy	
Strong shareholder support	Prudent financial policy	
	Moderate likelihood of government support	

Financing strategy

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

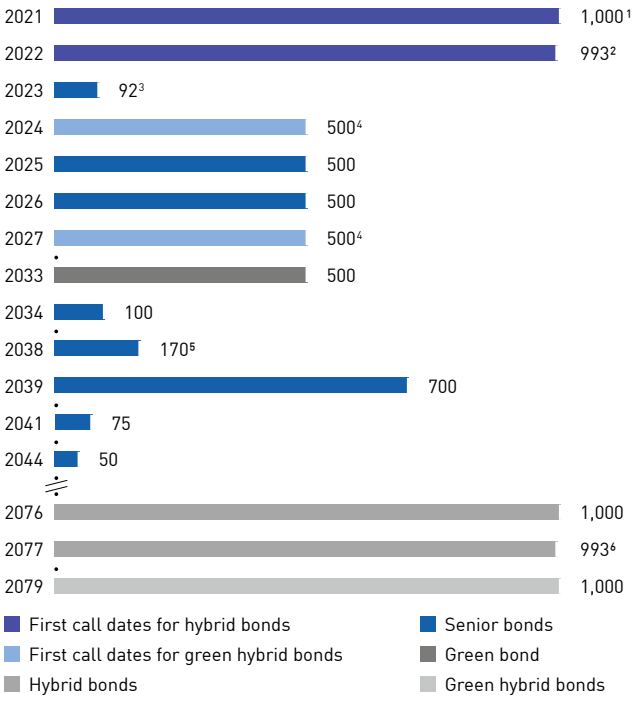
Alongside the internal financing capability and our own funds, we have the following financing instruments at our disposal to cover the financing needs for the strategic development of the operating business:

- Debt Issuance Programme (DIP) (Glossary, from p. 139), via which bonds are issued: €2.7 billion of €7.0 billion has been drawn
- Hybrid bonds: €3.0 billion. In July, EnBW issued two green hybrid bonds with a volume of €500 million each.
- Commercial paper (CP) programme (Glossary, from p. 139): €2.0 billion undrawn
- Syndicated credit line: €1.5 billion undrawn with a term until 2021
- Bilateral free credit lines: €0.7 billion of €1.4 billion drawn
- Project financing and low-interest loans from the European Investment Bank (EIB)

Documentation of short-term and long-term borrowings on the capital markets under the established DIP and CP programme, as well as all other credit documentation with banks (e.g. syndicated lines of credit) include internationally standardised clauses. The issuing of a negative pledge, as well as a pari passu clause (Glossary, from p. 139), to all creditors form essential key elements of our financing policy. The use of undrawn credit lines is not subject to restrictions. Details on financial liabilities are presented in note 22 and explanations on other financial commitments are presented in note 26 of the notes to the consolidated financial statements at www.enbw.com/report2019-downloads.

The maturities of the EnBW bonds have been further diversified.

Maturity profile of EnBW bonds
in € million



1 First call date: hybrid maturing in 2076.
2 First call date: hybrid maturing in 2077; includes US$300 million (swap in €), coupon before swap 5.125%.
3 CHF 100 million, converted in € as of 31/12/2019.
4 First call date: hybrid maturing in 2079.
5 JPY 20 billion (swap in €), coupon before swap 5.460%.
6 Includes US$300 million, converted in € at rate on 05/10/2016.

Green bonds

We issued our first two green hybrid bonds with a total volume of €1 billion on 29 July 2019. EnBW was thus the first German issuer to launch a green hybrid bond. The rating agencies classify half of the hybrid bonds as equity, which has a positive effect on the credit profile.

In line with our strategy, we are increasingly investing in climate-friendly growth projects. This was the reason why we executed a second green transaction after we had already issued the first green bond (Glossary, from p. 139) with a volume of €500 million in October 2018. The proceeds from the green hybrid bonds will be used for the expansion of offshore and onshore wind power and photovoltaic projects.

We were the first company to issue bonds according to the EU Prospectus Regulation from 21 July 2019. The sustainability rating agency ISS ESG and the Climate Bonds Initiative (CBI) examined and certified the two green hybrid bonds according to sustainability criteria.

The two bonds each have a volume of €500 million and a term of around 60 years. We have the right to redeem the bond with a starting coupon of 1.125% for the first time in a three month period before 5 November 2024 and it can then be redeemed early at every coupon date. The bond with a starting coupon of 1.625% can be redeemed for the first time in a three month period before 5 August 2027. It can then be redeemed early at every coupon date. The bonds are junior to all other financial liabilities but have an equal ranking to our existing hybrid bonds.

The green bonds contribute to selected sustainability goals of the United Nations (United Nations Sustainable Development Goals (SDGs)). The business activities and projects of EnBW focus, in particular, on the following four SDGs: SDG 7 (affordable and clean energy), SDG 9 (industry, innovation and infrastructure), SDG 11 (sustainable cities and communities) and SDG 13 (climate action). The green bonds also support our non-financial key performance indicators. Further information on our green bonds and the Impact Report can be found at www.enbw.com/green-bond.

Asset liability management model

We ensure the timely coverage of the pension and nuclear obligations using our asset liability management model (Glossary, from p. 139).

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, the actuarial reports on pension provisions and sector-specific appraisals by external experts on costs for nuclear decommissioning and disposal are taken into account. The aim of this model is to limit the impact of payments for the pension and nuclear obligations on the operating business to €300 million a year (plus an inflation supplement) by taking funds from the financial assets.

If 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 2019, the dedicated financial assets (Glossary, from p. 139) for pension and nuclear provisions totalled €6,328.7 million (previous year: €6,279.8 million). Alongside the dedicated financial assets, there are plan assets to cover certain pension obligations with a market value of €974.3 million as of 31 December 2019 (previous year: €987.8 million).

We strive to reach the defined investment targets with minimum risk. We also further optimised the risk/return profile of the financial assets in 2019. 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-optimised 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

Net debt

As of 31 December 2019, net debt increased significantly by €3,265.8 million compared to the figure posted at the end of 2018. This increase was due to the acquisition of the two companies Valeco and Plusnet as well as their subsidiaries. In addition, net debt increased due to the issuing of two green hybrid bonds with a total volume of €1 billion and the first-time application of the leasing standard IFRS 16 in the 2019 financial year.

The decrease in the interest rate for pension provisions from 1.8% to 1.1% and the interest rate for nuclear provisions from 0.6% to 0.03% also resulted in an increase in net debt.

The coverage ratio (Glossary, from p. 139) describes the dedicated financial assets (Glossary, from p. 139) in relation to the net pension and nuclear obligations. As of 31 December 2019, this ratio stood at 48.1%, which was around the same level as in the previous year (51.8%). Within the scope of the ALM model (Glossary, from p. 139), EnBW is still in a position to cover its future cash outflows for pension and nuclear provisions without excessively burdening the cash flow from operating activities.

Net debt

in € million	31/12/2019	31/12/2018	Change in %
Cash and cash equivalents available to the operating business	-1,127.7	-1,954.0	-42.3
Current financial assets available to the operating business	-139.7	-200.6	-30.4
Bonds	5,702.7	4,869.4	17.1
Liabilities to banks	2,021.7	1,482.8	36.3
Other financial liabilities	466.4	644.0	-27.6
Lease liabilities	699.6	0.0	–
Valuation effects from interest-induced hedging transactions	-85.4	-88.8	-3.8
Restatement of 50% of the nominal amount of the hybrid bonds[1]	-1,496.3	-996.3	50.2
Other	-19.7	-18.1	8.8
Net financial debt	**6,021.6**	**3,738.4**	**61.1**
Provisions for pensions and similar obligations[2]	7,655.3	6,550.9	16.9
Provisions relating to nuclear power	5,864.6	5,848.2	0.3
Liabilities relating to nuclear power	0.0	63.3	-100.0
Receivables relating to nuclear obligations	-360.4	-334.4	7.8
Net pension and nuclear obligations	**13,159.5**	**12,128.0**	**8.5**
Long-term securities and loans to cover the pension and nuclear obligations[3]	-5,517.7	-4,864.4	13.4
Cash and cash equivalents to cover the pension and nuclear obligations	-236.1	-295.4	-20.1
Current financial assets to cover the pension and nuclear obligations	-299.4	-569.1	-47.4
Surplus cover from benefit entitlements	-251.5	-208.8	20.5
Long-term securities to cover the pension and nuclear obligations directly associated with assets classified as held for sale	0.0	-298.9	-100.0
Other	-24.0	-43.2	-44.4
Dedicated financial assets	**-6,328.7**	**-6,279.8**	**0.8**
Net debt relating to pension and nuclear obligations	**6,830.8**	**5,848.2**	**16.8**
Net debt	**12,852.4**	**9,586.6**	**34.1**

1 The structural characteristics of our hybrid bonds meet the criteria for half of the hybrid bonds to be classified as equity, and half as debt, by the rating agencies Moody's and Standard & Poor's.
2 Less the market value of the plan assets (excluding the surplus cover from benefit entitlements) of €974.3 million (31/12/2018: €987.8 million).
3 Includes equity investments held as financial assets.

Investment analysis

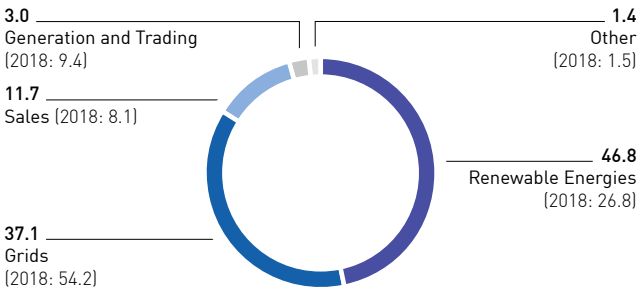
Net cash investment

in € million[1, 2]	2019	2018	Change in %
Investments in growth projects[3]	2,807.3	1,340.4	109.4
Investments in existing projects	507.9	446.0	13.9
Total investments	**3,315.2**	**1,786.4**	**85.6**
Divestitures[4]	-471.3	-371.3	26.9
Participation models	-74.2	51.9	–
Disposals of long-term loans	-0.7	-3.6	-80.6
Other disposals and subsidies	-140.5	-163.4	-14.0
Total divestitures	**-686.7**	**-486.4**	**41.2**
Net (cash) investment	**2,628.5**	**1,300.0**	**102.2**

1 The figures for the previous year have been restated.
2 Excluding investments held as financial assets.
3 Does not include cash and cash equivalents acquired with the acquisition of fully consolidated companies. These amounted to €77.8 million in the reporting period (previous year: €0.4 million).
4 Does not include cash and cash equivalents relinquished with the sale of fully consolidated companies. These amounted to €40.2 million in the reporting period (previous year: €61.5 million).

Investment by segment[1]

in %



1 The figures for the previous year have been restated.

Investment by the EnBW Group in 2019 was significantly higher than in the previous year. This increase is mainly due to the investments in Valeco and Plusnet in the second quarter of 2019. Around 84.7% of overall gross investment was attributable to growth projects; the proportion of investment in existing facilities stood at 15.3%.

Investment in the **Sales** segment of €389.4 million was significantly higher than the level in the previous year (restated: €144.2 million) due to the acquisition of Plusnet.

Investment in the **Grids** segment stood at €1,230.9 million, compared to €967.7 million (restated) in the previous year. It was primarily used for the expansion of the electricity grids in both years. The increase in 2019 compared to the previous year is primarily attributable to the expansion of the transmission grid by our Group subsidiaries TransnetBW and ONTRAS Gastransport, the expansion and renovation of the distribution grid and investment in the area of electromobility.

Investment in the **Renewable Energies** segment of €1,552.6 million was considerably higher than the figure in the previous year (restated: €478.8 million). The main reasons for this were the acquisition of Valeco and the construction of the EnBW Hohe See and EnBW Albatros offshore wind farms.

Investment in the **Generation and Trading segment** fell significantly in 2019 in comparison to the previous year to €98.3 million. In the previous year, investment stood at €168.0 million (restated) and was mainly attributable to the exploration and production business of VNG and the modernisation of the combined gas heat and power plant in Stuttgart-Gaisburg.

Other investments in 2019 of €44.0 million were above the level in the previous year (restated: €27.7 million).

Divestitures increased in comparison to the level in the previous year; this increase was primarily due to the sale of the remaining shares in EWE, the sale of the shares in EMB Energie Mark Brandenburg and VNG Slovakia, and divestitures from participation models. Shares were sold in the Buchholz III and Aalen-Waldhausen wind farms.

Investment obligations for the acquisition of intangible assets and property, plant and equipment amounted to €1,213.8 million as of 31 December 2019 (previous year: €1,142.7 million). Commitments from corporate acquisitions totalled €535.5 million (previous year: €476.1 million).

Investment decisions will take climate goals into account to a greater extent in the future. In this context, the investment guidelines were adapted in the 2018 financial year: For significant investment projects, their influence on the environmental and climate protection targets and figures – in the sense of the TCFD recommendations (Glossary, from p. 139) – will be illustrated in the future. This additional information will provide a basis for the approval by the investment committee of the Board of Management.

Liquidity analysis

Condensed cash flow statement

in € million	2019	2018	Change in %
Cash flow from operating activities	707.0	827.6	-14.6
Cash flow from investing activities	-2,317.1	-895.8	–
Cash flow from financing activities	551.9	-907.3	–
Net change in cash and cash equivalents	**-1,058.2**	**-975.5**	**-8.5**
Change in cash and cash equivalents due to changes in the consolidated companies	169.3	6.6	–
Net foreign exchange difference	3.1	5.5	-43.6
Change in cash and cash equivalents due to risk provisions	0.2	0.2	0.0
Change in cash and cash equivalents	**-885.6**	**-963.2**	**8.1**

The reduction in cash flow from operating activities in comparison to the previous year was mainly caused by the increase in the net balance of assets and liabilities from operating activities as well as by higher income tax payments in comparison to the previous year.

Cash flow from investing activities returned a significantly higher outflow of cash in the reporting period compared to the previous year. This was due, in particular, to the acquisitions of Valeco and Plusnet and payments associated with the construction of the EnBW Hohe See offshore wind farm, which has since been fully consolidated.

Cash flow from financing activities returned a cash inflow in the reporting period, which was mainly due to the issuing of two green hybrid bonds, a bond as part of the Debt Issuance Programme (Glossary, from p. 139) and short-term loans. This was offset to some extent by the repayment to the commercial paper programme (Glossary, from p. 139) and repayments for short-term loans from the previous year. The outflow of cash in the previous year was mainly attributable to planned repayments on two bonds and the simultaneous issuing of the green bond (Glossary, from p. 139) as well as the utilisation of the commercial paper programme.

The solvency of the EnBW Group was ensured at all times throughout the 2019 financial year thanks to the company's available liquidity and its internal financing capability, as well as external sources available for financing. The company's future solvency is secured by its solid financial position (p. 72 ff.).

Retained cash flow

in € million	2019	2018	Change in %
EBITDA	**2,245.2**	**2,089.6**	**7.4**
Changes in provisions	-416.0	-394.6	5.4
Non-cash-relevant expenses/income	46.3	-116.0	–
Income tax paid	-409.1	-270.7	51.1
Interest and dividends received	286.5	284.6	0.7
Interest paid for financing activities	-214.9	-247.0	-13.0
Dedicated financial assets contribution	19.2	-34.0	–
Funds from operations (FFO)	**1,557.2**	**1,311.9**	**18.7**
Dividends paid	-316.5	-312.8	1.2
Retained cash flow	**1,240.7**	**999.1**	**24.2**

Funds from operations (FFO) increased compared to the previous year, which was due primarily to an increase in the cash-relevant EBITDA. A positive dedicated financial assets contribution and lower interest payments in the reporting period also contributed to the increase. This was offset to some extent by higher income tax payments in the reporting period. The increased FFO led to an increase in the retained cash flow. The retained cash flow reflects our internal financing capability after all stakeholder needs have been settled. It is available to the company for investment without the need to raise additional debt.

Internal financing capability[1]

	2019	2018	Change in %
Adjusted retained cash flow in € million[2]	1,485.7	1,199.1	23.9
Adjusted net (cash) investment in € million[3]	1,797.9	1,300.0	38.3
Internal financing capability in %	**82.6**	**92.2**	**–**

1 The figures for the previous year have been restated.
2 Adjusted for the effects from the reimbursement of the nuclear fuel rod tax of €245.0 million (previous year: €200.0 million).
3 Adjusted for accelerated growth investment of €830.6 million (previous year: €0.0 million).

We have translated the retained cash flow into the adjusted retained cash flow, in order to take the adjustment due to the reimbursement of the nuclear fuel rod tax (Glossary, from p. 139) into account. This resulted in an increase of €685.0 million in the period from 2018 to 2020 (nuclear fuel rod tax adjusted for debt repayment). The remaining amount will be distributed on a straight-line basis in 2019 and 2020. The reimbursement of the nuclear fuel rod tax of €1,520.8 million in the 2017 financial year was used by EnBW for the debt repayment in 2018 of €835.8 million and for investments of €200.0 million, as well as for investments of €245.0 million in 2019.

We have adjusted the net (cash) investment to take account of the accelerated growth investment in Valeco and Plusnet, which will contribute to the EnBW 2025 growth strategy.

As there was a sharp rise in adjusted net investment compared to the previous year in combination with a less sharp increase in the adjusted retained cash flow, the internal financing capability fell. Although the adjusted retained cash flow exceeded the forecasted range of €1.3 billion to €1.4 billion in the reporting period, we just missed the target for internal financing capability of ≥ 85% in 2019.

Net assets

Condensed balance sheet

in € million	31/12/2019	31/12/2018	Change in %
Non-current assets	31,622.5	26,746.0	18.2
of which intangible assets	(3,347.4)	(1,748.7)	91.4
of which property, plant and equipment	(18,552.7)	(15,867.5)	16.9
of which entities accounted for using the equity method	(1,064.0)	(1,600.2)	-33.5
of which other financial assets	(6,356.9)	(5,426.5)	17.1
of which deferred taxes	(1,214.0)	(1,059.3)	14.6
Current assets	11,664.7	12,520.7	-6.8
Assets held for sale	0.9	342.3	-99.7
Assets	**43,288.1**	**39,609.0**	**9.3**
Equity	7,445.1	6,273.3	18.7
Non-current liabilities	24,739.7	22,036.9	12.3
of which provisions	(14,333.1)	(13,246.0)	8.2
of which deferred taxes	(890.0)	(774.8)	14.9
of which financial liabilities	(7,360.7)	(6,341.4)	16.1
Current liabilities	11,103.3	11,277.6	-1.5
of which provisions	(1,535.9)	(1,549.9)	-0.9
of which financial liabilities	(830.2)	(654.8)	26.8
Liabilities directly associated with assets classified as held for sale	0.0	21.2	-100.0
Equity and liabilities	**43,288.1**	**39,609.0**	**9.3**

As of 31 December 2019, the total assets were higher than the level at the end of the previous year. Non-current assets increased by €4,876.5 million. The main reasons for this were the full consolidation of EnBW Hohe See and the first-time consolidation of Valeco and Plusnet. In addition, property, plant and equipment increased due to the first-time application of the leasing standard IFRS 16 in the 2019 financial year. The increase in financial assets was due to the securities. The decrease for entities accounted for using the equity method was primarily caused by the full consolidation of EnBW Hohe See

since October 2019. Current assets fell by €856.0 million; this was mainly attributable to the payment of the purchase prices for Valeco and Plusnet. Lower trade receivables due to volume and price effects and a decrease in the current financial assets in the area of securities were more than compensated for by the change in derivatives (Glossary, from p. 139). The decrease in assets held for sale was primarily the result of EWE-Verband exercising its right to buy the 6% of the shares in EWE that were previously held by EnBW. The contractually agreed sale of shares in Stuttgart Netze Betrieb, which resulted in a loss of control of the company, also had an effect.

The equity increased by €1,171.8 million as of the reporting date of 31 December 2019. The main reasons for this development were the increase in non-controlling interests due to the first-time full consolidation of EnBW Hohe See and an increase in revenue reserves. This was offset by the increase in losses in other comprehensive income, which was mainly caused by the fall in the discount rate for the pension provisions from 1.8% at the end of 2018 to 1.1% as of the reporting date. The equity ratio increased from 15.8% at the end of 2018 to 17.2% on the reporting date. Non-current liabilities increased by €2,702.8 million. This was attributable, on the one hand, to the increase in the pension provisions because of the fall in the discount rate as well as the increase in financial liabilities due to the issuing of two green hybrid bonds with a total volume of €1 billion, while on the other hand, there was an increase in other liabilities and subsidies because of the first-time application of IFRS 16 in the 2019 financial year. The decrease in liabilities directly associated with assets held for sale was the result of the sale of shares in Stuttgart Netze Betrieb.

Other financial indicators

TOP ROCE and value added

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

Value added for 2019 by segment

	Sales	Grids	Renewable Energies	Generation and Trading	Other/ Consolidation	Total
Adjusted EBIT including the adjusted investment result[1] in € million	174.0	839.7	267.1	-178.0	-91.2	1,011.6
Average capital employed in € million	1,308.8	8,033.3	4,840.6	2,044.0	3,088.4	19,315.1
ROCE in %	**13.3**	**10.5**	**5.5**	**-8.7**	**–**	**5.2**
Weighted average cost of capital before tax in %	7.6	4.2	5.3	7.8	–	5.2
Value added in € million	**74.6**	**506.1**	**9.7**	**-337.3**	**–**	**0.0**

1 Investment result of €47.2 million, adjusted for taxes (investment result/0.706 - investment result; with 0.706 = 1 - tax rate 29.4%). Does not include impairment losses and reversals to impairment losses on investments, the result from the sale of equity investments, the share of the result from entities accounted for using the equity method not relevant to the ongoing management of the company and the result from equity investments held as financial assets.

Value added for 2018 by segment[1]

	Sales	Grids	Renewable Energies	Generation and Trading	Other/ Consolidation	Total
Adjusted EBIT including the adjusted investment result[2] in € million	218.0	768.4	123.7	-21.9	-46.6	1,041.6
Average capital employed in € million	1,067.1	7,019.8	3,667.4	2,109.0	2,190.0	16,053.3
ROCE in %	**20.4**	**10.9**	**3.4**	**-1.0**	**–**	**6.5**
Weighted average cost of capital before tax in %	7.7	5.3	6.1	8.0	–	6.3
Value added in € million	**135.5**	**393.1**	**-99.0**	**-189.8**	**–**	**32.1**

1 The figures for the previous year have been restated.
2 Investment result of €59.4 million, adjusted for taxes (investment result/0.706 - investment result; with 0.706 = 1 - tax rate 29.4%). Does not include impairment losses and reversals to impairment losses on investments, the result from the sale of equity investments, the share of the result from entities accounted for using the equity method not relevant to the ongoing management of the company and the result from equity investments held as financial assets.

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

In the 2019 financial year, value added fell in comparison to the previous year by €32.1 million to €0.0 million. The adjusted EBIT including the adjusted investment result fell, while the average capital employed rose. The risk-adjusted weighted average cost of capital was below the level in the previous year at 5.2%. The ROCE of 5.2% was below our forecasted range for the 2019 financial year (forecast 2019: 6.0% to 7.0%).

Sales: Value added in the Sales segment decreased in 2019 by €60.9 million. This was attributable to the increase in the average capital employed, which was primarily due to the first-time consolidation of Plusnet on 30 June 2019. In addition, the lower adjusted EBIT including the adjusted investment result contributed to the fall in value added.

Grids: Value added in the Grids segment increased by €113.0 million in comparison to 2018. Both the adjusted EBIT including the adjusted investment result and also the capital employed were above the figures in the previous year. The increase in capital employed was primarily attributable to the investment in the transmission and distribution grids and also the first-time application of the leasing standard IFRS 16.

Renewable Energies: Value added in the Renewable Energies segment of €9.7 million was higher than the value in the previous year. The adjusted EBIT including the adjusted investment result increased to €267.1 million. The capital base grew due to the construction of the EnBW Hohe See offshore wind farm and its revaluation as part of its full consolidation, as well as due to the acquisition of Valeco.

Generation and Trading: Value added in the Generation and Trading segment of €-337.3 million was below the level in 2018. This was caused by the decrease in adjusted EBIT including the adjusted investment result. The average capital employed in the reporting year remained at approximately the same level as in the previous year.

Performance indicators relevant to remuneration

The performance indicators relevant to remuneration are derived as follows. The remuneration of the members of the Board of Management is described in full in the remuneration report (p. 110 ff.).

EBT relevant to remuneration

in € million	2019	2018
EBT	**902.2**	**596.3**
Less outstanding items for derivatives allocated under trading within EBITDA	2.7	-4.1
Less the measurement of financial assets and outstanding items for derivatives allocated under trading within the financial result	-323.7	38.8
Less changes to the inflation rate and discount rate for nuclear provisions	475.3	133.3
EBT relevant to remuneration according to the new regulations[1]	**1,056.5**	**764.3**

1 The EBT relevant to remuneration was above the forecast of €850 million to €950 million due primarily to the revaluation of the shares in EnBW Hohe See.

Funds from operations (FFO) relevant to remuneration

in € million	2019	2018
Funds from operations (FFO)	**1,557.2**	**1,311.9**
Less income tax paid	409.1	270.7
Funds from operations (FFO) relevant to remuneration	**1,966.3**	**1,582.6**

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

in € million	2019	2018
Intangible assets	3,347.4	1,748.7
Property, plant and equipment	18,552.7	15,867.5
Investment properties	30.3	31.6
Investment cost subsidies	-6.7	-7.7
Construction cost subsidies	-901.6	-876.8
Intangible assets and property, plant and equipment (net)	**21,022.1**	**16,763.3**
Average intangible assets and property, plant and equipment (net)[1]	**18,327.1**	**16,371.6**

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

ROA (return on assets) relevant to remuneration

in € million	2019	2018
EBIT	**596.7**	**875.8**
Less outstanding items for derivatives allocated under trading within EBITDA	2.7	-4.1
EBIT relevant to remuneration	**599.4**	**871.7**
Less changes to the inflation rate and discount rate for nuclear provisions	297.8	–
EBIT relevant to remuneration according to the new regulations	**897.2**	**871.7**
Average intangible assets and property, plant and equipment (net)	18,327.1	16,371.6
ROA (return on assets) relevant to remuneration in %	**4.9**	**5.3**

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 a company.

We assume our responsibilities for the economy and society and aspire to be a driver of the Energiewende. 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. The focal point of this concept is the stakeholder team, which was set up on the initiative of the Board of Management in 2017. It consists of representatives from all important areas of the company. The stakeholder team communicates and maintains dialogue with relevant stakeholder groups both directly and indirectly.

TOP Reputation Index

Reputation is measured by means of the key performance indicator Reputation Index using a standardised 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. 45).

Key performance indicator

	2019	2018	Change in %	Forecast 2019
Reputation Index	52.8	51.3	2.9	54.1

Our Reputation Index increased to 52.8 index points in the reporting year. The most positive changes in comparison to the previous year were in the B2C target group – customers and the wider public. The EnBW image campaign in autumn 2019 was another positive development that strengthened above all the aspect of sympathy. However, we were unable to achieve the target value for 2019 of 54.1 points. The values for comparable large companies, whose reputation index was below our value, did not improve as strongly as our reputation. In other words: We were able to improve our relative position with respect to comparable large companies. The reputation values for municipal utilities and regional suppliers generally lie significantly higher than the values for EnBW and comparable large companies. More details on reputational risks can be found in the "Report on opportunities and risks" on p. 103.

Customer proximity

We aim to become a sustainable and innovative provider of infrastructure. A sustainable contribution could be made, for example, in the form of cooperative partnership models with local authorities, municipal utilities and suppliers. Our company also has great opportunities for generating additional revenue and for acquiring new customers using digital services and solutions.

An important step in this direction was the introduction of the new IT and process landscape for sales called **EnPower**. After it was introduced at Yello in the previous year, the EnBW brand also switched over to the new system in the middle of July 2019. On the one hand, EnPower facilitates better interaction between customers and the brands, while on the other hand, it lays the foundations for the digitalisation, automation and streamlining of settlement processes for the supply of electricity.

In parallel to the introduction of EnPower, the website www.enbw.com was also updated and given an even more customer-oriented design. The focus was placed on creating a user-friendly interface, ensuring clear navigation and providing information that is particularly relevant to customers.

TOP Customer Satisfaction Index

The energy sector is helping to push forward major social changes. The new energy world offers us great opportunities that we want to exploit and the main point of focus is our customers. We strive to maintain **long-term customer relationships** by offering networked products and new product combinations, continuous open communication and the best possible quality of service. Customer loyalty is based on high customer satisfaction, which is measured in accordance with the requirements of the EnBW Group standard for market research and surveys. The Customer Satisfaction Indices for EnBW and Yello are compiled from customer surveys carried out by an external provider (p. 45).

Key performance indicator

	2019	2018	Change in %	Forecast 2019
Customer Satisfaction Index for EnBW/Yello	116/157	120/152	-3.3/3.3	114–141/ 148–159

The satisfaction of the customers of EnBW fell slightly in 2019 but still reached a good level at 116 points – and was thus also within our forecasted range for 2019 of 114 to 141 points. A good level is reached when half of those surveyed indicate that overall they are particularly satisfied with EnBW. This is the case from 114 points upwards. A very good level of satisfaction is achieved from 136 points upwards. A possible cause for the slight decrease in the Customer Satisfaction Index for EnBW was, on the one hand, a price adjustment applied at the turn of the year 2018/2019 for the majority of those customers surveyed, while on the other hand, the switch over to the new EnPower platform had temporary effects on the service process and could also have had an impact on customer satisfaction.

The satisfaction of Yello customers remained at a high level (157) in 2019 and was thus at the higher end of our forecast (148–159). In comparison to the previous year, the value increased from 152 to 157. We believe that this high value could, amongst other things, be due to the diverse range of products for the Yello Plus tariff and a larger proportion of kWhapp users. kWhapp is an energy check app that helps users check their consumption regularly and adjust their advance payments at an early stage in the event of any changes.

Selected activities

Following the successful switchover of the system and process landscape in 2018, Yello benefited from new functionalities that increased its competitiveness in 2019. For example, products and services can be brought to the market more quickly and customers can be addressed individually. In October 2019, the **Digital Service Centre** also went online. It is a central digital contact point for customers and other interested parties. It combines content, services, contact options and answers to frequently asked questions.

With the continuation of our **corporate campaign,** we are demonstrating – under the revised slogan of "We're making E happen" – that electromobility is not just a future theme for the company but has already been part of our everyday lives and those of our customers for a long time. The campaign illustrates this with facts and information on the services provided by EnBW in the area of e-mobility. The aim of the campaign is to improve our reputation and prominence as a leading provider of e-mobility solutions, as well as for being a company that is making the Energiewende happen.

A main focus of the activities in the goal dimension "Customer proximity" in 2019 was **electromobility.** As a full-service provider together with our subsidiaries, our company covers the complete spectrum of services for the development and expansion of electromobility from the supply of electricity and the operation of a comprehensive charging infrastructure (Glossary, from p. 139) through to digital services for the consumer. In particular, the main focus was placed in 2019 on the comprehensive expansion of quick-charging stations. We were the largest operator of quick-charging infrastructure in Germany at the end of 2019 with around 290 quick-charging stations and we plan to operate up to 1,000 quick-charging stations across the country by the end of 2020. In addition, we offer drivers of electric cars access to more than 35,000 charging points in Germany, Austria and Switzerland via the EnBW mobility+ app. Following the introduction of the purely kWh-based EnBW mobility+ tariff, customers can use the app to pay for the electricity used to charge their e-cars at these charging points very easily and transparently. Yello also introduced e-mobility services in 2019. Anyone who is interested can, for example, rent a selection of vehicle models and test them under everyday conditions. In the yubee electromobility app, customers can use a driving simulator to find out whether an e-car would suit them at all and if so, which one would suit them best.

In the **SAFE project** (core charging network for e-cars in Baden-Württemberg), which was funded by the State of Baden-Württemberg, 77 municipal utilities and suppliers as well as three local authorities worked together with us to develop a core charging network (Glossary, from p. 139) in Baden-Württemberg. We coordinated the project as the head of the consortium. Following the conclusion of the funded project at the end of September 2019, Baden-Württemberg now has a comprehensive charging and quick-charging network for electric vehicles.

EnBW Telekommunikation GmbH is responsible for the main **telecommunications activities** of EnBW AG. As of 1 April 2019, it acquired around 55% of the shares in **NetCom BW** from Netze BW. NetCom BW has a strong market position with a focus on Baden-Württemberg. In order to expand our business in the telecommunications market across Germany, we acquired the company **Plusnet** on 30 June 2019. The company is active across the whole of Germany and has around 25,000 business customers.

The EnBW subsidiary **Senec** based in Leipzig is a specialist in equipping customers so that they are able to meet their own energy needs with solar electricity. According to a survey conducted by the market research company EuPD Research, the company was able to increase its market share on the German home electricity storage market from 9% to 14% in the first half of 2019. In the reporting year, Senec more than doubled its sales of electricity storage systems from 4,800 to 10,000 systems.

Our **contracting department** offers solutions to customers from industry, the real estate sector and local authorities for their on-site energy infrastructure. Depending on the customer's requirements, it provides, for example, heating, steam, cooling or compressed air as well as electricity from combined heat and power blocks based on long-term contracting agreements. We thus support our customers not only with modern energy infrastructure but also in the achievement of their targets with respect to supply reliability, energy and cost savings and CO_2 reductions. We can also help them make use of funding opportunities. These approaches were also used, for example, for three contracting projects that were concluded with local authorities in 2019.

Our company views itself as an experienced and powerful **partner for local authorities and public utilities.** Via our concessions in the electricity and gas sectors and numerous local authority holding companies in which we are active as a shareholder, we have extensive and strong connections throughout Baden-Württemberg. Alongside electricity and gas, other areas of cooperation in 2019 included the water and broadband networks (Glossary, from p. 139), the development of district projects (Glossary, from p. 139), the integration of charging infrastructure (Glossary, from p. 139) into local authority mobility concepts and assisting local authorities with their digital agendas.

In July 2019, we started a participation model for cities and communities in Baden-Württemberg called **"EnBW connects".** Around 550 local authorities can acquire shares in Netze BW. The prerequisite for taking part is that Netze BW must be the owner and also operator of the local electricity and/or gas distribution grid in the local authority as of 1 July 2019. We aim to further expand our role as a partner for cities and communities in Baden-Württemberg using this model.

Supply reliability

As an energy company and distribution grid operator, we are tasked with guaranteeing a reliable supply of electricity to our customers. The fact that the energy is increasingly being generated decentrally is a real challenge for the supply of electricity. This means that the electricity is being fed into our grid at many different points. In addition, the feed-in of energy from renewable sources fluctuates because it is dependent on the weather and other factors that are outside of our sphere of influence. We have set ourselves the goal of preparing our transmission grids so that they can handle this decentralised energy world. To this end, we are adding so-called smart grid technologies (Glossary, from p. 139) to the existing conventional infrastructure. This will enable us to better manage the generation, distribution and storage of the energy.

Our grid companies are responsible for the safe and reliable operation of the transmission grids. Processes are managed by these companies at their grid control centres. These are also responsible for resolving any unplanned outages in the respective region. As part of the investment and maintenance programmes, we maintain the grids and expand them according to demand. Depending on its volume, the investment must be approved by the Board of Management, along with the overall annual budget for the realisation of all investment and maintenance measures. The measures are carried out over one or multiple years and are realised independently by our grid companies. Some of the investment budget is used for the gradual expansion of smart grids. The increasing use of smart grid technology (Glossary, from p. 139) enables us to avoid or delay expensive investment in conventional grids. Besides the reliability and security of supply, the efficiency of the measures is also taken into account when making investment decisions. This is because grid investment also has an influence on the grid charges that make up part of the electricity price paid by customers.

TOP SAIDI

We record all unscheduled interruptions to supply at our distribution grid operators. This data flows into the "System Average Interruption Duration Index" (SAIDI) for electricity. It states the average duration of supply interruptions per connected customer in minutes per year (p. 45).

Key performance indicator

	2019	2018	Change in %	Forecast 2019
SAIDI (electricity) in min./year	15	17	-11.8	15–20

A better value for SAIDI was achieved in 2019 in comparison to previous years and it thus stood encouragingly at the lower end of the forecasted range. This was due to the fact that all of our grid subsidiaries were able to reduce the average length of the interruptions to supply in 2019.

Employees goal dimension

Employees are responsible for the business development of EnBW and shape the future of our company. Therefore, the key tasks of HR are recruiting employees for the company, including the promotion of young talent, encouraging loyalty to the company amongst employees and maintaining and fostering their motivation, satisfaction and employability. As part of the EnBW 2020 strategy, we believe that the value drivers for our HR policy can be found in the following areas of focus: leadership, safeguarding and promoting expertise, employment conditions and structures, and health management.

The further development of our corporate strategy in the period up to 2025 (p. 42 f.) will place new requirements on our HR policy. In future, the strategic focus will be placed on growth, infrastructure, selective internationalisation and new business also outside of the energy sector. Using a revised HR strategy that is valid from 2020, we want to give the people at EnBW – and at the same time our company – the opportunity for growth, development, a future and thus success.

Employee commitment

TOP Employee Commitment Index (ECI)

The key performance indicator ECI is an important indicator for us as it reflects the degree to which employees identify with the company. The annual measurement of this indicator enables us to respond specifically to any negative trends at an early stage. The key performance indicator ECI is taken into account in the remuneration and corresponding target agreements for the Board of Management (p. 46).

Key performance indicator

	2019	2018	Change in %	Forecast 2019
Employee Commitment Index (ECI)[1]	66	62	6.5	63

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

The fifth short survey for monitoring the ECI – MAB-Blitzlicht (Employee Flashlight) – was carried out between 16 September and 4 October 2019. As in the previous year, the MAB-Blitzlicht survey comprised twelve questions and was carried out by taking a random representative sample by an external, independent service provider. As in the full surveys, it collected information on the level of commitment of the employees to the EnBW Group and to their respective company. The already very high level of participation increased for the third year in a row to 74% (2018: 73%). This demonstrates that the employee survey enjoys a consistently high level of acceptance as a tool for providing feedback. The ECI from MAB-Blitzlicht 2019 showed a clear improvement to 66 points. The target set for 2019 was thus far exceeded. In general, commitment improved across all management and employee levels. According to an assessment carried out by our service provider, the ECI level achieved by our company is at a very high level in comparison to other companies in the sector. We believe that this positive development reflects the increasing level of trust in the future viability and competi-

tiveness of our company as well as our attractiveness as an employer overall. Both are decisive factors for retaining high-performing employees and also for acquiring new talent.

Selected activities in the HR areas of focus

Leadership: As part of the **"Next Level Leadership"** initiative, we offer employees with leadership roles the chance to take advantage of learning and development opportunities and provide space for the concrete practical implementation of modern leadership approaches in an increasingly complex and digital environment. In 2019, new teaching content was added into the syllabus for this programme that was launched back in 2018 (including delegating responsibility to a team, leading myself, resilience). A total of more than 1,100 employees and managers have used the different learning and development opportunities since the start of the programme (2019: 829 participants).

The new talent development programme **"SP4RK for Pioneers",** which was launched in 2019, combines the development of leadership skills with the development of innovative business models. Talent from across the company work for several months in cross-functional teams on projects with a start-up character in order to identify strategically relevant business models. At the same time, they learn methods for developing customer-centric business models and have the opportunity to develop important skills for the future in the context of modern leadership expertise.

A comprehensive cultural and transformation project was launched at **ED** at the beginning of 2019 to develop a common leadership culture and common principles, as well as to strengthen mutual trust. In numerous cross-hierarchical workshops, five leadership principles were developed that will be implemented across the whole ED Group and regularly evaluated in the individual departments.

Safeguarding and promoting expertise: We believe that **diversity** acts as a lever for successfully implementing our strategy. Under the motto "Diversity generates success", we rely on a diverse workforce in terms of numerous different criteria such as gender, age, interculturality, sexual orientation and people with disabilities, as well as sector backgrounds, different working models and work organisation. Strengthening diversity in the composition of the workforce and the leadership team is an important factor for success in many areas of the company. It promotes innovative strength, internationalisation and customer orientation, and thus also the successful implementation of our strategy. In recognition of this diversity, we took part in the Christopher Street Day in Stuttgart for the second time in 2019 with our own float. To promote diversity, we have introduced a process in which specific targets for particularly relevant diversity characteristics in various areas of the company have been agreed together with measures for their implementation. For example, language training courses have been offered to a greater extent to ensure the successful integration of many new employees with an international background. The Diversity Week 2019 was held in June with numerous campaigns and events also focussing on this complex theme.

SWD held a Diversity Day for the second time this year, this time on the theme of "Experience diversity". The main focus on this day was placed on the diversity of the workforce. The aim was to raise awareness for diversity and promote appreciative cooperation without any prejudice.

Proportion of women in management positions at EnBW AG

in %	2019	2018
First level below the Board of Management	0.0	0.0
Second level below the Board of Management	17.2	15.1

The Board of Management has set the goal for EnBW AG of further increasing the proportion of women at both management levels below the Board of Management in the period from 1 January 2017 to 31 December 2020. At both the first level (top management) and second level (upper management), the proportion of women should increase to at least 20%. Despite a great deal of effort, these targets were not yet achieved in 2019.

Another part of the HR policy is promoting young talent. Our company employed 1,014 trainees and students from the Cooperative State University (DH) as of 31 December 2019. This represents an increase of 8.1% compared to the previous year. There are plans to take on 409 new trainees and DH students in 2020. Our goal is to employ all of them after they have successfully completed their training. More than 80% of our trainees and DH students receive the guarantee of a job. In addition, we employed 1,333 working students and interns in 2019, which was 15.5% more than in 2018.

The **EnBW employer brand** was developed further in 2019 in order to achieve a stronger position on the job market and differentiate the company from the competition. Around 500 employees participated in the feedback campaign "Give our employer brand an image" in September 2019. The EnBW employer brand that was developed received a high level of acceptance at almost 90%.

We introduced the new **online application management system** Avature in 2019. It simplifies the process overall for applicants and offers them various different options when making an application, such as the automated scanning of a CV or adding links to social networks. In addition, it will provide better support to our internal processes dealing with the recruitment of new employees.

To recruit employees in growth fields, **PRE** is actively working together with specialist schools and carried out a special recruitment campaign for IT specialists and electrical fitters in 2019. Another main focus was placed on the promotion of young talent by offering, for example, internships and work placements abroad.

Employment conditions and structures: The Employers Association for Electricity Power Plants in Baden-Württemberg and the service trade union ver.di reached a **collective bargaining agreement** with a term of 24 months on 28 February 2019 after intensive negotiations. In accordance with the agreement, remuneration was increased by 2.5% from 1 March 2019 and by a further 1.9% from 1 November 2019. There will be another increase of 1.9% from 1 July 2020. Monthly remuneration for trainees in all year groups increased or will increase on the same dates by €80.00, €50.00 and €50.00, respectively. At EnBW AG and companies that come under the scope of the FOKUS collective bargaining agreement, the increases for trainees are €77.12, €48.20 and €48.20, respectively.

Health management: As part of occupational health and safety management, we offer a variety of preventative medical services for occupational safety and health protection at several sites. In 2019, the focus was placed on issues such as intestinal health. Health campaigns for the early detection of colorectal cancer were run throughout the year. In the area of mental health, a large range of preventative measures were also offered on the themes of stress, conflict situations and psychological disorders.

At **PRE,** the focus of health management is placed on primary prevention. This includes offering company sporting activities and holding sports events and is supplemented by a broad range of social measures. At **VNG,** there is a wide range of preventative services as part of occupational healthcare provision on the themes of heart, circulation, metabolism and musculoskeletal illnesses. Eye and hearing tests, as well as ECG and laboratory testing, are also available.

The sickness ratio of 4.9% was slightly below the figure in the previous year of 5.1%.

Outlook for the HR strategy

The revised HR strategy, which will be valid from 2020, supports the company's EnBW 2025 strategy (p. 42 f.). In defining the future direction of our HR policy, we assume that routine tasks and standardised processes will gradually become less significant due to digitalisation. Human strengths such as creativity, flexibility and curiosity will become more important in the workplace in future and employees will be called upon more strongly as idea generators and progressive thinkers. Our newly designed HR policy will support employees in this process of change, for example by developing new forms and formats for cooperation and opportunities for further training and education. In addition, we want to promote innovative thinking and action and strengthen networking opportunities. We will place a particular emphasis on the potential offered by the internationality and diversity of our employees.

The new HR strategy will focus on six key areas, which will be underpinned by a total of 21 strategic areas:

- HR processes, services & digitalisation
- Employer brand & recruiting
- Leadership and skills
- Qualification@EnBW
- Internationalisation
- Transformation into a modern working world

EnBW has set itself the following goal for its HR policy: We want to make every employee at our company an enthusiastic architect of their own individual development – and thus pivotal shapers of EnBW 2025.

On the basis of this goal, a new **future competence model** for the area of leadership has been designed in cooperation with the Board of Management at EnBW, which will act as a common standard for all people in leadership roles at EnBW – irrespective of their precise role. The central focus will be placed on skills such as customer orientation, entrepreneurship, innovative strength and team empowerment. The new future competence model will be consolidated by our entire leadership team in 2020 and operationalised in all relevant leadership processes.

Other performance indicators

Employees[1]

	31/12/2019	31/12/2018	Change in %
Sales[2]	4,394	3.718	18.2
Grids	9,254	8,920	3.7
Renewable Energies	1,384	1,144	21.0
Generation and Trading[2]	5,499	5.358	2.6
Other	2,762	2,635	4.8
Total	**23,293**	**21,775**	**7.0**
Number of full-time equivalents[3]	21,843	20,379	7.2

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.

As of 31 December 2019, our company had 23,293 employees, which was 7.0% more than at the end of 2018. This increase was primarily due to acquisitions and taking on new employees in strategic growth fields. The number of employees in the Sales segment thus increased due to the first-time consolidation of Plusnet and Senec. In the Grids segment, the increase in the number of employees was due to the growing importance of the regulated business. However, this expansion was offset to some extent by the sale of shares in Stuttgart Netze Betrieb, which resulted in a loss of control of the company. In the Renewable Energies segment, the increase was mainly attributable to the acquisition of Valeco. The increase in the number of employees in the Generation and Trading segment was attributable to restructuring within the Group and an increase in employees in the area of recycling of residual nuclear material. Digitalisation and the transformation of the company led to an increase in the number of employees in the Other segment; this effect was offset to some extent by restructuring measures. The employee turnover ratio stood at 6.3% in 2019 and was thus 0.2 percentage points lower than the figure in the previous year.

Further performance indicators for employees, such as the regional distribution or age structure of our employees, can be found on our website at www.enbw.com/performance-indicators. We also refer you to the details provided in the "Report on opportunities and risks" (p. 103).

Occupational safety

Our main goals in the area of occupational safety are to avoid accidents and work-related illness and to create a safe working environment. Responsibilities, roles and processes are defined in the Group guidelines "Occupational safety and health protection", which also documents the EnBW guidelines for occupational safety and health protection. The Occupational Safety Working Group (AK KAS) has the task of regulating issues that affect all companies uniformly within the Group. AK KAS is headed by the Chief Technical Officer of EnBW and has the power to make binding decisions in accordance with the company's rules of procedure.

TOP LTIF

The key performance indicator LTIF is used to measure the number of LTI according to the definition on p. 46. Every Group company included in the consolidated companies for the LTIF receives an individual target from the Board of Management on an annual basis – the fulfilment of this LTIF target flows into the monetary 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.

Key performance indicator

	2019	2018	Change in %	Forecast 2019
LTIF for companies controlled by the Group[1]	2.1	2.3	-8.7	< 3.7
LTIF overall[2]	3.8	3.6	5.6	–

1 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered except for companies in the area of waste management as well as external agency workers and contractors).
2 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered except for external agency workers and contractors).

In 2019, the LTIF for companies controlled by the Group once again improved in comparison to the previous year. The average days of absence per accident at 19.0 fell in comparison to the previous year (22.2). We believe that the significant improvement in occupational safety at EnBW is the result of consistent and effective activities in the area of occupational safety and health protection. The LTIF overall increased slightly in comparison to the previous year. This performance indicator includes subsidiaries in the area of waste management. However, the number of accidents in this area are at a good level in comparison to other companies in the sector.

In the reporting year, there was a fatal accident in relation to loading work.

The measures for achieving targets are independently defined by the Group companies. Various different **activities focussing on occupational safety** were carried out in 2019:

We work continuously on minimising danger in the workplace, which could result in accidents or work-related illnesses, through training and a programme of measures. In the first half of 2019, the focus was placed on the successive roll-out of the EHS software Quentic (formerly called EcoWebDesk, EWD) that had already begun in 2018. Important elements of Quentic are the documentation of risk assessments and hazardous substance management. A uniform hazardous substance register is being gradually collated from various existing sources which have existed for years. The internal audit department carried out an audit on the topic of "Risk assessments of work activities (HSSE)" in the first half of 2019. The audit did not result in any objections. In addition, two workshops for all occupational safety experts on the subject of "Talking about near accidents" were held in the reporting period. At Netze BW, a series of campaigns to further improve the safety culture were carried out in 2019:

- The management systems for occupational safety, environmental protection and energy management were integrated further.
- The grid-wide roll-out of the Quentic database is currently being realised.
- A meeting of the safety officers to discuss the latest issues was held in December 2019.
- To support the theme of health protection, first aid courses were offered to all employees. The target group was those employees who had not yet completed this type of course as part of their work activities.

In the area of conventional and renewable generation, numerous events were held at the power plant sites in 2019. The themes covered included simulator and safety training as well as fire-extinguishing exercises. At the nuclear power plants, more in-depth information was provided about best practice examples and reporting near accidents, and the exchange about experiences with partner companies was intensified in 2019. In addition, the "100 days without accidents" campaign started in 2015 was continued. This is a good tool for motivating employees to act safely.

The main focus at SWD was placed on the following activities:

- Building on the occupational safety and health protection programme 2015plus, a concept for the new programme 2020plus was developed further.
- A concept for dealing with near accidents was implemented in the first pilot areas.
- As part of the "RheinSchiene" project, a meeting of safety officers was held in Düsseldorf in cooperation with the Employer's Liability Insurance Association for the Energy, Textile and Electronics Sectors (BG ETEM).

We also refer you to the details provided in the "Report on opportunities and risks" (p. 104).

Environment goal dimension

Our Group environmental targets – which are integrated into the EnBW 2020 and EnBW 2025 Group strategies – are related to the expansion of renewable energies and to making our contribution to climate protection. These targets are measured using the key performance indicators "installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE" and CO_2 intensity (Glossary, from p. 139). Alongside EnBW AG, the main subsidiaries that have to deal with environmental issues include SWD and ED. In particular, both subsidiaries and EnBW AG have an environmental management system certified according to DIN EN ISO 14001:2015. This creates the prerequisites for ensuring that environmental requirements are systematically and continuously taken into account. It is used to manage the required 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 generation plants and transmission facilities and the possible consequences for air, water, soil and nature. We counter these risks using organisational and procedural measures to reduce their impact, as well as with emergency planning and hazard prevention measures.

Expansion of Renewable Energies

Key performance indicator

	2019	2018	Change in %	Forecast 2019
Installed output of RE in GW and the share of the generation capacity accounted for by RE in %	4.4/31.8	3.7/27.9	18.9/–	4.4–4.5/ 31–32

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

In the reporting year, the installed output of renewable energies increased to 4.4 GW and was thus within the range of the forecast. This increase was primarily attributable to the commissioning of our EnBW Hohe See offshore wind farm with an output of 497 MW and the onshore wind farms and solar parks added through the acquisition of Valeco. We also constructed 54 MW of output from photovoltaic power plants. Overall, the share of the generation capacity accounted for by RE increased – within the range of our forecast – to 31.8%.

Breakdown of the generation portfolio[1] (as of 31/12)

Electrical output[2,3] in MW	2019	2018
Renewable Energies	**4,398**	**3,738**
Run-of-river power plants	1,006	1,006
Storage/pumped storage power plants using the natural flow of water[3]	1,507	1,507
Onshore wind	826	718
Offshore wind	834	336
Other renewable energies	225	171
Thermal power plants[4]	**9,451**	**9,649**
Brown coal	875	875
Hard coal	3,586	3,491
Gas	1,165	1,458
Other thermal power plants	347	347
Pumped storage power plants that do not use the natural flow of water[3]	545	545
Nuclear power plants[5]	2,933	2,933
Installed output[6]	**13,849**	**13,387**
of which renewable in %	31.8	27.9
of which low CO_2 in %[7]	12.3	15.0

1 The generation portfolio includes long-term procurement agreements and generation from partly owned power plants.
2 The figures for the previous year have been restated.
3 Output values irrespective of marketing channel, for storage: generation capacity.
4 Including pumped storage power plants that do not use the natural flow of water.
5 The output from Block 2 of the Philippsburg nuclear power plant is included in the generation portfolio in 2019 because it was not shut down until the evening of 31/12/2019.
6 In addition, power plants with an installed output of 1,706 MW were registered for decommissioning. However, they were classified as system-relevant by the Federal Network Agency and TransnetBW and are thus used by TransnetBW as reserve grid capacity.
7 Excluding renewable energies; only gas power plants and storage power plants that do not use the natural flow of water.

Own generation[1] by primary energy source

in GWh	2019	2018
Renewable Energies	**9,988**	**8,414**
Run-of-river power plants	5,342	4,846
Storage/pumped storage power plants using the natural flow of water	959	1,030
Onshore wind	1,522	996
Offshore wind	1,806	1,233
Other renewable energies	359	309
Thermal power plants[2]	**37,819**	**45,078**
Brown coal	2,598	6,048
Hard coal	8,758	12,868
Gas	3,634	3,518
Other thermal power plants	188	198
Pumped storage power plants that do not use the natural flow of water	1,608	1,790
Nuclear power plants	21,033	20,656
Own generation	**47,807**	**53,492**
of which renewable in %	20.9	15.7
of which low CO_2 in %[3]	11.0	9.9

1 Own electricity generation includes long-term procurement agreements and partly owned power plants.
2 Including pumped storage power plants that do not use the natural flow of water.
3 Excluding renewable energies; only gas power plants and storage power plants that do not use the natural flow of water.

Own generation fell in 2019 compared to the previous year to 47.8 TWh. The main reason for this development was the lower deployment of our thermal power plants because of prices on the market. In contrast, generation based on renewable energies increased significantly, mainly due to the commissioning of our EnBW Hohe See offshore wind farm and the acquired wind turbines in France and Sweden. In addition, the greater volumes of electricity generated due to the better wind conditions and also at the run-of-river power plants due to higher water levels had a positive effect on this development. The proportion of own generation from renewable energy sources thus increased in comparison to 2018 to more than 20%.

Climate protection

Key performance indicator

	2019	2018	Change in %	Forecast 2019
CO_2 intensity in g/kWh	419	553	-24.2	-10% to 0%

TOP CO_2 intensity

The CO_2 intensity (Glossary, from p. 139) of own generation of electricity excluding nuclear power fell significantly in comparison to the previous year by 24.2% to 419 g/kWh and was thus appreciably below our forecasted range. This decrease was due, on the one hand, to higher generation from renewable sources in comparison to 2018 and, on the other hand, to the fact that our electricity generation from our fossil fuel-fired power plants fell much more sharply than forecast due to market-driven developments.

Climate neutrality: 2019 was characterised by political and social debate on climate change. In its Green Deal, the EU wants to introduce comprehensive measures and legal obligations for becoming climate neutral by 2050. Therefore, we have closely examined the significance of sustainability and climate protection themes for the business model and aim to support the international and national targets for climate neutral economic activities when developing our future measures and targets.

Our subsidiary ED was one of the first integrated energy companies in Germany and Switzerland to become climate neutral already at the beginning of 2020. For this purpose, ED implemented a comprehensive range of measures over the last few years, such as producing its own green electricity, increasing the energy efficiency of its buildings, reducing the CO_2 emissions from its vehicle fleet and compensating for grid transmission losses using green electricity.

In addition to the key performance indicators in the area of the environment, we utilise a broad range of additional environmental indicators for measuring, controlling and presenting the other results of our environmentally relevant activities. The most important performance indicators are presented in the following table on p. 90. A comprehensive presentation of our environmental performance indicators can be found on the Internet at www.enbw.com/umweltschutz. There is also information available here on our wide-ranging measures to improve energy efficiency, conserve biological diversity and protect nature and species, such as our EnBW amphibian protection programme, or on ecological enhancement measures in the area of our hydroelectric power plants. In addition, further information in conformity with the Global Reporting Initiative (GRI standards) can be found on the Internet.

Carbon footprint: Direct CO_2 emissions are determined mainly by the deployment of power plants. In particular, the sharp decrease in electricity generation from coal in combination with a significant increase in electricity generation from renewable sources led to a corresponding reduction in direct CO_2 emissions from 16.6 to 10.8 million t CO_2eq. Lower indirect CO_2 emissions from grid losses led to a fall in Scope 2 CO_2 emissions from 1.0 to 0.9 million t CO_2eq. Scope 3 CO_2 emissions are mainly influenced by the gas consumption of our customers. The moderate increase in gas sales led to a corresponding rise in Scope 3 emissions from 16.8 to 17.6 million t CO_2eq. The figure for the previous year was restated due to a reclassification within the Generation and Trading segment. Primarily as a result of the increased generation from renewable energy sources, CO_2 emissions avoided rose from 6.9 to 8.3 million t CO_2eq.

Energy consumption: Total final energy consumption includes the consumption of final energy for our business activities. It does not include conversion losses during energy generation or grid losses. Total final energy consumption is mostly influenced by pump energy as well as the company's own consumption requirements and the operating consumption of the power plants. Due to the lower level of own generation overall, the total final energy consumption fell by around 10% in comparison to the previous year from 3,252 GWh to 2,919 GWh.

The proportion of renewable energies in final energy consumption increased from 51% in 2018 to 53% in 2019. This was primarily due to an increase in electricity generation from renewable energies with a correspondingly higher proportion of renewable energies used for the company's own consumption requirements and the operating consumption of the power plants.

The energy consumption of our buildings covers the energy required for heating rooms, providing hot water and electricity. The energy consumption of buildings per employee decreased from 10,482 kWh in 2018 to 9,606 kWh in 2019. This decrease was the result of a diverse range of measures for increasing the energy efficiency of our buildings.

Environmental protection expenditure: We report environmental protection expenditure in line with the requirements of the statistical offices and using the guidelines published by our sector association, BDEW. According to these reporting requirements, investments and current expenditure for the use of renewable energies should be reported in full as expenditure for climate protection. Investment in climate protection increased at an above-average rate from €535 million in the previous year to €1,535 million in 2019. The reasons for this development were the investments associated with the construction of the EnBW Hohe See and EnBW Albatros offshore wind farms and the acquisition of the project developer and operator of wind farms and solar parks Valeco, which are included as expenses for climate protection in accordance with the reporting requirements. The increase in current environmental protection expenses to €301 million (previous year: €268 million) was mainly attributable to higher expenditure in the area of renewable energies.

Mobility: Alongside the expansion of the public charging infrastructure (Glossary, from p. 139) (p. 82), we are also continuously expanding the charging options for electric cars at our sites for our employees. A total of around 580 charging points were thus installed at 65 sites across Germany in 2019. By expanding the charging infrastructure at our sites, we want to make it easier for our employees to switch over to electromobility and thus also push forward the mobility transition internally within the company.

Environmental performance indicators

	Unit	2019	2018
Carbon footprint			
Direct CO_2 emissions (Scope 1)[1]	millions of t CO_2eq	10.8	16.6
Indirect CO_2 emissions (Scope 2)[2]	millions of t CO_2eq	0.9	1.0
Other indirect CO_2 emissions (Scope 3)[3, 4]	millions of t CO_2eq	17.6	16.8
CO_2 emissions avoided[5]	millions of t CO_2eq	8.3	6.9
CO_2 intensity of business journeys and travel[6]	g CO_2/km	169	181
Energy consumption			
Total final energy consumption[7]	GWh	2,919	3,252
Proportion of renewable energies in final energy consumption[3, 8]	%	53	51
Energy consumption of buildings per employee[9]	kWh/MA	9,606	10,482
Environmental protection expenditure[10]			
Investment in environmental protection	€ million	1,535	535
Current environmental protection expenses	€ million	301	268

1 Preliminary data.
2 Includes greenhouse gas emissions through electricity grid losses and through electricity consumption of plants in the gas and electricity grid, water supplies and buildings.
3 The figures for the previous year have been restated.
4 Includes greenhouse gas emissions through consumption of purchased electricity volumes by customers, consumption of gas by customers, fuel provision, supply chains for gas sales and business travel.
5 Includes CO_2 emissions avoided through the expansion of renewable energies, through energy efficiency projects with customers/partners and through the generation and sale of biogas.
6 Includes all business travel activities (Scope 1 and Scope 3).
7 Includes final energy consumption of production including pump energy, energy consumption of grid facilities (electricity, gas and water) excluding grid losses, energy consumption of buildings and vehicles.
8 For electricity consumption for which the proportion of renewable energies is unknown, a proportion of renewable energies in accordance with the current Bundesmix (federal mix) label for electricity of 35% is assumed. For fuels, a proportion of 5% bioethanol is generally assumed.
9 Calculated partially on the basis of assumptions and estimations.
10 Pursuant to the German Environmental Statistics Act (UStatG) and BDEW guidelines on the recognition of investment and ongoing expenditure relating to environmental protection (April 2007).

Selected activities

Hydropower: Electricity generated from hydropower protects the climate. At the same time, the use of hydropower also encroaches on nature. Therefore, we are committed to harmonising hydropower with ecology. If power plants cause changes to the natural landscape, we compensate for these effects through ecological enhancement measures. For example, we ensure or improve the continuity of watercourses by constructing or optimising fish passes and fish ladders for fish to ascend or descend the river. We are constantly working on new, innovative solutions for ensuring that fish can ascend rivers and for protecting the fish. This can be seen, for example, in our project to enable fish to migrate along the River Murg at the sites in Kirschbaumwasen and Forbach (low-pressure power plant). As the local conditions do not allow the use of traditional solutions for fish to ascend or descend the river, a new type of fish lift is being used. This makes a valuable contribution to achieving the targets in the EU Water Framework Directive for the River Murg, which is classified as a salmon programme waterway. By constructing additional weir turbines at the sites of the fish lifts, we ensure a continuous supply of residual and weir water while generating climate-friendly energy at the same time.

Conservation of biological diversity: We initiated the programme "Stimuli for Diversity" for the protection of amphibian species together with LUBW (Baden-Württemberg State Institute for the Environment) in 2011, which has also included funding for protective measures for reptiles since 2016. The programme is part of the project "The economy and business for nature", which is a component of the state initiative "Active for biological diversity". It still remains the only conservation programme from a company nationwide that not only funds the protection of one single species but two whole groups of species across the state. In the reporting year, nine further projects were realised. More than 110 measures have been implemented in total across Baden-Württemberg since the start of the funding programme, which have successfully improved the living conditions for many endangered species in the state.

EnBW Ostwürttemberg DonauRies has planted a total of 10,600 native deciduous and conifer trees in Ostwürttemberg and the DonauRies region in the last three years. It works together with eight local authorities and the Association for the Protection of German Forests (SDW) on this initiative, which makes a contribution to biodiversity and regional climate protection.

We also refer you to the details provided in the "Report on opportunities and risks" (p. 104).

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 the Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, as well as the management report of EnBW AG contained in the Group management report, will be published in the German Federal Gazette (Bundesanzeiger).

For statements that are necessary to understand the position of EnBW AG and which 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. 41 ff. and 62 ff.). The full financial statements of EnBW AG are available for download at (www.enbw.com/report2019-downloads).

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]	2019	2018	Change in %
Revenue	38,220.6	24,883.1	53.6
Cost of materials	-37,385.9	-24,364.2	-53.5
Amortisation and depreciation	-569.3	-458.1	-24.3
Other operating result	-39.6	-502.6	92.1
Earnings before interest and taxes	**225.8**	**-441.8**	**–**
Financial result	-29.3	-73.0	59.9
Tax	84.1	-285.9	–
Annual net profit/loss	**280.6**	**-800.7**	**–**

1 In accordance with German commercial law.

EnBW AG reported an annual net profit of €280.6 million. The substantial increase in comparison to the previous year was mainly influenced by €667.6 million higher earnings before interest and taxes and the increase in the tax result of €370.0 million.

The operating result of EnBW AG is primarily determined by the revenues generated from electricity and gas sales, as well as by the associated cost of materials.

In the earnings before interest and taxes, the increase in revenue of €13,337.5 million was offset by an increase in the cost of materials of €13,021.7 million.

The revenue (after the deduction of electricity and energy taxes) of €38,220.6 million primarily includes revenue from electricity sales of €17,345.5 million and gas sales of €19,592.5 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.

As a result of the further expansion in trading activities in 2019, the trading business recorded an increase in revenue of €13,630.5 million to €35,415.2 million. In the gas trading business, the increase in trading volume more than offset lower market prices. In the electricity trading business, the higher trading volume was also positively influenced by increasing prices on the energy markets. The increase in revenue was also offset by the increase in the cost of materials of €13,515.3 million to €34,727.2 million.

Revenues from sales activities were split into €1,668.6 million for electricity and €200.6 million for gas, which represented an overall drop of €35.8 million.

In the retail and end customer sector (B2C), electricity sales of 6.9 billion kWh were at the same level as in the previous year. Gas sales increased in the same period by 0.2 billion kWh to 4.1 billion kWh due to the growing contract portfolio and were thus higher than the previous year. The increase in energy sector costs was passed on to customers in both business segments, which resulted in higher revenues.

The sales to business customers (B2B) includes supplying customers within the Group and redistributing and holding reserve supplies for B2B customers. Sales in the B2B electricity business fell by 0.3 billion kWh to 0.5 billion kWh due primarily to the decrease in sales to redistribution customers. Gas sales to business customers fell in the same period by 0.1 billion kWh to 0.2 billion kWh, which was mainly due to lower demand from customers within the Group.

The cost of materials includes costs for electricity procurement of €15,986.9 million and costs for gas procurement of €19,607.7 million.

Alongside scheduled amortisation and depreciation, the amortisation and depreciation item includes impairment losses of €236.5 million.

The significant improvement in the other operating result was primarily attributable to higher income from the disposal of assets of €848.2 million in comparison to the previous year. This was offset primarily by lower income from reversals of impairment losses of €189.7 million and lower income from the reversals of provisions of €153.9 million in comparison to the previous year.

The positive development of the financial result was mainly influenced by lower impairment losses on financial assets of €13.2 million, the fall in the interest expenses for nuclear provisions of €44.7 million, a fall in the interest expenses for affiliated entities of €60.7 million and the accrual of tax provisions of €24.0 million. This was offset to some extent by the decrease of €109.9 million in investment income.

There was a positive tax result in the financial year of €84.1 million. The taxes mainly comprise the reversal of provisions for tax audit risks of €107.0 million. In the previous year, there was an allocation to the provisions for tax audit risks of €133.8 million and lower out-of-period tax expenses of €159.0 million. The option of recognising a surplus of deferred tax assets was not exercised.

Net assets of EnBW AG

Balance sheet of EnBW AG

in € million[1]	31/12/2019	31/12/2018	Change in %
Assets			
Non-current assets			
Intangible assets	519.6	635.4	-18.2
Property, plant and equipment	933.7	1,248.4	-25.2
Financial assets	22,125.6	20,130.5	9.9
	23,578.9	**22,014.3**	**7.1**
Current assets			
Inventories	494.5	446.7	10.7
Receivables and other assets	2,530.5	3,336.4	-24.2
Securities	45.8	119.2	-61.6
Cash and cash equivalents	169.5	628.1	-73.0
	3,240.3	**4,530.4**	**-28.5**
Prepaid expenses	**366.5**	**1,226.3**	**-70.1**
Surplus from offsetting	**315.8**	**268.1**	**17.8**
	27,501.5	**28,039.1**	**-1.9**
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	1,872.5	1,872.5	–
Retained earnings	383.6	279.1	37.4
	3,725.5	**3,621.0**	**2.9**
Extraordinary items for investment cost subsidies and grants	**23.4**	**24.0**	**-2.5**
Provisions	**11,204.4**	**11,032.4**	**1.6**
Liabilities	**12,094.2**	**12,414.7**	**-2.6**
Deferred income	**454.0**	**947.0**	**-52.1**
	27,501.5	**28,039.1**	**-1.9**

1 In accordance with German commercial law.

The net assets of EnBW AG as of 31 December 2019 are significantly influenced by the non-current assets (particularly the financial assets), the receivables and other assets, as well as by cash and cash equivalents. These are primarily offset by non-current liabilities and provisions relating to nuclear power and for pensions and similar obligations.

Financial assets primarily consist of shares in affiliated entities to the amount of €15,437.0 million, securities held as non-current assets to the amount of €2,726.6 million and investments to the amount of €1,607.0 million. The increase in financial assets of €1,995.1 million includes, on the one hand, shares in affiliated entities primarily as a result of restructuring within the Group and payments into the capital reserve of subsidiaries. In addition, loans to affiliated entities increased by €353.5 million in comparison to the previous year.

Trade receivables to the amount of €715.6 million mainly comprise receivables from trading activities and consumption accruals for electricity and gas deliveries not yet invoiced and were €68.6 million below the figure in the previous year. Receivables from affiliated entities fell by €505.4 million in comparison to the previous year. This was primarily due to the reclassification of loans to affiliated entities.

The cash and cash equivalents of EnBW AG totalling €169.5 million mainly consist of bank deposits, which are invested as time deposits to the amount of €50.0 million. More details on the development of this item can be found in the section "Financial position of EnBW AG".

The provisions for pensions and similar obligations held by EnBW AG to the amount of €5,285.8 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 paid by the subsidiaries concerned in each case. The increase in the provisions for pensions and similar obligations of €517.3 million was mainly due to the effect of the further decrease in the discount rate as in the previous year. In addition, provisions relating to nuclear power of €3,939.7 million are disclosed, which arise due to public law obligations and requirements in the operating licences.

Of the liabilities totalling €12,094.2 million, €6,635.6 million have a residual term of more than one year. Overall, there are liabilities of €7,347.5 million to affiliated entities, which primarily result from intercompany settlement transactions within the framework of the centralised financial and liquidity management, as well as from loan agreements.

The decrease in liabilities by €320.5 million was mainly due to the reduction in other liabilities from margin payments of €308.9 million and to the decrease of €70.9 million in option premiums received. In addition, there were repayments totalling €70.5 million to bank loans.

Non-current liabilities exist to the amount of €2,700.4 million to EnBW International Finance B.V. as part of the Debt Issuance Programme (DIP) (Glossary, from p. 139), to the amount of €2,992.6 million from the issuing of five hybrid bonds and to the amount of €597.7 million from loan agreements with credit institutions. The main changes in comparison to the previous year were the issuing of two green hybrid bonds with a total volume of €1,000.0 million.

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 €22,125.6 million are offset by long-term debt of €15,339.4 million.

The liquidity of EnBW AG on the reporting date guarantees 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 decreased from €628.1 million by €458.6 million to €169.5 million.

The cash flows of EnBW AG fundamentally arise from both its own operating business and also the operating business of the subsidiaries which balance payments received and made via the bank accounts of EnBW AG as part of the intercompany cash pooling system (Glossary, from p. 139) within the framework of the central financing and liquidity management.

Important business transactions that had an effect on the financial position of EnBW AG in the financial year are summarised below:

Material liquidity-related business transactions in the reporting year were investments in the area of renewable energies and telecommunications totalling €1,189.9 million. These were offset by the sale of an investment resulting in a cash inflow of €342.8 million.

Other significant events were the issuing of two green hybrid bonds with a total volume of €996.5 million and the issuing of a bond with a volume of €74.8 million via EnBW International Finance B.V. This was offset by repayments to bank loans of €70.5 million.

There was a cash outflow of €561.5 million in connection with the utilisation of the nuclear power and pension provisions.

A total of €176.1 million was distributed to the shareholders of EnBW AG in dividends.

This was offset by the receipt of dividends with an impact on liquidity of €271.6 million.

In the 2019 financial year, EnBW AG paid tax arrears for income tax from previous years (including the associated interest) and prepayments for the following year totalling €208.0 million.

Overall assessment of the economic situation of EnBW AG and the development of EnBW AG

In our judgement, the development of the results of operations, financial position and net assets of EnBW AG as of 31 December 2019 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, an annual net profit of €200 million was expected in 2019. The annual net profit for 2019 stands at €280.6 million and was significantly influenced by effects not relevant to the ongoing management of the company, which arose both at EnBW AG itself and also at its subsidiaries which had an impact on EnBW AG due to profit and loss transfer agreements.

The main effects not relevant to the ongoing management of the company were higher interest expenses for pension provisions and provisions relating to nuclear power totalling €611.6 million (€566.3 million of which is reported under interest expense of EnBW AG) resulting from the drop in the discount rate and were thus €194.6 million higher than expected. Furthermore, allocations to the provisions relating to nuclear power, mainly due to adjustments in cost estimates, of €122.1 million (of which €71.2 million was reported under the cost of materials of EnBW AG) had a negative effect. Other negative effects arose from impairment losses on intangible assets and property, plant and equipment totalling €236.5 million, impairment losses on financial assets of €91.1 million and allocations to provisions for onerous contracts of €60.9 million.

This was primarily offset by income from the disposal of assets of €858.9 million, the reversal of other provisions of €182.4 million and tax provisions of €129.0 million, as well as adjustments to the provisions for onerous contracts of €81.7 million.

Based on the annual net profit of €280.6 million and taking into account the profit carried forward of €103.0 million, there are retained earnings of €383.6 million.

We anticipate an annual net loss of around €250 million in 2020. The net result for the year will be negatively influenced by high interest expenses for non-current provisions. As a result of the low-interest phase, the average interest rate will fall further in the future. We anticipate that this will have a negative impact on earnings of €600 million in 2020. After it has been adjusted for this effect, the annual net profit will be around €350 million. The amount from the valuation of the provisions for pension obligations and the valuation of the dedicated financial assets (Glossary, from p. 139) in the CTA that is ineligible for distribution as dividends will stand at around €900 million by 31 December 2020. Due to a fall in the average interest rate, we expect a negative impact on earnings of a similar magnitude in 2021. We anticipate that this negative impact on earnings will decrease in 2022.

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. 100 ff.).

Comments on reporting

The consolidated financial statements of EnBW AG are prepared in accordance with section 315 e (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 company in the sense of EnWG, EnBW AG engages in 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 6 b (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 (www.enbw.com/shareholder-structure), 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 €29.20 at the start of 2019 and stood at €50.50 by the end of the year (www.enbw.com/stock-chart).

The trust placed in EnBW by capital market participants is based on the value generated by the company. Against this background, EnBW manages the development of value using ROCE and its creditworthiness using the key performance indicators internal financing capability (up to 2020) and debt repayment potential (from 2021). EnBW strives to generally pay a dividend payout ratio of between 40% and 60% of adjusted Group net profit. Based on the annual net profit of EnBW AG of €280.6 million and taking into account the profit carried forward of €103.0 million, there is retained earnings of €383.6 million for the financial year and thus dividends will be paid for the 2019 financial year. If approved by the Annual General Meeting, the dividend to be distributed for the 2019 financial year will be €0.70 per share. Adjusted for IFRS 9 valuation effects, this corresponds to a payout ratio of 40%.

Overall assessment of the economic situation of the Group

The energy sector is currently experiencing a period of great upheaval. There is particular pressure for change due to the Energiewende, digitalisation, sector coupling (Glossary, from p. 139) and the desire of local authorities to become self-sufficient. In addition, the issue of climate protection is receiving greater public attention. The European Commission announced its target of climate neutrality by 2050 in a comprehensive Green Deal in 2019. In 2020, it will investigate the effects of increasing the 2030 climate targets to at least 50% or 55%. With regards to the framework conditions facing EnBW and other players in the energy industry, other measures can be expected as part of the Green Deal in future.

Following the successful implementation of the EnBW 2020 strategy, there will be a smooth transition between the strategy periods: We already strengthened our business activities in the area of renewable energies in 2019 with the acquisition of the French project developer and operator of wind farms and solar parks Valeco. We also took a significant step in building a strong position for ourselves on the nationwide telecommunications market in Germany in 2019 with the acquisition of Plusnet. Both transactions will already contribute to the EnBW 2025 growth strategy.

The operating business developed overall in 2019 as expected and forecast at the start of the year: The adjusted EBITDA of the EnBW Group increased by 12.7% in comparison to the previous year. Adjusted for the effects of the changes in the consolidated companies, the adjusted EBITDA would have increased by 8.1%. The result in the Sales segment developed positively in the reporting year and was at the higher end of our forecast. The acquisition of Plusnet made a significant contribution in this area. The result in the Grids segment increased in line with our forecast. The main factor influencing this positive earnings performance was the higher revenue from the use of the grids, above all due to the increased investment that was necessary for ensuring the security and reliability of supply of the grids. In the Renewable Energies segment, the result improved significantly and was within the forecasted range. In particular, the commissioning of our EnBW Hohe See offshore wind farm and the earnings contributions from the acquired wind farms in France had a positive effect. The result in the Generation and Trading segment fell as forecast due to the loss of the earnings contribution made by VNG Norge and its subsidiary VNG Danmark which were sold in 2018 and lower out-of-period earnings. In total, the Grids and Renewable Energies segments contributed around three quarters of the adjusted EBITDA of EnBW. The adjusted EBITDA for the Group in 2020 will increase further and be between €2.75 billion and €2.9 billion. It will lie above the strategic target as a result.

The non-operating EBITDA decreased further in 2019 compared to the previous year. This decrease is mainly attributable to allocations to provisions for onerous contracts for long-term electricity procurement agreements and risk provisions for a possible obligation to pay EEG cost allocations for the company's own energy deliveries within the EnBW Group.

In total, the Group net profit attributable to the shareholders of EnBW for the 2019 financial year improved by €400.0 million to €734.2 million. Earnings per share amounted to €2.71 in the 2019 financial year, compared to €1.23 in the previous year.

The financial position of the company remains sound. Solvency was ensured at all times throughout the 2019 financial year thanks to the company's available liquidity and its internal financing capability, as well as external sources available for financing. On 29 July 2019, we issued our first two green hybrid bonds with a total volume of €1 billion. EnBW was thus the first German company to issue a green hybrid bond. The adjusted retained cash flow exceeded the forecasted range of €1.3 billion to €1.4 billion in the reporting period, while we just missed the target value for internal financing capability of ≥ 85% due to the sharp increase in net investment adjusted for growth investment. The fall in ROCE was mainly due to the increase in the average capital employed.

In the customers and society goal dimension, the Reputation Index of EnBW improved in 2019 compared to the previous year; the most positive changes here were amongst customers and the wider public. The satisfaction of the customers of EnBW fell in 2019 as a result of the general trend in the sector, as well as individual measures such as a price adjustment and a system migration. The satisfaction of Yello customers remained at a high level in 2019. Supply reliability improved in 2019. In the employees goal dimension, the Employee Commitment Index rose due to the improved perception of the current competitiveness of our company and employees having greater trust in the future viability of the Group. In the area of occupational safety, the LTIF for companies controlled by the Group fell further. However, the LTIF overall increased slightly. In the environment goal dimension, the expansion of renewable energies is continuing according to plan. The CO_2 intensity (Glossary, from p. 139) of our own generation of electricity fell significantly in comparison to the previous year and was thus well below the forecasted range.

In the estimation of the Board of Management, the operating business of our company developed positively in 2019. Overall, the operating result increased as expected. EnBW is also generally on course in the non-financial goal dimensions.

Forecast

In our forecast we take a look, insofar as is possible, at the expected future growth and development of EnBW in the years 2020 to 2022.

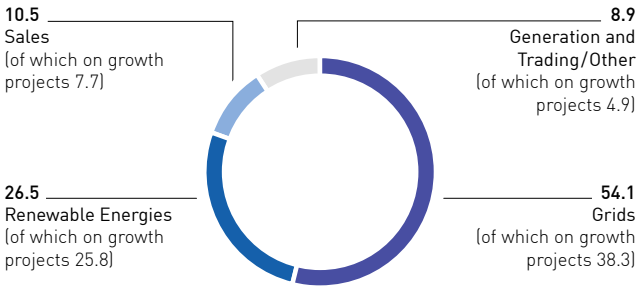
The expected economic, political and regulatory conditions are presented in the chapter "General conditions" (p. 62 ff.). Potential factors influencing the forecast are described in detail in the "Report on opportunities and risks" (p. 100 ff.).

Expected trends in the finance and strategy goal dimensions

Investment over a three-year period

In order to continue to play an active role in shaping the Energiewende, **total investment** of €7.0 billion is planned for the 2020 to 2022 period. This represents on average €2.3 billion per year. €1.6 billion (23%) of this investment will be on existing projects and €5.4 billion (77%) on growth projects. The majority of the total investment will be made in the regulated business (Renewable Energies and Grids).

Total investment 2020–2022
in %



Around 54% of the investment will flow into the **Grids** segment, of which around 38% will be for growth projects and 16% for existing projects. In order to make the transport of renewable energies from the north to the south of Germany possible, funds have been allocated to the transmission grid for the realisation of the two HVDC projects (Glossary, from p. 139) ULTRANET and SuedLink that involve our subsidiary TransnetBW and are part of the Network Development Plan (Glossary, from p. 139). In addition, extensive investment in the expansion and upgrading of the existing grids is planned.

Around 27% of the total investment will be attributable to the **Renewable Energies** segment – of which 26% will be for growth investment. This includes funds for the realisation of further offshore wind farms after 2019. In addition, funds have been allocated for the construction of onshore wind farms both at home and abroad to achieve the 1,000 MW target by 2020 and for solar parks (including three large photovoltaic parks with a total output of around 460 MW) from our comprehensive project pipeline (p. 42).

Around 11% of the investment will be attributable to the **Sales** segment, of which approximately 8% will be for growth investment. This growth investment is mainly intended for the expansion of electromobility, as well as for the development of energy solutions.

Around 9% of the total investment will be attributable to the **Generation and Trading** segment and Other. Growth investment will account for a little more than half of this amount. This mainly comprises investment relating to the accepted bid for the construction of a gas turbine power plant in Marbach am Neckar as special technical equipment for grids.

The investment programme of the EnBW Group thus reflects our strategy for expanding renewable energies and ensuring security of supply in the regulated areas of the transmission and distribution grids.

In order to finance the entire investment volume of around €7.0 billion, **divestitures** amounting to almost €0.7 billion are planned in the years 2020 to 2022. This includes divestitures in the onshore and photovoltaic sectors, which will build on our already realised participation models. The remaining divestitures will involve the receipt of construction cost subsidies and the participation model "EnBW connects". This local authority participation model is currently attracting a great deal of interest from local authorities (p. 82).

The balance of gross investment and divestitures gives the net investment, which is €6.3 billion or €2.1 billion on average per year.

It is expected that the target set in the EnBW 2020 strategy of making a gross investment of €14.1 billion in the period 2012 to 2020 (based on the reference year of 2012) (p. 41) will be exceeded by around €3 billion.

In view of the around €5.1 billion in already realised divestitures by the end of 2019 and the divestitures planned for 2020, we expect that the target set in the EnBW 2020 strategy of €5.1 billion in divestitures (based on the reference year of 2012) (p. 41) will be slightly exceeded.

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

Development in 2020 (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	
	2020	2019	2020	2019
Sales	€325 to €400 million	€294.3 million	10% to 15%	12.1%
Grids	€1,300 to €1,400 million	€1,311.2 million	40% to 55%	53.9%
Renewable Energies	€825 to €925 million	€482.8 million	25% to 35%	19.8%
Generation and Trading	€425 to €500 million	€383.8 million	10% to 20%	15.8%
Other/Consolidation		€-39.6 million		-1.6%
Total	**€2,750 to €2,900 million**	**€2,432.5 million**		**100.0%**

In the **Sales** segment, we expect an adjusted EBITDA in 2020 above the level in the previous year. This development will be due to increased earnings from the area of telecommunications as a result of the acquisition of Plusnet in the 2019 financial year, as well as to efficiencies related to the introduction of a new billing system. Therefore, we expect a stable share of the adjusted EBITDA for the Group accounted for by this segment.

The adjusted EBITDA for the **Grids** segment in 2020 is set to reach the same level as the 2019 financial year and it will thus continue to be the segment with the highest earnings. Revenue from the use of the grids which will come from returns on the increased investment activity in projects that are included in the Network Development Plan Electricity and Network Development Plan Gas (Glossary, from p. 139) is expected to remain stable in comparison to the previous year. We expect a stable or decreasing share of the adjusted EBITDA for the Group accounted for by this segment.

The adjusted EBITDA for the **Renewable Energies** segment will increase significantly in 2020. Our offshore wind farms EnBW Hohe See and EnBW Albatros – which were commissioned in autumn 2019 and at the beginning of 2020, respectively – will make full-year earnings contributions. In addition, the expansion and acquisition of onshore wind farms and photovoltaic power plants realised during the course of 2019 and planned in 2020 will make a positive contribution to earnings. Our forecasts are generally based on wind yields that correspond to the long-term average. As the wind conditions were slightly below the long-term average in 2019, this will result in slightly higher earnings in 2020 in comparison to the previous year. We expect an increase in the share of the adjusted EBITDA for the Group accounted for by this segment.

In the **Generation and Trading** segment, we expect an adjusted EBITDA in 2020 above the level in the previous year. We sold our electricity deliveries for 2020 on the forward market at higher wholesale market prices than in the previous year (Glossary, from p. 139). This will be offset to some extent by the decommissioning of Block 2 of our Philippsburg nuclear power plant. The share of the adjusted EBITDA for the Group accounted for by this segment should remain stable.

In Other/Consolidation, an adjustment to the management concept in connection with the reorganisation of the SAP system will have an effect in the 2020 financial year in comparison to the previous year. The expenses for the Group functions will no longer be split between the operating segments. This will have a positive effect on the adjusted EBITDA in all segments.

The **adjusted EBITDA** for the EnBW Group in 2020 will increase further and be between €2.75 billion and €2.9 billion. Earnings will thus lie between €350 million and €500 million above the strategic target value. We expect a slight increase in adjusted EBITDA for the Group in 2021 in comparison to 2020. This will be due to a constant increase in earnings in all segments.

The **EBITDA** in 2020 and 2021 will develop in line with the adjusted EBITDA. We do not make any forecasts relating to material non-operating effects.

The **EBT** relevant to remuneration is expected to be between €1.05 billion and €1.15 billion in 2020 as a result of the rise in adjusted EBITDA and will thus increase in comparison to the previous year. A further slight increase in EBT is expected in 2021. The accuracy of the forecast for EBT is, however, still dependent on other exogenous factors that cannot be planned for, such as impairment losses, the reversal of impairment losses or impending losses for onerous contracts for electricity procurement agreements.

Assuming an adjusted EBITDA in the range of €2.75 billion to €2.9 billion, we expect to achieve an **adjusted retained cash flow** (p. 78) of between €1.9 billion and €2.0 billion. This includes an increase of €245 million from the reimbursement of the nuclear fuel rod tax (Glossary, from p. 139). Adjusted for this effect, the anticipated dividend payment of around €340 million (including payments from investments to third parties) and the income tax payments, we expect an FFO of between €2.2 billion and €2.3 billion. The adjusted retained cash flow is expected to fall in 2021 in comparison to 2020, which will be primarily due to the elimination of the adjustment for the repayment of the nuclear fuel rod tax.

TOP Internal financing capability

Key performance indicator

	2020	2019
Internal financing capability in %	around 100	82.6

We expect an internal financing capability in 2020 of around 100% because planned net investment and the adjusted retained cash flow will be at a comparable level. We continue to strive to maintain an internal financing capability of around 100% for the period from 2017 to 2020. However, it is possible that the internal financing capability may fall below 100% in individual years. Following the transition to the growth strategy, the key performance indicator internal financing capability will be replaced by the new key performance indicator debt repayment potential from 2021 on.

TOP ROCE

Key performance indicator

	2020	2019
ROCE in %	5.5–6.0	5.2

In the 2020 financial year, ROCE is expected to be above the level in the previous year and at between 5.5% and 6.0%. In general, investments tend to lead at first to a fall in ROCE due to a low initial contribution to earnings. Investment in our offshore wind farm EnBW Hohe See and the acquisition of Valeco and Plusnet had a strong negative impact on ROCE in 2019. The ROCE is expected to recover in 2021. The forecast for the ROCE in 2020 is below the stated strategic target for 2020 due to higher capital employed – in comparison to the strategy – but without a corresponding increase in EBIT. The capital employed is significantly higher due to an increase in the cumulative investment volume (€3.0 billion) and the revaluation of EnBW Hohe See. Alongside a lower weighted average cost of capital (WACC) compared to 2012, increased impairment losses on additional investments, a significant fall in the discount rate for the nuclear provisions and the revaluation of EnBW Hohe See have a negative impact on EBIT.

The ROA will develop in line with the ROCE. In 2020, the ROA is expected to be between 5.2% and 6.2%, while we anticipate that it will increase slightly in 2021 compared to 2020 as things currently stand.

Expected trends in the customers and society goal dimension

Key performance indicators

	2020	2019
Reputation Index	55.4	52.8
Customer Satisfaction Index for EnBW/Yello	114–136/ 148–159	116/157
SAIDI (electricity) in min./year	15–20	15

TOP Reputation Index

EnBW will strive to noticeably improve its reputation continuously over the next few years. The Reputation Index is an important non-financial performance indicator because this index value is influenced by a whole series of factors that are important to the future viability of our company. The existing reputation management department and the stakeholder team at EnBW can recommend measures for optimising the reputation of the company.

TOP Customer Satisfaction Index

We also continue to expect a high level of competitive pressure in 2020 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. In addition, exogenous factors could negatively impact customer satisfaction more and more in the future, such as discussions about the future of coal-fired power generation, the development of state levies, the proposed gradual increase in CO_2 prices up to 2023 included in the German government's climate action package, increasing costs or delays to the expansion of the grids. To improve the satisfaction of our customers, we are also expanding our range of sustainable energy industry services and energy solutions and targeting our sales activities in this direction in 2020. We will combine traditional energy products (electricity and gas) with household and energy-related products to offer our customers a range of "ecosystem solutions". One example is an EnBW mobility+ offer that bundles an electric car with a green electricity tariff, a charging box for the home and other e-mobility services. On the basis of the goals described above, we are striving to achieve a Customer Satisfaction Index for EnBW of between 114 and 136 points in the 2020 financial year.

The aim is to continue to keep the index value for the satisfaction of Yello customers within our forecast. Therefore, there will be a greater focus on the expansion of personalised customer contact and customised offers in 2020. In addition, new electricity and gas products, more content in the Yello Magazine and the further development of digital services should increase the attractiveness of the Yello portfolio even more. On this basis, we are striving to achieve an index value for Yello of between 148 and 159 points in the 2020 financial year – as in the previous year.

It is anticipated that we will not fully achieve the target values in 2020 that were defined in our EnBW 2020 strategy for a Customer Satisfaction Index of >136 for EnBW and >159 for Yello. We believe that the main reason for this is that climate protection measures have made the consumption of energy increasingly expensive for customers. Despite the fact that we have developed new skills, offers and services in this area, this has negatively impacted the perception of the energy sector overall.

TOP SAIDI

The grid subsidiaries of EnBW have always achieved a highly reliable supply throughout their grid area and for their customers. The corresponding key performance indicator SAIDI, which states the average duration of supply interruptions per connected customer per year, stood at 15 minutes in 2019. We are striving to achieve a value of between 15 and 20 minutes in the 2020 financial year and subsequent years.

Expected trends in the employees goal dimension

Key performance indicators

	2020	2019
Employee Commitment Index (ECI)[1]	≥ 66	66
LTIF for companies controlled by the Group[2]	≤ 2.1	2.1
LTIF overall[3]	≤ 3.8	3.8

1 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered (except ITOs)).
2 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered except for companies in the area of waste management as well as external agency workers and contractors).
3 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered except for external agency workers and contractors).

TOP Employee Commitment Index

The Employee Commitment Index (ECI) reached 66 points and thus clearly exceeded the target we set for 2019 of 63 points. In 2020, we have set ourselves the goal of maintaining this high level and matching at least the level achieved in 2019. We anticipate that we will achieve or even exceed the target value defined in the EnBW 2020 strategy for 2020 of 65 points.

TOP LTIF

We are committed to our goal of continuously improving occupational safety within the company for both our own employees and third-party employees who carry out work on behalf of EnBW. Therefore, we have implemented numerous accident prevention measures. The main focus of our measures will be placed on the roll-out of the new Quentic software as well as a heightened awareness for unsafe situations and conditions. Consistent reporting of these types of occurrences and communication amongst employees about hazardous situations will help us to increase the awareness of employees. We intend to continuously reduce the LTIF for companies controlled by the Group and LTIF overall.

Expected trends in the environment goal dimension

Key performance indicators

	2020	2019
Installed output of RE in GW and the share of the generation capacity accounted for by RE in %	5.0/> 40	4.4/31.8
CO_2 intensity in g/kWh	16%–23%	419

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

The installed output of renewable energies will increase to 5 GW in 2020, which will primarily be due to the EnBW Albatros offshore wind farm that was placed into operation at the beginning of 2020 and the Weesow-Willmersdorf solar park that is currently being realised. In addition, there are plans to further expand onshore wind and photovoltaic power plants. As a result, and also because of the shutdown of Block 2 of the Philippsburg nuclear power plant, the share of the generation capacity of the Group accounted for by renewable energies will increase. In subsequent years, we also expect a continuous increase in the installed output of renewable energies. This will also increase the share of the generation capacity accounted for by RE further.

TOP CO_2 intensity

In 2020, we expect an increase in own electricity generation from renewable energy sources due to the further expansion of renewable energies. At the same time, we expect an increase in the use of our thermal power plants in comparison to the previous year as they were utilised far less than expected in 2019 due to the prevailing market prices. Important factors for uncertainty in the 2020 forecast include the volatility of the wind and water supplies, the further development of the clean dark spread (Glossary, from p. 139) and the utilisation of the power plants for redispatch. As a result of the low CO_2 intensity (Glossary, from p. 139) in 2019, an increase of between 16% and 23% in comparison to the previous year is expected in the 2020 financial year. This forecast nevertheless corresponds to our defined target for 2020 of a reduction in CO_2 intensity of between 15% and 20% compared to the reference year 2015.

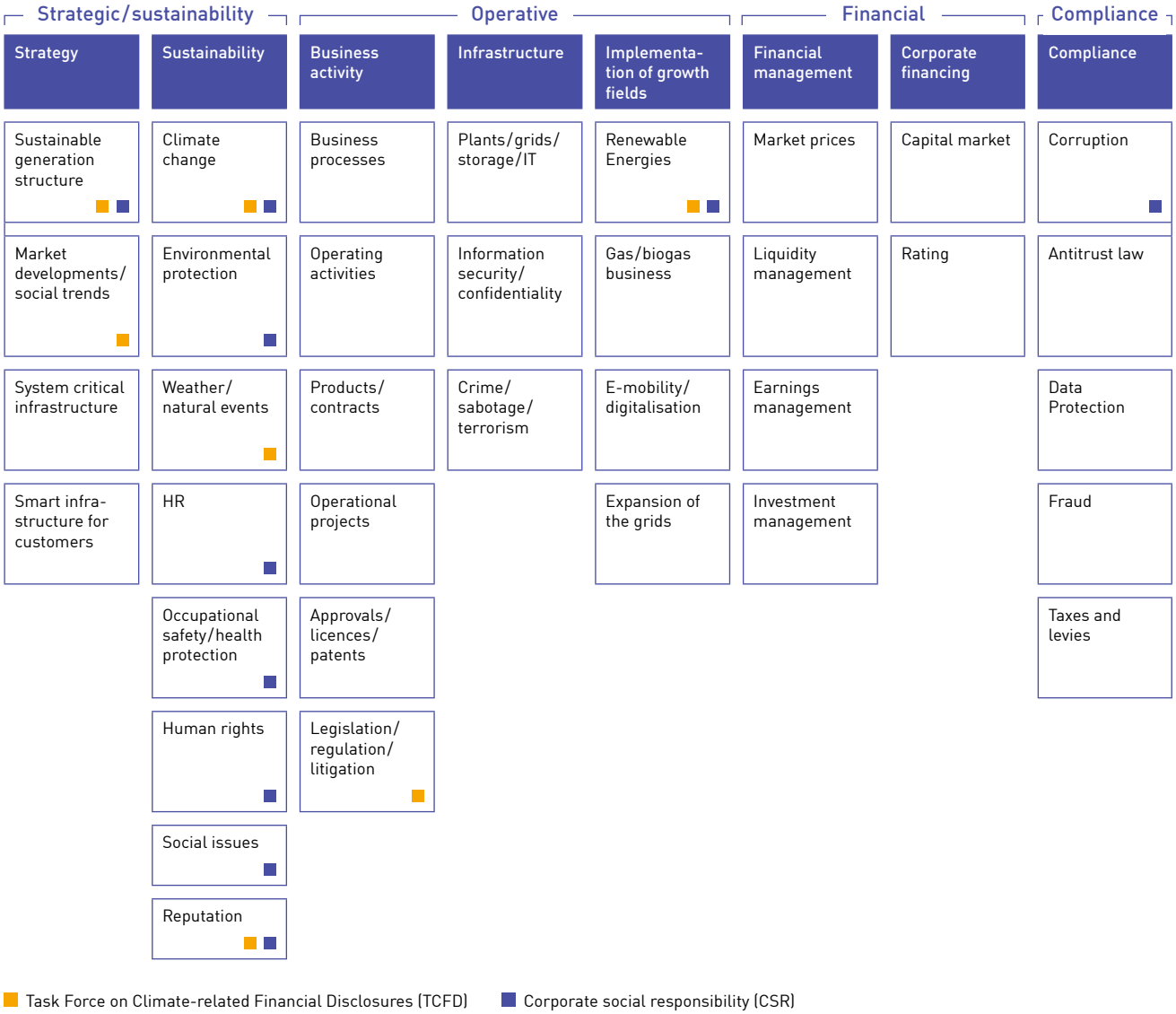
Overall assessment of anticipated developments by the management

We expect an increase in adjusted EBITDA for the Group in 2020 compared to 2019. The shift in earnings between the segments laid out in our strategy will continue in 2020. We will exceed our target values for 2020 at a Group level and at least achieve the targets at a segment level. This means that we will be able to continue to make sufficient investment funds available internally to enable us to play an active role in shaping the Energiewende. We continue to strive to maintain a balanced financing structure, solid financial profile and thus solid investment-grade ratings (Glossary, from p. 139). With respect to our non-financial key performance indicators, we expect a stable to positive development in 2020.

Report on opportunities and risks

Principles of the integrated opportunity and risk management system

Opportunity and risk map

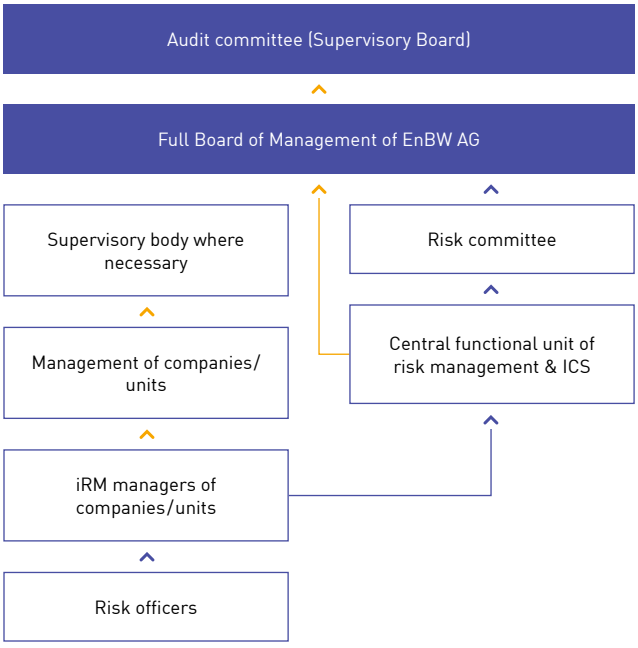


The integrated opportunity and risk management system (iRM) of EnBW is based on the internationally established COSO II framework as a standard for risk management systems that span entire companies. The iRM aims, through a holistic and integrated approach, to effectively and efficiently identify, evaluate and manage opportunities and risks (including monitoring) and report on the opportunity/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 categorise opportunities and risks, the opportunity and risk map that is well-known throughout the Group is utilised. 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 fulfilment of the requirements for a non-financial declaration, the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) (Glossary, from p. 139) are also taken into account. In addition, the iRM process is also subject to ongoing development within the scope of digitalisation.

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 selected 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 firstly 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 opportunities and risks are evaluated within the medium-term planning period. As long as a financial evaluation of the opportunities and risks is possible, they are allocated to relevance classes 0 to 4 if they have a value in the range from less than €0.2 million up to less than €50 million within the medium-term planning period. From relevance class 5 and above and with a probability of occurrence of over 50%, the opportunities and risks are generally included in the Group report on opportunities and risks. This corresponds to €50 million within the medium-term planning period. The top risks/opportunities and the long-term opportunities and risks that are of particular importance are then added. The reports are submitted on a quarterly basis in standardised form. In the case of any significant changes, a special report is immediately issued.

Those opportunities or risks relevant to the Group report on opportunities and risks are generally evaluated in relation to the current planning period using quantitative methods (e.g. scenario techniques and distribution functions) for the purpose of stochastic modelling. Any possible effects on the adjusted EBITDA, the adjusted EBIT and the capital employed (with any associated impact on the ROCE), the retained cash flow or the adjusted retained cash flow, the net investment or the adjusted net investment (with any associated impact on the internal financing capability) and the net debt are considered. Alongside these financial effects, opportunities and risks can also have impacts on the other key performance indicators (p. 43 ff.), which are discussed with those responsible in the specialist areas.

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.

Alongside the top opportunities/risks, there are a wide variety of other opportunities and risks facing the Group that are allocated to relevant risk categories on the opportunity and risk map (p. 100) and evaluated with the aid of the iRM relevance filter. Alongside the key performance indicators in the finance and strategy goal dimensions, these effects can also have an impact on the key performance indicators in the customers and society, employees and environment goal dimensions. Any impact on the areas of compliance, social engagement and procurement is also examined in the process.

Relevance filter for classifying opportunities and risks

Strategic/sustainability	Operative	Financial	Compliance
Achievement of strategic targets, sustainability targets, e.g. climate protection, environmental protection, reputation	Achievement of business targets, functional processes, retaining added value, customer/external effects	Achievement of financial targets, generally in accordance with medium-term planning or approved (project) budgets	Compliance with legal/official regulations and internal regulations
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
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 promptly remedied. This accounting-related ICS methodology is based on the COSO II standard.

Once the control mechanisms have reached a standardised 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 jeopardise 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 organised at both a centralised and decentralised 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 standardised procedures and also consolidates collected data.

Processes

Standardised procedures 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, and with the 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 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.

Non-financial declaration

As part of the non-financial declaration, we closely analyse the related opportunities and risks in the areas of compliance, social engagement and procurement, as well as in the customers and society, employees and environment 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) (Glossary, from p. 139). You can find further information on this subject on p. 122.

Risks associated with the non-financial declaration

The non-financial declaration describes, amongst 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 f. 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. 53 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 utilises 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, in this context, especially through the pre-qualification process (p. 59 f.).

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 risks. Respect for human rights is ensured using a multi-stage auditing process as part of the procurement process – with all existing and potential suppliers being regularly subjected to a screening process. Other measures that form part of the assessment are carried out in direct cooperation with the compliance department. In coal mining, there are possible human rights risks related to the working and living conditions of people in the coal mining regions. An increase in civil society activity in this context can in turn result in an increase in reputational risks. 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. 60 f.).

In preparation for future (liquid) gas contracts, we carried out further (preliminary) assessments of the sustainability and compliance of producers from different countries as part of the process for auditing business partners. No material human rights risks were identified in the supply chain for the USA as a potential source of supply. We identified no issues in connection with other producers either that would necessitate a more in-depth analysis.

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, the Reputation Index (p. 81). 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 still high level of 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. Opportunities exist above all through the provision of a broader range of customer-specific products and services such as offering hardware bundles (Glossary, from p. 139) and product options, as well as through processes more oriented to the customer. EnBW also continued to expand its range of sustainable energy industry services and energy solutions in 2019 and targeted its sales activities in this direction (p. 81 f).

Employees goal dimension

Employee commitment: Due to competition on the job market, there is a risk when recruiting employees that the company will not be able to secure a sufficient number of employees with the necessary qualifications and expertise in the relevant target groups. In addition, this risk is exacerbated by demographic trends and the stricter conditions facing the energy industry. We believe that regular anonymous employee surveys, from which we derive the Employee Commitment Index (ECI) as a key performance indicator, are an important tool for seizing opportunities early in the areas of employee development and employee loyalty (p. 83 f.).

Occupational safety: Risks generally exist in the areas of occupational safety and health protection in our business activities. We counter these risks using comprehensive organisational 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 form of the key performance indicator LTIF for companies controlled by the Group and LTIF overall (p. 86 f.) in the employees goal dimension.

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. 87 f.).

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 (Glossary, from p. 139) (p. 88 f.).

We counter these risks using, amongst other things, an environmental management system certified according to DIN EN ISO 14001:2015, which has been established at key subsidiaries (p. 87). 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 organisational 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 utilise 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. 81).

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 especially 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. 41 ff.). For this reason, the top opportunity/top risk 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 realisation of projects for sustainable energy generation and for the operation of power plants. These risks are managed and mitigated through 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 changes in the market also flow into the risk evaluation process. However, there are also opportunities such as changing customer needs (p. 81 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 first recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) (Glossary, from p. 139) have been implemented and are communicated in the report on opportunities and risks. Building on the revision of the risk map in 2016, special focus is placed on sustainability aspects – especially climate protection targets – and they will be anchored more deeply in the risk evaluation process in future. Therefore, we have closely examined the significance of sustainability and climate protection themes for the business model and aim to implement measures and set targets to orientate our risk management system even more towards climate-related risks (p. 33 and 87).

Opportunity and risk position

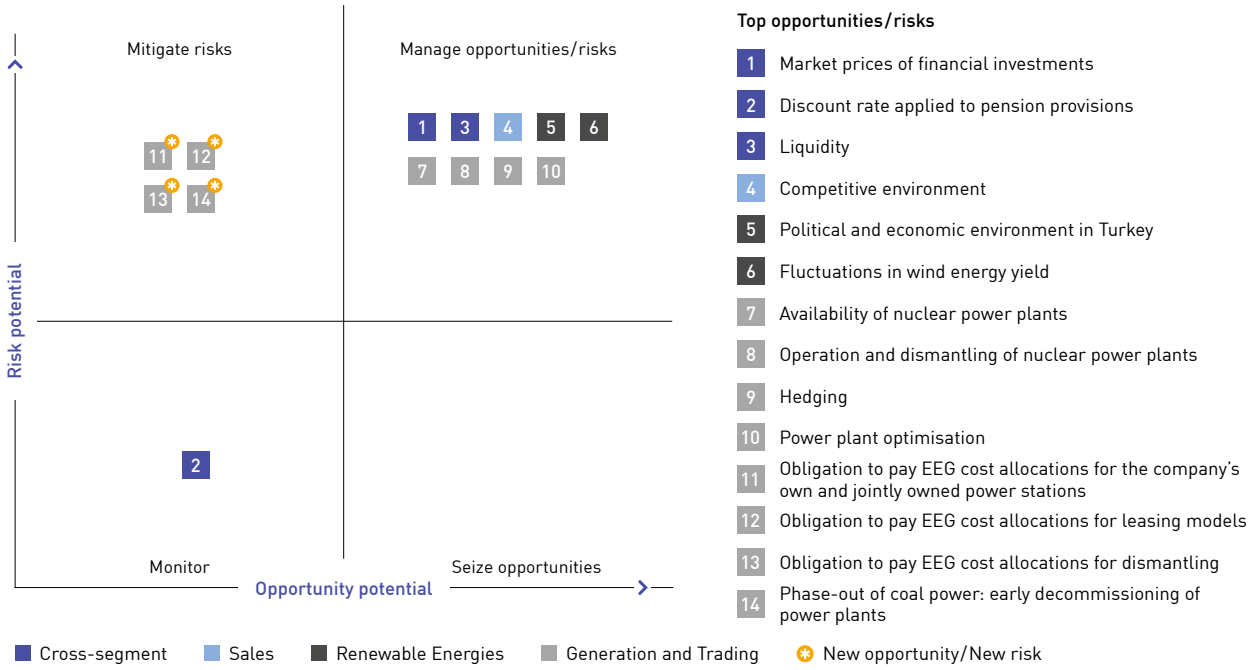
The diagram on the following page illustrates how the opportunity and risk position is reported to the Board of Management and the audit committee of the Supervisory Board. The arrangement of the top opportunities/risks in the quadrants indicates how EnBW can employ control measures to exploit the opportunities or to counteract the risks.

The individual evaluations of the top opportunities/risks tell us – based on the relative 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, internal financing capability, ROCE and net debt. The risks are depicted after the implementation of the risk limitation measures.

The following opportunities and risks were new in 2019:

- Obligation to pay EEG cost allocations (Glossary, from p. 139) for the company's own and jointly owned power stations
- Obligation to pay EEG cost allocations for leasing models
- Obligation to pay EEG cost allocations for dismantling
- Phase-out of coal power: early decommissioning of power plants

Top opportunities/risks as of 31/12/2019



Details on the top opportunities/risks, as well as other opportunities/risks relevant to the report, and their potential effects on the relevant performance indicators are listed in the following section.

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 lesser 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, official investigations or proceedings and other claims are pending against EnBW. The probability of these actions being successful is, however, considered very low and thus they are not reported under contingent liabilities and other financial obligations.

In connection with these types of legal proceedings, we also recognise 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. The next court hearings are expected to be held in March 2020. Therefore, there continues to be a risk in 2020 of losing the water grid without receipt of adequate compensation.

Financial opportunities and risks

1 Market prices of financial investments: The financial investments managed by the asset management system (Glossary, from p. 139) are subject to opportunities and risks due to price changes and other valuation changes as a result of the volatile financial market environment (p. 72). A significantly higher amount of securities allocated to the dedicated financial assets must, since 2018, be measured at fair value through profit or loss in accordance with IFRS 9. The fluctuation in the value of these securities is recognised in profit or loss and stood at €335.5 million in the reporting year (previous year: €-38.5 million). Through corresponding effects, this could have either a positive and negative impact in 2020 and 2021 on net debt in the low to mid three-digit million euro range. For the market prices for financial investments, we currently identify an equal level of opportunity and risk due to the increased volatility on the financial markets.

2 Discount rate applied to pension provisions: There is a general opportunity and risk due to 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. On the reporting date for the annual financial statements of the Group in 2019, the discount rate stood at 1.1% in comparison to the previous year (1.8%). The future development of interest rates could have a positive impact in the low four-digit million euro range or a negative impact in the low to mid three-digit million euro range on the development of net debt in 2020 and 2021. Against the background of the expected development of interest rates in future, we currently identify an increased level of opportunity and a lower level of risk.

3 **Liquidity:** Due to unforeseeable developments, especially margin payments, unused project funds or tax issues as well as financial market crashes, the Group's liquidity planning is subject to uncertainty that could lead to deviations between actual payments and planned payments. In general, there is also a risk of additional liquidity requirements if the rating agencies downgrade the credit rating of EnBW (p. 72 f.). The risk of margin payments is increasing primarily as a result of rising trading volumes and greater volatility on the energy market. These effects could have a total positive or negative impact in the mid three-digit million euro range on net debt in 2020 and 2021, as well as an indirect impact on the key performance indicator ROCE via capital employed and on internal financing capability via the adjusted net investment. We currently identify a balanced level of opportunity and risk in this area.

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 when dealing with public officials. Important preventative measures, especially training and advisory services, are described on p. 49 f.

In addition, there are antitrust risks in the sales activities of some subsidiaries that could result in fines and damaged 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.

Sales segment

Financial opportunities and risks

4 **Competitive environment:** There is a risk that the continued tense competitive situation for all EnBW brands in the electricity, gas and energy solutions business could have a negative effect on the customer base, sales volumes and price levels. In the future, there will still be pressure on prices and a willingness amongst customers to switch suppliers. The EnBW 2020 strategy also covers the development and expansion of system solutions and complete solutions that are specifically tailored to the various customer segments (p. 41 ff.). Alongside the traditional supply of electricity and gas, we see good opportunities here also for offering our customers innovative energy solutions in the areas of energy technology in the home, e.g. with products such as photovoltaic storage systems, the area of corporate energy efficiency and also electromobility (p. 81 ff.). The EnBW subsidiaries Plusnet and NetCom BW should grow together and play an even stronger role on the market in the future. We believe that this is also an important step in the expansion of sustainable infrastructure and should achieve corresponding earnings contributions for our company. This could have both a positive or negative impact in the low single-digit million euro range on the key performance indicator adjusted EBITDA in 2020 and 2021 and thus an indirect impact on the key performance indicator internal financing capability via the adjusted retained cash flow and on the key performance indicator ROCE via the adjusted EBIT. We currently identify a low level of opportunity and risk in this area.

Grids segment

Strategic opportunities and risks

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) (Glossary, from p. 139) with other transmission system operators. A regulation stipulating the use of underground cabling also 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.

Financial opportunities and risks

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 thus 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 on 31 December 2019, there was a surplus in the low three-digit million euro range on the EEG bank account of our subsidiary TransnetBW. Due to the EEG cost allocations (Glossary, from p. 139) defined for 2020, we anticipate that the bank account balance will tend to fall in 2020 and 2021.

Renewable Energies segment

Strategic opportunities and risks

5 **Political and economic environment in Turkey:** We have been commercially active in Turkey for many years in the expansion of energy generation from wind power and hydropower. In the past few years, the economic and political framework conditions in Turkey have deteriorated noticeably. We continue to monitor these developments very closely, especially because we have a duty of care for those employees working in Turkey. There has been an increased security risk for a number of years, although no immediate risk to local employees can currently be identified. We are still in regular contact with the German embassy, the German Consulate General, our partner Borusan and other German companies active in Turkey so that we will be able to identify any negative developments as early as possible and respond in good time. This risk could have an effect on the key performance indicator ROCE in 2020 and 2021. We currently identify a low level of opportunity and risk in this area.

Financial opportunities and risks

6 **Fluctuations in wind energy yield:** There is a general opportunity or risk for wind power plants due to wind energy yield fluctuations because the amounts of electricity generated by them are subject to variations in the mean annual wind speed. These fluctuations naturally grow as we acquire more and more wind turbines. In order to take these wind fluctuations into account in our planning, wind reports were created. In addition, measurement campaigns are being carried out up to the end of 2020 to evaluate wind speeds. Nevertheless, these wind fluctuations could naturally have both a positive or negative impact in the high double-digit million euro range on the key performance indicator adjusted EBITDA in 2020 and 2021 and thus an indirect impact on the key performance indicator internal financing capability via the adjusted retained cash flow and on the key performance indicator ROCE via the adjusted EBIT. Following the expansion of our wind portfolio with the addition of the wind turbines at EnBW Hohe See and EnBW Albatros, we currently identify an increasing level of opportunity and risk in this area.

Generation and Trading segment

There are general risks associated with the operation and dismantling of nuclear power plants. During the dismantling of nuclear power plants, there is an additional risk of a delay in the return of waste to the local **intermediate storage facilities,** with possible additional costs as a result of the waste being stored for a longer period of time in Great Britain and France, as well as the risk of further costs for approval and authorisation procedures.

At the end of 2019, the remaining provisions held by EnBW were revalued as part of the regular examination of the discount rate and escalation rate. Due to changes in these kinds of assumptions in the future, we currently identify a low level of opportunity and risk for the remaining **nuclear provisions**.

Depending on market developments and the framework conditions related to the Energiewende, there is a general risk of a negative impact on earnings due to **impairment losses on power plants and impending losses for onerous contracts for electricity procurement agreements.**

Operative opportunities and risks

7 **Availability of nuclear power plants:** There is a general risk that exogenous and endogenous factors will have an influence on the availability of these power plants. We strive to counter these risks using preventive measures. Depending on their duration, interruptions to the operation of the power plants can positively or negatively impact the operating result. The availability of nuclear power plants could have a negative effect in the low single-digit million euro range and a positive effect in the low double-digit million euro range on the key performance indicator adjusted EBITDA in 2020 and 2021, and thus an indirect impact on the key performance indicator internal financing capability via the adjusted retained cash flow and on the key performance indicator ROCE via the adjusted EBIT. We currently identify a rather higher level of opportunity in this area.

8 **Operation and 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. The following issues can arise, amongst other things: delays to approvals, an increase in the amount of preparation work required for dismantling, developing buffer zones and retrofitting work and bottlenecks in the supply of the necessary resources. In addition, there is an opportunity to make cost savings due to synergies over time and also due to learning effects for subsequent dismantling activities. There could be opportunities in the mid double-digit million euro range and risks in the high double-digit million euro range that have an effect on the development of net debt in 2020 and 2021. We currently identify a balanced level of opportunity and risk in this area.

Financial opportunities and risks

9 **Hedging:** When selling generated electricity volumes, EnBW is exposed to the risk of falling electricity prices and the risk of the unfavourable 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 utilised in 2019 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. This could have both a positive or negative impact in the low double-digit million euro range on the key performance indicator adjusted EBITDA in 2021, and thus an indirect impact on the key performance indicator internal financing capability via the adjusted retained cash flow and on the key performance indicator ROCE via the adjusted EBIT. We currently identify a balanced level of opportunity and risk in the area of hedging (Glossary, from p. 139) due to increasing fuel and CO_2 prices. Further information can be found in the section "Accounting for financial instruments" in the notes to the consolidated financial statements at www.enbw.com/report2019-downloads.

10 **Power plant optimisation:** 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 optimisation on the forward market (Glossary, from p. 139), through the sale of system services (Glossary, from p. 139) and through placements on the spot and intraday trading platforms (Glossary, from p. 139). However, regulatory interventions continue to have a strong influence. In particular, fluctuating revenues from system services and volatility on the forward and spot markets (Glossary, from p. 139) could have both a positive or negative impact in the mid double-digit million euro range on the key performance indicator adjusted EBITDA in 2020 and 2021, and thus an indirect impact on the key performance indicator internal financing capability via the adjusted retained cash flow and on the key performance indicator ROCE via the adjusted EBIT. We currently identify a low level of risk and opportunity that is dependent on the development of market prices.

11 **Obligation to pay EEG cost allocations for the company's own and jointly owned power stations:** Both for its own power plants, including nuclear power plants, and for power plants in joint ownership, EnBW AG utilises the exemption from EEG cost allocations (Glossary, from p. 139) for end usage for the respective share of the power plants. There are a number of different arguments that suggest that the German Federal Network Agency and the transmission system operators could define the role of the operator differently. Possible back payments for EEG

cost allocations in previous years could have a negative impact in the low three-digit million euro range in 2020 and a negative impact in the high double-digit million euro range in 2021 on the key performance indicator adjusted EBITDA and thus an indirect impact on the key performance indicator internal financing capability via the adjusted retained cash flow and on the key performance indicator ROCE via the adjusted EBIT. We currently identify an increased level of risk in this area.

12 **Obligation to pay EEG cost allocations for leasing models:** Certain virtual slices of power plants were leased to third parties in the past. EnBW as the operator and the third party as the co-operator have assumed up to now that, due to this leasing relationship, the third party was the plant operator at the relevant site according to the EEG and was permitted to consume electricity in the spatial context of their plants free of EEG cost allocations. In general, there is a risk with these leasing models that the transmission system operators will demand back payment for the EEG cost allocations. Possible back payments for EEG cost allocations in previous years could have a negative effect in the mid double-digit million euro range in 2020 on the key performance indicator adjusted EBITDA and thus an indirect impact on the key performance indicator internal financing capability via the adjusted retained cash flow and on the key performance indicator ROCE via the adjusted EBIT. We currently identify an increased level of risk in this area.

13 **Obligation to pay EEG cost allocations for dismantling:** In the existing planning of the dismantling costs for nuclear power plants, it was assumed that the so-called "self-supply entitlement" can be used for the electricity supplied to the blocks during the post-operation and dismantling stages. Therefore, the costings for the consumption of electricity do not contain any EEG cost allocations. There is a risk that the self-supply entitlement cannot be applied, which will result in increased dismantling costs. This could have a negative effect in 2020 and 2021 on the net debt in the low three-digit million euro range. We currently identify an increased level of risk in this area.

14 **Phase-out of coal power: early decommissioning of power plants:** The version of the Coal Phase-out Act adopted by the German cabinet and its framework parameters (plans for operators regarding replacement power plants and decommissioning) are open to varying interpretations with respect to the phase-out path. In general, the later decommissioning of brown coal power plants will mean that hard coal power plants are shut down more quickly and thus even new hard coal power plants will be removed from the grid earlier. The German government does not plan to provide compensation for any power plants decommissioned after 2027. We currently identify an increased level of risk in this area.

No opportunities or risks relevant to the report have been eliminated in comparison to the previous year.

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. In the past financial year, these links were not monitored individually.

Linking the top opportunities/risks with the key performance indicators

Key performance indicators

Top opportunities/risks	Financial performance indicators			Strategic performance indicators				Non-financial performance indicators						
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1 Market prices of financial investments														
2 Discount rate applied to pension provisions														
3 Liquidity		●	●											
4 Competitive environment	●	●	●	●				○	○	○	○			
5 Political and economic environment in Turkey			●					○						
6 Fluctuations in wind energy yield	●	●	●			●								○
7 Availability of nuclear power plants	●	●	●				●	○						
8 Operation and dismantling of nuclear power plants														
9 Hedging	●	●	●				●							
10 Power plant optimisation	●	●	●				●							○
11 Obligation to pay EEG cost allocations for the company's own and jointly owned power stations	●	●	●				●							
12 Obligation to pay EEG cost allocations for leasing models	●	●	●				●							
13 Obligation to pay EEG cost allocations for dismantling														
14 Phase-out of coal power: early decommissioning of power plants	○	○	○				○	○	○					○

■ Cross-segment
■ Sales
■ Renewable Energies
■ Generation and Trading

● Direct effect
○ Potential/long-term effect

A Adjusted EBITDA
B Internal financing capability
C ROCE

Total share of adjusted EBITDA:
D "Customer proximity"/ Sales
E Grids
F Renewable Energies
G Generation and Trading

H Reputation Index
I EnBW/Yello Customer Satisfaction Index
J SAIDI (electricity)
K Employee Commitment Index (ECI)

L LTIF for companies controlled by the Group/ LTIF overall
M Installed output of RE and share of generation capacity accounted for by RE
N CO_2 intensity

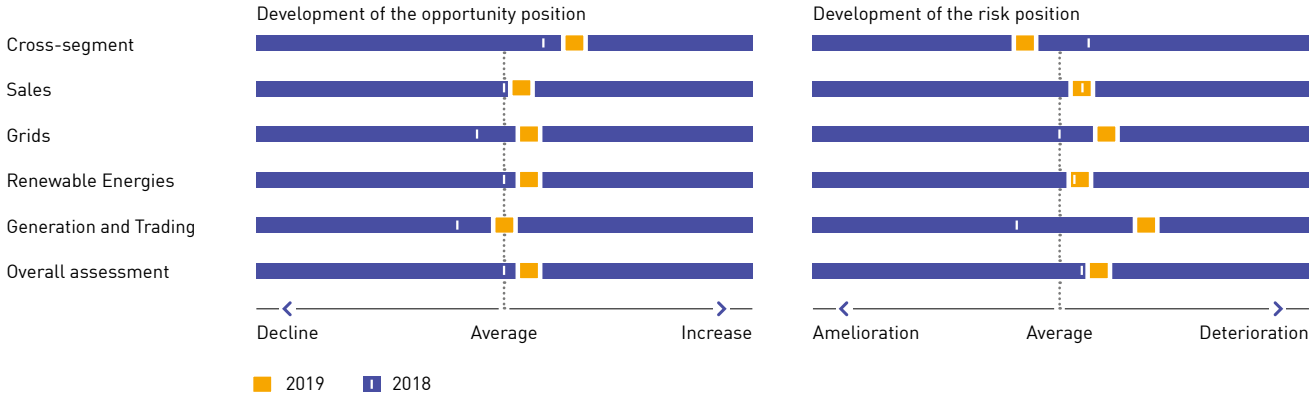
Overall assessment by the management

The risk situation for our company increased further in 2019. However, we also identify increased potential for opportunities at the same time. EnBW still faces numerous factors that pose a danger to planning certainty and thus the achievement of its economic targets, and that have high risk potential, such as regulatory requirements and legislation dealing with sustainable energy generation. This has far-reaching consequences for the operating business of the EnBW Group and places a burden on its earnings potential. The expansion of renewable energies is thus subject to factors that are just as difficult to plan for, as the latest developments in the area of energy generation from coal power plants demonstrate. The persisting competitive and market risks could influence the operating result, financial position and net assets.

At the same time, the Energiewende offers a multitude of opportunities to develop new models for future business segments. We will resolutely pursue these with our revised post-2020 strategy – which is based on the EnBW 2020 strategy that has been successfully implemented up to now. For example, we believe that there are opportunities in a diverse range of customer-oriented measures such as innovative energy solutions, as well as in the areas of electromobility and telecommunications. The commercial development of environmentally friendly and CO_2-efficient energy solutions will be resolutely pushed forward. The implementation of our post-2020 strategy aims to secure the future viability of the company and tap into this potential for growth.

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

Opportunity and risk position 2019



Remuneration report

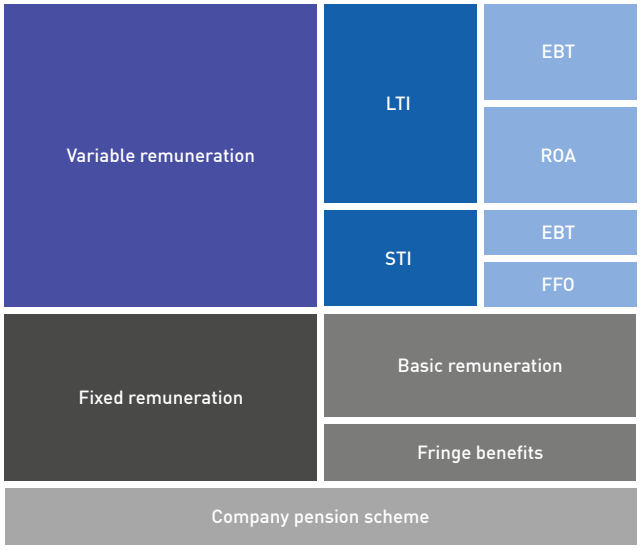
The remuneration report summarises the principles relevant for determining the remuneration of the members of the Board of Management and explains the structure and level of both Board of Management and Supervisory Board remuneration. The remuneration report takes the recommendations of the German Corporate Governance Code (DCGK) in the version from 7 February 2017 and the German Accounting Standard (GAS) 17 (amended in 2010) into consideration in this respect. It also contains disclosures required by German commercial law to be included in the notes pursuant to section 314 HGB and the management report pursuant to section 315 HGB.

Board of Management remuneration

Based on proposals of the personnel committee, the Supervisory Board passes resolutions on the remuneration of the Board of Management, including the main contract elements, and reviews it on a regular basis. The criteria for determining appropriate remuneration include the responsibilities 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 senior management and the workforce as a whole, as well as its development over time.

The Board of Management remuneration system in the following form has been valid since 1 January 2018. The definitions of the performance indicators were changed on 5 December 2018 with effect from 1 January 2019 (see explanation for the performance indicator EBT). The following diagram shows the structure of the total remuneration:

Components of target remuneration



The remuneration in the reporting year comprises basic remuneration, one-year and multi-year variable remuneration, as well as contributions as part of the company pension scheme. The ratio of single-year to multi-year variable remuneration is approx. 40% to 60%, depending on the individual target income for the member of the Board of Management, so that multi-year variable remuneration significantly outweighs single-year variable remuneration. In general, the variable remuneration components have a multi-year measurement basis in accordance with section 4.2.3 sentence 4 DCGK (in the version from 7 February 2017). The single-year variable remuneration component is described below as the Short Term Incentive (STI) while the multi-year variable remuneration component is described as the Long Term Incentive (LTI).

Fixed remuneration

The fixed remuneration comprises basic remuneration and fringe benefits.

Variable remuneration

Short-term variable remuneration (Short Term Incentive – STI)
The STI is paid for a period of one financial year in each case and paid out in the following financial year. The measurement period for the STI is the financial year for which it is paid.

The performance indicators for calculating the extent to which the target for the STI has been achieved are the following non-adjusted corporate performance indicators for the EnBW Group determined for one financial year:

- EBT (earnings before taxes), adjusted for earnings from the measurement of financial assets allocated to the financial result and outstanding items for derivatives allocated under trading as well as (since the resolution passed by the Supervisory Board of EnBW Energie Baden-Württemberg AG on 5 December 2018 with effect from 1 January 2019) for effects due to the adjustment of the nuclear provisions and to the change in the inflation rate for costs for the operation, dismantling and disposal of the nuclear power plants and in the discount rate
- FFO (funds from operations), adjusted for the items of income tax paid and income tax received

The Supervisory Board will define the target values for the performance indicators EBT and FFO each year before the start of the single-year measurement period.

The target value for the performance indicator EBT is generally defined on the basis of the figure actually achieved in the previous year, whereby the Supervisory Board can, at its own discretion, make the achievement of the target easier or more difficult by adjusting the figure from the previous year, taking into account extraordinary events in the previous year and general considerations on the development of earnings (target-actual comparison).

The target value for the performance indicator FFO corresponds to the value defined for the performance indicator in the single-year budget plan approved in the year before the start of the measurement period (plan-actual comparison).

The target remuneration for the STI consists of two equally weighted partial remuneration amounts (50 : 50). Each partial remuneration amount will be achieved if the target value for the respective performance indicator is achieved to 100%.

The extent to which the individual targets for each of the performance indicators are achieved is based, in the case of the underachievement or overachievement of the target value, on the ratio of the defined target value and the actual value for the performance indicator in the measurement period as defined in the consolidated financial statements for the year of payment.

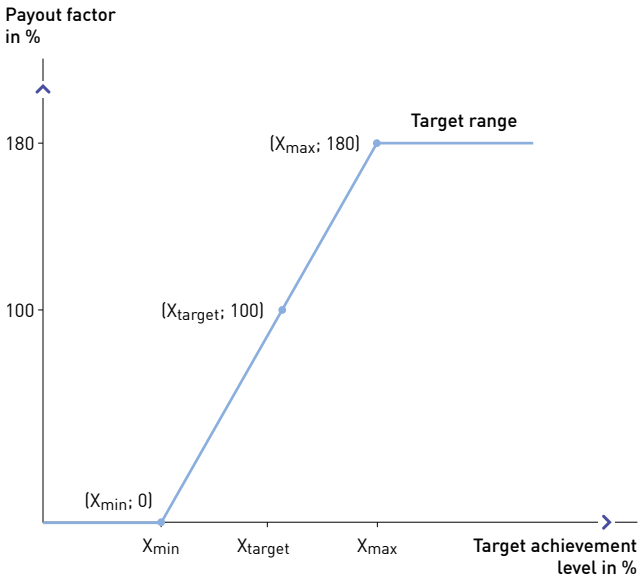
In the event of the overachievement of the target, the maximum possible remuneration that can be paid is limited to 180% of the partial target remuneration defined for each performance indicator (partial remuneration cap). The sum of both partial remuneration caps gives the total STI remuneration cap, which is 180% of the total amount for the STI target remuneration. In the event of the underachievement of the target, STI remuneration has no lower limit and can fall to an amount of €0.

When defining the target values for the short-term remuneration components, the Supervisory Board can also separately define a minimum and maximum value – at its own discretion – and thus the target range for each of the performance indicators on an annual basis.

The target range corresponds to a piecewise linear function, as shown in the adjacent diagram, which is determined by the value of the lowest achievement level X_{min} in relation to the lowest payout factor and the value of the highest achievement level X_{max} in relation to the highest payout factor. The relationship between the target value and the minimum and maximum values can be used to determine the lowest and highest achievement levels (X_{min} and X_{max}), respectively, while the relationship between the target remuneration and the minimum and maximum remuneration can be used to determine the lowest and highest payout factors, respectively. The partial amount of the short-term variable remuneration for each performance indicator based on the achievement level is calculated by multiplying the actual payout factor by the target remuneration defined for the respective performance indicator.

The actual payout factor is derived using the actual value achieved for the performance indicator and the piecewise linear function for the target range.

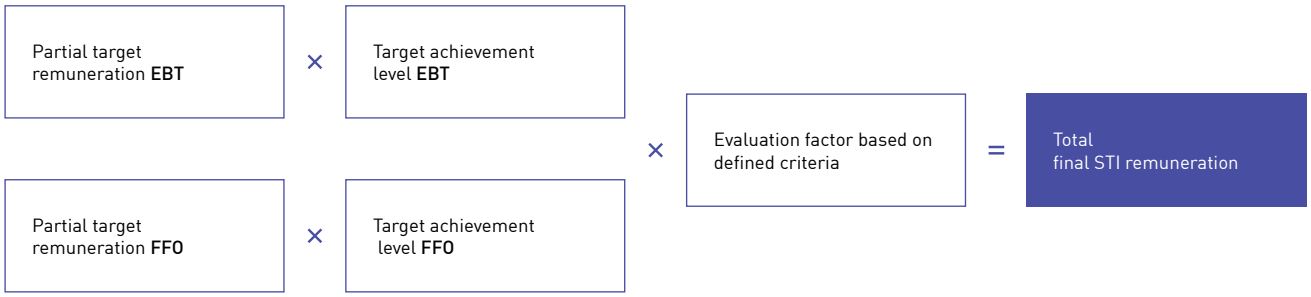
Target range



If the definitions for the performance indicators or accounting policies change, especially as a result of amendments to accounting standards, the target values and ranges will be adjusted correspondingly during the ongoing measurement period, insofar as these changes cause the relevant achievement level to differ by more than +/-5 percentage points in comparison to the value that would have been achieved without these changes. The sum of the partial remuneration amounts for each performance indicator gives the total preliminary STI remuneration.

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 criteria. The adjustment is carried out by multiplying the total preliminary remuneration by a certain factor, whose lowest value is 0.7 and highest value is 1.3. Only one decimal place is used for this factor. If not defined otherwise by the Supervisory Board, the default factor is 1.0. The level of this factor is primarily determined by the Supervisory Board on the basis of an evaluation of 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.

Calculation of the Short Term Incentive (STI)



In the event of extraordinary performance by the whole Board of Management or one member of the Board of Management, the Supervisory Board can at its own discretion grant special remuneration as part of the short-term variable remuneration.

As part of a final evaluation of the short-term variable remuneration, the Supervisory Board also has the discretionary power to appropriately adjust the amount of the STI to take into account extraordinary and unforeseeable events that cannot be controlled by the Board of Management that have had a considerable impact on the financial performance indicators on which the remuneration system is based. This discretionary power does not apply to the success targets or comparative values, the subsequent adjustment of which should be excluded according to the recommendations in section 4.2.3 (2) DCGK in the version from 7 February 2017.

If remuneration is granted in accordance with the two previous paragraphs, the total STI remuneration cap of 180% of the target STI remuneration still applies.

Long-term variable remuneration (Long Term Incentive – LTI)

The LTI is paid for a period of one financial year and paid out in the financial year following the conclusion of the measurement period. The measurement period for calculating the LTI covers a period of three financial years which includes the year for which the remuneration is being paid and the two subsequent financial years (performance period).

The performance indicators for calculating the extent to which the target for the LTI has been achieved are the following non-adjusted corporate performance indicators for the EnBW Group determined for one financial year in each case:

- EBT (earnings before taxes), adjusted for earnings from the measurement of financial assets allocated to the financial result and outstanding items for derivatives allocated under trading as well as (since the resolution passed by the Supervisory Board of EnBW Energie Baden-Württemberg AG on 5 December 2018 with effect from 1 January 2019) for effects due to the adjustment of the nuclear provisions and to the change in the inflation rate for costs for the operation, dismantling and disposal of the nuclear power plants and in the discount rate
- ROA (return on assets = return on the capital expenditure for intangible assets and property, plant and equipment based on the relationship between the non-adjusted EBIT [adjusted in line with the regulations for deviations in the performance indicator EBT] and the sum of the intangible assets and property, plant and equipment [adjusted for subsidies related to capital expenditure])

The target values for the performance indicators EBT and ROA for a performance period are defined by the Supervisory Board at its own discretion on an annual basis based on the corporate strategy and with effect for the next performance period that begins in the following year.

The target remuneration for the LTI consists of two equally weighted partial remuneration amounts (50 : 50). Each partial remuneration amount will be achieved if the target value for the respective performance indicator is achieved to 100%.

The extent to which the individual targets for each of the performance indicators are achieved is based, in the case of the underachievement or overachievement of the target value, on the ratio of the defined target value and the arithmetic mean of the actual values for the performance indicator as defined in the consolidated financial statements for each individual year of the performance period.

In the event of the overachievement of the target, the maximum possible remuneration that can be paid is limited to 180% of the partial target remuneration defined for each performance indicator (partial remuneration cap). The sum of both partial remuneration caps gives the total LTI remuneration cap, which is 180% of the total amount for the LTI target remuneration. In the event of the underachievement of the target, LTI remuneration has no lower limit and can fall to an amount of €0.

When defining the target values for the long-term remuneration components, the Supervisory Board can also separately define a minimum and maximum value – at its own discretion – and thus the target range for each of the performance indicators on an annual basis (see here the information provided for the STI).

The partial amount of the long-term variable remuneration for each performance indicator based on the achievement level is calculated by multiplying the actual payout factor by the target remuneration defined for the respective performance indicator. The actual payout factor is derived using the actual value achieved for the performance indicator and the piecewise linear function for the target range. The sum of the partial remuneration amounts for each performance indicator gives the total LTI remuneration.

If the definitions for the performance indicators or accounting policies change, especially as a result of amendments to accounting standards, the target values and ranges will be adjusted correspondingly during the ongoing measurement period, insofar as these changes cause the relevant achievement level to differ by more than +/-5 percentage points in comparison to the value that would have been achieved without these changes.

The regulations for the Board of Management remuneration system that were valid up to 31 December 2017 apply for the long-term variable remuneration in the measurement periods 2015 to 2017, 2016 to 2018 and 2017 to 2019, whereby the Supervisory Board of EnBW Energie Baden-Württemberg AG passed a resolution on 12 July 2018 that a remuneration cap for the total LTI of 110% of the total target remuneration will be introduced for the measurement periods 2016 to 2018 and 2017 to 2019. The LTI value appreciation bonus according to the old remuneration system consisted of a basic LTI, a competition component and a sustainability component. The total value appreciation bonus is the sum of the variable remuneration payments that are calculated from these three components. Target values, lower limits and upper limits are defined in advance by the Supervisory Board. The basic LTI is determined by the accumulated contribution to value added derived from the three-year medium-term planning. It is calculated from the difference between the performance indicators ROCE and WACC (weighted average cost of capital) multiplied by the average capital employed. The competition component measures the relative performance of the EnBW Group in the respective three-year performance period against a peer group of competitors on the basis of the value spread (= ROCE – WACC). The goal of the sustainable growth of the company in its strictest sense is also taken into account through the LTI sustainability component. In this component, the impact of the sustainable growth of the company on the areas of customers, employees and environment/society is taken into account. The extent to which the targets for all three components have been achieved is determined after the conclusion of the three-year planning period that acts as the basis for the calculations in each case. The Supervisory Board is entitled to adjust the targets if events arise that are not relevant to the ongoing management of the company and thus outside of the sphere of influence of the Board of Management. The size of the value appreciation bonus for 100% achievement of the targets, as well as the maximum and minimum values for the overachievement or underachievement of the agreed targets, can also be found in the table "Target income of members of the Board of Management". The amount based on the achievement of the relevant targets is paid out after the conclusion of the three-year measurement period. With a view to maintaining the previous level of target income, interest of 3% per annum is accrued on the calculated bonus payment for two years and is paid after the conclusion of the three-year calculation period.

Remuneration of members of the Board of Management in the 2019 financial year

in €	Dr. Frank Mastiaux, Chairman		Dr. Bernhard Beck, LL.M. (until 30 June 2019)	
	2019	2018	2019	2018
Fixed remuneration				
Basic remuneration	1,040,000	990,000	257,500	515,000
Other remuneration[1]	3,162	17,086	5,743	18,715
Variable remuneration				
Without long-term incentive	1,108,235	802,705	329,869	413,075
With long-term incentive[2]	1,198,817	1,198,817	732,021	732,021
Total	3,350,214	3,008,608	1,325,133	1,678,811

1 Other remuneration includes monetary benefits, particularly from the provision of company cars amounting to €75,994 (previous year: €98,344).
2 Current preliminary value appreciation bonus for the performance periods 2018 to 2020 (and 2019 to 2021) is €1,012,095 for Dr. Frank Mastiaux (€812,174), €527,925 for Dr. Bernhard Beck (€226,823), €527,925 for Thomas Kusterer (€471,939), €0 for Colette Rückert-Hennen (€302,431) and €527,925 for Dr. Hans-Josef Zimmer (€453,647). The exact level of the value appreciation bonus for the performance periods 2018 to 2020 (and 2019 to 2021) can only be determined following the end of the 2020 financial year (and 2021 financial year), and can fluctuate within the LTI spread pursuant to the following table Target income of members of the Board of Management.

Target income of members of the Board of Management[1]

in €	Dr. Frank Mastiaux Chief Executive Officer				Dr. Bernhard Beck, LL.M. (until 30 June 2019) Chief Personnel Officer			
	2019	2019 (min.)	2019 (max.)	2018	2019	2019 (min.)	2019 (max.)	2018
Fixed remuneration	1,040,000	1,040,000	1,040,000	990,000	257,500	257,500	257,500	515,000
Fringe benefits	3,162	3,162	3,162	17,086	5,743	5,743	5,743	18,715
Total	**1,043,162**	**1,043,162**	**1,043,162**	**1,007,086**	**263,243**	**263,243**	**263,243**	**533,715**
One-year variable remuneration performance bonus	750,000	0	1,350,000	710,000	205,000	0	369,000	370,000
Multi-year variable remuneration LTI 2017 to 2019	1,026,000	0	1,130,000	1,026,000	630,000	0	690,000	630,000
Total	**2,819,162**	**1,043,162**	**3,523,162**	**2,743,086**	**1,098,243**	**263,243**	**1,322,243**	**1,533,715**
Pension expenses	526,560	526,560	526,560	546,663	46,950	46,950	46,950	112,847
Total remuneration	**3,345,722**	**1,569,722**	**4,049,722**	**3,289,749**	**1,145,193**	**310,193**	**1,369,193**	**1,646,562**

1 This table illustrates the remuneration in both the reporting year and previous year which arises given 100% achievement of the targets (target income) and the potential minimum and maximum remuneration for the financial year. Remuneration is described for Board of Management members who were appointed at least on a part-time basis in either the reporting year or previous year to the Board of Management at EnBW AG.

Payments to Board of Management members[1]

in €	Dr. Frank Mastiaux Chief Executive Officer		Dr. Bernhard Beck, LL.M. (until 30 June 2019) Chief Personnel Officer	
	2019	2018	2019	2018
Fixed remuneration	1,040,000	990,000	257,500	515,000
Fringe benefits	3,162	17,086	5,743	18,715
Total	**1,043,162**	**1,007,086**	**263,243**	**533,715**
One-year variable remuneration performance bonus	815,340	838,069	463,980	464,059
LTI 2015 to 2017		1,222,921		718,222
LTI 2016 to 2018	1,198,817		732,021	
Total	**3,057,319**	**3,068,076**	**1,459,244**	**1,715,996**
Pension expenses	526,560	546,663	46,950	112,847
Total remuneration	**3,583,879**	**3,614,739**	**1,506,194**	**1,828,843**

1 This table illustrates payments in both the reporting year and previous year pursuant to the German Income Tax Act (Einkommensteuergesetz). Earnings are described for members of the Board of Management who were appointed at least on a part-time basis in either the reporting year or previous year to the Board of Management of EnBW AG.

	Thomas Kusterer		Colette Rückert-Hennen (since 1 March 2019)		Dr. Hans-Josef Zimmer	
	2019	2018	2019	2018	2019	2018
	600,000	515,000	380,000	0	570,000	515,000
	22,508	23,594	17,333	0	39,982	39,956
	629,438	419,686	371,952	0	603,431	418,477
	625,931	625,931	0	0	625,931	625,931
	1,877,877	1,584,211	769,285	0	1,839,344	1,599,364

	Thomas Kusterer Chief Financial Officer				Colette Rückert-Hennen (since 1 March 2019) Chief Human Resources Officer				Dr. Hans-Josef Zimmer Chief Technical Officer			
	2019	2019 (min.)	2019 (max.)	2018	2019	2019 (min.)	2019 (max.)	2018	2019	2019 (min.)	2019 (max.)	2018
	600,000	600,000	600,000	515,000	380,000	380,000	380,000	0	570,000	570,000	570,000	515,000
	22,508	22,508	22,508	23,594	17,333	17,333	17,333	0	39,982	39,982	39,982	39,956
	622,508	**622,508**	**622,508**	**538,594**	**397,333**	**397,333**	**397,333**	**0**	**609,982**	**609,982**	**609,982**	**554,956**
	430,000	0	774,000	370,000	273,333	0	492,000	0	410,000	0	738,000	370,000
	535,000	0	590,000	535,000	0	0	0	0	535,000	0	590,000	535,000
	1,587,508	**622,508**	**1,986,508**	**1,443,594**	**670,666**	**397,333**	**889,333**	**0**	**1,554,982**	**609,982**	**1,937,982**	**1,459,956**
	369,898	369,898	369,898	380,180	0	0	0	0	242,401	242,401	242,401	235,725
	1,957,406	**992,406**	**2,356,406**	**1,823,774**	**670,666**	**397,333**	**889,333**	**0**	**1,797,383**	**852,383**	**2,180,383**	**1,695,681**

	Thomas Kusterer Chief Financial Officer		Colette Rückert-Hennen (since 1 March 2019) Chief Human Resources Officer		Dr. Hans-Josef Zimmer Chief Technical Officer	
	2019	2018	2019	2018	2019	2018
	600,000	515,000	380,000	0	570,000	515,000
	22,508	23,594	17,333	0	39,982	39,956
	622,508	**538,594**	**397,333**	**0**	**609,982**	**554,956**
	388,980	445,103	0	0	507,056	443,895
		620,561		0		620,560
	625,931		0	0	625,931	
	1,637,419	**1,604,258**	**397,333**	**0**	**1,742,969**	**1,619,411**
	369,898	380,180	0	0	242,401	235,725
	2,007,317	**1,984,438**	**397,333**	**0**	**1,985,370**	**1,855,136**

Compensation agreed with the Board of Management in the event of termination of service

The Supervisory Board of EnBW AG passed a new resolution on 18 March 2016 for the reorganisation of the company pension scheme for the Board of Management, effective as of 1 January 2016.

The regulations that were valid up until then can be found in the following publications:

- The company pension scheme that was valid for members of the Board of Management up until 31 December 2015 is presented in detail in the remuneration report for 2015, which was published in the combined management report of the EnBW Group and EnBW AG for the 2015 financial year.
- The regulations governing the transition of the company pension scheme that was valid for members of the Board of Management up until 31 December 2015 are presented in detail in the remuneration report for 2016, which was published in the combined management report of the EnBW Group and EnBW AG for the 2016 financial year.

The company pension scheme for the members of the Board of Management at the company is a modern and market-oriented pension system that provides members of the Board of Management with flexibility with respect to how the pension benefits are paid out. Following the introduction of the new system, there has been a shift from the previous defined benefit pension plan to a defined contribution pension model. In the new system, annual pension contributions will be paid that accrue interest at a rate oriented to the capital market. In order to ensure that the business risks associated with the pension scheme – especially the interest rate risks and biometric risks – remain calculable in the future, the interest model only contains a relatively low fixed interest entitlement that forms the basic interest rate plus a non-guaranteed surplus that is based on the actual development of interest rates in the life insurance industry.

During the term of the contract, EnBW pays fixed annual contributions to the pension scheme to an individual pension account. Pension contributions are paid for a maximum period of three terms of office (or 13 years in office). The fixed annual contributions are €230,000 for ordinary members of the Board of Management and €390,000 for the Chairman of the Board of Management. In the event of invalidity and as a supplementary risk benefit, age-dependent "notional" contributions will be paid on top of the balance already existing on the pension account until the member reaches the age of 60 – although at the most seven contributions will be paid.

As well as the annual contributions, interest is paid that is oriented to the market and consists of a guaranteed basic interest rate and a non-guaranteed surplus. The guaranteed interest is paid on every contribution in advance until the defined retirement age (63 years old). In addition, annual surplus payments can be paid above and beyond the guaranteed interest. These are based on the current average interest rate for capital investments actually achieved in the past year in the life insurance industry and are not guaranteed.

When the pension is due (age, invalidity, death), payment of the pension assets is generally made in five to ten instalments. Alternatively, a life-long pension payment can be made on the request of the member of the Board of Management – including a 60% entitlement for surviving dependants – or a mixed form of payment. Payment options are also available to the surviving dependants. If the member leaves the Board of Management before the pension is due, the pension account will remain at its current balance plus any surplus payments that are still due to be made.

The members of the Board of Management are entitled to make their own contributions to the pension scheme and supplement the pension provision financed by the employer. For this purpose, a proportion of the annual STI bonus up to a maximum sum of €50,000 p.a. can be converted into a pension entitlement. The regulations described above apply correspondingly to self-financed contributions.

Vested pension entitlements from the old pension scheme: As part of the transfer of the existing pension entitlements from the old pension scheme, the following vested pension entitlements – in accordance with the individual term of service in each case – were determined for the serving members of the Board of Management as of 31 December 2015: Dr. Frank Mastiaux: €80,676 p.a., Dr. Bernhard Beck (until 30/06/2019): €195,846 p.a., Thomas Kusterer: €89,523 p.a., Dr. Hans-Josef Zimmer: €174,636 p.a.

Individual pension contributions that deviate from the regulations for the new pension scheme: From 1 January 2016, the annual pension contributions and the interest on the contributions will generally be paid in accordance with the rules of the new system for new members of the Board of Management appointed in the future. However, a deviation was necessary for the then serving members of the Board of Management to take account of the transition to the new system, and individual pension contributions and an individual contribution period have been defined. The following individual pension contributions were determined: Dr. Frank Mastiaux: €360,000 p.a., Dr. Bernhard Beck (until 30/06/2019): €170,000 p.a., Thomas Kusterer: €215,000 p.a., Dr. Hans-Josef Zimmer: €120,000 p.a.

Regulation for limiting severance payments: No severance benefit obligations exist in the event of premature termination of service on the Board of Management. However, severance benefits may be payable on the basis of a severance agreement made with the individual. For agreements in place as of the reporting date, it was agreed that payments made to a member of the Board of Management on premature termination of his or her contract without serious cause, including fringe benefits, shall not exceed the value of two years' remuneration (severance cap) and compensate for no more than the remaining term of the contract. In concluding or extending contracts for the Board of Management, care is taken to ensure that no payments will be made to a member of the Board of Management in the event of the premature termination of the contract due to an important reason for which the member of the Board of Management is responsible.

In the event of the premature termination of service on the Board of Management due to a change of control, the possibility

of a severance payment for the member of the Board of Management is limited to the pro rata share of annual remuneration(s) for the residual term of the contract. However, the severance payment must not exceed three times the annual remuneration.

In concluding or extending contracts for the Board of Management, it is agreed that settlement or severance payments should not exceed three times the annual remuneration and must not compensate for more than the residual term of the contract in the event of the premature termination of service on the Board of Management due to a change of control.

Temporary unavailability for work: In the event of temporary unavailability for work on the part of a member of the Board of Management due to illness or any other reason for which the member of the Board of Management is not responsible, remuneration will be paid for the first six months. The amount of variable remuneration will be calculated from the average of the last three years, and basic remuneration will be paid for a further six months. However, payments in the event of unavailability for work will be made no longer than until the end of the term of the service agreement.

The disclosures for the 2019 financial year concerning post-employment benefits are presented below. This presentation satisfies the requirements of section 285 No. 9a HGB. The disclosures include the vested entitlement as of the reporting date, the annual expenses for pension obligations and the present value of the pension obligations earned as of the reporting date.

Post-employment benefits

in €	Dr. Frank Mastiaux, Chairman		Dr. Bernhard Beck, LL.M. (until 30 June 2019)		Thomas Kusterer		Colette Rückert-Hennen (since 1 March 2019)		Dr. Hans-Josef Zimmer	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Vested benefit from previous entitlement p.a.	80,676	80,676	195,846	195,846	89.523[2]	89.523[2]	0	0	174,636	174,636
Capital from contribution model	1,767,878	1,296,167	379,626	373,116	1,096,121	777,533	198,025	0	513,058	384,086
Annual expenses for pension obligations[1]	526,560	546,663	46,950	112,847	369,898	380,180	0	0	242,401	235,725
Present value of pension obligations (defined benefit obligations)	4,391,428	3,396,435	5,646,078	5,216,617	4,096,394	3,151,738	244,894	0	5,599,845	4,845,098

1 Including an addition to capital for pension benefits totalling €101,649 (previous year: €128,128). This is a pension commitment financed through voluntarily waiving part of the salary.
2 In addition to the vested pension, Thomas Kusterer also has a special capital component of €135,000.

Annual expenses for pension obligations include both service and interest costs. There are defined benefit obligations in accordance with IFRS of €20.0 million for the current members of the Board of Management (previous year: €16.6 million).

Former members of the Board of Management and their surviving dependants received total remuneration of €5.2 million in the 2019 financial year (previous year: €4.8 million). These pension payments are indexed to the percentage change in remuneration according to the collective bargaining agreement.

There are defined benefit obligations to former members of the Board of Management and their surviving dependants in accordance with IFRS of €114.8 million (previous year: €99.0 million).

As in the previous year, no loans or advances to members of the Board of Management existed at the end of the financial year.

Supervisory Board remuneration

In response to a proposal of the Board of Management and Supervisory Board, the Annual General Meeting on 25 April 2013 revised the regulations for Supervisory Board remuneration. Accordingly, members of the Supervisory Board each receive fixed remuneration of €40,000 for the entire 2019 financial year, payable at the end of the financial year in addition to reimbursement of their expenses.

The Chairman of the Supervisory Board receives twice the above, while the Deputy Chairman of the Supervisory Board receives one and a half times the aforementioned amount.

Members of the Supervisory Board receive fixed remuneration of €7,500 each per financial year to offset the additional work involved in any activities in one or more Supervisory Board committees. The Chairperson of one or more committees receives twice the amount of the remuneration for the committee work, unless the respective committee has not met in the financial year concerned. Supervisory Board members who have only belonged to the Supervisory Board or a committee or acted as a Chairperson for part of the financial year are paid remuneration proportionate to the duration of their office or their position in that financial year.

In addition, members of the Supervisory Board receive an attendance fee of €750 for Supervisory Board meetings and committee meetings. Attendance at preliminary meetings is remunerated with €250 per meeting, but only for one preliminary meeting per Supervisory Board meeting.

According to this remuneration system, the members of the Supervisory Board will receive the total remuneration (including attendance fees and remuneration for offices held at subsidiaries) shown in the table for the 2019 financial year.

The disclosures for the remuneration for members of the Supervisory Board include attendance fees amounting to €237,000 (previous year: €201,500) and the remuneration for offices held at subsidiaries include attendance fees totalling €19,575 (previous year: €14,390). No other remuneration or benefits for services rendered personally, in particular consulting or mediation services, were paid to members of the Supervisory Board, nor did they receive any loans or advances in the reporting year.

The members of the Board of Management and the Supervisory Board are covered by adequate D&O insurance concluded in the interest of EnBW. For this D&O insurance, the deductible for members of the Board of Management and the Supervisory Board is 10% of the claim in each case, but no more than one and a half times the fixed annual remuneration.

Total remuneration for members of the Supervisory Board of EnBW AG

in €	Fixed remuneration (incl. attendance fees)		Remuneration for offices held at subsidiaries		Total	
	2019	2018	2019	2018	2019	2018
Lutz Feldmann, Chairman	107,750	110,750	0	0	107,750	110,750
Dietrich Herd, Deputy Chairman	85,250	84,750	9,500	9,500	94,750	94,250
Achim Binder (since 1 January 2019)	64,500	0	10,069	0	74,569	0
Dr. Dietrich Birk	58,750	57,250	0	0	58,750	57,250
Stefanie Bürkle[1]	55,750	52,000	0	0	55,750	52,000
Stefan Paul Hamm[2]	64,500	64,000	7,513	7,513	72,013	71,513
Volker Hüsgen (since 1 October 2018)	56,750	13,723	13,805	2,579	70,555	16,302
Michaela Kräutter[2]	57,750	46,000	7,513	950	65,263	46,950
Silke Krebs (until 31 December 2018)	0	56,500	0	0	0	56,500
Marianne Kugler-Wendt[2]	57,750	56,500	6,400	6,100	64,150	62,600
Thomas Landsbek	58,500	46,000	0	0	58,500	46,000
Dr. Hubert Lienhard	64,503	54,250	0	0	64,503	54,250
Marika Lulay (since 14 February 2019)	49,274	0	0	0	49,274	0
Sebastian Maier (until 31 December 2018)	0	56,500	0	6,615	0	63,115
Arnold Messner (until 31 December 2018)	0	63,750	0	8,113	0	71,863
Dr. Wolf-Rüdiger Michel[1]	57,250	54,250	0	0	57,250	54,250
Gunda Röstel	65,500	64,000	11,313	11,513	76,813	75,513
Jürgen Schäfer (since 1 January 2019)	56,750	0	0	0	56,750	0
Klaus Schörnich (until 30 September 2018)	0	42,777	0	200	0	42,977
Heinz Seiffert[1] (until 31 December 2018)	0	55,750	0	0	0	55,750
Harald Sievers (since 1 January 2019)	55,000	0	0	0	55,000	0
Edith Sitzmann[3]	61,750	54,250	0	0	61,750	54,250
Ulrike Weindel	60,750	56,500	0	0	60,750	56,500
Lothar Wölfle[1]	63,250	63,250	0	0	63,250	63,250
Dr. Bernd-Michael Zinow	68,250	66,250	12,000	12,800	80,250	79,050
Total	**1,269,527**	**1,219,000**	**78,113**	**65,883**	**1,347,640**	**1,284,883**

1 The regulations in the State Civil Service Act (Landesbeamtengesetz) and the Ancillary Activities Ordinance (Landesnebentätigkeitsverordnung – LNTVO) of the Federal State of Baden-Württemberg for relinquishing remuneration from secondary employment to the administrative district apply. The regulations in LBeamtVG apply instead for Mr Seiffert.

2 In accordance with the regulations of the German Federation of Trade Unions (DGB) on the transfer of supervisory board remuneration, the remuneration is transferred to the Hans Böckler Foundation and ver.di GewerkschaftsPolitische Bildung gGmbH.

3 The members of the state government and the state secretaries are obligated to relinquish any remuneration, including attendance fees, received for membership of supervisory boards, executive boards, advisory boards and all other comparable boards to which they have been appointed in connection with their office or to which they are assigned as a member of the state government, applying section 5 LNTVO analogously, provided that the remuneration received in the calendar year exceeds the gross total for level "B6 and higher" (currently €6,100) (council of ministers resolution dated 05/07/2016).

Disclosures pursuant to sections 289 a (1) and 315 a (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 289 a (1) and 315 a (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 which 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 19 of the notes to the consolidated financial statements at www.enbw.com/report2019-downloads.

Restrictions relating to voting rights or transferability of shares

Agreements were reached on 22 December 2015 between, on the one hand, Zweckverband Oberschwäbische Elektrizitätswerke (Zweckverband OEW) and OEW Energie-Beteiligungs GmbH and, on the other, the Federal State of Baden-Württemberg, NECKARPRI GmbH and NECKARPRI-Beteiligungsgesellschaft mbH, which include clauses relating to restrictions of authorisation over EnBW shares held by these parties and a general mutual obligation of both main shareholders to maintain parity investment relationships in EnBW 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. 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 authorised or conditional capital nor any authorisation 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. 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 2019, the company holds 5,749,677 treasury shares which were purchased on the basis of earlier authorisations 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 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 EnBW agreements are subject to the condition of a change of control following a takeover bid as defined by sections 289a (1) No. 8 and 315a (1) No. 8 HGB:

A syndicated credit line of €1.5 billion, which had not been drawn as of 31 December 2019, can be terminated by the lenders and become due for repayment given a change of control at EnBW. This does not apply if the purchaser of the shares is the Federal State of Baden-Württemberg or Zweckverband OEW or another German state-owned public law legal entity.

A promissory note loan of €200 million taken out by Stadtwerke Dusseldorf AG (SWD AG) relating to the financing of their CCGT power plant, two bilateral bank loans together totalling around €44 million and a syndicated loan, of which €182 million was drawn as of 31 December 2019, can each become due for repayment given a change of control at SWD AG, including an indirect change of control. This does not apply if, after the change of control, the majority of shares in SWD AG are held directly or indirectly by German government entities and the City of Düsseldorf holds at least 25.05% of the shares in SWD AG.

A syndicated credit line with a volume of €700 million agreed with VNG AG, of which around €390 million was drawn as of 31 December 2019, can become due for repayment given a change of control at VNG, including an indirect change of control. This does not apply if, after the change of control, the majority of shares in VNG continue to be held directly by German public sector shareholders or indirectly by these shareholders via controlled legal entities.

A bond of JPY 20 billion issued on 12 December 2008 under the Debt Issuance Programme (Glossary, from p. 139) can be terminated by the lenders and become due for repayment given a change of control at EnBW. This does not apply if the purchaser of the shares is EDF (whose legal successor as shareholder has been the Federal State of Baden-Württemberg since February 2011) or Zweckverband OEW or another German state-owned public law corporation. Two bilateral long-term bank loans, drawn to the value of €350 million and around €318 million as of 31 December 2019, can be terminated by the lender and become due for repayment given a change of control at EnBW, provided the change of control has a negative effect on repayment of the loan in future. This does not apply if the purchaser of the shares is EDF (whose legal successor as shareholder has been the Federal State of Baden-Württemberg since February 2011) or Zweckverband OEW.

Compensation agreements

Compensation agreements pursuant to sections 289 a (1) No. 9 and 315 a (1) No. 9 HGB concluded with members of the Board of Management to cover any case of a change of control are described and explained in the remuneration report, which is part of the management report.

Nos. 4 and 5 of sections 289 a (1) and 315 a (1) HGB were not relevant for EnBW in the 2019 financial year.

Index for the non-financial declaration of the EnBW Group and EnBW AG

In accordance with sections 315b and 289b HGB, the EnBW Group and EnBW AG have been obligated to issue a non-financial declaration since the 2017 financial year. We comply with the requirements by fully integrating the non-financial declaration into the Integrated Annual Report as part of the combined management report of the EnBW Group and EnBW AG. For all of the aspects required by the act and also other aspects that are material from the perspective of EnBW, such as standing in society, customer satisfaction and supply quality, we fulfil the obligations by providing information about concepts and processes, measures, performance indicators and risks.

Index for the non-financial declaration of the EnBW Group and EnBW AG

Themes	Aspects	Section	Page reference
Compliance	› Fighting corruption and bribery	› Corporate governance	page 49 f.
		› In dialogue with our stakeholders	page 55
		› Report on opportunities and risks	page 103
Social engagement	› Social issues	› In dialogue with our stakeholders	page 53 ff.
		› Report on opportunities and risks	page 103
Procurement	› Respect for human rights	› In dialogue with our stakeholders	page 52 ff.
		› Procurement	page 59 ff.
		› Report on opportunities and risks	page 103
Reputation	› Standing in society	› In dialogue with our stakeholders	page 52 ff.
		› The EnBW Group	page 81
		› Forecast	page 98
		› Report on opportunities and risks	page 103
Customer proximity	› Customer satisfaction	› In dialogue with our stakeholders	page 52 ff.
		› The EnBW Group	page 81 f.
		› Forecast	page 98 f.
		› Report on opportunities and risks	page 103
Supply reliability	› Supply quality	› In dialogue with our stakeholders	page 51
		› The EnBW Group	page 83
		› Forecast	page 99
Employee commitment	› Employee issues	› In dialogue with our stakeholders	page 52 ff.
		› The EnBW Group	page 83 ff.
		› Forecast	page 99
		› Report on opportunities and risks	page 103
Occupational safety	› Employee issues	› The EnBW Group	page 86 f.
		› Forecast	page 99
		› Report on opportunities and risks	page 104
Expansion of renewable energies	› Environmental issues	› Business model	page 32 f.
		› Strategy, goals and performance management system	page 41 ff.
		› In dialogue with our stakeholders	page 51 ff.
		› The EnBW Group	page 87 f.
		› Forecast	page 99
		› Report on opportunities and risks	page 104
Climate protection	› Environmental issues	› Business model	page 32 f.
		› Strategy, goals and performance management system	page 41 ff.
		› In dialogue with our stakeholders	page 51 ff.
		› General conditions	page 63
		› The EnBW Group	page 88 ff.
		› Forecast	page 99
		› Report on opportunities and risks	page 104

The non-financial declaration is issued jointly for the EnBW Group and EnBW AG. 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. 32 ff.). We have not identified any material individual risks in the 2019 financial year that have a very high probability of a serious negative impact in relation to the relevant non-financial issues.

The reporting of sustainability topics has been based for many years on the standards issued by the Global Reporting Initiative (GRI). Since the 2017 financial year, we have based our reporting on the GRI standards – "Core" option, including the Electric Utilities Sector Supplement (www.enbw.com/gri-index). Our sustainability reporting also complies with the requirements of the Communication on Progress for the UN Global Compact.

Information on the diversity concept can be found in the declaration of corporate management at www.enbw.com/corporate-governance.

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft is commissioned to audit the consolidated financial statements and the combined management report including the contents of the non-financial declaration with reasonable assurance and then to issue an audit opinion following the conclusion of the audit. The full consolidated financial statements and the combined management report for the 2019 financial year are accessible to the public on the website at www.enbw.com/report2019-downloads.

Index for the Task Force on Climate-related Financial Disclosures (TCFD)

EnBW started to implement the recommendations from the TCFD in 2017 (Glossary, from p. 139). This work has continued in the 2019 financial year and is being continuously developed in each of the four key elements. The index also includes other themes besides these where we are working on the further implementation of the TCFD recommendations.

Task Force on Climate-related Financial Disclosures (TCFD)

TCFD element	Themes	Section	Page reference
Governance	› Corporate management	› Corporate governance	page 48
	› Materiality analysis	› In dialogue with our stakeholders	page 51 f.
	› Investment guidelines	› The EnBW Group	page 76
	› Climate protection initiatives	› In dialogue with our stakeholders, General conditions	pages 52 and 63
	› Overall assessment by the management	› Overall assessment of the economic situation of the Group	page 95
	› Board of Management remuneration	› Remuneration report	page 110 ff.
Strategy	› Robustness of business model/scenario analysis	› Business model	page 33
	› Strategy, strategic development	› Strategy, goals and performance management system	page 41 ff.
	› Interdependencies	› Strategy, goals and performance management system	page 46 f.
	› Materiality analysis	› In dialogue with our stakeholders	page 51 f.
	› Green bonds	› The EnBW Group	page 74
	› General conditions, climate protection	› General conditions	page 63
Risk management	› Integrated opportunity and risk management including opportunity and risk map	› Report on opportunities and risks	page 100 ff.
	› Environment goal dimension: opportunities and risks	› Report on opportunities and risks	page 104
Performance indicators and targets	› Sustainability ratings	› In dialogue with our stakeholders	page 53
	› Key performance indicators and long-term targets	› Strategy, goals and performance management system	page 44 ff.
	› Environment goal dimension: key performance indicators and other performance indicators	› The EnBW Group	page 87 ff.

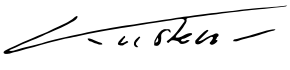
Declaration of the legal representatives

We assure to the best of our knowledge that, in accordance with the applicable accounting principles, the annual and consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the company and the Group, and that the combined management report gives a true and fair view of the business development including the result and situation of the company and the Group and also describes the significant opportunities and risks relating to the anticipated development of the company and the Group.

Karlsruhe, 4 March 2020

EnBW Energie Baden-Württemberg AG

Dr. Mastiaux



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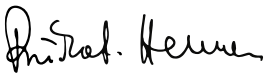

Rückert-Hennen

Dr. Zimmer

Condensed financial statements of the EnBW Group

Note

The full set of financial statements of the EnBW Group 2019 including the notes to the consolidated financial statements and the unqualified auditor's report form part of the Integrated Annual Report 2019 – Extended Version, which is available in PDF format on our website at www.enbw.com/report2019-downloads.

Income statement

in € million[1]	Notes	2019	2018	Change in %
Revenue including electricity and energy taxes		19,270.7	21,391.0	-9.9
Electricity and energy taxes		-505.7	-575.6	-12.1
Revenue	**(1)**	**18,765.0**	**20,815.4**	**-9.9**
Changes in inventories		18.3	13.9	31.7
Other own work capitalised		148.1	102.1	45.1
Other operating income	(2)	1,544.0	1,185.1	30.3
Cost of materials	(3)	-14,841.1	-16,838.1	-11.9
Personnel expenses	(4)	-2,007.0	-1,871.8	7.2
Impairment losses	(25)	-89.2	-36.7	143.1
Other operating expenses	(5)	-1,292.9	-1,280.3	1.0
EBITDA		**2,245.2**	**2,089.6**	**7.4**
Amortisation and depreciation	(6)	-1,648.5	-1,213.8	35.8
Earnings before interest and taxes (EBIT)		**596.7**	**875.8**	**-31.9**
Investment result	(7)	401.3	100.9	–
of which net profit/loss from entities accounted for using the equity method		(28.9)	(-24.1)	–
of which other profit/loss from investments		(372.4)	(125.0)	–
Financial result	(8)	-95.8	-380.4	-74.8
of which finance income		(537.1)	(295.5)	(81.8)
of which finance costs		(-632.9)	(-675.9)	(-6.4)
Earnings before tax (EBT)		**902.2**	**596.3**	**51.3**
Income tax	(9)	2.1	-128.7	-101.6
Group net profit		**904.3**	**467.6**	**93.4**
of which profit/loss shares attributable to non-controlling interests		(170.1)	(133.4)	(27.5)
of which profit/loss shares attributable to the shareholders of EnBW AG		(734.2)	(334.2)	(119.7)
EnBW AG shares outstanding (million), weighted average		**270.855**	**270.855**	**0.0**
Earnings per share from Group net profit (€)[2]	**(24)**	**2.71**	**1.23**	**119.7**

1 The figures for the previous year have been restated. Further disclosures are presented in the notes under "Changes in accounting policies". We publish the full set of consolidated financial statements at www.enbw.com/report2019-downloads.

2 Diluted and basic; in relation to profit/loss attributable to the shareholders of EnBW AG.

Statement of comprehensive income

in € million[1]	Notes	2019	2018	Change in %
Group net profit		**904.3**	**467.6**	**93.4**
Revaluation of pensions and similar obligations	(20)	-1,028.3	-110.0	–
Entities accounted for using the equity method	(13)	-0.3	0.0	–
Income taxes on other comprehensive income	(9)	300.8	31.8	–
Total of other comprehensive income and expenses without future reclassifications impacting earnings		**-727.8**	**-78.2**	**–**
Currency translation differences		24.2	5.1	–
Cash flow hedge	(25)	131.8	-143.8	–
Financial assets at fair value in equity	(14)	18.7	-16.2	–
Entities accounted for using the equity method	(13)	-2.9	1.0	–
Income taxes on other comprehensive income	(9)	-49.6	81.5	–
Total of other comprehensive income and expenses with future reclassifications impacting earnings		**122.2**	**-72.4**	**–**
Total other comprehensive income		**-605.6**	**-150.6**	**–**
Total comprehensive income		**298.7**	**317.0**	**-5.8**
of which profit/loss shares attributable to non-controlling interests		(153.4)	(132.6)	15.7
of which profit/loss shares attributable to the shareholders of EnBW AG		(145.3)	(184.4)	-21.2

1 Further information is available in the notes under (19) "Equity". We publish the full set of consolidated financial statements at www.enbw.com/report2019-downloads.

Balance sheet

in € million[1]	Notes	31/12/2019	31/12/2018
Assets			
Non-current assets			
Intangible assets	(10)	3,347.4	1,748.7
Property, plant and equipment	(11),(12)	18,552.7	15,867.5
Entities accounted for using the equity method	(13)	1,064.0	1,600.2
Other financial assets	(14)	6,356.9	5,426.5
Trade receivables	(15)	331.3	302.0
Other non-current assets	(16)	756.2	741.8
Deferred taxes	(21)	1,214.0	1,059.3
		31,622.5	**26,746.0**
Current assets			
Inventories		1,066.1	1,192.0
Financial assets	(17)	448.6	774.7
Trade receivables	(15)	3,976.8	4,515.7
Other current assets	(16)	4,809.4	3,788.9
Cash and cash equivalents	(18)	1,363.8	2,249.4
		11,664.7	**12,520.7**
Assets held for sale	(23)	0.9	342.3
		11,665.6	**12,863.0**
		43,288.1	**39,609.0**
Equity and liabilities			
Equity	**(19)**		
Shares of the shareholders of EnBW AG			
Subscribed capital		708.1	708.1
Capital reserve		774.2	774.2
Revenue reserves		5,234.5	4,676.4
Treasury shares		-204.1	-204.1
Other comprehensive income		-2,565.6	-1,976.7
		3,947.1	**3,977.9**
Non-controlling interests		3,498.0	2,295.4
		7,445.1	**6,273.3**
Non-current liabilities			
Provisions	(20)	14,333.1	13,246.0
Deferred taxes	(21)	890.0	774.8
Financial liabilities	(22)	7,360.7	6,341.4
Other liabilities and subsidies	(22)	2,155.9	1,674.7
		24,739.7	**22,036.9**
Current liabilities			
Provisions	(20)	1,535.9	1,549.9
Financial liabilities	(22)	830.2	654.8
Trade payables	(22)	4,055.1	5,039.8
Other liabilities and subsidies	(22)	4,682.1	4,033.1
		11,103.3	**11,277.6**
Liabilities directly associated with assets classified as held for sale	(23)	0.0	21.2
		11,103.3	**11,298.8**
		43,288.1	**39,609.0**

1 We publish the full set of consolidated financial statements at www.enbw.com/report2019-downloads.

Cash flow statement

in € million[1]	Notes	2019	2018
1. Operating activities			
EBITDA		2,245.2	2,089.6
Changes in provisions	(20)	-416.0	-394.6
Result from disposals of assets	(2),(5)	-18.5	-88.4
Other non-cash-relevant expenses/income	(2),(3),(5)	64.8	-27.6
Change in assets and liabilities from operating activities		-759.4	-480.7
Inventories		(-160.4)	(-201.7)
Net balance of trade receivables and payables	(15),(22)	(-517.8)	(49.6)
Net balance of other assets and liabilities	(16),(22)	(-81.2)	(-328.6)
Income tax paid	(9),(16),(22)	-409.1	-270.7
Cash flow from operating activities		**707.0**	**827.6**
2. Investing activities			
Capital expenditure on intangible assets and property, plant and equipment	(10),(11)	-1,947.8	-1,369.5
Disposals of intangible assets and property, plant and equipment	(10),(11)	50.1	77.3
Cash received from subsidies for construction cost and investments	(22)	90.4	86.1
Acquisition of subsidiaries, entities accounted for using the equity method and interests in joint operations	(13)	-1,135.1	-297.6
Sale of subsidiaries, entities accounted for using the equity method and interests in joint operations	(13)	68.3	297.9
Cash paid for investments in other financial assets	(14),(17)	-722.6	-750.4
Cash received from the sale of other financial assets	(14),(17)	1,014.0	765.3
Cash received/paid for investments in connection with short-term finance planning	(17),(22)	-20.9	10.5
Interest received	(8)	111.6	94.4
Dividends received	(7)	174.9	190.2
Cash flow from investing activities		**-2,317.1**	**-895.8**
3. Financing activities			
Interest paid for financing activities	(8)	-214.9	-247.0
Dividends paid	(19)	-316.5	-312.8
Cash received for changes in ownership interest without loss of control	(19)	23.4	4.6
Cash paid for changes in ownership interest without loss of control		-0.8	0.0
Increase in financial liabilities	(22)	3,148.6	1,125.1
Repayment of financial liabilities	(22)	-2,038.7	-1,425.4
Repayment of lease liabilities	(22)	-108.3	–
Payments from alterations of capital in non-controlling interests	(19)	59.1	-51.8
Cash flow from financing activities		**551.9**	**-907.3**
Net change in cash and cash equivalents	**(18)**	**-1,058.2**	**-975.5**
Change in cash and cash equivalents due to changes in the consolidated companies	(18)	169.3	6.6
Net foreign exchange difference	(18)	3.1	5.5
Change in cash and cash equivalents due to risk provisions	(18)	0.2	0.2
Change in cash and cash equivalents	**(18)**	**-885.6**	**-963.2**
Cash and cash equivalents at the beginning of the period	(18)	2,249.4	3,212.6
Cash and cash equivalents at the end of the period	**(18)**	**1,363.8**	**2,249.4**

1 Further information is available in the notes under (32) "Notes to the cash flow statement". We publish the full set of consolidated financial statements at www.enbw.com/report2019-downloads.

Statement of changes in equity

in € million[1]				Other comprehensive income							
	Subscribed capital and capital reserve[2]	Revenue reserves	Treasury shares	Revaluation of pensions and similar obligations	Currency translation differences	Cash flow hedge	Financial assets at fair value in equity	Entities accounted for using the equity method	Shares of the shareholders of EnBW AG	Non-controlling interests	Total
Notes				(20)		(25)	(14)	(13)			
As of 01/01/2018	**1,482.3**	**4,479.3**	**-204.1**	**-1,716.9**	**-12.0**	**-109.2**	**10.9**	**0.3**	**3,930.6**	**2,327.2**	**6,257.8**
Other comprehensive income				-74.6	3.2	-68.2	-11.2	1.0	-149.8	-0.8	-150.6
Group net profit		334.2							334.2	133.4	467.6
Total comprehensive income	**0.0**	**334.2**	**0.0**	**-74.6**	**3.2**	**-68.2**	**-11.2**	**1.0**	**184.4**	**132.6**	**317.0**
Dividends		-135.4							-135.4	-139.2	-274.6
Other changes[3]		-1.7							-1.7	-25.2	-26.9
As of 31/12/2018	**1,482.3**	**4,676.4**	**-204.1**	**-1,791.5**	**-8.8**	**-177.4**	**-0.3**	**1.3**	**3,977.9**	**2,295.4**	**6,273.3**
Other comprehensive income				-712.0	17.3	95.8	13.3	-3.3	-588.9	-16.7	-605.6
Group net profit		734.2							734.2	170.1	904.3
Total comprehensive income	**0.0**	**734.2**	**0.0**	**-712.0**	**17.3**	**95.8**	**13.3**	**-3.3**	**145.3**	**153.4**	**298.7**
Dividends		-176.1							-176.1	-121.9	-298.0
Other changes[3]									0.0	1,171.1	1,171.1
As of 31/12/2019	**1,482.3**	**5,234.5**	**-204.1**	**-2,503.5**	**8.5**	**-81.6**	**13.0**	**-2.0**	**3,947.1**	**3,498.0**	**7,445.1**

1 Further information is available in the notes under (19) "Equity". We publish the full set of consolidated financial statements at www.enbw.com/report2019-downloads.
2 Of which subscribed capital €708.1 million (31/12/2018: €708.1 million, 01/01/2018: €708.1 million) and capital reserve €774.2 million (31/12/2018: €774.2 million, 01/01/2018: €774.2 million).
3 Of which changes in revenue reserves due to changes in ownership interest in subsidiaries without loss of control of 0.0 million (previous year €-1.7 million). Of which changes in non-controlling interests due to changes in ownership interest in subsidiaries without loss of control of €26.0 million (previous year €6.2 million).

Information on the result of the audit of the consolidated financial statements and the combined management report of the company and the Group for the 2019 financial year

The condensed financial statements for the 2019 financial year that form part of the Integrated Annual Report do not include the notes to the consolidated financial statements and the declaration of corporate management 2019 of the EnBW Group and EnBW AG including the corporate governance report 2019. The full set of consolidated financial statements – including the notes to the consolidated financial statements – and the combined management report for the company and the Group were both audited for the 2019 financial year by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft as the auditor and Group auditor elected by the Annual General Meeting of EnBW Energie Baden-Württemberg AG on 8 May 2019. Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft arrived at the overall conclusion that the audit did not lead to any reservations and issued an unqualified audit opinion. The full set of consolidated financial statements and the combined management report for the company and the Group, both for the 2019 financial year, as well as the unqualified audit opinion issued by the auditor, can be accessed on the website of EnBW Energie Baden-Württemberg AG.

Corporate bodies

The Supervisory Board

Members

- **Lutz Feldmann, Bochum**
  Independent business consultant
  Chairman
- **Dietrich Herd, Philippsburg**
  Chairman of the Group works council for the EnBW Group as well as Chairman of the central works council for the "generation sector" and Chairman of the Philippsburg nuclear power plant works council for the "generation sector" of EnBW Energie Baden-Württemberg AG, Karlsruhe, Deputy Chairman
- **Achim Binder, Stuttgart**
  Deputy Chairman of the Group works council for the EnBW Group, Chairman of the central works council "grids sector" of EnBW Energie Baden-Württemberg AG and Chairman of the regional service works council of Netze BW GmbH, Stuttgart
- **Dr. Dietrich Birk, Göppingen**
  Managing Director of the Verband Deutscher Maschinen- und Anlagenbau e.V. (VDMA), Regional Association for Baden-Württemberg
- **Stefanie Bürkle, Sigmaringen**
  District Administrator of the Sigmaringen district
- **Stefan Paul Hamm, Gerlingen**
  Union Secretary/Head of the Department for Utilities and Waste Management, ver.di Baden-Württemberg
- **Volker Hüsgen, Essen**
  Chairman of the works council of Stadtwerke Düsseldorf AG
  until 31 December 2019
  Independent works council representative
  since 1 January 2020
  Member of the Group works council for the EnBW Group and first Deputy Chairman of the Supervisory Board of Stadtwerke Düsseldorf AG
- **Michaela Kräutter, Stutensee**
  Union Secretary for Utilities and Waste Management and State Union Secretary for Employees, ver.di Central Baden/North Black Forest district
- **Marianne Kugler-Wendt, Heilbronn**
  Regional Director of ver.di for the districts Heilbronn-Neckar-Franconia (until 30 September 2019) and Rhine-Neckar (until 30 May 2019)
- **Thomas Landsbek, Wangen im Allgäu**
  Member of the Group works council for the EnBW Group as well as Chairman of the central works council for the "market sector" and Chairman of the Stuttgart works council for the "market sector" of EnBW Energie Baden-Württemberg AG, Karlsruhe
- **Dr. Hubert Lienhard, Heidenheim an der Brenz**
  Supervisory Board
- **Marika Lulay, Heppenheim**
  Chairwoman of the Managing Directors (CEO) and member of the Board of Directors at GFT Technologies SE, Stuttgart
- **Dr. Wolf-Rüdiger Michel, Rottweil**
  District Administrator of the Rottweil district
- **Gunda Röstel, Flöha**
  Commercial Director of Stadtentwässerung Dresden GmbH and Authorised Officer of Gelsenwasser AG
- **Jürgen Schäfer, Bissingen**
  Member of the Group works council for the EnBW Group and Deputy Chairman of the works council for TransnetBW GmbH, Stuttgart
- **Harald Sievers, Ravensburg**
  District Administrator of the Ravensburg district
- **Edith Sitzmann MdL, Freiburg**
  Minister for Finance of the Federal State of Baden-Württemberg and member of the State Parliament of Baden-Württemberg
- **Ulrike Weindel, Karlsruhe**
  Member of the Group works council for the EnBW Group as well as Chairwoman of the central works council for the "functional units sector" and Chairwoman of the Karlsruhe operations for the "functional units sector" of EnBW Energie Baden-Württemberg AG, Karlsruhe
- **Lothar Wölfle, Friedrichshafen**
  District Administrator of the Lake Constance district
- **Dr. Bernd-Michael Zinow, Karlsruhe**
  Head of the functional unit Legal Services, Auditing, Compliance and Regulation (General Counsel) at EnBW Energie Baden-Württemberg AG, Karlsruhe

Status

- **Active member**
- **Inactive member**

As of 4 March 2020

Further information is available at:
www.enbw.com/supervisory-board

Committees

Personnel committee

- **Lutz Feldmann**
  Chairman

- **Achim Binder**
- **Stefan Paul Hamm**
- **Dietrich Herd**
- **Edith Sitzmann**
- **Lothar Wölfle**

Audit committee

- **Gunda Röstel**
  Chairwoman

- **Stefanie Bürkle**
- **Volker Hüsgen**
- **Marianne Kugler-Wendt**
- **Thomas Landsbek**
- **Dr. Hubert Lienhard**
- **Dr. Wolf-Rüdiger Michel**
- **Ulrike Weindel**

Ad hoc committee (since 7 June 2010)

- **Dr. Bernd-Michael Zinow**
  Chairman

- **Dietrich Herd**
- **Gunda Röstel**
- **Harald Sievers**

Finance and investment committee

- **Lutz Feldmann**
  Chairman

- **Achim Binder**
- **Dr. Dietrich Birk**
- **Stefan Paul Hamm**
- **Dietrich Herd**
- **Edith Sitzmann**
- **Lothar Wölfle**
- **Dr. Bernd-Michael Zinow**

Nomination committee

- **Lutz Feldmann**
  Chairman

- **Dr. Dietrich Birk**
- **Dr. Wolf-Rüdiger Michel**
- **Gunda Röstel**
- **Edith Sitzmann**
- **Lothar Wölfle**

Mediation committee (committee pursuant to section 27 (3) German Co-determination Act (MitbestG))

- **Lutz Feldmann**
  Chairman

- **Dietrich Herd**
- **Thomas Landsbek**
- **Edith Sitzmann**

Digitalisation committee (since 1 January 2019)

- **Dr. Hubert Lienhard**
  Chairman

- **Michaela Kräutter**
- **Marika Lulay**
- **Jürgen Schäfer**
- **Harald Sievers**
- **Ulrike Weindel**

Status

- **Active member**
- **Inactive member**

As of 4 March 2020

Further information is available at:
www.enbw.com/supervisory-board

Offices held by members of the Board of Management

› **Dr. Frank Mastiaux**
Chairman

› **Thomas Kusterer**
- Netze BW GmbH
- VNG AG (Chairman)

› **Colette Rückert-Hennen**
- EnBW Kernkraft GmbH (Chairwoman) (since 1 July 2019)

› **Dr. Hans-Josef Zimmer**
- Stadtwerke Düsseldorf AG (Chairman) (since 1 January 2020)
- EnBW Kernkraft GmbH
- Netze BW GmbH (Chairman)
- terranets bw GmbH (Chairman)
- TransnetBW GmbH (Chairman)

- Vorarlberger Illwerke AG

› **Dr. Bernhard Beck**
(until 30 June 2019)
- EnBW Kernkraft GmbH (Chairman) (until 30 June 2019)
- Energiedienst AG
- Stadtwerke Düsseldorf AG (Chairman) (until 31 December 2019)

- BKK VerbundPlus, Körperschaft des öffentlichen Rechts (alternating Chairman)
- Energiedienst Holding AG
- Pražská energetika a.s.

Status
› **Active member**
› **Inactive member**

Disclosures of office holders pursuant to section 285 No. 10 German Commercial Code (HGB)
- Membership in other statutory supervisory boards
- Membership in comparable domestic and foreign control bodies of business enterprises

Further information is available at:
www.enbw.com/board-of-management

As of 4 March 2020

Other offices held by members of the Supervisory Board

› **Lutz Feldmann**
Chairman
- Villa Claudius gGmbH (Chairman)
- Thyssen'sche Handelsgesellschaft mbH

› **Dietrich Herd**
Deputy Chairman
- EnBW Kernkraft GmbH

› **Achim Binder**
- Netze BW GmbH

› **Dr. Dietrich Birk**
- SRH Holding (SdbR)

› **Stefanie Bürkle**
- SWEG Südwestdeutsche Landesverkehrs-AG
- Hohenzollerische Landesbank Kreissparkasse Sigmaringen, Anstalt des öffentlichen Rechts (Chairwoman)
- Flugplatz Mengen Hohentengen GmbH (Chairwoman)
- SRH Kliniken Landkreis Sigmaringen GmbH (Chairwoman)
- Sparkassenverband Baden-Württemberg, Anstalt des öffentlichen Rechts
- Verkehrsverbund Neckar-Alb-Donau GmbH (naldo) (Chairwoman)
- Wirtschaftsförderungs- und Standortmarketinggesellschaft Landkreis Sigmaringen mbH (Chairwoman)
- Zweckverband Oberschwäbische Elektrizitätswerke (Deputy Chairwoman)
- Zweckverband Thermische Abfallverwertung Donautal (TAD) (Deputy Chairwoman)

› **Stefan Paul Hamm**
- Netze BW GmbH

› **Volker Hüsgen**
- AWISTA GmbH
- Netzgesellschaft Düsseldorf mbH
- Stadtwerke Düsseldorf AG
- RheinWerke GmbH

› **Michaela Kräutter**
- Netze BW GmbH

› **Marianne Kugler-Wendt**
- Bausparkasse Schwäbisch-Hall AG (until 31 May 2019)
- EnBW Kernkraft GmbH
- SLK-Kliniken Heilbronn GmbH (until 30 September 2019)
- Heilbronner Versorgungs GmbH
- Stadtwerke Heilbronn GmbH
- Heilbronn Marketing GmbH (since 1 October 2019)

› **Thomas Landsbek**
- BürgerEnergiegenossenschaft Region Wangen im Allgäu eG
- Gemeindewerke Bodanrück GmbH & Co. KG

› **Dr. Hubert Lienhard**
- Heraeus Holding GmbH
- SMS Group GmbH
- Voith GmbH & Co. KGaA
- Voith Management GmbH
- Broetje-Automation GmbH (Chairman) (until 31 November 2019)
- Heitkamp & Thumann KG

› **Marika Lulay**
- Wüstenrot & Württembergische AG
- GFT Technologies SE

› **Dr. Wolf-Rüdiger Michel**
- Kreisbaugenossenschaft Rottweil e. G. (Chairman)
- ITEOS, Anstalt des öffentlichen Rechts
- Kreissparkasse Rottweil, Anstalt des öffentlichen Rechts (Chairman)
- Schwarzwald Tourismus GmbH
- SMF Schwarzwald Musikfestival GmbH
- Sparkassen-Beteiligungen Baden-Württemberg GmbH
- Sparkassenverband Baden-Württemberg, Körperschaft des öffentlichen Rechts
- Wirtschaftsförderungsgesellschaft Schwarzwald-Baar-Heuberg mbH
- Zweckverband Bauernmuseum Horb/Sulz
- Zweckverband Oberschwäbische Elektrizitätswerke (Deputy Chairman)
- Zweckverband Ringzug Schwarzwald-Baar-Heuberg
- Zweckverband RBB Restmüllheizkraftwerk Böblingen (Deputy Chairman)
- ZTN-Süd Warthausen

Status
› **Active member**
› **Inactive member**

Disclosures of office holders pursuant to section 285 No. 10 German Commercial Code (HGB)
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As of 4 March 2020

› **Gunda Röstel**
- Universitätsklinikum Carl Gustav Carus Dresden an der Technischen Universität Dresden, Anstalt des öffentlichen Rechts (Deputy Chairwoman)
- VNG AG
- Netze BW GmbH
- Hochschulrat der Technischen Universität Dresden, Körperschaft des öffentlichen Rechts (Chairwoman)
- Stadtwerke Burg GmbH

› **Jürgen Schäfer**

› **Harald Sievers**
- Oberschwabenklinik GmbH (Chairman)
- SV SparkassenVersicherung Lebensversicherung AG
- Gesellschaft für Wirtschafts- und Innovationsförderung Landkreis Ravensburg mbH (WiR) (Chairman)
- Ravensburger Entsorgungsanlagengesellschaft mbH (REAG) (Chairman)
- Bodensee-Oberschwaben Verkehrsverbund GmbH (Deputy Chairman)
- Bodensee-Oberschwaben-Bahn VerwaltungsGmbH
- Kreissparkasse Ravensburg (Chairman of the Administrative Board))
- Zweckverband Oberschwäbische Elektrizitätswerke

› **Edith Sitzmann**
- Landesbank Baden-Württemberg, Anstalt des öffentlichen Rechts (Deputy Chairwoman)
- Landeskreditbank Baden-Württemberg, Förderbank, Anstalt des öffentlichen Rechts (Chairwoman of the Administrative Board)
- Kreditanstalt für Wiederaufbau, Anstalt des öffentlichen Rechts
- Baden-Württemberg Stiftung gGmbH

› **Ulrike Weindel**

› **Lothar Wölfle**
- Abfallwirtschaftsgesellschaft der Landkreise Bodenseekreis und Konstanz (Chairman)
- Bodensee-Oberschwaben Verkehrsverbund GmbH
- Bodensee-Oberschwaben-Bahn Verkehrsgesellschaft mbH (Chairman since 1 January 2020)
- Sparkasse Bodensee (Deputy Chairman since 1 January 2020)
- Zweckverband Oberschwäbische Elektrizitätswerke (Chairman)
- Zweckverband Breitband Bodensee (Deputy Chairman) (since 24 September 2019)
- Wirtschaftsförderungsgesellschaft Bodenseekreis GmbH (Chairman)
- Regionales Innovations- und Technologietransfer Zentrum GmbH (RITZ) (Deputy Chairman)

› **Dr. Bernd-Michael Zinow**
- TransnetBW GmbH
- VNG AG

Status
› **Active member**
› **Inactive member**

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As of 4 March 2020

Service

Rear cover pages:

Financial terms

Adjusted earnings figures
Adjusted earnings figures are operational earnings figures that are adjusted for non-operating effects. They include, amongst others, adjusted EBIT and adjusted Group net profit/loss.

Adjusted EBITDA
The operating profitability of companies is often measured based on adjusted EBITDA (earnings before interest, taxes, depreciation and amortisation). It describes earnings before the investment and financial results, income taxes and amortisation, adjusted for non-operating effects. The key performance indicator adjusted EBITDA is the central earnings indicator for EnBW.

Capital employed
Capital employed comprises all assets from the operating business. At EnBW, it primarily comprises property, plant and equipment in the form of power plants or grids. Non-interest-bearing liabilities – such as trade payables – are deducted.

Debt repayment potential
This future key performance indicator describes the › retained cash flow in relation to the › net debt and is the most significant performance indicator of the Group's ability to repay its debts internally. It will replace the › internal financing capability from 2021.

EBIT
EBIT stands for earnings before interest and taxes.

EBITDA
EBITDA stands for earnings before interest, taxes, depreciation and amortisation.

EBT
EBT stands for earnings before taxes.

Free cash flow
The cash flow freely available to the company for the distribution of dividends and for the repayment of debt.

Funds from operations (FFO)
FFO is the cash-relevant earnings from operating activities that is available to the company for investments, the distribution of dividends and the repayment of debt.

Internal financing capability
The key performance indicator internal financing capability describes the › adjusted retained cash flow in relation to the › net (cash) investment and is the most significant performance indicator in the period from 2017 to 2020 of the Group's ability to finance its activities internally.

Net financial debt
Net financial debt comprises the financial liabilities (including finance leases) taken on by the company less cash and cash equivalents and financial assets that are available to the company for its operating business. Financial liabilities are adjusted for valuation effects from interest-induced hedging transactions and for the portion of equity for the hybrid bonds.

Net (cash) investment and adjusted net (cash) investment
Net (cash) investment describes the overall cash-relevant investment less the overall cash-relevant divestitures in the financial year. In the 2019 financial year, the adjusted net (cash) investment was adjusted to take account of accelerated growth investment, which has already been paid for the EnBW 2025 growth strategy.

Net debt
Net debt comprises › net financial debt and the › net debt relating to pension and nuclear obligations.

Net debt relating to pension and nuclear obligations
Net debt relating to pension and nuclear obligations comprises the provisions for pensions and similar obligations and provisions relating to nuclear power. These provisions are netted against receivables relating to the dismantling of nuclear power plants and the › dedicated financial assets.

Non-operating figures
The non-operating figures include effects that cannot be predicted or cannot be directly influenced by EnBW and as such are not relevant to the ongoing management of the company. They include, amongst others, non-operating EBIT and non-operating Group net profit/loss.

Retained cash flow and adjusted retained cash flow
The retained cash flow is decisive for the › internal financing capability of EnBW. After covering ongoing costs and dividend payments, it is available to the company for investment without the need to raise additional debt. The adjusted retained cash flow is the retained cash flow adjusted to take into account the extraordinary effect of the reimbursement of the › nuclear fuel rod tax in 2017. In the 2018 financial year, the reimbursed funds were used for the repayment of debt and for strategic investments. We plan to distribute the remaining amount on a straight-line basis in the period 2019 to 2020, also for the purpose of strategic investment. Accordingly, this will lead to an increase in the adjusted retained cash flow over the period 2018 to 2020.

ROCE
ROCE is the return on capital employed in a company. The key performance indicator ROCE describes the relationship between adjusted EBIT including the adjusted investment result and the average capital employed and is thus the central value-oriented performance indicator of EnBW for assessing the return on capital employed in the relevant financial year.

WACC
WACC stands for the weighted average cost of capital and is used in combination with value-based performance indicators. The cost of capital is determined based on the weighted average cost of equity and debt together.

Glossary

A

Asset liability management (ALM) model
A model for asset liability and cash flow management. A cash flow-based model is used to determine the effects of the pension and nuclear provisions on the balance sheet, income statement and cash flow statement over the next 30 years. This ensures that the Group can cover its long-term pension and nuclear provisions within an economically viable time period using corresponding financial investments (so-called › dedicated financial assets).

Asset management
A financial asset management system facilitates the active management of investments that are used to cover pension and nuclear provisions. The central focus of this activity is to generate appropriate returns while taking into account the risks incurred.

B

Base
Base load product. The constant base level of supply/demand over a period of time.

Broadband
EnBW supports local authorities and municipal associations with tasks ranging from broadband planning and the installation of the infrastructure through to operation, as well as with the associated end-customer business (Internet, telephone and television).

Bundle
Product bundling (bundle offer) describes offering multiple products or services together in one package. Customers receive an appropriate add-on in addition to their purchase.

C

Cash pooling
Daily pooling of the cash or cash equivalents of one or multiple companies within a Group with the target of concentrating and transparently depicting them at the level of the parent company in order to optimise the interest result.

Certified Emission Reduction (CER)
Certified emission reductions from Clean Development Mechanism (CDM) projects. Pursuant to the Kyoto protocol, investors in industrialised countries earn these in developing countries with CDM emission reduction projects. 1 CER corresponds to 1 t CO_2. CERs can be used by companies to meet the obligation to return allowances under the European emissions trading system.

Clean Dark Spread (CDS)
The difference between the electricity price and the generation costs for a typical coal power station, which is calculated using the coal price, CO_2 allowance price and the degree of efficiency of the power station.

CO_2 allowances
CO_2 allowances have been traded on the Leipzig electricity exchange since 2005. If a company purchases a CO_2 allowance, it is entitled to emit 1 t CO_2 .

CO_2 intensity
In the energy sector, CO_2 intensity refers to CO_2 emissions connected with electricity generation. It is measured in terms of g/kWh or t/MWh. CO_2 intensity as referred to here in the energy sector should not be confused with the meaning used in the wider economy.

Coal Commission
The Commission on Growth, Structural Change and Employment (commonly known as the Coal Commission) was appointed by the German government to present recommendations on, amongst other things, the themes of climate protection, safeguarding jobs and economic aspects related to the phase-out of coal generated power.

Combined Heat and Power Act (KWKG)
The Combined Heat and Power Act (KWKG) governs the remuneration and feed-in of electricity generated in combined heat and power plants (large CHP power plants and small decentralised CHP blocks).

Commercial paper (CP) programme
The CP programme is a flexible financing instrument and serves to issue unsecured bonds on the money market for the purpose of short-term financing.

Coverage ratio
Coverage of the pension and nuclear provisions of the Group by financial assets in the › dedicated financial assets.

CSR performance
CSR performance provides an indication of a company's entire sustainability performance. It examines measures to protect the environment and human rights, promote good working conditions and fight corruption within the traditional dimension of corporate social responsibility (CSR) and also focuses on which processes a company has established to guarantee them.

D

Debt Issuance Programme (DIP)
The DIP, also known as EMTN (Euro Medium Term Notes), is a standardised documentation platform for raising debt through the issuing of medium and long-term bonds on the capital market.

Dedicated financial assets
Dedicated financial assets are cash and cash equivalents and financial assets that are held to cover the pension and nuclear obligations.

Derivatives
Financial instruments whose price or market rate is derived from its underlying asset.

District development
District development deals with smart and sustainable urban planning, as well as connecting up, constructing and operating modern residential districts. It comprises urban infrastructure themes such as energy, grids, e-mobility, digital networking, safety and smart services.

E

EEG cost allocations
Cost allocations under the EEG (Renewable Energies Act) are charged by the transmission system operators (TSO). On the one hand, the cost allocations cover the difference between the income generated by the transmission system operators from selling the electricity from RE plants and the expenses incurred by the transmission system operators for the fixed feed-in remuneration and market premium payments to direct marketers of RE plants, while on the other hand, they also cover the costs of implementing the EEG. More than half of the electricity price for household customers today consists of taxes, duties and cost allocations. The EEG cost allocation accounts for the largest share.

Electromobility charging infrastructure
There are currently four different types of electrical connectors for charging electric vehicles. An AC charging station provides alternating current with up to 3.6 kW of electricity via a Schuko connector and up to 22 kW of electricity via a type-2 connector at each charging point. An AC/DC charging station (quick-charging station) is equipped with a CCS and CHAdeMO connector providing up to 50 kW (DC = direct current) of electricity and with a type-2 connector providing up to 43 kW (AC = alternating current) of electricity. A charging station can have multiple charging points. The actual charging output is dependent on how quickly a vehicle can charge. Starting in 2019, existing locations are upgraded with quick-charging stations with a charging output of up to 150 kW.

Energy saving contracting
The cross-discipline optimisation of building technology together with building operation based on cooperation in partnership. Investments in renovations or efficiency enhancement measures are financed through energy cost-savings.

Energy supply contracting
The outsourcing, for a specific period and for a specific area, of tasks relating to energy optimisation or utility energy supplies to a third party.

EPEX
The European Power Exchange (EPEX SPOT SE) is a stock exchange for the short-term wholesale trading of electricity in Germany, France, Austria, Switzerland and Luxembourg.

EU allowance (EUA)
EU emission allowance. An EUA entitles a company to emit 1 t CO_2. Each EU state allocates its supply of EUAs (1 EUA = 1 t CO_2) to its national companies either free of charge or via auctions.

EU Green Deal
The EU Green Deal is a package of measures from the European Union with the primary aim of making the EU climate neutral by 2050 and which contains staggered measures to achieve this goal.

F

Forward market
Market on which the supply and procurement of electricity, fuel and CO_2 allowances are traded for a future period. Usual periods include weeks, months, quarters and years. Settlement can be either physical or financial. The forward market has the primary function of acting as a price hedge.

G

Green bonds
Green bonds are issued exclusively to finance climate-friendly projects. The proceeds are invested in sustainable environmental and climate protection projects.

Greenhouse gas emissions
The increase in the concentration of various greenhouse gases, especially carbon dioxide (CO_2), increases the greenhouse effect and leads to global warming, which itself has many consequences. Alongside carbon dioxide, other greenhouse gases include methane, nitrous oxide, fluorinated hydrocarbons, sulphur hexafluoride and nitrogen trifluoride.

Greenhouse Gas (GHG) Protocol
The Greenhouse Gas Protocol (GHG Protocol) is a globally recognised standard for calculating CO_2 and greenhouse gas emissions. To identify the main sources of emission in a company, it is very important to correctly define and categorise relevant direct and indirect sources of emissions. The GHG Protocol defines the fundamental principles with respect to relevance, completeness, consistency, transparency and precision. It is based on the principles of financial accounting and divides the greenhouse gas emissions into three emission categories: Scope 1, Scope 2 and Scope 3.

H

Hedging
Hedging is a structured approach for securing against financial risks through financial transactions. Hedging involves engaging in countertrade transactions to offset a transaction or an existing position. This is usually carried out in the form of futures contracts.

HVDC
High-voltage DC transmission lines (HVDC) are used to transport electrical energy across large distances. The transmission lines use direct current for transportation as the transmission losses are lower.

I

Independent Transmission Operator (ITO)
The "Independent Transmission Operators" must fulfil the European unbundling regulations for greater liberalisation of the electricity and natural gas markets (3rd EU internal energy market package), which were implemented in the German Energy Industry Act (EnWG) in 2011. The aim of the unbundling regulations defined in the EnWG is to increase competition on the European energy market. An important prerequisite here is that the transmission grids are made available to all market participants as a neutral platform in a non-discriminatory way.

Intraday trading
Intraday trading of electricity is carried out on both the › EPEX SPOT in Paris and the OTC (Over-the-Counter) market, i.e. via contracts negotiated off-exchange between electricity purchasers and sellers. It describes the continuous purchase and sale of electricity that is delivered on the same day. Therefore, it is also described as short-term wholesale electricity trading.

Investment-grade rating
An investment-grade rating exists if a credit rating of at least Baa3 (Moody's) or BBB- (Standard & Poor's) has been issued.

N

Network Development Plan Electricity (NDP Electricity)
This plan describes the measures that need to be deployed over the next 10 and 20 years to expand and restructure the German land-based high-voltage grid to ensure the secure operation of the network. These measures make a significant contribution to the integration of rapidly growing renewable energies and thus also to the Energiewende. The NDP Electricity is prepared jointly by the four German transmission system operators every two years (since 2016), before being submitted to the German Federal Network Agency (BNetzA) as the responsible regulator.

Network Development Plan Gas (NDP Gas)
In the NDP Gas, German gas transmission system operators calculate the transportation capacities that they will require in the future. The plan is prepared every two years in close cooperation with the German Federal Network Agency (BNetzA) and in consultation with relevant market participants.

Nuclear fuel rod tax
This tax was imposed from 2011 to 2016 at a rate of €145/g of nuclear fuel employed. However, it was declared unconstitutional on 7 June 2017 and also repaid to all energy supply companies in 2017.

P

Pari passu clause
A pari passu clause (Latin "pari passu" = on equal footing) is an obligation in financial agreements (for example, in bond agreements or loan agreements). The debtor/issuer obligates themselves during the term of the uncollateralised financial liability (for example, bond or loan) to the principle of equality, meaning future uncollateralised financial liabilities will not be given precedence over the existing financial liability.

R

Repowering
Old power plants for generating energy are replaced by newer and more efficient ones. The term is mainly used in connection with wind turbines.

S

Sectoral productivity factor (Xgen)
The sectoral productivity factor (Xgen) reflects the difference between cost developments in the efficient operation of electricity and gas grids and the development of prices within the whole economy. It is used as an adjustment factor for the consumer price index and is taken into account in the revenue cap for the grid operators.

Sector coupling
Sector coupling is the networking of electricity, heating, mobility and industrial processes for the purpose of lowering carbon dioxide emissions. As sector coupling offers synergy effects in the integration of high proportions of renewable energies, it is viewed as a key concept for the Energiewende and the development of energy systems using 100% renewable energies. There is a general consensus that sector coupling is necessary for the implementation of the Energiewende and the achievement of climate protection targets.

Smart grid
The smart electricity grid: a communication and control network that monitors and optimises the operation of its interconnected elements – from electricity generators, storage systems, consumers of electricity and network operating equipment in energy transmission and distribution grids. The aim is to optimise the supply of energy by operating the system efficiently, reliably and cost-effectively.

Special technical equipment for grids
Special technical equipment for grids are generation plants that will secure the electricity supply in the event of grid-related supply bottlenecks after the last nuclear power plants have been shut down.

Spot market
Market on which electricity supply and procurement quantities are offered and requested for the following day.

System services
The complete set of services required to ensure the quality of electricity supplies: provision of operating reserves, maintaining frequency stability, maintaining voltage levels, re-establishing supply, management services.

T

TCFD (Task Force on Climate-related Financial Disclosures)
The Task Force on Climate-related Financial Disclosures (TCFD) has developed recommendations for the climate-related opportunity and risk reporting by companies. Companies are encouraged to disclose climate-related information – in the four key areas of Governance, Strategy, Risk Management and Metrics and Targets – where such information is considered material for the company. EnBW is represented on the international task force appointed by the G20 through its Chief Financial Officer Thomas Kusterer (www.fsb-tcfd.org).

TEG (Technical Expert Group on Sustainable Finance)
The European Commission set up an expert group in July 2018 with the task of drawing up key aspects for the development of a sustainable financial system for the European internal market. Alongside the development of a taxonomy for sustainable economic activity, the aim is to develop minimum standards for green bonds and sustainability benchmarks, as well as to update the non-binding guidelines on non-financial disclosure while paying particular consideration to climate-related information. The Chief Financial Officer of EnBW, Thomas Kusterer, was appointed to the expert group.

V

Virtual power plant
A virtual power plant is a business segment where products are marketed through a single platform that increases the value of decentralised energy plants – renewable energies, storage systems, loads – by bundling, marketing and optimising them together.

Multi-year overview

Financial and strategic performance indicators

EnBW Group		2019	2018	2017	2016	2015
Earnings						
External revenue[2]	in € million	18,765	20,815	21,974	19,368	21,167
TOP Adjusted EBITDA	in € million	2,433	2,158	2,113	1,939	2,110
EBITDA	in € million	2,245	2,090	3,752	731	1,918
Adjusted EBIT	in € million	945	958	999	1,025	1,182
EBIT	in € million	597	876	2,504	-1,663	277
Group net profit/loss[1]	in € million	734	334	2,054	-1,797	158
Earnings per share from Group net profit/loss[1]	in €	2.71	1.23	7.58	-6.64	0.58
Balance sheet						
Non-current assets	in € million	29,321	24,643	24,878	23,382	24,388
Total assets	in € million	43,288	39,609	38,785	38,535	38,158
Equity	in € million	7,445	6,273	5,863	3,216	5,123
Equity ratio	in %	17.2	15.8	15.1	8.3	13.4
Net financial debt	in € million	6,022	3,738	2,918	3,654	3,329
Coverage ratio ALM	in %	48.1	51.8	53.3	60.8	74.2
Cash flow						
Retained cash flow	in € million	1,241	999	3,050	950	1,718
TOP Internal financing capability[2]	in %	82.6	92.2	111.9	72.1	347.8
Total investment[2]	in € million	3,315	1,786	1,770	2,585	1,462
Profitability						
TOP Return on capital employed (ROCE)	in %	5.2	6.5	7.3	7.8	9.5
Weighted average cost of capital before tax	in %	5.2	6.3	6.3	6.9	6.9
Average capital employed	in € million	19,315	16,053	15,120	13,761	13,627
Value added	in € million	0	32	151	124	354
Sales						
Electricity	in billions of kWh	153	137	122	115	115
Gas[2]	in billions of kWh	297	329	250	139	135
Sales						
Electricity sales[2]	in billions of kWh	37	38	40	44	48
Gas sales[2]	in billions of kWh	74	68	57	54	82

Financial and strategic performance indicators

EnBW Group		2019	2018	2017	2016	2015
External revenue[2]	in € million	7,679	7,348	7,354	7,771	9,061
TOP Adjusted EBITDA[2]	in € million	294	268	330	250	255
Grids						
External revenue	in € million	3,460	3,215	7,472	6,644	6,351
TOP Adjusted EBITDA	in € million	1,311	1,177	1,046	1,004	747
Renewable Energies						
Electricity sales	in billions of kWh	3	2	2	3	3
External revenue	in € million	653	478	508	511	447
TOP Adjusted EBITDA	in € million	483	298	332	295	287
Generation and Trading						
Electricity sales[2]	in billions of kWh	112	97	80	68	65
Gas sales[2]	in billions of kWh	223	260	193	85	53
External revenue[2]	in € million	6,970	9,768	6,631	4,434	5,300
TOP Adjusted EBITDA[2]	in € million	384	431	377	337	777

1 In relation to the profit/loss attributable to the shareholders of EnBW AG.
2 The figures for the 2018 financial year have been restated.

Non-financial performance indicators

	2019	2018	2017	2016	2015
Customers and society goal dimension					
TOP Reputation Index	52.8	51.3	52.1	50.0	48.5
TOP EnBW/Yello Customer Satisfaction Index[1]	116/157	120/152	143/161	132/150	136/152
TOP SAIDI (electricity) in min./year	15	17	19	16	15
Employees goal dimension					
TOP Employee Commitment Index (ECI)[2]	66	62	60	59	60
TOP LTIF for companies controlled by the Group[3]/LTIF overall[4]	2.1/3.8	2.3/3.6	3.0/–[5]	3.9/–[5]	3.8/–[5]
Environment goal dimension					
TOP Installed output of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE in %	4.4/31.8	3.7/27.9	3.4/25.8	3.1/23.1	3.1/23.6
TOP CO_2 intensity in g/kWh	419	553	556	577	606

1 EnBW has been working together with a new market research company since 2017. Despite using the same survey methodology and random sampling, current and earlier values are only comparable to a limited extent.
2 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered (except ITOs)).
3 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered except for companies in the area of waste management as well as external agency workers and contractors).
4 Variations in the group of consolidated companies (all companies with more than 100 employees are generally considered except for external agency workers and contractors).
5 This performance indicator has only been reported since 2019. No figures for the comparative periods 2015 to 2017 are available.

Important notes

Published by
EnBW Energie Baden-Württemberg AG

Coordination and editor
Communication Media & Events, Karlsruhe

Concept and design
Truffle Bay Management Consulting GmbH, Munich

Illustrations
Jindrich Novotny, Hanover

Photos for image section
EnBW Energie Baden-Württemberg AG; Uli Deck, Karlsruhe; Rolf Otzipka, Hamburg; Ingo Rack, Bad Buchau; Sebastian Spasic, Delbrück

Photos of the Board of Management
Catrin Moritz, Essen; Uli Deck, Karlsruhe; Paul Gärtner, Karlsruhe

Photo of the Supervisory Board
Matthias Hangst, Karlsruhe

Typesetting
In-house using ns.publish

Printed by
Elanders GmbH, Waiblingen
Printed on RecyStar Polar
(Recycled paper with Blue Angel certification, produced climate neutrally)

ISBA: R.3616.2003

Publication of the Integrated Annual Report 2019: 26 March 2020

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Publication in the German Federal Gazette
The complete consolidated financial statements prepared by EnBW Energie Baden-Württemberg AG and audited by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft and the management report, which is combined with the Group management report, will be published in the German Federal Gazette ("Bundesanzeiger") together with the unqualified audit opinion. The necessary documents will be submitted to the German Federal Gazette ("Bundesanzeiger") by 30 April 2020 at the latest.

No offer or investment recommendation
This report has been prepared for information purposes only. It does not constitute an offer, an invitation or a recommendation to purchase or sell securities issued by EnBW Energie Baden-Württemberg AG (EnBW), a company of the EnBW Group or any other company. This report also does not constitute a request, invitation or recommendation to vote or give consent. All descriptions, examples and calculations are included in this report for illustrative purposes only.

Forward-looking statements
This report contains forward-looking statements which are based on current assumptions, plans, estimates and forecasts made by the management of EnBW. Forward-looking statements of this kind are therefore only valid at the time they were first published. Forward-looking statements are indicated by the context, but may also be identified by the use of the words "can", "will", "should", "plans", "intends", "expects", "thinks", "estimates", "forecasts", "potential", "continued" and similar expressions.

By nature, forward-looking statements are subject to risks and uncertainties that cannot be controlled or accurately predicted by EnBW. Actual events, future results, the financial position, development or performance of EnBW and the companies of the EnBW Group may therefore diverge considerably from the forward-looking statements made in this report. Therefore, it cannot be guaranteed nor can any liability otherwise be assumed that these forward-looking statements will prove complete, correct or precise, or that expected and forecast results will actually occur in the future.

No obligation to update the information
EnBW assumes no obligation of any kind to update the information contained in this report or to adjust or otherwise update forward-looking statements to future events or developments. This Annual Report can also be downloaded from the Internet in German or English. In cases of doubt, the German version shall be authoritative.

Financial calendar 2020

26 March 2020

Publication of the Integrated
Annual Report 2019

Annual General Meeting 2020

Due to the current COVID-19 crisis, the Annual General Meeting has been postponed. A new date has not yet been set.

15 May 2020

Publication of the Quarterly Statement
January to March 2020

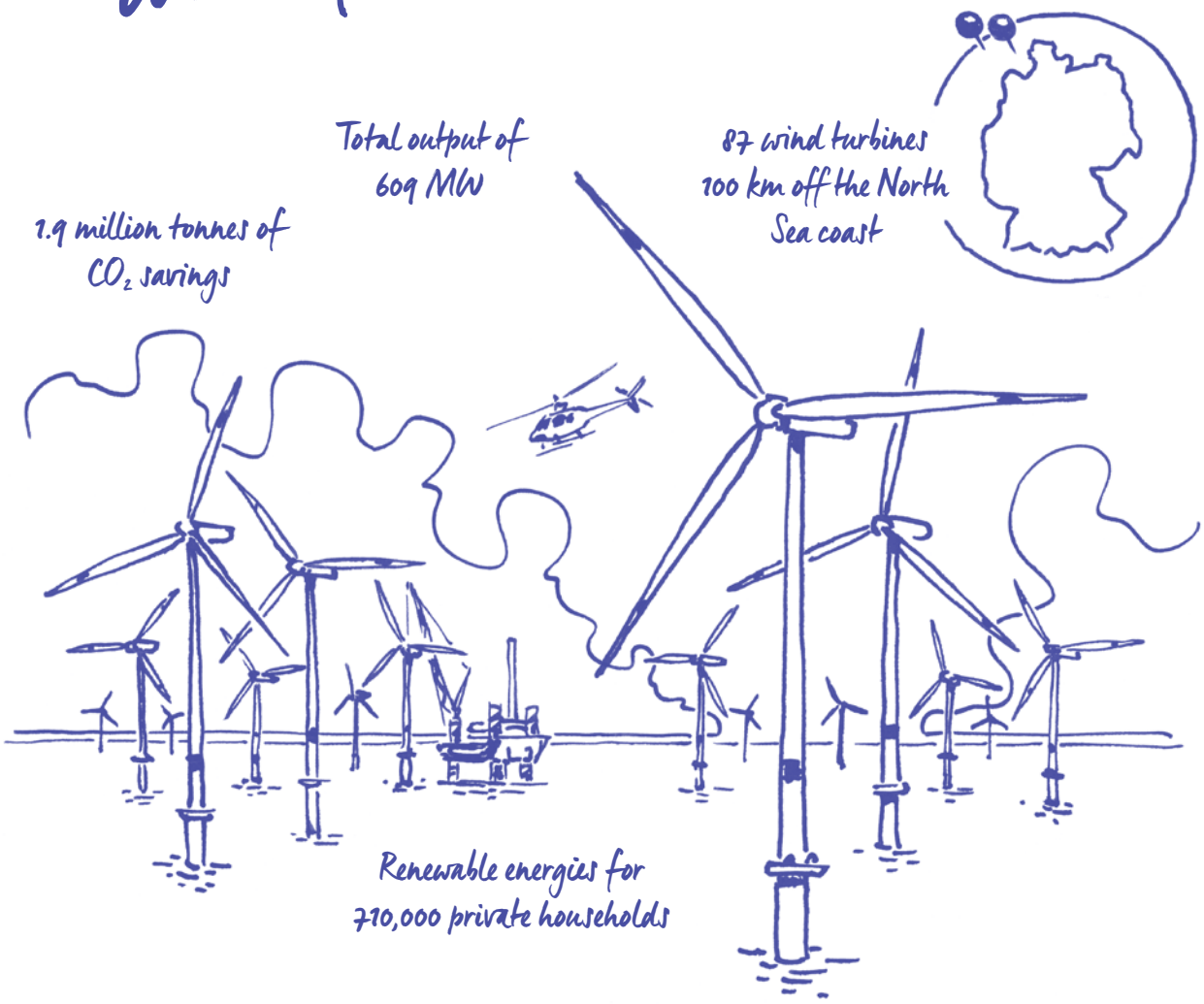
30 July 2020

Publication of the Six-Monthly Financial Report
January to June 2020

13 November 2020

Publication of the Quarterly Statement
January to September 2020

On track for growth with new wind farms in the North Sea



Completed in 2019, EnBW Hohe See and EnBW Albatros have a total capacity of 609 MW, which makes these two wind farms the largest offshore project to be built in Germany to date.

We are continuing to push forward the expansion of renewable energies and are planning to construct the EnBW He Dreiht wind farm in the North Sea with 900 MW of output – for the first time without state funding.

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Playing an active role in shaping the Energiewende

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Service

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Navigation

The integrated management of EnBW comprises financial and non-financial goals in the dimensions:

Finance | Strategy | Customers and society | Employees | Environment

TOP Our key performance indicators are labelled with this symbol.

The cross-references take you to further information within this report or to the definition of terms in the glossary.

We have also published an online version of the Integrated Annual Report 2019 at: www.enbw.com/report2019.

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