

Six-Monthly Financial Report

January to June 2019



Performance indicators of the EnBW Group

Financial and strategic performance indicators

in € million	01/01– 30/06/2019	01/01– 30/06/2018	Change in %	01/01– 31/12/2018
External revenue ¹	11,529.0	10,073.0	14.5	20,617.5
Adjusted EBITDA	1,276.0	1,141.0	11.8	2,157.5
Share of adjusted EBITDA accounted for by Sales in € million/in % ¹	108.8/8.5	158.9/14.0	-31.5/-	268.4/12.4
Share of adjusted EBITDA accounted for by Grids in € million/in %	719.8/56.4	684.9/60.0	5.1/-	1,176.9/54.5
Share of adjusted EBITDA accounted for by Renewable Energies in € million/in %	204.9/16.1	164.8/14.4	24.3/-	297.7/13.8
Share of adjusted EBITDA accounted for by Generation and Trading in € million/in % ¹	261.2/20.5	139.4/12.2	87.4/-	430.8/20.0
Share of adjusted EBITDA accounted for by Other/Consolidation in € million/in %	-18.7/-1.5	-7.0/-0.6	-/-	-16.3/-0.7
EBITDA	1,071.1	1,184.7	-9.6	2,089.6
Adjusted EBIT	572.3	549.4	4.2	957.5
EBIT	365.7	586.8	-37.7	875.8
Adjusted Group net profit ²	510.0	328.3	55.3	438.3
Group net profit ²	286.2	346.2	-17.3	334.2
Earnings per share from Group net profit ² in €	1.06	1.28	-17.3	1.23
Retained cash flow	514.0	333.5	54.1	999.1
Total investments	1,528.6	574.3	-	1,769.9

Non-financial performance indicators³

	01/01– 30/06/2019	01/01– 30/06/2018	Change in %	01/01– 31/12/2018
Customers goal dimension				
Customer Satisfaction Index for EnBW/Yello	116/161	130/150	-10.8/7.3	120/152
SAIDI (electricity) in min./year	8	8	-	17
Employees goal dimension				
LTIF ⁴	2.1	2.5	-16.0	2.3

Employees^{5,6}

	30/06/2019	30/06/2018	Change in %	31/12/2018
Employees	22,488	21,397	5.1	21,775
Full-time equivalents	21,086	19,999	5.4	20,379

1 The figures for the previous year have been restated.

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

3 The values for the key performance indicators Reputation Index, Employee Commitment Index (ECI), "Installed output of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE in %" and CO₂ intensity will be exclusively collected at the end of the year.

4 Variations in the group of consolidated companies (consideration of all employees at those companies controlled by the Group, except external agency workers and contractors).

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

6 The number of employees for the ITOs (ONTRAS Gastransport GmbH, terranets bw GmbH and TransnetBW GmbH) is only updated at the end of the year; for intervals of less than a year, the number of employees from 31/12/2018 is carried forward.

Q2 2019 at a glance

- › Adjusted EBITDA of the EnBW Group increases by 11.8% to €1,276.0 million
- › Renewable energies make strong contribution to growth in earnings
- › Acquisition of Valeco and Plusnet accelerates implementation of strategy
- › Forecast for adjusted EBITDA for the 2019 financial year of between €2,350 million and €2,500 million reconfirmed

Table of contents

Current developments	2	Six-monthly consolidated financial statements	
		Income statement	29
		Statement of comprehensive income ..	30
Interim Group management report		Balance sheet	31
Business activity and strategy	4	Cash flow statement	32
In dialogue with our stakeholders	5	Statement of changes in equity	33
Research, development and innovation ..	8	Notes and explanations	34
Procurement	9	Certification following auditor's review	45
General conditions	11	Declaration of the legal	
The EnBW Group	15	Representatives	46
Forecast	27		
Opportunities and risks	28	Service	
		Important notes	47
		Financial calendar	48

EnBW drives selective internationalisation forward

EnBW is expanding the area of renewable energies to make it one of the main pillars of the company. Moving beyond its own home market, the Group will work together with partners to open up new growth opportunities as part of a strategy of selective internationalisation.

Montpellier (France)

Around 135 Valeco employees became part of the EnBW family at the beginning of June 2019. Valeco is one of the top 10 operators of onshore wind and solar power plants in France. "With Valeco, we have now one of the most experienced players on the French renewable energies market at our

"With Valeco, we have now one of the most experienced players on the French renewable energies market at our side."

Dr. Frank Mastiaux

side," emphasises EnBW CEO Frank Mastiaux. Since 2018, the energy supply company has had a local presence in France and is developing the onshore wind and solar business through its subsidiary EnBW Energies Renouvelables. Valeco has an installed output of 276 megawatts of onshore wind power and 56 megawatts of solar power, as well as a project pipeline of 1,700 megawatts.

Falkenberg (Sweden)

Alongside France, Sweden is another of the top European markets for the expansion of onshore wind energy. EnBW has already been represented on the Scandinavian market via its subsidiary Connected Wind Services (CWS) since 2016. CWS has now become one of the most significant players in the area dealing with the servicing and maintenance of wind power plants. In July 2018, EnBW founded its Swedish subsidiary EnBW Sverige. The subsidiary is currently constructing a wind farm with three turbines and a total output of around eleven megawatts in southern Sweden. In January 2019, EnBW acquired seven Swedish wind farms with a total of 51 wind turbines and an installed output of 105 megawatts.

Changhua (Taiwan)

Taiwan plans to phase out nuclear power by 2025. The loss of nuclear power is to be compensated by the expansion of renewable energies – particularly in the area of offshore wind power. EnBW has had a presence there via its subsidiary EnBW Asia Pacific since the beginning of 2018 and has participated with local partners in the tender process for three offshore wind power projects in the Changhua region with a total output of up to 2,000 megawatts.

Jersey City, Boston, Morro Bay (USA)

North America has set ambitious targets for the expansion of offshore wind power. The regional company EnBW North America plans to support the federal states in the achievement of their targets and has thus opened offices on the East Coast of the USA in Jersey City (New Jersey) and Boston (Massachusetts). In Morro Bay (California), on the West Coast of the USA, EnBW has been developing the world's first floating offshore wind farm in a joint venture since 2018.



1,700 MW

Valeco project pipeline

€50 million

Valeco 2018 annual revenue

Through the acquisition of Valeco, EnBW will increase its installed output from renewable energies. In the past few years, the company has already invested around €3 billion in the expansion of renewable energies and installed more than 1,200 megawatts of output from renewable sources. The company plans to invest more than €5 billion by 2025 in Germany and selected foreign markets.

The EnBW subsidiary Senec is growing on the international photovoltaics market.

The EnBW subsidiary Senec offers complete packages consisting of an electric storage system and cloud solution for photovoltaic systems. Plant operators have the opportunity to consume a significantly higher proportion of their own generated electricity themselves as a result.

Onslow (Australia)

The conditions for solar power are ideal in Australia – one fifth of all private homes have a PV system on the roof. In the coastal town of Onslow in Western Australia, the EnBW storage system manufacturer Senec is working on a pilot project to combine solar power plants and storage systems so that large volumes of decentrally produced solar power can be fed into the grid – without making any compromises in terms of reliability and safety.

Vicenza (Italy)

Senec is also one of the leading storage system suppliers in Italy, offering innovative energy solutions on this important market of the future. The aim is to develop complete packages for households that will enable them to supply themselves independently with their own self-generated solar electricity. Experts expect stable growth of around 20 percent annually in this market in the coming years.

Interim Group management report

Business activity and strategy

Business activity

As an integrated energy company, EnBW operates in Germany along the entire energy industry value chain in four segments: Sales, Grids, Renewable Energies and Generation and Trading. It has a diversified business portfolio with a favourable risk-return profile. Following our realignment as part of the Energiewende, the overall share of adjusted EBITDA accounted for by the regulated grid business and the share accounted for by renewable energies are both increasing.

EnBW has its roots in Baden-Württemberg. We are active here along the entire energy industry value chain and are positioned as a market leader. In the process, we are supported by a series of key subsidiaries. We also operate throughout Germany and in Europe. Our entry onto the Swedish market via our Swedish subsidiary EnBW Sverige and initial activities in France, Taiwan and the USA demonstrate our focus on selective internationalisation in the area of renewable energies. The latest step in this direction was the acquisition of the French developer and operator of wind and solar farms Valeco in June 2019. We have already been represented in Denmark and Sweden by our subsidiary Connected Wind Services since 2016. In Turkey, we are active in the renewable energies sector with our Turkish partner Borusan. The companies Energiedienst Holding (ED) in Switzerland and Pražská energetika.a.s. (PRE) in the Czech Republic, in which EnBW has held a participating interest for many years, also place a strong focus on renewable energies.

EnBW supplies around 5.5 million customers with energy and provides them with energy solutions and energy industry services. EnBW is one of the leading providers of energy and environmental services in Germany. Another focus is placed on 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 offered by EnBW. With its strong sales brands, EnBW is close to its customers and is consistently oriented to their needs.

Detailed information on the business model of EnBW can be found in the Integrated Annual Report 2018 from p. 38 onwards.

Strategy

The EnBW 2020 strategy is guided by the principle: “Energiewende. Safe. Hands on.” It combines the two core elements of a digital and innovative customer business with the efficient and safe operation, construction and dismantling of energy supply plants and infrastructure.

EnBW aims to more than double the share of its generation capacity accounted for by renewable energies from 19% (based on the reference year of 2012) to more than 40% in 2020. The

capacities of our onshore wind farms will be increased significantly in Germany and selected foreign markets. Offshore wind power represents a further opportunity for growth. By investing extensively in grid expansion, we will be making a substantial contribution to the infrastructure required by the energy system and thus to the security of supply. Innovative products and services will form another important pillar of the company’s business. By 2020, a significant share of our earnings – the target value set in 2013 for adjusted EBITDA is between €2.3 and €2.5 billion – is to be generated through strategic initiatives. From today’s perspective, we already expect to achieve this target in 2019. At the same time, the overall share of adjusted EBITDA accounted for by the regulated grid business and renewable energies will increase from around 40% (based on the reference year of 2012) to at least 70% in 2020. This will improve the risk-return profile of EnBW.

EnBW intends to invest €14.1 billion in total by 2020 (based on the reference year of 2012). In order to obtain the financial headroom required for such extensive investments, we have significantly extended our divestiture programme – involving divestitures, cash flows from participation models, the disposal of assets and subsidies – with our EnBW 2020 strategy to around €5.1 billion (based on the reference year of 2012). Investment of €11.5 billion (around 80% of the target) had already been made and divestitures of €4.4 billion (around 85% of the target) were already completed by the end of 2018.

As an integrated energy supply company, EnBW is rigorously and confidently implementing its 2020 strategy. It is clear as the end of the strategy period approaches that the improvements in efficiency 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. If there is no new and unexpected massive deterioration in the general conditions, EnBW will achieve or even surpass its earnings targets for 2020 at both the Group and segment level.

A detailed presentation of the EnBW Group strategy can be found in the Integrated Annual Report 2018 from p. 48 onwards.

Strategic development post 2020

The further development of the EnBW strategy post 2020 will focus on the key trends defining the second phase of the Energiewende, in which the market, customers and technology will lead the way. We want to increasingly place the strategic focus of our company on the aspect of infrastructure within our existing business fields and also use the core expertise of EnBW to exploit new growth opportunities above and beyond the energy sector. The core expertise of EnBW – what we do well and do better than many others – lies in the safe and reliable operation and management of critical infrastructures in the

energy sector. This distinctive expertise can be transferred to other infrastructure sectors beyond the energy industry, for instance in the broadband business, district development in cities or the expansion of charging infrastructure as the basis for electromobility. EnBW strengthened its position on the German telecommunications market with the acquisition of Plusnet in June 2019, for example. The aim is to develop a balanced business portfolio that has diverse potential for growth, a high proportion of stable business and an attractive risk-return profile.

EnBW will switch even more from a phase of “repositioning” to a phase of “growth” from 2020. An important driver of growth is the expansion of generation from renewable energies. As well as doubling installed output from onshore and offshore wind power to over 3.5 GW, a third pillar will be formed by the development of a portfolio of large photovoltaic projects. Photovoltaics is the fastest growing generation technology worldwide due to its cost benefits. EnBW is aiming to become the pioneer in Germany for open-field photovoltaic power plants without state funding. In order to further safeguard its

growth ambitions, EnBW is following a strategy of selective internationalisation in the area of renewable energies. The aim is a dual diversification of risk – in terms of generation types and regional markets – and to exploit scaling effects. At the same time, EnBW is focussing on a sharp expansion of the transmission grids, profitable growth of the distribution grids and the further development of sales into a customer infrastructure business, for example in the area of electromobility.

EnBW has set itself the target of increasing the adjusted EBITDA for the Group to at least €3 billion by 2025. Even in the growth phase post 2020, EnBW will maintain its financial discipline and intends to control its credit standing using the debt repayment potential (ratio of the retained cash flow to net debt). This performance indicator will be used to safeguard the good credit standing of EnBW while at the same time allowing the implementation of the investment programme to achieve the goals in 2025.

In dialogue with our stakeholders

Shares and capital market

The two major shareholders of EnBW AG, the Federal State of Baden-Württemberg (indirectly via NECKARPRI-Beteiligungsgesellschaft mbH) and OEW Energie-Beteiligungs GmbH, each hold 46.75% of the share capital in the company.

The overall shareholder structure as of 30 June 2019 breaks down as follows:

Shareholders of EnBW

Shares in % ¹	
OEW Energie-Beteiligungs GmbH	46.75
NECKARPRI-Beteiligungsgesellschaft mbH	46.75
Badische Energieaktionärs-Vereinigung	2.45
Gemeindeelektrizitätsverband Schwarzwald-Donau	0.97
Neckar-Elektrizitätsverband	0.63
EnBW Energie Baden-Württemberg AG	2.08
Other shareholders	0.39

¹ The figures do not add up to 100% due to rounding differences.

The shareholder structure of EnBW AG remains very stable. There are very limited trading volumes in the shares as a result. According to Xetra, the stock market price stood at €31.00 on 28 June 2019.

EnBW engages in continuous and open dialogue with capital market participants in order to ensure investors, analysts and rating agencies maintain their trust in the company at all times. As part of our annual investor updates, discussions were held with investors in London, Zurich, Paris, Frankfurt, Munich, the Netherlands, Singapore and Hong Kong in April. The EnBW Group Bankers' Day was held in June 2019 at the Stuttgart-Münster combined heat and power plant (www.enbw.com/groupbankersday). Analysts have been invited to the EnBW Capital Market Day at the EnBW offices in Hamburg on 16 October 2019. The EnBW Factbook 2019 will be published at the same time.

Society

EnBW is acutely aware of its responsibility towards society. Its commitment to addressing the concerns and interests of society focuses on the target groups of end customers, business partners and local authorities within its 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, art and culture.

In the area of cultural activities, the “**Bella Figura**” exhibition started on 4 April 2019 at the Group headquarters in Karlsruhe. The exhibition focusses on late Gothic sculpture and innovative, creative ideas that emerged in the art metropolises of Stuttgart

and Karlsruhe in the 20th century. The exhibits are taken from the extensive collection held by one of our main shareholders, Oberschwäbische Elektrizitätswerke (OEW). This exhibition was also on display at EnBW City in Stuttgart from 27 May to 17 July. It can then be seen at Achberg Castle from 10 August to 27 October 2019 and at the Dominican Museum in Rottweil from 10 November 2019 to 16 February 2020.

EnBW offers pupils in years 8 to 10 at all mainstream schools interesting and motivating insights into the changes that are taking place in electricity generation as part of the Energiewende with the educational concept “**Energy on Tour**” (www.energie-auf-tour.de). As part of a science show including physical experiments and interactive exhibits, the complex task for energy supply companies of transforming an energy supply grid during ongoing operation into a new, decentralised system while making it smarter at the same time is explained. In the process, the diverse range of career training opportunities in this sector is also presented and direct links established with the educational plans at schools providing general education. In the first half of 2019, three “Energy on Tour” campaign weeks were held in Korntal-Münchingen, Lahr and Pforzheim. Further campaign weeks will be held in various regions across the state in the coming years. The **EnBW Energybox** – a collection of materials for carrying out 22 exciting experiments on the theme of energy – has been developed for nurseries and primary schools. Inquisitive children from the age of five are able to carry out the experiments with a partner or in a group with some guidance. The experiments are linked to the children’s world of experience and give a child-friendly introduction to the subject of energy. 25 boxes will be given away to nurseries, child day-care facilities and primary schools in Baden-Württemberg each quarter.

The **Kessel Festival** was held for the first time on the Cannstatter Wasen in Stuttgart on 1 and 2 of June 2019. The combination of music, sport, culture and sustainability presented at the open air venue and neighbouring equestrian stadium provided exceptional entertainment for visitors of all ages. EnBW used the event to present electromobility as a hands-on experience and offered games and arts and crafts opportunities for children that focussed on the theme of energy.

In 2020, EnBW will cease its operations at the **Stöckach site** in the east of Stuttgart and thus create 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 would like to

develop the new Stöckach (www.der-neue-stoekach.de) itself and keep it in company or public ownership for at least 20 years. The site will be used to construct up to 800 apartments with at least 60,000 m² of living space, of which up to 40% will be subsidised housing. EnBW plans to create opportunities for social interaction, leisure, local supply structures, health, energy supplies and mobility – supported by technological solutions. The participation of citizens will play a central role in the project: the “Stöckach Ideas Room” has been created as an information office for interested citizens to visit. By offering open workshops for citizens and walking tours of the site and the local neighbourhood, EnBW is stimulating dialogue with citizens and inviting them to participate in shaping the future of the site. An international urban planning competition will be launched at the end of June 2019 to collect and implement the best ideas for creating a living and sustainable future for the Stöckach site in Stuttgart.

The influx of refugees into Germany remains a major social, political and economic challenge. EnBW is engaged here on multiple levels: EnBW 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 and their countries of origin. A multi-stage **career integration programme** has been run by EnBW in Karlsruhe and its subsidiary Netze BW in Stuttgart since 2016. A total of 37 participants are completing a one-year introductory qualification in the current programme that has been running since September 2018. This preliminary qualification for an apprenticeship will be continued with a new group in September 2019. Since September 2017, 27 students have been learning an IHK-certified technical profession in dual vocational training. In September 2019, a new group of students will start their training at EnBW or Netze BW.

EnBW is also supporting employees who are providing **assistance to refugees** on a voluntary basis. Numerous small aid projects are promoted that mainly focus on language training, sport and meaningful leisure activities. Around 45% of the donation pot established by EnBW for this purpose in December 2015 had been utilised by the middle of 2019. In addition, EnBW has participated in the employers’ initiative “Right to stay through work” since January 2018. The aim of the initiative is to make a contribution to the success of integration through work. Furthermore, EnBW has been a member of the “We stand together – German industry integration initiatives” network since September 2018. The joint platform www.wir-zusammen.de gives examples of already successfully established projects, promotes transparency and offers guidance.

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, green bond	www.enbw.com/conferencecall www.enbw.com/investors-update
	Group Bankers' Day	Latest developments at EnBW and in the energy sector	www.enbw.com/groupbankersday
	"The EU Sustainable Finance Action Plan"	Conference in cooperation with DAI/Allianz with 130 participants on the demands on/opportunities for companies and investors in the area of sustainable finance	www.enbw.com/sustainable-finance
 Employees	EnBW aktuell	Two events providing current insights into nuclear power during the period of transition and the departure of Dr. Beck	
	Diversity Week	Campaigns on the themes of internationalisation, disability, sexual orientation and gender diversity	Page 24
	"New Mobility" schemes	Employee schemes for e-mobility, mobile communications and local public transport	
	"Making it happen" bus campaign	EnBW employees support social and charitable projects	www.enbw.com/macherbus
 Customers	Trade fairs and congresses	For example: "Aktionstag Elektromobilität", Hannover Messe, Flotte! The sector meeting for fleet operators, Intersolar (SENEC)	
	Platforms for dialogue and discussion with customers	For example: customer parliament, Energy Strategy Days or EnBW Property Developer Energy Day	
	Yello campaign "Expect more", customer blog, social media channels, newsletter	Information on latest news, offers and services	www.yello.de www.facebook.com/yello
	Customer magazine, customer blog, social media channels, newsletter and local presence	Information on latest news, products, services and events	www.twitter.com/enbw www.facebook.com/enbw www.enbw.com/blog
 Local authorities/ public utilities	Technology exchange with experts	On the theme of "The path to a digital future"	
	Energy Team Baden-Württemberg	Joint dialogue platform for municipal utilities, regional suppliers and EnBW	www.energie-team.org
 Society/ environment	3rd Spring Sustainability Days at KIT	EnBW participates with an excursion to the Rheinhafen Steam Power Plant and a presentation	www.zak.kit.edu/fruehlingstage2019
	"Energy on Tour"	Educational project on the energy supply of the future for high schools	www.enbw.com/energie-auf-tour
	Stuttgart-Gaisburg power plant	Official inauguration of the new gas-fired CHP power plant	
	Biodiversity: funding programme: "Stimuli for Diversity"	Application phase 2019 concluded, funding projects are being selected	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-stoekach.de Page 6
 Suppliers/ business partners	Development discussions with potential suppliers	Dialogue and suitability testing to qualify as an EnBW supplier for civil engineering and grid construction	
	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, two debate evenings, cooperation event: "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	
	German Innovation Award 2019	Awards ceremony for the joint initiative of Accenture, EnBW, WirtschaftsWoche and ada	www.der-deutsche-innovationspreis.de
	Active and transparent communication via the media	Major articles in daily newspapers and magazines such as "Stuttgarter Zeitung", "Der Spiegel", "The Economist" and via social media; 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

The goal of **research and development** at EnBW is to identify important 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 the operational units or with customers directly at the site of their subsequent application. This ensures that successful research projects deliver innovations for EnBW.

Wind energy: The yield forecasts for offshore wind farms are subject to a degree of uncertainty. Turbulence and blockages cause the wind flows to change within the farm in comparison to undisturbed wind flows. Mathematical models are used to minimise flow losses by determining the most favourable arrangement of the turbines and forecast the yields from the wind farm as precisely as possible. In addition, it is highly probable that a so-called **global blockage effect** – influenced by the arrangement of the turbines – causes changes to the wind flow in the incoming flow zone at the wind farm. EnBW is carrying out research into this effect at its EnBW Baltic 2 offshore wind farm. The latest laser technology will be used to take wind measurements starting in August 2019. The first results are expected in the third quarter of 2020. Based on the data and findings of this research, it should be possible to improve the design of wind farms in the future, make more precise yield forecasts and increase the yields.

Due to the increasing proportion of renewable energies within the energy system, energy supply companies are becoming more and more dependent on precise wind and sun forecasts. Such forecasts for the energy trade have only been available for a period of around 14 days up to now. However, a timescale of between 14 days and a few months has become much more important over the last few years as it covers the general weather trends that will have an effect on the electricity wholesale market. Against this background, the European Union (EU) already started the “Sub-seasonal to seasonal climate predictions for energy” (S2S4E) project in 2017 to improve these forecasts. Alongside research institutes, consulting companies and energy supply companies from seven European countries, EnBW is the only German company participating in the project. On 20 June 2019, the **S2S4E project** launched the newly developed **Decision Support Tool (DST)** which helps the energy trade adapt to weather-related trends more precisely. The DST provides trend forecasts for precipitation, sunshine, temperature and wind, as well as for energy generation and consumption. The forecasts cover a period ranging from one week up to three months. The tool will be tested within the project up to November 2020.

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. EnBW is participating in this research project funded by the government which will run until September 2020. The EnBW subsidiary EnPV was founded in parallel and in the first half of 2019 it investigated how the laboratory processes could be transferred to industrial machines for a future pilot line. It found that the production of the cells without using lead and other pollutants should be possible using standard machines and the target costs will be similar to current production costs on the premium market.

Green gases: In various projects, EnBW is investigating how it can provide its customers with carbon-neutral gaseous and also liquid energy sources. In a pilot project in Laufenberg, Energiedienst Holding (ED) is investigating how CO₂ and hydrogen can be used to produce synthetic diesel and paraffin. ED received approval for the construction work in 2018 and the decision to push forward with the implementation of the project together with partners and suppliers was taken in May 2019.

Innovation

EnBW develops new business models outside of its core business in its central **innovation management department** in order to quickly identify new sources of revenue for the Group and bring them to the market. The innovation strategy focuses on two main approaches: the generation and scaling up of new business models in internal projects and investments in external start-ups by EnBW New Ventures GmbH. Following the successful development of new business models, the EnBW start-up teams then face the next challenges in the growth and scaling up phase. In order to efficiently support teams during this phase, innovation management has established the **Company Builder**: It provides start-ups with additional skills in the form of controlling, sales and marketing experts so that the start-ups can optimise their products and position them on the market. For the refinement of existing sales channels or the development of new ones, support is also given in the areas of process automation and cost optimisation.

Innovation management at EnBW once again received **external recognition** in 2019 from the business magazine “Capital” and the management consultants “Infront Consulting & Management”: Based on a study of the innovation process at around 50 established corporations, EnBW innovation management was awarded first place in the category “Innovation Development”. In particular, the jury highlighted the fact that EnBW innovation management bundles all of the most important tools (its Innovation Lab, Company Builder, Incubator and a venture capital investor) together like a Swiss army knife.

The newly designed and clearly structured incubation process at EnBW also received great attention in 2018. All of the measures are combined under the name “**SP4RK**”. New business ideas have to systematically complete a four-phase programme. The initial idea is conceived within 16 hours and is then validated and developed into an idea for a business model over a period of 16 days. During the following 16 weeks, a start-up is formed based on the business idea that is now ready for market launch. In the final phase of the programme lasting 16 months, the idea must prove itself on the market and start earning money for the first time. This structured innovation process at EnBW is unique and has already helped a number of start-ups successfully launch on the market.

EnBW and Bridgemaker, a company builder based in Berlin, founded a joint start-up for fleet services called **Ben Fleet Services (Ben)** in the spring of 2019. This young company based in Berlin will offer fleet managers and fleet operators a comprehensive range of services for efficiently managing their fleets via their own online portal in the future. The services include, for example, on-site cleaning, inspections, maintenance, repairs and the relocation of vehicles in a fleet from one site to

another. All of the services offered by Ben can be conveniently booked online for one single vehicle or a whole group of vehicles. Ben also provides companies who operate small to medium-sized fleets with access to services that were previously reserved for large fleet operators. In addition, Ben reduces the administrative work involved in managing a fleet, increases the availability of the vehicles and reduces the fleet costs.

Another start-up from the EnBW idea factory is **ChargeHere**, which offers inexpensive charging infrastructure solutions for car parks and large parking facilities to promote the further expansion of electromobility. The company focuses on residential buildings, workplaces and long-term parking spaces. The charging cables are laid to the individual parking spaces from a central switching cabinet – which removes the need for a large number of wall boxes, enables optimised, dynamic load management and the controlled charging of the vehicles. Once the technical development and pilot phase has been completed, ChargeHere will be launched on the market and start to actively sell its solutions.

Procurement

Efficient and sustainable procurement processes

Purchasing at EnBW views itself as a partner for generating added value within the Group. It ensures the supply of materials and services at the best possible quality/cost ratio and thus strengthens the competitiveness of the company. EnBW places great emphasis on the efficient design of its procurement processes for achieving cost-effective purchasing results, as well as on sustainable procurement, while 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.

A large number of suppliers and service providers contribute to the services rendered by EnBW. They play an important role in the company's efforts to achieve a leading position on the energy market. **Supplier management** promotes successful cooperation between suppliers and EnBW because it makes the performance of the suppliers transparent and also makes continuous optimisation in partnership possible. This is connected with the desire to procure high-quality materials and services that are safe and socially acceptable.

Sustainable procurement begins with the careful selection of business partners. Central purchasing at EnBW AG uses a standardised **prequalification process** for this purpose. Starting from a certain procurement volume, suppliers are required to provide a self-assessment via the EnBW supplier portal about 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 in occupational health and safety. A multi-level procedure ensures that all conditions necessary for a commissioning are fulfilled. The information is checked every three years on the basis of a renewed self-assessment.

For invitations to tender from €20,000, EnBW introduced electronic tendering (**eVergabe**) as its standard process from 1 April 2019. It covers all stages of the tender process. As part of an electronic commerce system, the transparent processes found in eVergabe deliver a higher level of legal certainty for procurement processes as it manages and stores everything required by the regulations in the area of procurement law and through the secure encryption of electronic data transmissions and seamless documentation.

The mobile application **eBau** is used by the construction coordinators at our subsidiary Netze BW to inspect service providers in the area of grid construction and ensure legally compliant documentation. Occupational safety, quality, compliance with environmental protection requirements and trade-specific criteria are checked using standardised checklists. Any deficiencies that are identified are recorded, confirmed by those

responsible on-site and sent directly to the contractor electronically via the eBau application. The results of the checks also flow into the supplier evaluation system. In the first half of 2019, 949 inspections were carried out; 36 points on the checklists revealed deficiencies.

Procurement plays an important role in the strategically important expansion of the power plant portfolio in the area of renewable energies. In order to identify potential new sources of supply, such as in Asia, and to expand the supplier portfolio, **market analyses** on global procurement markets are carried out and **meetings with suppliers** are held.

Responsible raw materials procurement in the coal sector

Responsible raw materials procurement, particularly in the coal sector, is of major importance to EnBW. In the first half of 2019, the most important **coal suppliers** to Western Europe were Russia and the USA. Colombia and South Africa are able to secure higher prices for their coal in other markets and thus only play a subordinate role in the supply of coal to Western Europe. This development is also reflected in the volumes of coal purchased by EnBW.

Origin of coal supplies to EnBW power plants

in million t	01/01– 30/06/2019	01/01– 30/06/2018	Change in %
Russia	1.38	1.25	10.4
Colombia	0.20	0.05	300.0
USA	0.35	0.30	16.7
South Africa	0.04	0.12	-66.7
Germany	-	0.10	-
Total	1.98¹	1.82	8.8

¹ Any differences are due to rounding.

The slight increase in coal supplies compared to the same period of the previous year was due to the low water level in the Rhine river in the fourth quarter of 2018, which resulted in a significant fall in the coal stores at the power plants located on the Rhine

and Neckar. In the first half of 2019, the good water levels on the rivers were used to restock the coal stores. More than three quarters of the coal was sourced from supply contracts that were directly concluded with coal producers.

The main focus of the corporate strategy at EnBW is placed on repositioning the energy portfolio from fossil fuels to renewable energies. However, coal will remain an important part of the portfolio for a limited period of time. For this reason, responsible raw materials procurement, particularly in the coal sector, is of major importance to EnBW.

In a **progress and development report** that EnBW will publish in the summer of 2019, the company will summarise the impact it has had on the coal mining regions in Colombia. The study was produced in close cooperation with the twentyfifty agency with the involvement of the coal mining companies Drummond and Prodeco as well as various non-governmental organisations and provides an overview of the developments that have taken place in the fields of occupational safety, environmental and health protection, security, freedom of association, resettlements and living conditions. The report will be used by EnBW to examine its overall approach and the results it has been able to achieve over the past seven years and more: was it possible to achieve real progress in the coal mining regions of Colombia? Have the coal suppliers also developed the necessary conditions internally in terms of their structures and human resources so that they can commit to improving working and living conditions? Have the managers of these companies shown a clear commitment to these goals? The progress and development report is designed to help further develop the future cooperation between EnBW and its Colombian suppliers.

EnBW is committed to engaging in responsible business activities and strives to live up to its corporate responsibilities along the value added chain. In the near future, EnBW is thus planning to **broaden its engagement** with the main coal producers in Russia. Based on its activities in Colombia, it will not only enter into dialogue with stakeholders but a trip to Russia including visits to the coal mines is being planned for 2020.

The **sustainability index** – which documents the sustainability performance of EnBW contractual partners – was expanded in this context and updated with all current and potential business partners in the first half of 2019.

General conditions

Cross-segment framework conditions

Climate protection

The long dry spell in the exceptionally hot summer of 2018 and extreme weather events around the world mean that climate protection has been receiving much greater public attention. Clear examples of this can be found in the “Fridays for Future” movement and the results of the European elections.

The reform of the European Union Emissions Trading System agreed by the EU Parliament has been reflected in the price of CO₂ allowances that have risen up to €25/t CO₂. In Germany, it is anticipated that the national climate targets for 2020 will be missed by a large margin. In order to minimise the deviation from the targets for 2020 and ensure the targets for 2030 will be achieved, far-reaching measures are required. There are plans to anchor these measures in a climate protection act that is currently being discussed, although it is not expected to be approved until the autumn of 2019. The aim is also to increase the share of gross energy consumption accounted for by renewable energies to 65% by 2030. The Omnibus Energy Act, which was passed by the Bundestag in November 2018, thus includes special auctions for onshore wind and photovoltaic power plants in the period from 2019 to 2021 with a total capacity of 4 GW for each. However, this will not be sufficient to achieve the 65% target, especially as the expansion of onshore wind energy is currently proving very difficult. The discussions have also focussed on higher charges for CO₂ emissions, especially in the transport and heating sectors.

EnBW advocates the introduction of a minimum CO₂ 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. A minimum price should cover as many European countries as possible, such as France.

The EnBW Chief Financial Officer, Thomas Kusterer, is a member of the Technical Expert Group on Sustainable Finance (TEG) which is supporting the European Commission up to the end of 2019 in the development of a legal framework for sustainable financing opportunities. He is also engaged as a member of the Task Force on Climate-related Financial Disclosures (TCFD) in the development of climate-related risk reporting by companies. In October 2018, EnBW published its first Green Financing Framework and issued its first green bond with a volume of €500 million.

The strategy being followed by EnBW of concentrating investment on renewable energies, expanding the grids and developing new and increasingly digitalised business models is working towards the achievement of national climate protection targets, while the strategy itself is being validated by the international efforts for climate protection.

Coal Commission

The so-called “Coal Commission” presented its final report on 26 January 2019. It recommends the end of coal-fired power generation in Germany by 2038. However, this deadline could be moved forward to 2035 if a review to be carried out in 2032 indicates that an earlier termination date would be possible. German brown and hard coal capacities in the energy industry should also be reduced to 15 GW each by 2022 (the total capacity of both is currently around 42 GW). A further reduction in the total capacity to 17 GW will then be required by 2030. The commission has outlined compensation rules for the period up to 2030 for the operators of the power plants to be decommissioned. These rules recommend that brown coal and hard coal power plants are decommissioned on the basis of voluntary agreements up to 2022. This rule will remain valid for brown coal power plants up to 2030. In the period between 2023 and 2030, a degressive decommissioning premium for the hard coal power stations will be offered for tender. However, further details about the design of the compensation rules are not currently available.

Sales segment

The **Building Energy Act (GEG)** aims to define a minimum energy standard for new buildings as required by the EU building directive. Furthermore, it will resolve discrepancies between different existing laws (e.g. EnEV and EEWärmeG) by merging them to form one set of rules. On 29 May 2019, the draft act for the GEG was submitted for consultation in hearings at a state and association level. It is still unclear when the act will be approved. EnBW supports its customers with numerous products and solutions for the energy-efficient and low-carbon generation of heating.

The market penetration of **electromobility** is gathering speed. The main reasons for this development are the accelerated expansion of the charging infrastructure, a greater choice of vehicles with around 40 electric passenger car models available in 2019/2020 and proposed investment in electromobility of around 300 billion US dollars by manufacturers over the next ten years. In addition, state funding in the form of a purchase subsidy (environmental bonus) has been extended until the end of 2020. There were more than 17,400 public and semi-public charging stations by the middle of the year, of which 12% were quick-charging stations. There is thus a charging point for about every ten vehicles. EnBW has installed more than 150 direct current (DC) quick-charging stations over the last few years and is thus one of the leading players on the German market. An increasing level of electrification for other means of transport (due to the recent approval of electric kick scooters) and a change towards shared usage concepts can also be seen.

Another growth field is the **expansion of the broadband network**. The requirements placed on broadband will rise steadily, amongst private customers due to, for example, video streaming and cloud applications and amongst commercial customers due to increased networking and industry 4.0. The continuous expansion of the “last mile” of the broadband network is thus essential. EnBW could further expand its portfolio in the broadband business with the acquisition of Plusnet.

The Energiewende is moving into the cities. Energy supplies are becoming more diverse, green and decentralised, while consumption is being managed more efficiently and intelligently. Electricity, heating and transport are becoming increasingly integrated at the same time and new developments such as automated transport are generating brisk demand for complex, individual solutions for the supply and management of energy. This requires a supplier who can offer all of this expertise from one source and is able to develop safe, efficient and decentralised solutions to optimise the use of energy and resources together with customers using innovative business models. EnBW supports its customers in these complex tasks through the cross-sector planning and implementation of **customer-oriented urban district solutions**.

Grids segment

The decision by the German Federal Court of Justice (BGH) made during the course of 2019 on the rates of return on equity for electricity and gas grids and the investment in the expansion and restructuring of these grids have had a considerable impact on the grids business.

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

On 10 July 2019, the OLG Düsseldorf repealed the **general sectoral productivity factor (Xgen) gas** that was defined by the BNetzA on 21 February 2018. It had serious doubts that Xgen had been determined in a legally compliant manner. From around 500 complaints that it had received, the OLG initially dealt with the complaint from our subsidiary Netze BW against the Xgen gas. The BNetzA is now obligated to issue a new decision on the matter. An appeal to the BGH was approved.

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 required grid expansion measures on time.

The transmission system operators published their second draft of the **Network Development Plan (NDP) Electricity 2030**, version 2019, on 15 April 2019 and submitted it to the BNetzA for examination. In particular, the plans already include another HVDC connection to Baden-Württemberg by 2030 in the grid area covered by our transmission system operator **TransnetBW**. In comparison to the first draft of the NDP, the investment costs have increased significantly overall, primarily due to the greater need for reactive power compensation equipment to maintain the stability of the system. Following the completion of a sensitivity analysis, the TSO came to the conclusion that the grid measures identified in the plan for the period up to 2035 are also necessary even in the event of the complete phasing out of coal power. The approval of the NDP by the BNetzA is expected in the second half of 2019. In all probability, the approved NDP will then also act as the basis for the legally prescribed amendment to the Federal Requirements Plan.

Our distribution grid subsidiary **Netze BW** has been testing the impact on the **electricity grids** of the extensive use of **electromobility** in Ostfildern since June 2018. The successful project has now been extended to gain further insights into the charging behaviour of e-car users. In order to gain further information on how electromobility can be optimally integrated into the grids, there are plans to establish three other test areas that are each structured differently: a large apartment building, a rural area and a new housing development.

For the preparation of their next **Network Development Plan (NDP) Gas 2020–2030**, the transmission system operators published the consultation document for the framework scenario on 17 June 2019. For the first time, the framework scenario includes a separate presentation of the forecast for the demand in Baden-Württemberg because the need for greater capacity 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 up to 35% more capacity will be required by 2030.

Renewable Energies segment

The **offshore wind** projects currently under construction or in development in Germany will form the basis for stable growth in capacity up to 2025. The EnBW offshore wind farms EnBW Hohe See and EnBW Albatros are due to be fully connected to the grid by the end of 2019.

The hurdles that need to be overcome to gain approval in the **onshore wind** sector in Germany have slowed expansion and this can only be remedied with significantly improved framework conditions. The limited availability of projects can also be seen by the noticeable lack of bids for the BNetzA auctions for onshore wind projects.

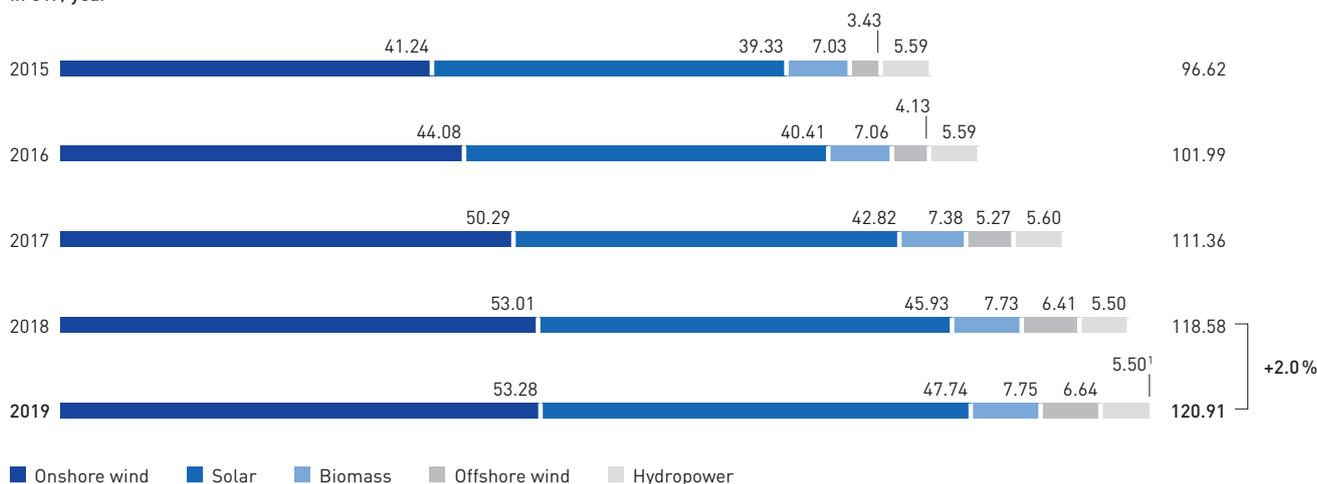
The sharp decrease in costs for **photovoltaic** modules has made major projects possible without funding and also rooftop installations in combination with battery storage systems that have been optimised for own consumption. As a result, we continue to expect dynamic growth in installed solar capacity even above the legally defined maximum limit of 52 GW. The

cost benefits of photovoltaics over wind power can be seen not least by the results of the **joint auctions for wind and solar power**, in which only those bids for solar projects were accepted.

EnBW has strengthened its **international business** even further and created a solid platform for implementing wind and solar projects on the French market by concluding its acquisition of Valeco on 3 June 2019.

Installed net output for electricity generation from renewable energies in Germany

in GW/year



¹ Correction to the value for hydropower from 4.80 GW to 5.50 GW by EnBW.

Source: AGEE, BMWi, Federal Network Agency | As of: 04/07/2019

Generation and Trading segment

Electricity wholesale market

In the first half of 2019, the average spot market price was almost €3/MWh above the level in the previous year. The average price on the forward market was also significantly higher than the average price in the previous year. These increases are due to much higher prices for CO₂ allowances.

The current forward market prices for 2021 are continuing to fall. It is anticipated that the prices for 2022 will increase in comparison to those for 2020 and 2021, above all due to the phasing out of nuclear power. A decisive factor for the future development of electricity prices will be the development of fuel and CO₂ prices and the trends in the electricity generation mix.

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

in €/MWh	Average H1 2019	Average H1 2018	Average 2018
Spot	38.33	35.74	44.47
Rolling front year price	48.00	37.42	43.84

Gas market

Above-average temperatures in February and March 2019 led to significantly lower demand for heating in Germany. In addition, the global supply of LNG was expanded by the new production facilities in the USA and Australia, which led to a noticeable increase in LNG deliveries to north-west Europe over the entire winter of 2018/2019. The spot market price thus fell almost continuously during the first quarter of 2019. Following a temporary increase in gas prices during the second quarter due to unexpected supply shortages (caused by temporary cuts in production in Norway, amongst other things), the spot market prices fell once again. Decisive factors for this development were low demand due to relatively full gas storage facilities following the mild winter and the still relatively high volume of LNG deliveries. This fall in prices also had an impact on annual prices.

The gas storage facilities will also not generate much demand over the summer of 2019 because they still remain relatively full. If the deliveries of LNG to north-west Europe continue to remain high as expected, this will also result in lower demand for stored gas over the coming winter. The commissioning of further LNG plants is an indication that the LNG supply to Europe could increase further. It is currently unclear whether the gas pipeline Nord Stream 2 from Russia to Germany will be placed into operation on time by the end of 2019. In particular, it is designed to replace the transit of Russian gas through the Ukraine because the corresponding transit contract expires at the end of the year and an extension has not yet been agreed.

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

in €/MWh	Average H1 2019	Average H1 2018	Average 2018
Spot	15.73	21.23	22.98
Rolling front year price	19.39	18.14	20.70

Oil market

Crude oil prices increased from US\$55/bbl at the beginning of the year to almost US\$75/bbl by the end of April 2019. The main reason for this development was the production cuts by OPEC and some non-OPEC countries such as Russia that came into force at the beginning of 2019 and eliminated the oversupply on the global market. Concerns about the global economy and the associated demand for oil have negatively influenced oil prices since May. The reasons for this development were the trade dispute between the USA and China and the threat made by Iran to block the Strait of Hormuz which is important to the oil trade. The conflict between Iran and the USA ended the fall in prices in the middle of June and caused oil prices to rise again to US\$66/bbl. In addition, hopes of an extension to the OPEC+ agreement to limit production, which is actually due to expire at the end of June 2019, had a stabilising effect on prices.

Forward market prices reflected the expectation that prices will continue to fall. This expectation is due to fears of an excess supply on the oil market from the second half of 2019 onwards because of, amongst other things, the sharp rise in US oil production and lingering concerns about the economy and the associated fall in global demand for oil.

Development of prices on the oil markets

in US\$/bbl	Average H1 2019	Average H1 2018	Average 2018
Crude oil (Brent), front month (daily quotes)	66.17	71.16	71.69
Crude oil (Brent), rolling front year price (daily quotes)	63.60	66.40	68.94

Coal market

Coal prices remained relatively stable in January 2019 but there was then a clear downwards trend in prices up to the end of June 2019. After recording a high in January of US\$86.95/t, prices on the forward market fell to a low of US\$62.15/t by June. This downturn in prices was triggered by the intense pressure to sell on the spot market. Prices on the spot market fell from US\$85.47/t at the beginning of January to US\$47.22/t at the end of June. The main reason for the decrease in prices on the global market was the fall in coal consumption in China – due to very high volumes of electricity generated by hydropower plants – and a significant downturn in demand for coal in Europe. The reduced demand was attributable to considerably higher feed-ins from renewable energies and lower gas prices which resulted in a fuel switch from coal to gas.

If this trend continues, coal prices on both the spot market and the forward market 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 sometimes major interventions by the Chinese authorities to regulate the domestic coal market and coal imports have made coal prices highly volatile. It is not possible to predict the type or timing of these measures, yet the impact on market prices is always clearly felt.

Development of prices on the coal markets

in US\$/t	Average H1 2019	Average H1 2018	Average 2018
Coal – API #2 spot market price	74.30	88.06	91.91
Coal – API #2 rolling front year price	64.68	83.14	87.03

CO₂ allowances

The reduction in supply (so-called market stability reserve, MSR) for emissions allowances agreed in 2018 resulted in a significant increase in the price for EUA certificates in 2018. The price for EUA certificates has remained at about the same level in 2019. The number of certificates available in the auction this year will be reduced by around 400 million, which is almost 50% less.

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

Development of prices for emission allowances/daily quotes

in €/t CO ₂	Average H1 2019	Average H1 2018	Average 2018
EUA – rolling front year price	24.28	12.17	15.62
CER – rolling front year price	0.22	0.20	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 2 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 will expire at the latest on 31 December 2019.

The EnBW Group

Finance and strategy goal dimensions

Results of operations

Electricity sales increase due mainly to trading activities, gas sales fall

Electricity sales of the EnBW Group (without Grids)

in billions of kWh ¹ 01/01–30/06	Sales		Renewable Energies		Generation and Trading		Total (without Grids)		Change in %
	2019	2018	2019	2018	2019	2018	2019	2018	
Retail and commercial customers (B2C)	7.8	7.8	0.0	0.0	0.0	0.0	7.8	7.8	0.0
Business and industrial customers (B2B)	10.3	9.7	0.0	0.0	0.0	0.0	10.3	9.7	6.2
Trade	1.0	1.1	1.4	1.3	68.4	45.7	70.8	48.1	47.2
Total	19.1	18.6	1.4	1.3	68.4	45.7	88.9	65.6	35.5

¹ The figures for the previous year have been restated.

In the first half of 2019, electricity sales of the EnBW Group were 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. In a persistently challenging competitive environment, electricity sales in business with retail and commercial customers (B2C) stood at the same level as in the

previous year. Sales in the business and industrial customer sector (B2B) were slightly higher in comparison to the previous year. Sales in the trading sector rose significantly due to more extensive trading activities. However, the effect of trading activities on the earnings potential of the company is limited. Adjusted for the effects of the changes in the consolidated companies, electricity sales of the EnBW Group increased by 35.4%.

Gas sales of the EnBW Group (without Grids)

in billions of kWh ¹ 01/01–30/06	Sales		Generation and Trading		Total (without Grids)		Change in %
	2019	2018	2019	2018	2019	2018	
Retail and commercial customers (B2C)	10.6	10.2	0.0	0.0	10.6	10.2	3.9
Business and industrial customers (B2B)	30.1	27.9	0.0	0.0	30.1	27.9	7.9
Trade	0.4	0.1	114.5	144.6	114.9	144.7	-20.6
Total	41.1	38.2	114.5	144.6	155.6	182.8	-14.9

¹ The figures for the previous year have been restated.

The gas sales of the EnBW Group fell significantly compared to the same period of 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. Gas sales in the retail customer business (B2C) were higher than in the previous year due to a slight increase in the number of customers. Sales to business and industrial custo-

mers (B2B) were also higher than in the previous year. In contrast, there was a fall in sales in the trading sector. However, the effect of the trading activities on the earnings potential of the company is limited. Adjusted for the effects of the changes in the consolidated companies, gas sales of the EnBW Group were 14.8% below the level in the previous year.

External revenue higher than the previous year in all segments

External revenue of the EnBW Group by segment

in € million ^{1,2}	01/01– 30/06/2019	01/01– 30/06/2018	Change in %	01/01– 31/12/2018
Sales	3,935.1	3,767.1	4.5	7,347.7
Grids	1,663.3	1,522.4	9.3	3,215.4
Renewable Energies	284.4	266.7	6.6	477.5
Generation and Trading	5,641.1	4,513.1	25.0	9,569.9
Other/Consolidation	5.1	3.7	37.8	7.0
Total	11,529.0	10,073.0	14.5	20,617.5

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, there was an increase in external revenue of 14.8% or €1,488.1 million. The figures for revenues in the previous year have been restated because, in comparison to the interim reporting in 2018, the application of IFRS 15 meant that further aspects were reported net at the end of the year. Due to the changed classification of three companies in the previous year, there was a slight shift between the segments.

Sales: In the first half of 2019, revenue in the Sales segment was higher than the figure in the previous year. Adjusted for the effects of the changes in the consolidated companies, this would have been an increase of 4.8% or €179.0 million. This was primarily due to higher electricity and gas sales.

Grids: Revenue in the Grids segment increased in the reporting period compared to the previous year, which was due in particular to higher revenues from the use of the grids. Adjusted for the effects of the changes in the consolidated companies, this would have been an increase of 8.9% or €136.5 million.

Renewable Energies: In the Renewable Energies segment, revenue increased in the first half of 2019 in comparison to the previous year. This increase is mainly attributable to higher generation from our offshore and onshore wind farms due to the weather and the purchase of onshore wind farms. Adjusted for the effects of the changes in the consolidated companies, this would have been an increase of 4.0% or €11.0 million.

Generation and Trading: Revenue in the Generation and Trading segment increased significantly in the reporting period in comparison to the same period of the previous year, which was primarily due to the expansion in electricity trading activities. Adjusted for the effects of the changes in the consolidated companies, this would have been an increase of 25.9% or €1,160.2 million.

Material developments in the income statement

The increase in revenues of €1,456.0 million in comparison to the figure in the previous year to €11,529.0 million was primarily attributable to higher trading activity. The negative balance from other operating income and other operating expenses in the reporting period increased from €-77.7 million in the previous year to €-309.2 million in the reporting period. This is

primarily due to lower income from the reversal of provisions and higher expenses from the measurement of derivatives. The cost of materials was €1,095.7 million higher than the figure in the previous year, which was mainly due to increased trading activity. The figures for revenues and cost of materials in the previous year have been restated because, in comparison to the interim reporting in 2018, the application of IFRS 15 meant that further aspects were reported net at the end of the year. The investment result in the reporting period stood at €74.9 million, which was €27.6 million higher than the figure of €47.3 million in the previous year. This development was mainly attributable to higher earnings from entities accounted for using the equity method. The financial result improved in the reporting period in comparison to the same period of the previous year by €26.1 million to €-36.1 million (previous year: €-62.2 million). The main reason for this development was a better result from the market valuation of securities. This was offset by the fall in the discount rate for nuclear provisions from 0.6% to 0.3%. Overall, earnings before tax (EBT) totalled €404.5 million in the first six months of the 2019 financial year, compared with €571.9 million for the same period in the previous year.

Earnings

The Group net profit/loss attributable to the shareholders of EnBW AG fell from €346.2 million in the same period of the previous year by €60.0 million to €286.2 million in the reporting period. Earnings per share amounted to €1.06 in the reporting period compared to €1.28 in the previous year.

Adjusted earnings and non-operating result

The sum of the adjusted earnings figures and non-operating figures gives the figure on the income statement. The non-operating result includes effects that either cannot be predicted or cannot be directly influenced by EnBW and as such are not relevant to the ongoing management of the company. The effects are presented 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 of EnBW. 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.

Adjusted EBITDA of the EnBW Group by segment

in € million ¹	01/01– 30/06/2019	01/01– 30/06/2018	Change in %	01/01– 31/12/2018
Sales	108.8	158.9	-31.5	268.4
Grids	719.8	684.9	5.1	1,176.9
Renewable Energies	204.9	164.8	24.3	297.7
Generation and Trading	261.2	139.4	87.4	430.8
Other/Consolidation	-18.7	-7.0	-	-16.3
Total	1,276.0	1,141.0	11.8	2,157.5

¹ The figures for the previous year have been restated.

Share of adjusted EBITDA for the EnBW Group accounted for by the segments

in % ¹	01/01– 30/06/2019	01/01– 30/06/2018	01/01– 31/12/2018
Sales	8.5	14.0	12.4
Grids	56.4	60.0	54.5
Renewable Energies	16.1	14.4	13.8
Generation and Trading	20.5	12.2	20.0
Other/Consolidation	-1.5	-0.6	-0.7
Total	100.0	100.0	100.0

¹ The figures for the previous year have been restated.

The adjusted EBITDA of the EnBW Group increased in the first half of 2019 in comparison to the same period of the previous year by 11.8%. Adjusted for the effects of changes in the consolidated companies, the adjusted EBITDA of the EnBW Group would have increased by 13.6%. 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.

Sales: The adjusted EBITDA in the Sales segment decreased in the first six months of 2019 by 31.5% in comparison to the same period of the previous year. Adjusted for the effects of changes in the consolidated companies, the decrease was 31.1%. The main reasons for this fall in earnings were higher procurement costs and pricing measures that have not yet become effective. Plusnet GmbH was acquired in June 2019 and will contribute to the operating result in the second half of 2019.

Grids: The adjusted EBITDA in the Grids segment increased in the first six months of 2019 by 5.1% in comparison to the same period of the previous year. Adjusted for the effects of changes in the consolidated companies, the increase was 5.5%. 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.

Renewable Energies: The adjusted EBITDA in the Renewable Energies segment for the first six months of 2019 was 24.3% above the value achieved in the same period of the previous year. Adjusted for the effects of the changes in the consolidated companies, and mainly due to the purchase of onshore wind farms in Sweden, the increase in earnings was 20.1%. This development is mainly attributable to better wind conditions. The French company Valeco S.A.S. was acquired in June 2019 and will contribute to the operating result in the second half of 2019.

Generation and Trading segment: In the Generation and Trading segment, the adjusted EBITDA increased in the first six months of 2019 by 87.4% compared to the same period of the previous year. Changes to the group of consolidated companies were mainly due to the sale of VNG Norge AS and its subsidiary VNG Danmark ApS in the previous year. Adjusted for the resulting effects, the increase was 117.5%. Our electricity deliveries were sold on the forward market at higher wholesale market prices than in the previous year. In addition, the regular inspection of Block 2 of the Philippsburg nuclear power plant (KKP 2) had not yet taken place by the end of June 2019, while the inspection in 2018 was already completed in the second quarter. In the reporting period, this meant that more electricity was generated while at the same time it resulted in temporarily lower expenses. This was offset to some extent by negative out-of-period earnings in comparison to the previous year.

Non-operating EBITDA of the EnBW Group

in € million	01/01– 30/06/2019	01/01– 30/06/2018	Change in %
Income/expenses relating to nuclear power	-7.2	11.6	-
Result from disposals	3.3	8.9	-62.9
Reversals of/additions to the provisions for onerous contracts relating to electricity procurement agreements	0.0	32.3	-100.0
Restructuring	-13.5	-13.6	0.7
Valuation effects	-180.9	0.0	-
Other non-operating result	-6.6	4.5	-
Non-operating EBITDA	-204.9	43.7	-

Group net profit of the EnBW Group

in € million	01/01– 30/06/2019			01/01– 30/06/2018		
	Total	Non-operating	Adjusted	Total	Non-operating	Adjusted
EBITDA	1,071.1	-204.9	1,276.0	1,184.7	43.7	1,141.0
Amortisation and depreciation	-705.4	-1.7	-703.7	-597.9	-6.3	-591.6
EBIT	365.7	-206.6	572.3	586.8	37.4	549.4
Investment result	74.9	13.9	61.0	47.3	-9.2	56.5
Financial result	-36.1	-94.7	58.6	-62.2	0.0	-62.2
EBT	404.5	-287.4	691.9	571.9	28.2	543.7
Income tax	-79.1	88.3	-167.4	-150.6	-10.9	-139.7
Group net profit/loss	325.4	-199.1	524.5	421.3	17.3	404.0
of which profit/loss shares attributable to non-controlling interests	[39.2]	[24.7]	[14.5]	[75.1]	[-0.6]	[75.7]
of which profit/loss shares attributable to the shareholders of EnBW AG	[286.2]	[-223.8]	[510.0]	[346.2]	[17.9]	[328.3]

The fall in Group net profit in the reporting period in comparison to the same period of the previous year is mainly due to the fall in EBITDA. Please refer to the section “Material developments in the income statement” for further information on this subject.

Financial position**Financing**

In addition to the Group’s internal financing capability and its own funds, the EnBW Group has the following instruments at its disposal to cover its overall financing needs (as of 30 June 2019):

- > Debt Issuance Programme, via which bonds are issued: €2.7 billion of €7.0 billion has been drawn. In January, EnBW made a private placement with a volume of €75.0 million and a term of 22 years.
- > Hybrid bonds: €2.0 billion
- > Commercial paper (CP) programme: €600.0 million of €2.0 billion has been drawn
- > Syndicated credit line: €1.5 billion undrawn with a term until 2021
- > Bilateral free credit lines: €921.0 million
- > Project financing and low-interest loans from the European Investment Bank (EIB)

Established issuer on the debt capital market

EnBW has sufficient and flexible access to the capital market at all times. The EnBW bonds continue to have a well-balanced maturity profile. Against the background of the acquisitions of Valeco and Plusnet, both of which were concluded in June, we are reassessing our liquidity position. On this basis, we will decide on further financing steps while taking into account the current interest rate environment.

Rating and rating trends

EnBW currently has the following ratings:

- > Moody’s: A3/negative
- > Standard & Poor’s (S&P): A-/stable
- > Fitch: A-/stable

EnBW aims to maintain a solid investment-grade rating. At the beginning of June, Moody’s confirmed its A3 rating for EnBW but lowered the outlook to negative. In its rationale for this decision, the rating agency pointed to the acquisitions of Valeco and Plusnet. Moody’s believes that the two acquisitions support the strategic development of EnBW but that they have come too soon. In addition, the low interest environment is having a negative effect on the present value of the pension and nuclear provisions.

Investment analysis

Net cash investment of the EnBW Group

in € million ¹	01/01– 30/06/2019	01/01– 30/06/2018	Change in %	01/01– 31/12/2018
Investments in growth projects ²	1,370.4	434.7	-	1,323.9
Investments in existing projects	158.2	139.6	13.3	446.0
Total investments	1,528.6	574.3	-	1,769.9
Divestitures ³	-344.4	-5.5	-	-371.3
Participation models	34.1	54.4	-37.3	51.9
Other disposals and subsidies	-66.4	-67.1	-1.0	-163.4
Total divestitures	-376.7	-18.2	-	-482.8
Net (cash) investment	1,151.9	556.1	107.1	1,287.1

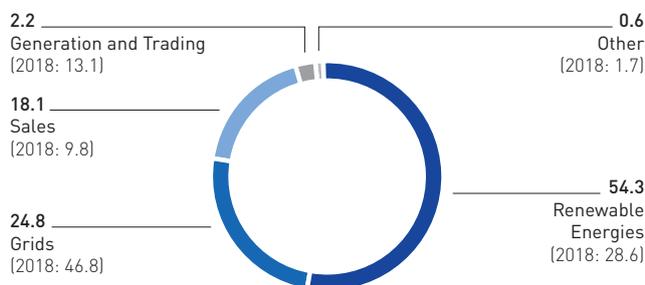
1 Excluding investments held as financial assets.

2 Does not include cash and cash equivalents acquired with the acquisition of fully consolidated companies. These amounted to €68.7 million in the reporting period (01/01/2018–30/06/2018: €0.0 million, 01/01/2018–31/12/2018: €0.4 million).

3 Does not include cash and cash equivalents relinquished with the sale of fully consolidated companies. These amounted to €37.7 million in the reporting period (01/01/2018–30/06/2018: €0.0 million, 01/01/2018–31/12/2018: €61.5 million).

Investment by the EnBW Group in the first half of 2019 was higher than the level in the previous year. This increase is mainly due to the investments in Valeco and Plusnet in the second quarter of 2019. Around 89.7% of overall gross investment was attributable to growth projects; the proportion of investments in existing facilities stood at 10.3%.

Investment by segment in %



Investment in the **Sales** segment of €276.6 million was significantly higher than the level in the previous year (€56.6 million) due to the acquisition of Plusnet.

Investment in the **Grids** segment stood at €379.6 million, compared to €268.6 million in the previous year. It was primarily used for the expansion of the electricity grids in both

years. The increase in the first half of 2019 compared to the same period of the previous year is primarily attributable to the expansion of our transmission grids, the expansion and renovation of the distribution grids and investment in the area of electromobility.

Investment in the **Renewable Energies** segment of €829.3 million was higher than in the previous year (€164.4 million). The main reasons for this were the investment in Valeco and the EnBW Hohe See and EnBW Albatros construction projects.

Investment in the **Generation and Trading** segment fell significantly in the first half of 2019 in comparison to the same period of the previous year to €33.0 million. In the same period of the previous year, investment stood at €75.1 million 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 of €10.1 million were at the same level as in the previous year (€9.7 million).

Divestitures increased compared to the same period of the previous year; this increase was primarily due to the sale of the remaining shares in EWE and divestitures from participation models. Shares were sold in the Buchholz III and Aalen-Waldhausen wind farms.

Liquidity analysis

Retained cash flow of the EnBW Group

in € million	01/01– 30/06/2019	01/01– 30/06/2018	Change in %	01/01– 31/12/2018
EBITDA	1,071.1	1,184.7	-9.6	2,089.6
Changes in provisions	-276.5	-366.1	-24.5	-394.6
Non-cash-relevant expenses/income	197.5	-96.1	-	-116.0
Income tax paid	-256.9	-240.6	6.8	-270.7
Interest and dividends received	130.6	143.4	-8.9	284.6
Interest paid for financing activities	-119.4	-126.9	-5.9	-247.0
Dedicated financial assets contribution	4.4	39.1	-88.7	-34.0
Funds from operations (FFO)	750.8	537.5	39.7	1,311.9
Dividends paid	-236.8	-204.0	16.1	-312.8
Retained cash flow¹	514.0	333.5	54.1	999.1

1 Adjusted for the effects from the reimbursement of the nuclear fuel rod tax of €122.5 million (01/01–30/06/2018: €100.0 million), the adjusted retained cash flow stood at €636.5 million (01/01–30/06/2018: €433.5 million).

The increase in the funds from operations (FFO) was mainly due to the higher cash-relevant EBITDA. It was primarily offset to some extent by higher income tax payments and a lower dedicated financial assets contribution in the reporting period. The positive development of the FFO also resulted in an improved retained cash flow.

The internal financing capability is a key performance indicator. It is measured using the retained cash flow adjusted for the effects from the reimbursement of the nuclear fuel rod tax. After all stakeholder needs have been settled, the retained cash flow is available to the company for investment without the need to raise additional debt. This performance indicator is not reported during the year because cash inflows and outflows may be postponed.

Free cash flow of the EnBW Group

in € million	01/01– 30/06/2019	01/01– 30/06/2018	Change in %	01/01– 31/12/2018
Funds from operations (FFO)	750.8	537.5	39.7	1,311.9
Change in assets and liabilities from operating activities	-711.2	-155.4	-	-480.7
Capital expenditure on intangible assets and property, plant and equipment	-482.0	-434.6	10.9	-1,369.5
Disposals of intangible assets and property, plant and equipment	23.3	39.1	-40.4	77.3
Cash received from subsidies for construction costs and investments, and tax refunds from recognised exploration expenditure	43.1	28.0	53.9	86.1
Free cash flow	-376.0	14.6	-	-374.9

Free cash flow fell significantly in comparison to the previous year by €390.6 million despite the increase in the FFO. This negative development was primarily due to the sharp increase in the negative net balance of assets and liabilities from operating activities.

This increase in the first half of the year was mainly attributable to an increase in the net balance of trade receivables and payables and higher inventories.

Condensed cash flow statement of the EnBW Group

in € million	01/01– 30/06/2019	01/01– 30/06/2018	Change in %	01/01– 31/12/2018
Cash flow from operating activities	24.0	326.5	-92.6	827.6
Cash flow from investing activities	-931.5	-230.9	-	-895.8
Cash flow from financing activities	369.5	-371.1	-	-907.3
Net change in cash and cash equivalents	-538.0	-275.5	-95.3	-975.5
Change in cash and cash equivalents due to changes in the consolidated companies	-3.6	0.9	-	0.9
Net foreign exchange difference	1.5	0.0	-	5.5
Change in cash and cash equivalents due to risk provisions	0.1	0.1	-	0.2
Change in cash and cash equivalents	-540.0	-274.5	96.7	-963.2

The substantial reduction in cash flow from operating activities in comparison to the previous year was mainly due to the increase in the negative net balance of assets and liabilities from operating activities. Cash flow from investing activities returned a substantially higher outflow of cash in the reporting period compared to the same period of the previous year, which was mainly due to the acquisitions of the companies Valeco and Plusnet in the reporting period.

Cash flow from financing activities returned a cash inflow in the reporting period, due to the issuing of a bond as part of the Debt Issuance Programme and short-term loans, while there was an outflow of cash in the same period of the previous year.

Net assets

Condensed balance sheet of the EnBW Group

in € million	30/06/2019	31/12/2018	Change in %
Non-current assets	28,845.1	26,746.0	7.8
Current assets	10,807.6	12,520.7	-13.7
Assets held for sale	87.9	342.3	-74.3
Assets	39,740.6	39,609.0	0.3
Equity	5,769.3	6,273.3	-8.0
Non-current liabilities	23,467.7	22,036.9	6.5
Current liabilities	10,503.6	11,277.6	-6.9
Liabilities directly associated with assets classified as held for sale	0.0	21.2	-100.0
Equity and liabilities	39,740.6	39,609.0	0.3

As of 30 June 2019, the total assets held by the EnBW Group were slightly higher than the level at the end of the previous year. Non-current assets increased by €2,099.1 million. This was due, on the one hand, to the first-time consolidation of Valeco and Plusnet and, on the other hand, to the first-time application of the leasing standard IFRS 16 in the 2019 financial year, which resulted in an increase in property, plant and equipment. In addition, there was an increase in financial assets attributable to the securities. The fall in current assets by €1,713.1 million was due to, amongst other things, the payments of the purchase price for Valeco and Plusnet and the lower trade receivables due to volume and price effects. The decrease in assets held for sale was primarily the result of EWE-Verband exercising its right to buy 6% of the shares in EWE.

The contractually agreed sale of shares in Stuttgart Netze Betrieb GmbH, which resulted in a loss of control of the company, also had an effect. This was offset to some extent by the reclassification of EMB Energie Mark Brandenburg GmbH as assets held for sale.

The equity held by the EnBW Group fell by €504.0 million as of the reporting date of 30 June 2019. This was primarily attributable to an increase in losses in other comprehensive income of €538.1 million, which was mainly caused by the fall in the discount rate for the pension provisions from 1.8% at the end of 2018 to 1.25% as of the reporting date. The equity ratio fell from 15.8% at the end of 2018 to 14.5% on the reporting date. Non-current

liabilities increased by €1,430.8 million. This was due, on the one hand, to the increase in the pension provisions because of the fall in the discount rate and, on the other hand, to the increase in other liabilities and subsidies because of the first-time application of IFRS 16 in the 2019 financial year. Current liabilities decreased by €774.0 million, which was largely due to a fall in the provisions and trade payables. The fall in trade payables was mostly

attributable to volume and price effects. This was offset to some extent by the increased utilisation of the commercial paper programme and an increase in liabilities to banks, due to amongst other things the acquisitions of Valeco and Plusnet. The decrease in liabilities directly associated with assets held for sale was the result of the sale of shares in Stuttgart Netze Betrieb GmbH.

Net debt

Net debt of the EnBW Group

in € million	30/06/2019	31/12/2018	Change in %
Cash and cash equivalents available to the operating business	-1,491.3	-1,954.0	-23.7
Current financial assets available to the operating business	-100.0	-200.6	-50.1
Long-term securities available to the operating business	-33.5	0.0	-
Bonds	5,308.5	4,869.4	9.0
Liabilities to banks	2,109.9	1,482.8	42.3
Other financial liabilities	468.4	644.0	-27.3
Liabilities from leasing	668.1	0.0	-
Valuation effects from interest-induced hedging transactions	-84.5	-88.8	-4.8
Restatement of 50% of the nominal amount of the hybrid bonds ¹	-996.3	-996.3	0.0
Other	-25.5	-18.1	40.9
Net financial debt	5,823.8	3,738.4	55.8
Provisions for pensions and similar obligations ²	7,289.5	6,550.9	11.3
Provisions relating to nuclear power	5,925.5	5,848.2	1.3
Liabilities relating to nuclear power	63.3	63.3	0.0
Receivables relating to nuclear obligations	-347.2	-334.4	3.8
Net pension and nuclear obligations	12,931.1	12,128.0	6.6
Long-term securities and loans to cover the pension and nuclear obligations ³	-5,252.3	-4,864.4	8.0
Cash and cash equivalents to cover the pension and nuclear obligations	-218.1	-295.4	-26.2
Current financial assets to cover the pension and nuclear obligations	-419.3	-569.1	-26.3
Surplus cover from benefit entitlements	-124.6	-208.8	-40.3
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	-30.5	-43.2	-29.4
Dedicated financial assets	-6,044.8	-6,279.8	-3.7
Net debt relating to pension and nuclear obligations	6,886.3	5,848.2	17.8
Net debt	12,710.1	9,586.6	32.6

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 €1,015.7 million (31/12/2018: €987.8 million).

3 Includes equity investments held as financial assets.

As of 30 June 2019, net debt increased significantly by €3,123.5 million compared to the figure posted at the end of 2018. This increase was primarily due to the acquisition of the two companies Valeco S.A.S. and Plusnet GmbH as well as their subsidiaries. In addition, the decrease in the interest rate for pension provisions from 1.8% as of 31 December 2018 to 1.25% as of 30 June 2019 and the interest rate for nuclear provisions from

0.6% as of 31 December 2018 to 0.3% as of 30 June 2019, as well as the first-time application of the leasing standard IFRS 16 in the 2019 financial year, led to an increase in net debt. The transition effect from the first-time application of the leasing standard IFRS 16 alone was €521.0 million as of 1 January 2019 and is reflected in the non-current liabilities.

Related parties

Relationships with related parties (entities and individuals) are disclosed – insofar as they have changed significantly in comparison to the reporting date of 31 December 2018 – in the notes and explanations of the six-monthly consolidated financial statements.

Customers and society goal dimension

We report on the non-financial goal dimensions of EnBW in the areas of customers and society, employees and the environment at the six-month stage on the basis of the key non-financial performance indicators presented in the Group management report 2018 (Integrated Annual Report 2018 from p. 94 onwards). Exceptions are the Reputation Index in the customers and society goal dimension, the Employee Commitment Index (ECI) in the employees goal dimension and the key performance indicators of “installed output of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE” in the environment goal dimension as well as the CO₂ intensity. The values for these key indicators are exclusively collected at the end of the year.

Customer proximity

Customer Satisfaction Index

Key performance indicator

	01/01– 30/06/2019	01/01– 30/06/2018	Change in %	01/01– 31/12/2018
Customer Satisfaction Index for EnBW/Yello	116/161	130/150	-10.8/7.3	120/152

The key performance indicator Customer Satisfaction Index at EnBW achieved a value of 116 in the first half of 2019 and thus stood at a good level. 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. The value of 116 points for the Customer Satisfaction Index is also within the forecasted range for 2019 (114 to 141). Although it is below the comparative values for the first half of 2018 and the whole of 2018, the Customer Satisfaction Index has, however, recovered slightly compared to autumn 2018 (111). This fall in satisfaction of customers of EnBW was primarily caused by two pricing measures within a short period of time in 2018 and the general trend in the sector.

The satisfaction of the customers of Yello once again stood at an excellent level (161) in the first half of 2019 and was even above the forecast for the whole year (148 to 159). This high value is attributable to enhanced marketing activities as part of the new campaign “Expect more” and the new products for the Yello bundle range.

In 2019, EnBW also expanded its portfolio of energy industry services and energy solutions and carried out numerous sales activities and communication measures. A special emphasis was placed here on **electromobility**. In this sector, EnBW has become

a full-service provider and together with its subsidiaries 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 through to digital services for the consumer. Cooperations with renowned partners – Tank & Rast, Euronics, hagebau, OMV and Shell – have helped push forward the expansion of quick-charging infrastructure across Germany, even in urban areas. The number of publicly accessible charging stations in Germany, Austria and Switzerland covered by the EnBW mobility+ app increased from 22,000 to more than 30,000 in 2019. EnBW now offers a uniform and transparent kWh tariff via the app across the largest charging network in this region – with network coverage of over 95%. The EnBW mobility+ Wallbox enables safe and easy charging at home with a charging capacity of up to 11 kW.

In a Germany-wide invitation to tender, EnBW was selected in December 2017 to develop a comprehensive electromobility concept for the **RegioENERGIE association**. The concept, which was funded by the Federal Ministry of Transport and Digital Infrastructure, was completed in February 2019 and aims to deliver more climate protection and sustainability. It comprises measures for system-wide integration of electromobility within the local communities, analysing potential sites for the charging infrastructure and determining the electrification potential of local authority fleets.

Netze BW has established itself as a leading general contractor for the **expansion of broadband** in Baden-Württemberg. This involves the turnkey installation of passive broadband infrastructure for local authorities and telecommunications companies. The local authorities can then, for example, lease the network to a telecommunications provider who provides telephone and Internet services for end customers. As one of the first districts in Baden-Württemberg, Karlsruhe has connected many thousands of households to the fibre-optic network of the future in cooperation with Netze BW. In addition, the general contractor model has also been successfully utilised by other district administrations such as Calw and Freudenstadt. Netze BW was selected in both cases following a Europe-wide invitation to tender.

Yello started its new campaign “Expect more” in 2019. TV commercials have been used to advertise Yello Solar and the energy check app kWhapp, as well as the Yello Plus tariff. By May, the successful kWhapp app from Yello had already been downloaded 1 million times. The Yello Plus tariff – an energy contract offered in combination with a chosen device – was also in high demand in 2019. The range of hardware options available is being continuously expanded to improve the attractiveness of the product even further. Yello is extending its range of products to include a new heating system product. Customers across Germany can select between three storage heater tariffs and two heat pump tariffs. In the area of e-mobility, Yello launched a new leasing offer on the market following the successful BMW i3 campaign in 2017: In cooperation with S&G Automobil AG, Yello offered customers the opportunity to secure a branded smart EQ fortwo in March.

At the turn of the year, EnBW transferred an extensively modernised combined heat and power plant into commercial operation on time at the Walsrode industrial park in Bomlitz (50 km north of Hanover). The new power plant blocks were installed while the other companies based at the industrial park continued to operate as normal. Alongside the new construction of the combined heat and power plant comprising highly efficient gas motors and steam boilers with an output of 13.5 MW of electrical power and up to 126 tonnes of steam per hour, a completely new control centre was also built. All of the information from the 200 **contracting plants** operated by EnBW across the whole of Germany converge into this control centre.

Numerous renowned project developers from the real estate sector have concluded **heating supply contracts** with EnBW contracting services. Alongside major construction projects, each with significantly more than 100 residential units, the contracts also cover smaller projects for around 50 residential units. The heating centres that are being planned, financed and built by EnBW will supply heating for the first time from 2020. EnBW is also handling the long-term operation of these heating plants. Discussions with companies from the housing sector are still ongoing and other projects, also outside of Baden-Württemberg, are at the planning stage. EnBW has worked together with large industrial companies in the areas of contracting, energy saving and the avoidance of CO₂ emissions for many years. Following a two-year preparation and implementation phase to complete the required renovation and modernisation measures, we achieved a further milestone with a customer from the medical technology sector: it was possible to sustainably reduce their electricity consumption by 18% or 1.45 million kWh per year. Efficient CHP plants have been used so that the total CO₂ emissions could be reduced by 1,930 tonnes per year and a 20% reduction in emissions was thus achieved.

Supply reliability

Supply reliability

Key performance indicator

	01/01– 30/06/2019	01/01– 30/06/2018	Change in %	01/01– 31/12/2018
SAIDI (electricity) in min./year	8	8	-	17

The reliability of the energy supply is given a high priority by the EnBW grid operators. The key performance indicator SAIDI – measured by the average length of supply interruptions experienced annually by each connected customer – for the grid companies in the EnBW Group remained at a good level in the first half of 2019.

Employees goal dimension

Following on from the strategy dialogues and the Leadership Forum held in 2018, the transformation initiative “**Next Level EnBW**” has been started and initially focuses on five key initiatives. The aim is to identify specific areas requiring change in order to successfully implement the strategy. The current key

initiatives for Next Level EnBW include, amongst other things, the themes of “organisation of cooperation at the company”, “customer orientation” and “internationalisation” as well as the establishment of the required skills. Cross-functional teams of employees and managers from various areas of the company are working together within “Next Level EnBW”.

As part of the **Next Level Leadership Programme**, HR is offering managers and “employees in management positions” a learning and development platform for the changing requirements for modern leadership in the era of digitalisation. The main focal points include, amongst other things, modern leadership, leadership and cooperation in an agile environment (agile basics, scrum master, agile coaching, etc.) and leadership in new roles and organisational forms (“leadership in a value stream”, product owner, etc.).

The Employers Association for Electricity Power Plants in Baden-Württemberg and the service trade union ver.di have reached a **collective bargaining agreement** with a term of 24 months after intensive negotiations. Remuneration will increase by 2.5% from 1 March 2019, by a further 1.9% from 1 November 2019 and again by 1.9% from 1 July 2020. Monthly remuneration for trainees in all year groups will increase at these times by €80, €50 and €50, respectively. For trainees at EnBW AG or those who come under the FOKUS collective bargaining agreement, the increases will be €77.12, €48.20 and €48.20, respectively.

Following the launch of the pilot project “**employees recruit employees**” in September 2018 initially only in those areas with a high need for recruitment such as IT, Netze BW, NetCom and the Innovation Campus, it has now been rolled out to other companies and areas in the EnBW Group. Employees are rewarded in the form of a €1,500 bonus if a new employee is recruited by EnBW based on their personal recommendation. This bonus is paid out as soon as the recommended person has been employed by EnBW for six months. EnBW has received around 500 employee recommendations for the pilot so far. A total of 41 applicants have been taken on as employees and some others are currently still involved in the selection process.

Strengthening diversity in the composition of the workforce and the leadership team at EnBW 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. 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. Another campaign to promote **diversity & inclusion** at EnBW emerged from the interdisciplinary project “Out of the box”. The aim is to develop acceptance for and the courage to engage with different viewpoints. The Diversity Week 2019 was held in June at EnBW with numerous campaigns and events focussing on the themes of internationalisation, disability, sexual orientation and gender diversity. On Diversity Day itself, colleagues from various different areas and networks were able to exchange information with one another at several of our large sites. For example, colleagues at the stand representing severely disabled employees at the Group

headquarters in Karlsruhe provided information on “invisible” and “visible disabilities and their impact on daily working life.

In March 2019, the “New Mobility” employee campaign was expanded and relaunched for a second time. Following the first campaign, EnBW employees are already using 180 BMW i3,

almost 1,600 bicycles, of which 80% are e-bikes, and more than 777 job tickets. Employees are now able to source smartphones and tablets via EnBW and apply to receive an e-Golf. Due to the huge interest, the original contingent of 50 e-Golfs was increased by a further 150 vehicles in April.

Further performance indicators for employees

Employees of the EnBW Group¹

	30/06/2019	31/12/2018	Change in %
Sales	4,197	3,718 ³	12.9
Grids	8,884	8,920	-0.4
Renewable Energies	1,319	1,144	15.3
Generation and Trading	5,458	5,358 ³	1.9
Other	2,630	2,635	-0.2
Total	22,488	21,775	3.3
Number of full-time equivalents ²	21,086	20,379	3.5

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

2 Converted into full-time equivalents.

3 The figures for the previous year have been restated.

As of 30 June 2019, the EnBW Group had 22,488 employees, which was 3.3% more than at the end of 2018. The increase is due primarily to the acquisitions for the implementation of our growth strategy. The number of employees in the Sales segment increased due to the first-time consolidation of Plusnet GmbH and restructuring within the Group. In the Renewable Energies segment, the increase in the number of employees was mainly attributable to the acquisition of the French company Valeco S.A.S. In contrast, the number of employees in the Grids segment fell as a result of the movement of employees to the Sales segment as part of restructuring measures and the deconsolidation of Stuttgart Netze Betrieb GmbH. However, this was offset to some extent by an increase in the number of employees due to the growing importance of the regulated business and the acquisition of Voltcom spol.s.r.o. by Pražská energetika a.s. The increase in the number of employees in the Generation and Trading segment and the decrease in Other were mainly attributable to restructuring within the Group.

Occupational safety

LTIF

Key performance indicator

	01/01–30/06/2019	01/01–30/6/2018	Change in %	01/01–31/12/2018
LTIF ¹	2.1	2.5	-16.0	2.3

1 Variations in the group of consolidated companies (consideration of all employees at those companies controlled by the Group, except external agency workers and contractors).

The key performance indicator LTIF (Lost Time Injury Frequency) once again fell noticeably in the first six months of 2019 in comparison to the same period of the previous year. In contrast, the days of absence per accident increased from 14.0 days to 19.8 days. We believe that the continuous improvement of the LTIF in the past few years is due to our constant and intensive work in the areas of occupational safety and health protection.

EnBW works continuously on minimising danger in the workplace, which could result in accidents or work-related illnesses, through training and a programme of measures. One focus in the first half of 2019 was the successive roll-out of the software Quentic (formerly called EcoWebDesk, EWD). Important elements of Quentic are the documentation of risk assessments and hazardous substance management. A uniform hazardous substance register has been gradually collated from various existing sources over the years. The internal audit department carried out an audit on the topic of “Risk assessments of work activities” in the first half of 2019. The results of this audit were seven green traffic lights – i.e. positive assessments – and a recommendation to introduce Quentic in the intended companies by the middle of 2020. In addition, two workshops for all occupational safety experts were held in the reporting period. The main theme of the workshops was “dialogue about near accidents”.

Environment goal dimension

As a large energy company, EnBW shares responsibility for our environment and climate protection. Supplying our customers with energy causes emissions, above all through the operation of power plants, and uses natural resources and space. Environmentally and climate protection form an integral part of the EnBW corporate strategy.

The long-term success of an energy supply company's activities hinges on acceptance by society. EnBW strives to achieve a credible balance between respecting the environment and achieving its corporate, political and social goals, and underpins this commitment with a diverse range of activities.

The **installed output** from renewable energies at the EnBW Group stood at 3.7 GW at the end of 2018. Further capacity will be added during the course of 2019 thanks to the gradual commissioning of the EnBW Hohe See (497 MW) and EnBW Albatros (112 MW) offshore wind farms. More than 50 of the total of 87 wind turbines at EnBW Hohe See and EnBW Albatros had been installed by the middle of the year. In addition, the conclusion of the acquisition of the French developer and operator of wind and solar farms Valeco in June 2019 will also increase the installed output from renewable energies at the EnBW Group. EnBW is well on track to achieve its objectives in the environment goal dimension by 2020.

Alongside onshore and offshore wind power, **solar energy** acts as the third pillar for the expansion of renewable energies at EnBW. Due to technical advances, the cost of constructing solar parks has fallen by up to 90% over the last ten years in Germany. Against this background, EnBW has significantly expanded its activities in the solar sector recently and has now established a project development pipeline of around 800 MW. The company's first major project is the planned construction of the Weesow-Willmersdorf solar park in Brandenburg. It will be the largest solar park built in Germany and will provide 175 MW of output on an area covering 164 hectares. EnBW aims to realise this project without EEG subsidies, which will be the first time this has been achieved in Germany.

EnBW is investigating new approaches for the expansion of renewable energies via its subsidiary Erdgas Südwest (ESW): it is realising an innovative project to construct the largest **floating photovoltaic power plant** in Germany on the Maiwald quarry lake in the Renchen district near Achern. The company will thus exploit a new potential source of space for the regional Energiewende. ESW is installing 2,304 solar modules with an electric output of 750 kWp on a floating substructure on the 43 hectare lake. The plant covers only 2% of the surface area of the lake but will supply 800,000 kWh of electricity per year in the future. The yield is expected to be around 10% more in comparison to open-field and roof photovoltaic systems due to the cooling effect of the water. Around two thirds of the electricity generated there will be directly consumed on-site at a gravel plant. This means the timing of the production and

consumption of the electricity will be perfectly matched. In contrast to open-field power plants, the power plant is not competing with other uses for the space on the quarry lake.

In the **USA**, only five offshore wind power plants have been placed into operation to date. Nevertheless, the progress made in reducing the cost of offshore wind power in Europe due to technological advances and the experience gained through the installation of more than 4,540 offshore wind turbines with a total output of 18.5 GW has also been followed with great interest in the USA. Due to the constant development of the technology and the pioneering work completed in Europe, prices have now reached a level where energy from offshore wind projects can compete with electricity generated from fossil fuels from a cost perspective. Europe's expertise in reducing costs has come at just the right time for the USA. This applies, in particular, to the federal states in the north-east who are currently discussing how they can meet important climate protection targets and replace ageing conventional power plants. Against this background, EnBW North America opened two new offices in the spring of 2019 on the East Coast of the USA and is preparing to enter the offshore wind power market in the USA.

Together with the City of Stuttgart and other large employers in the region, EnBW signed an agreement in February 2019 to join the "Alliance for clean air". EnBW has thus declared its readiness to implement further measures for **maintaining clean air** in 2019 and 2020. Some important steps have already been taken in the #newmobility project – such as the "DeinTicket", "DeinBike", "Dein Mitfahren" and "Dein i3" (Your Ticket, Your Bike, Your Ride and Your i3) campaigns and the projects to comprehensively expand the charging infrastructure. Cross-company measures have also been discussed in the alliance. These include, for example, new mobility concepts, the promotion of electric-powered vehicles, the rigorous electrification of vehicle fleets, expanding the public transportation options and establishing a cross-company, digital ride-sharing community.

The EnBW funding programme "**Stimuli for Diversity**" has been successfully supporting social engagement in Baden-Württemberg for the protection of amphibians since 2011 and the protection of reptiles since 2016. The funding programme was launched by EnBW together with the Baden-Württemberg State Institute for the Environment, Measurements and Nature Conservation (LUBW) and is part of the project "The economy and business for nature", which is a component of the state initiative "Active for biological diversity" that was initiated by the state government of Baden-Württemberg. The application period for the 2019 funding year ended in May 2019. Many well-founded and interesting project applications were once again submitted. The specialist jury selected eleven projects that make an important contribution to improving the living conditions and preserving the habitats of amphibians and reptiles in Baden-Württemberg. The selected projects will be funded by EnBW and will be completed between October and December 2019.

Forecast

In the following forecast, we take a look at the expected development of EnBW in the current financial year. It should be noted that the present conditions increase the level of

uncertainty with which predictions about the future development of the company can be made, as the assumptions upon which they are based can quickly become outdated.

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

Development in 2019 (adjusted EBITDA and the share of adjusted EBITDA accounted for by the segments) compared to the previous year¹

	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	
	2019	2018	2019	2018
Sales	€225 to 300 million	€268.4 million	5% to 15%	12.4%
Grids	€1,300 to 1,400 million	€1,176.9 million	50% to 60%	54.5%
Renewable Energies	€425 to 500 million	€297.7 million	15% to 25%	13.8%
Generation and Trading	€350 to 425 million	€430.8 million	10% to 20%	20.0%
Other/Consolidation		€-16.3 million		-0.7%
Adjusted EBITDA, Group	€2,350 to 2,500 million	€2,157.5 million		100.0%

¹ The figures for the previous year have been restated.

The earnings forecast for the entire Group and the individual segments for the whole of the 2019 financial year remains unchanged from that given in the Group management report 2018.

In the **Sales** segment, we continue to expect earnings in 2019 at the same level as in the previous year. We expect a stable share of the adjusted EBITDA for the Group accounted for by this segment. In the area of electricity and gas sales, there were price adjustments for B2C customers. The acquisition of Plusnet GmbH will make a positive earnings contribution in the second half of the year.

The adjusted EBITDA for the **Grids** segment will increase further in 2019. It will thus continue to be the segment with the highest earnings. In comparison to the previous year, we expect higher revenue from the use of the grids as we start to see returns on the increased investment activity in projects that are included in the Network Development Plan Electricity and Network Development Plan Gas. The share of the adjusted EBITDA for the Group accounted for by this segment should remain stable.

The adjusted EBITDA for the **Renewable Energies** segment will increase significantly in 2019. In the offshore wind sector, this will be due to the planned commissioning of our offshore wind farms EnBW Hohe See and EnBW EnBW Albatros, which are still due to be completed on schedule. In addition, the expansion and acquisition of onshore wind farms in 2018 and those planned in 2019 will make a positive contribution to earnings. In 2018, we constructed and acquired onshore wind farms with an

output of 178 MW, which included wind farms in Sweden. The French company Valeco S.A.S. was acquired in June 2019 and will contribute to the operating result in the second half of 2019. The forecast for the volume of electricity generated by the run-of-river power plants is based on the long-term average water levels. The wind-yield forecasts are also based on the long-term average. As 2018 was negatively influenced by poor wind conditions and low water levels, we expect a significantly higher result in 2019 in comparison to the previous year. In the first half of 2019, the volume of electricity generated was in line with the long-term average. We expect an increase in the share of the adjusted EBITDA for the Group accounted for by this segment.

The adjusted EBITDA for the **Generation and Trading** segment in 2019 is not expected to exceed the figure achieved in the previous year. In comparison to the previous year, we anticipate lower out-of-period earnings which will mainly be attributable to the clarification of open issues relating to electricity procurement agreements that were recognised through profit or loss in 2018. The loss of the earnings contribution made by VNG Norge AS and its subsidiary VNG Danmark ApS due to their sale in 2018 will also result in a fall in earnings. In contrast, the unscheduled extension to the inspection of Block 2 of the Neckarwestheim nuclear power plant (GKN II) had a negative impact on earnings in the previous year. We expect a slight decrease in the share of the adjusted EBITDA for the Group accounted for by this segment.

The **adjusted EBITDA** for the EnBW Group in 2019 will increase further and be between €2,350 million and €2,500 million. This will be due primarily to the areas of growth in the Grids and Renewable Energies segments. In addition, we anticipate that the early achievement of our efficiency target in 2019 will have an effect in the amount of €650 million.

Expected trends in non-financial key performance indicators

After the end of the first half of 2019, there are no significant changes to the non-financial performance indicators compared to the expectations formulated for the 2019 financial year in the Integrated Annual Report 2018 (Integrated Annual Report 2018, p. 112 f.).

Opportunities and risks

In comparison to the report issued at the end of 2018, the risks faced by the EnBW Group remained largely unchanged in the first six months of 2019. No risks currently exist that might jeopardise the EnBW Group as a going concern.

Using the report on risks in the Group management report 2018 as a basis, only the significant opportunities or risks which have changed, arisen or ceased to exist in the reporting period are described in this Six-Monthly Financial Report January to June 2019. Regarding non-financial aspects, there were no material changes to the opportunities and risks in comparison to the report issued at the end of 2018. A detailed presentation of the opportunity and risk position can be found in the Integrated Annual Report 2018 from p. 114 onwards.

Cross-segment opportunities and risks

Discount rate applied to pension provisions

There is a general opportunity and risk due to a potential change in the discount rate applied to the pension provisions because the present value of the pension provisions falls when the discount rate increases and increases when the discount rate falls. As of the reporting date of 30 June 2019, the discount rate was 1.25%, which was down 0.55 percentage points on the rate at

the end of 2018 (1.8%). The future development of interest rates could have a negative impact in the mid double-digit million euro to low billion euro range on net debt in 2019. Against the background of the expected development of interest rates in the near future, we currently identify an increased level of risk.

Generation and Trading segment

Dismantling of nuclear power plants (previously 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. Moreover, there is also an opportunity to make lasting cost savings due to synergies over time and also due to learning effects for subsequent dismantling activities. Opportunities and risks are identified during the project planning stage that could result in reduced or additional costs or adjustments to the term of the project. There could be opportunities and risks that have an effect on net debt in the mid double-digit million euro range in 2019. We currently identify a balanced level of opportunity and risk in this area.

Six-monthly consolidated financial statements

Income statement

in € million ¹	01/04– 30/06/2019	01/04– 30/06/2018	01/01– 30/06/2019	01/01– 30/06/2018
Revenue including electricity and energy taxes	4,963.1	4,276.8	11,780.8	10,385.9
Electricity and energy taxes	-105.4	-138.0	-251.8	-312.9
Revenue	4,857.7	4,138.8	11,529.0	10,073.0
Changes in inventories	8.7	19.6	34.1	40.1
Other own work capitalised	27.0	191.2	49.0	209.3
Other operating income	105.2	222.6	420.1	408.9
Cost of materials	-3,762.1	-3,368.4	-9,271.1	-8,175.4
Personnel expenses	-482.1	-455.7	-931.7	-884.6
Impairment losses	-11.0	4.7	-29.0	0.0
Other operating expenses	-380.2	-255.9	-729.3	-486.6
EBITDA	363.2	496.9	1,071.1	1,184.7
Amortisation and depreciation	-358.2	-303.4	-705.4	-597.9
Earnings before interest and taxes (EBIT)	5.0	193.5	365.7	586.8
Investment result	31.2	32.2	74.9	47.3
of which net profit/loss from entities accounted for using the equity method	(10.7)	(-4.0)	(27.1)	(2.8)
of which other profit/loss from investments	(20.5)	(36.2)	(47.8)	(44.5)
Financial result	-45.9	71.8	-36.1	-62.2
of which finance income	(94.0)	(138.0)	(279.4)	(212.7)
of which finance costs	(-139.9)	(-66.2)	(-315.5)	(-274.9)
Earnings before tax (EBT)	-9.7	297.5	404.5	571.9
Income tax	17.3	-63.2	-79.1	-150.6
Group net profit	7.6	234.3	325.4	421.3
of which profit/loss shares attributable to non-controlling interests	(-4.8)	(25.6)	(39.2)	(75.1)
of which profit/loss shares attributable to the shareholders of EnBW AG	(12.4)	(208.7)	(286.2)	(346.2)
EnBW AG shares outstanding (million), weighted average	270.855	270.855	270.855	270.855
Earnings per share from Group net profit (€)²	0.05	0.77	1.06	1.28

¹ The figures for the previous year have been restated.

² Diluted and basic; in relation to profit/loss attributable to the shareholders of EnBW AG.

Statement of comprehensive income

in € million	01/04– 30/06/2019	01/04– 30/06/2018	01/01– 30/06/2019	01/01– 30/06/2018
Group net profit	7.6	234.3	325.4	421.3
Revaluation of pensions and similar obligations	-514.5	6.5	-874.8	129.7
Entities accounted for using the equity method	-0.3	0.0	-0.5	0.0
Income taxes on other comprehensive income	154.2	-2.0	260.4	-38.0
Total of other comprehensive income and expenses without future reclassifications impacting earnings	-360.6	4.5	-614.9	91.7
Currency translation differences	16.4	-16.3	13.6	-6.4
Cash flow hedge	-15.9	-15.6	68.5	-25.5
Financial assets at fair value in equity	10.0	-6.1	30.2	-7.5
Entities accounted for using the equity method	0.2	-0.2	0.2	-0.2
Income taxes on other comprehensive income	0.3	15.1	-32.1	23.7
Total of other comprehensive income and expenses with future reclassifications impacting earnings	11.0	-23.1	80.4	-15.9
Total other comprehensive income	-349.6	-18.6	-534.5	75.8
Total comprehensive income	-342.0	215.7	-209.1	497.1
of which profit/loss shares attributable to non-controlling interests	(-2.7)	(25.9)	(42.8)	(78.4)
of which profit/loss shares attributable to the shareholders of EnBW AG	(-339.3)	(189.8)	(-251.9)	(418.7)

Balance sheet

in € million	30/06/2019	31/12/2018
Assets		
Non-current assets		
Intangible assets	2,543.0	1,748.7
Property, plant and equipment	16,540.7	15,867.5
Entities accounted for using the equity method	1,688.2	1,600.2
Other financial assets	5,884.3	5,426.5
Trade receivables	317.1	302.0
Other non-current assets	666.5	741.8
Deferred taxes	1,205.3	1,059.3
	28,845.1	26,746.0
Current assets		
Inventories	1,070.3	1,192.0
Financial assets	560.5	774.7
Trade receivables	3,778.3	4,515.7
Other current assets	3,689.1	3,788.9
Cash and cash equivalents	1,709.4	2,249.4
	10,807.6	12,520.7
Assets held for sale	87.9	342.3
	10,895.5	12,863.0
	39,740.6	39,609.0
Equity and liabilities		
Equity		
Shares of the shareholders of EnBW AG		
Subscribed capital	708.1	708.1
Capital reserve	774.2	774.2
Revenue reserves	4,786.5	4,676.4
Treasury shares	-204.1	-204.1
Other comprehensive income	-2,514.8	-1,976.7
	3,549.9	3,977.9
Non-controlling interests	2,219.4	2,295.4
	5,769.3	6,273.3
Non-current liabilities		
Provisions	14,060.9	13,246.0
Deferred taxes	768.7	774.8
Financial liabilities	6,418.3	6,341.4
Other liabilities and subsidies	2,219.8	1,674.7
	23,467.7	22,036.9
Current liabilities		
Provisions	1,170.8	1,549.9
Financial liabilities	1,468.5	654.8
Trade payables	3,898.5	5,039.8
Other liabilities and subsidies	3,965.8	4,033.1
	10,503.6	11,277.6
Liabilities directly associated with assets classified as held for sale	0.0	21.2
	10,503.6	11,298.8
	39,740.6	39,609.0

Cash flow Statement

in € million	01/01– 30/06/2019	01/01– 30/06/2018
1. Operating activities		
EBITDA	1,071.1	1,184.7
Changes in provisions	-276.5	-366.1
Result from disposals	-3.3	-8.3
Other non-cash-relevant expenses/income	200.8	-87.8
Change in assets and liabilities from operating activities	-711.2	-155.4
Inventories	[-313.0]	[-13.0]
Net balance of trade receivables and payables	[-476.0]	[71.4]
Net balance of other assets and liabilities	[77.8]	[-213.8]
Income tax paid	-256.9	-240.6
Cash flow from operating activities	24.0	326.5
2. Investing activities		
Capital expenditure on intangible assets and property, plant and equipment	-482.0	-434.6
Disposals of intangible assets and property, plant and equipment	23.3	39.1
Cash received from subsidies for construction costs and investments, and tax refunds from recognised exploration expenditure	43.1	28.0
Acquisition/sale of subsidiaries, entities accounted for using the equity method and interests in joint operations	-986.1	-89.5
Change in securities and financial investments	339.6	82.7
Interest received	64.7	62.2
Dividends received	65.9	81.2
Cash flow from investing activities	-931.5	-230.9
3. Financing activities		
Interest paid for financing activities	-119.4	-126.9
Dividends paid	-236.8	-204.0
Cash received for changes in ownership interest without loss of control	21.6	0.0
Increase in financial liabilities	1,576.5	207.9
Repayment of financial liabilities	-772.1	-200.4
Repayment and interest portion of the lease liability	-50.2	-
Payments from alterations of capital in non-controlling interests	-50.1	-47.7
Cash flow from financing activities	369.5	-371.1
Net change in cash and cash equivalents	-538.0	-275.5
Change in cash and cash equivalents due to changes in the consolidated companies	-3.6	0.9
Net foreign exchange difference	1.5	0.0
Change in cash and cash equivalents due to risk provisions	0.1	0.1
Change in cash and cash equivalents	-540.0	-274.5
Cash and cash equivalents at the beginning of the period	2,249.4	3,212.8
Cash and cash equivalents at the end of the period	1,709.4	2,938.3
of which cash and cash equivalents in current assets	(1,709.4)	(2,864.0)
of which cash and cash equivalents in assets held for sale	[0.0]	[74.3]

Statement of changes in equity

in € million ¹	Other comprehensive income ²										Total
	Subscribed capital and capital reserve	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	
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				92.1	-5.8	-8.5	-5.1	-0.2	72.5	3.3	75.8
Group net profit		346.2							346.2	75.1	421.3
Total comprehensive income	0.0	346.2	0.0	92.1	-5.8	-8.5	-5.1	-0.2	418.7	78.4	497.1
Dividends		-135.4							-135.4	-108.4	-243.8
Other changes									0.0	-49.7	-49.7
As of 30/06/2018	1,482.3	4,690.1	-204.1	-1,624.8	-17.8	-117.7	5.8	0.1	4,213.9	2,247.5	6,461.4
As of 01/01/2019	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				-612.3	10.4	42.8	21.3	-0.3	-538.1	3.6	-534.5
Group net profit		286.2							286.2	39.2	325.4
Total comprehensive income	0.0	286.2	0.0	-612.3	10.4	42.8	21.3	-0.3	-251.9	42.8	-209.1
Dividends		-176.1							-176.1	-90.4	-266.5
Other changes ³									0.0	-28.4	-28.4
As of 30/06/2019	1,482.3	4,786.5	-204.1	-2,403.8	1.6	-134.6	21.0	1.0	3,549.9	2,219.4	5,769.3

1 The figures for the previous year have been restated.

2 Of which other comprehensive income directly associated with the assets held for sale as of 30/06/2019 in the amount of €1.9 million (01/01/2019: €0.0 million, 30/06/2018: €0.0 million, 01/01/2018: €0.0 million). Of which attributable to the shareholders of EnBW AG: €1.4 million (01/01/2019: €0.0 million, 30/06/2018: €0.0 million, 01/01/2018: €0.0 million). Of which attributable to non-controlling interests: €0.5 million (01/01/2019: €0.0 million, 30/06/2018: €0.0 million, 01/01/2018: €0.0 million).

3 Of which changes in revenue reserves due to changes in ownership interest in subsidiaries without loss of control of 0.0 million. Of which changes in non-controlling interests due to changes in ownership interest in subsidiaries without loss of control of €23.3 million.

Notes and explanations

Accounting policies

The six-monthly financial statements of the EnBW Group are prepared according to the International Financial Reporting Standards (IFRS), the adoption of which is mandatory in the EU as of the reporting date. In addition, the related interpretations (IFRIC/SIC) are observed. Standards and interpretations that have not yet come into force have not been adopted.

The accounting policies applied for the six-monthly consolidated financial statements as of 30 June 2019, as well as the evaluation methods and input parameters for measuring fair value, are the same as those used for the consolidated financial statements as of 31 December 2018 with the exception of the new policies described below.

In accordance with IAS 34, the form of reporting chosen for the presentation of the consolidated financial statements of EnBW AG as of 30 June 2019 was shortened in comparison with that used for the consolidated financial statements as of 31 December 2018.

In addition to the income statement, the statement of comprehensive income, balance sheet, condensed cash flow statement and statement of changes in equity for the EnBW Group are presented separately. Rounding differences may occur due to the methods used to carry out the calculations.

Significant events in the reporting period, as well as detailed descriptions of the segments and financial result and changes in the assets held for sale, are given in the EnBW Group section of the management report.

Changes in accounting policies

The International Accounting Standards Board (IASB) and the IFRS Interpretation Committee (IFRS IC) have adopted the following new standards and amendments to existing standards whose application is mandatory as of the 2019 financial year:

- > Amendments to IAS 19 (2018) "Plan Amendment, Curtailment or Settlement"
- > Amendments to IAS 28 (2017) "Long-term interests in Associates and Joint Ventures"
- > Amendments to IFRS 9 (2017) "Prepayment Features with Negative Compensation"
- > IFRIC 23 (2017) "Uncertainty over Income Tax Treatments"
- > Collective standard for the amendment of various IFRS (2017) "Improvements to the IFRS Cycle 2015–2017"

These new rules have no material impact on the EnBW consolidated financial statements.

In addition, the IFRS IC published a decision in March 2019 on the physical settlement of contracts to buy or sell a non-financial item ("Physical settlement of contracts to buy or sell a non-financial item (IFRS 9)"). We are currently investigating the impact of this decision and plan to implement any changes by the end of 2019.

First-time adoption of amended accounting standards

The IASB has also adopted the following new standard whose application is mandatory from the 2019 financial year:

- > **IFRS 16 (2016) "Leases"**: The standard replaces the current standard for accounting for leases IAS 17 and the associated interpretations IFRIC 4, SIC-15 and SIC-27. IFRS 16 must be applied for financial years beginning on or after 1 January 2019. The new standard introduces a uniform accounting model for the lessee, whereby for all leases the lessee recognises the conferred right of use as an asset and a corresponding lease liability. During the term of the lease, the right of use is depreciated and the measurement of the lease liability is carried out using the effective interest method. Accounting for expenses for operating leases on a straight-line basis according to IAS 17 will be replaced by depreciation of the right-of-use assets and interest expenses for the liabilities from the lease. The accounting regulations and the associated classification of leases in line with IAS 17 will remain largely unchanged for the lessor.

The transition to the new standard took place on 1 January 2019 according to the modified retrospective approach; the figures for the previous year will not be adjusted. EnBW utilises the simplified approach to report short-term leases and leases involving low-value assets directly on the income statement. Moreover, EnBW utilises the option of accounting for lease and non-lease components together, except for the asset classes real estate and vehicles. The simplified approach was used by EnBW to apply IFRS 16 at the time of transition to leases that were already classified as leases according to IAS 17 and IFRIC 4. Furthermore, the right of use to the leased asset will be reported in the amount of the lease liability. The initial direct costs are not taken into account when measuring the right-of-use assets for the first-time application.

Due to the first-time application of IFRS 16, right-of-use assets of €509.7 million and lease liabilities of €521.0 million were reported as of 1 January 2019. The €11.3 million difference between the lease liabilities and the right-of-use assets is due to the elimination of a provision for an onerous contract. The first-time application of IFRS 16 led to a shift in the figures on the income statement between EBITDA and amortisation and depreciation as well as interest costs. Accordingly, EBITDA increased by €50.2 million, amortisation and depreciation by €44.6 million and interest costs by €4.7 million. The first-time application of IFRS 16 caused the cash flow from operating activities to increase by €50.2 million on the consolidated cash flow statement due to the rise in EBITDA. In contrast, cash flow from financing activities fell by €50.2 million due to the repayment and interest portion of the lease liability.

On the basis of the commitments from operating leases as of 31 December 2018, the transition to the opening balance for the lease liabilities as of 1 January 2019 breaks down as follows:

in € million	01/01/2019
Commitments from operating leases as of 31/12/2018	499.6
Minimum lease payments (nominal value) from finance lease liabilities as of 31/12/2018	162.8
Relief for short-term leases	-14.8
Relief for leases involving low-value assets	-6.6
Non-lease components	1.5
Reasonably certain extension and termination options	8.0
Variable index-based lease payments	0.8
Residual value guarantees	0.1
Other	51.6
Gross lease liabilities as of 01/01/2019	703.0
Discounting	-82.3
Lease liabilities as of 01/01/2019	620.7
Present value of the finance lease liabilities as of 31/12/2018	-99.8
Additional lease liabilities due to the first-time application of IFRS 16 as of 01/01/2019	521.0

The weighted average incremental borrowing rate on 1 January 2019 was 1.33%. The following main classes of underlying assets for former operating leases were identified in the Group that are reported according to the new accounting principles in IFRS 16: distribution facilities and grids, real estate, land, power plants, vehicles and other technical equipment.

Effects of new accounting standards that are not yet mandatory

The IASB and IFRS IC have already published the following standards and interpretations whose adoption is not yet mandatory for the 2019 financial year. Their application in the future is subject to their endorsement by the EU into European law.

- > Amendments to IAS 1 and IAS 8 (2018) "Definition of Material"
- > Amendments to IFRS 3 (2018) "Business Combinations"
- > Amendments to IFRS 10 and IAS 28 (2014) "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"
- > IFRS 17 (2017) "Insurance Contracts"
- > Amendments to the References to the Conceptual Framework for the IFRS Standards (2018)

Consolidated companies

All subsidiaries under the control of the Group are included in the consolidated financial statements in accordance with the full consolidation method. The equity method is used when there is a joint arrangement in the form of a joint venture or a significant influence may be exercised over the business policy of the associated company, but the entity does not qualify as a subsidiary. Joint arrangements that are classified as joint operations are reported based on the proportion of the assets, liabilities, income and expenses which are attributable to the parent company in compliance with the respective applicable IFRS.

There are no reciprocal shareholdings in the EnBW Group as defined by section 19 (1) German Companies Act (AktG).

The consolidated companies are as follows:

Type of consolidation			
Number	30/06/2019	31/12/2018	30/06/2018
Fully consolidated companies	195	171	155
Entities accounted for using the equity method	24	23	23
Joint operations	3	3	3

First-time full consolidation of affiliated entities

First-time full consolidation of Valeco S.A.S.

In order to strengthen its onshore wind business, EnBW acquired 100% of the shares in the developer and operator of wind and solar farms Valeco S.A.S., Montpellier, France, from Holding GAY and the minority shareholder Caisse des dépôts et consignations (CDC) on 3 June 2019. Valeco S.A.S. was fully consolidated in the EnBW consolidated financial statements from this point in time and 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.

The fair value of Valeco S.A.S. at the time of full consolidation was €607.5 million. There were no significant incidental acquisition costs incurred as part of the transaction. The purchase price was paid in the form of cash and cash equivalents. The amount reported for goodwill is a preliminary figure due to the fact that the calculation of the fair value of the assets and liabilities has not yet been concluded. In particular, it represents future business generation and is not deductible for tax purposes.

If Valeco S.A.S. had been fully consolidated since the beginning of the year, Group revenue would have increased by €25.7 million to €11,554.7 million and earnings after income taxes would have increased by €2.6 million to €328.0 million.

The following assets and liabilities were taken over as part of the acquisition:

in € million	Fair value
Intangible assets	250.2
Property, plant and equipment	131.7
Other non-current assets	42.0
Cash and cash equivalents	35.1
Other current assets	33.0
Total assets	492.0
Non-current liabilities	238.7
Current liabilities	40.6
Total liabilities	279.3
Net assets ¹	212.7
Fair value of the shares	607.5
Goodwill	394.8

¹ The calculation of the fair value of these assets and liabilities has not yet been concluded because analyses relating to the assets and liabilities are still outstanding. Therefore, provisional values have been stated in accordance with IFRS 3.45.

The fair value of the trade receivables acquired as part of the business combination stood at €10.8 million. There were no material individual impairment losses. It is anticipated that the total amount of the trade receivables will be largely collected.

First-time full consolidation of Plusnet GmbH

The expansion of activities in the area of telecommunications through the acquisition of 100% of the shares in Plusnet GmbH, Cologne, from QSC AG on 30 June 2019 is part of the strategy to develop EnBW into a supplier of sustainable infrastructure. The company was fully consolidated in the EnBW consolidated financial statements from this point in time. Plusnet has many years of experience in the operation of modern broadband technology as well as established sales channels, and also operates its own voice-data network across Germany.

The fair value of Plusnet GmbH at the time of full consolidation was €229.0 million. There were no significant incidental acquisition costs incurred as part of the transaction. The purchase price was paid in the form of cash and cash equivalents. The amount reported for goodwill is a preliminary figure due to the fact that the calculation of the fair value of the assets and liabilities has not yet been concluded. In particular, it represents future growth expectations and is not deductible for tax purposes.

If Plusnet GmbH had been fully consolidated since the beginning of the year, Group revenue would have increased by €124.2 million to €1,653.2 million and earnings after income taxes would have increased by €14.6 million to €340.0 million.

The following assets and liabilities were taken over as part of the acquisition:

in € million	Fair value
Intangible assets	5.5
Property, plant and equipment	99.5
Other non-current assets	0.8
Cash and cash equivalents	33.4
Other current assets	34.9
Total assets	174.1
Non-current liabilities	79.7
Current liabilities	35.6
Total liabilities	115.3
Net assets ¹	58.8
Fair value of the shares	229.0
Goodwill	170.2

¹ The calculation of the fair value of these assets and liabilities has not yet been concluded because analyses relating to the assets and liabilities are still outstanding. Therefore, provisional values have been stated in accordance with IFRS 3.45.

The fair value of the trade receivables acquired as part of the business combination stood at €32.7 million. The individual impairment losses totalled €3.5 million. It is anticipated that the total amount of the trade receivables will be largely collected.

Revenue

Alongside revenue from contracts with customers, there is other revenue from ordinary business activities. This is how they break down:

in € million ¹	01/01– 30/06/2019	01/01– 30/06/2018
Revenue from contracts with customers	11,381.8	9,992.3
Other revenue	147.2	80.7
Total	11,529.0	10,073.0

¹ The figures for the previous year have been restated.

The change in revenue is explained in more detail in the section “The EnBW Group” and mainly relates to revenue from contracts with customers.

The figures for revenues in the previous year have been restated because, in comparison to the interim reporting in 2018, the application of IFRS 15 meant that further aspects were reported net at the end of the year. Due to the changed classification of three companies in the previous year, there was a slight shift between the segments.

The following tables break down the revenue according to region and products.

External revenue by region

in € million 01/01-30/06/2019	Sales	Grids	Renewable Energies	Generation and Trading	Other/ Consolidation	Total
Revenue from contracts with customers by region	3,932.8	1,518.4	284.4	5,641.1	5.1	11,381.8
Germany	(3,296.9)	(1,433.6)	(226.9)	(4,969.1)	(5.1)	(9,931.6)
European currency zone excluding Germany	(54.8)	(2.5)	(4.0)	(659.3)	(0.0)	(720.6)
Rest of Europe	(581.1)	(82.3)	(53.5)	(12.7)	(0.0)	(729.6)
Rest of world	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Other revenue	2.3	144.9	0.0	0.0	0.0	147.2
Total	3,935.1	1,663.3	284.4	5,641.1	5.1	11,529.0

External revenue by region

in € million ¹ 01/01-30/06/2018	Sales	Grids	Renewable Energies	Generation and Trading	Other/ Consolidation	Total
Revenue from contracts with customers by region	3,765.2	1,443.6	266.7	4,513.1	3.7	9,992.3
Germany	(3,244.1)	(1,355.2)	(175.3)	(3,747.2)	(3.6)	(8,525.4)
European currency zone excluding Germany	(54.0)	(2.3)	(3.6)	(714.6)	(0.0)	(774.5)
Rest of Europe	(467.1)	(86.1)	(87.8)	(51.3)	(0.0)	(692.3)
Rest of world	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.1)
Other revenue	1.9	78.8	0.0	0.0	0.0	80.7
Total	3,767.1	1,522.4	266.7	4,513.1	3.7	10,073.0

¹ The figures for the previous year have been restated.

External revenue by product

in € million 01/01-30/06/2019	Sales	Grids	Renewable Energies	Generation and Trading	Other/ Consolidation	Total
Revenue from contracts with customers by product	3,932.8	1,518.4	284.4	5,641.1	5.1	11,381.8
Electricity	(2,625.9)	(995.4)	(261.0)	(2,954.4)	(0.0)	(6,836.7)
Gas	(1,233.9)	(287.2)	(3.1)	(2,485.4)	(0.0)	(4,009.6)
Energy and environ- mental services/other	(73.0)	(235.8)	(20.3)	(201.3)	(5.1)	(535.5)
Other revenue	2.3	144.9	0.0	0.0	0.0	147.2
Total	3,935.1	1,663.3	284.4	5,641.1	5.1	11,529.0

External revenue by product

in € million ¹ 01/01-30/06/2018	Sales	Grids	Renewable Energies	Generation and Trading	Other/ Consolidation	Total
Revenue from contracts with customers by product	3,765.2	1,443.6	266.7	4,513.1	3.7	9,992.3
Electricity	(2,641.6)	(947.6)	(245.4)	(1,739.1)	(0.0)	(5,573.7)
Gas	(1,063.1)	(270.9)	(3.6)	(2,531.8)	(0.0)	(3,869.4)
Energy and environ- mental services/other	(60.5)	(225.1)	(17.7)	(242.2)	(3.7)	(549.2)
Other revenue	1.9	78.8	0.0	0.0	0.0	80.7
Total	3,767.1	1,522.4	266.7	4,513.1	3.7	10,073.0

¹ The figures for the previous year have been restated.

Revenues mainly arise from goods and services that are satisfied over time.

Assets held for sale

The decrease in assets held for sale was primarily attributable to the 6% shareholding in EWE that was recognised under other financial assets, which was acquired by EWE-Verband in 2019 due to EWE exercising its right to buy the shares. Furthermore, EMB Energie Mark Brandenburg GmbH which is accounted for using the equity method was reclassified as assets held for sale. The sale is expected to be completed in the third quarter of 2019.

Dividends

On 8 May 2019, the Annual General Meeting of EnBW AG approved the proposal by the Board of Management and the Supervisory Board to distribute a dividend of €0.65 per share for the 2018 financial year. This corresponds to a dividend payment of €176.1 million.

Contingent liabilities and other financial commitments

Compared to 31 December 2018, contingent liabilities and other financial commitments decreased by €1,651.3 million to €36,431.8 million. This decrease was mainly due to lower purchase obligations in the gas sector and lower financial commitments from lease agreements. Commitments from operating leases are recognised on the balance sheet since 1 January 2019 due to the application of IFRS 16.

Notes relating to fair value

The fair value of financial assets and financial liabilities is determined by reference to quoted market prices, insofar as the financial instruments are traded on an active market, or by using valuation techniques such as the discounted cash flow method. Where the parameters used in the valuation techniques are not supported by observable market data, assumptions need to be made which can affect the fair value of financial assets and financial liabilities.

The fair value and carrying amounts of the financial assets and financial liabilities under the individual balance sheet items are shown below.

Carrying amounts and fair value of financial instruments

in € million	30/06/2019			31/12/2018		
	Fair value	Not within the scope of application	Carrying amount	Fair value	Not within the scope of application	Carrying amount
Financial assets	5,917.7	527.1	6,444.8	5,706.8	494.4	6,201.2
Measured at fair value through profit or loss	(3,979.3)		(3,979.3)	(3,697.1)		(3,697.1)
Measured at fair value in equity	(1,604.6)		(1,604.6)	(1,688.9)		(1,688.9)
Measured at amortised cost	(333.8)		(333.8)	(320.8)		(320.8)
Trade receivables	4,095.4		4,095.4	4,817.7		4,817.7
Other assets	3,706.1	649.4	4,355.5	3,898.5	632.2	4,530.7
Measured at fair value through profit or loss	(2,299.2)		(2,299.2)	(2,586.1)		(2,586.1)
Measured at amortised cost	(1,175.2)		(1,175.2)	(1,140.4)		(1,140.4)
Derivatives designated as hedging instruments	(231.7)		(231.7)	(152.6)		(152.6)
Carrying amount in accordance with IAS 17	–		–	(19.4)		(19.4)
Cash and cash equivalents	1,709.4		1,709.4	2,249.4		2,249.4
Assets held for sale ¹	0.0	87.9	87.9	299.2	43.1	342.3
Total	15,428.6	1,264.4	16,693.0	16,971.6	1,169.7	18,141.3
Financial liabilities	8,298.4		7,886.8	7,432.1		6,996.2
Measured at amortised cost	(8,298.4)		(7,886.8)	(7,332.3)		(6,896.4)
Carrying amount in accordance with IAS 17	–		–	(99.8)		(99.8)
Trade payables	2,027.7	1,870.8	3,898.5	802.4	4,237.4	5,039.8
Other liabilities and subsidies	4,193.4	1,992.3	6,185.6	3,588.5	2,119.3	5,707.8
Held for trading	(2,280.2)		(2,280.2)	(2,463.6)		(2,463.6)
Measured at amortised cost	(1,767.3)		(1,767.3)	(1,048.2)		(1,048.2)
Derivatives designated as hedging instruments	(145.9)		(145.9)	(76.7)		(76.7)
Liabilities directly associated with assets classified as held for sale	0.0		0.0	0.0	21.2	21.2
Total	14,519.5	3,863.1	17,971.0	11,823.0	6,377.9	17,765.0

¹ This refers to a non-recurring measurement of the fair value due to the application of IFRS 5.

The individual levels of the valuation hierarchy are as follows:

- > Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities
- > Level 2: Other techniques for which all inputs that have a significant effect on the recorded fair value are observable, either directly or indirectly
- > Level 3: Procedures that use input parameters which have a material impact on the recorded fair value and are not based on observable market data

At the end of each reporting period it is determined whether there is any reason to reclassify between the levels of the valuation hierarchy. A reclassification is carried out if the valuation procedure for measuring fair value is being changed and the input factors with significance for the valuation lead to an allocation to a different level.

Counterparty default risk is taken into account when measuring the fair value of derivative financial instruments. Default risk with respect to an individual counterparty is calculated on the basis of the net risk position. For more information on the valuation techniques and the input parameters used, please refer to the explanations in the section "Financial assets" in the extended version of the Integrated Annual Report 2018 on p. 164.

Hierarchy of input data

in € million	30/06/2019			31/12/2018		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Financial assets	2,807.3	1,320.4	1,456.2	2,754.7	1,215.8	1,415.5
Measured at fair value through profit or loss	(1,468.2)	(1,083.0)	(1,428.2)	(1,270.6)	(1,011.0)	(1,415.5)
Measured at fair value in equity	(1,339.1)	(237.5)	(28.0)	(1,484.1)	(204.8)	
Other assets	25.0	2,505.9	0.0	103.5	2,635.2	0.0
Measured at fair value through profit or loss	(25.0)	(2,274.2)		(102.7)	(2,483.4)	
Derivatives designated as hedging instruments	(0.0)	(231.7)		(0.8)	(151.8)	
Assets held for sale ¹						291.9
Total	2,832.3	3,826.3	1,456.2	2,858.2	3,851.0	1,707.4
Other liabilities and subsidies	5.6	2,420.5	0.0	99.7	2,440.6	0.0
Held for trading	(3.2)	(2,277.0)		(98.9)	(2,364.7)	
Derivatives designated as hedging instruments	(2.4)	(143.5)		(0.8)	(75.9)	
Total	5.6	2,420.5	0.0	99.7	2,440.6	0.0

¹ This refers to a non-recurring measurement of the fair value due to the application of IFRS 5.

The following table shows the development of the financial instruments to be accounted for at fair value in accordance with Level 3:

in € million	As of 01/01/2019	Changes in consolidated companies, currency adjustments, other	Changes recognised through profit or loss	Additions	Disposals	As of 30/06/2019
Financial assets	1,415.5	-4.0	40.0	127.8	-151.1	1,428.2

The changes recognised through profit or loss of €40.0 million (previous year: €67.9 million) were recognised in the financial result. In the first six months of the year, results from Level 3 financial instruments were recognised in the investment result or financial result in the amount of €56.2 million (previous year: €46.3 million), of which €57.4 million (previous year: €46.3 million) is accounted for by financial instruments still held on the reporting date.

Segment reporting

01/01–30/06/2019

in € million	Sales	Grids	Renewable Energies	Generation and Trading	Other/ Consolidation	Total
External revenue	3,935.1	1,663.3	284.4	5,641.1	5.1	11,529.0
Internal revenue	402.4	708.3	192.9	1,666.0	-2,969.6	0.0
Total revenue	4,337.5	2,371.6	477.3	7,307.1	-2,964.5	11,529.0
Adjusted EBITDA	108.8	719.8	204.9	261.2	-18.7	1,276.0
EBITDA	105.6	719.7	201.2	65.1	-20.5	1,071.1
Adjusted EBIT	68.0	468.6	107.0	-32.2	-39.1	572.3
EBIT	64.8	468.5	101.6	-228.3	-40.9	365.7
Scheduled amortisation and depreciation	-40.8	-251.2	-97.9	-293.4	-20.4	-703.7
Impairment losses	0.0	0.0	-1.7	0.0	0.0	-1.7
Capital employed as of 30/06/2019	1,549.0	7,963.1	4,193.0	2,555.8	3,302.7	19,563.6

01/01–30/06/2018

in € million	Sales	Grids	Renewable Energies	Generation and Trading	Other/ Consolidation	Total
External revenue	3,767.1	1,522.4	266.7	4,513.1	3.7	10,073.0
Internal revenue	385.8	1,205.0	153.4	1,351.9	-3,096.1	0.0
Total revenue	4,152.9	2,727.4	420.1	5,865.0	-3,092.4	10,073.0
Adjusted EBITDA	158.9	684.9	164.8	139.4	-7.0	1,141.0
EBITDA	159.9	690.4	167.0	174.4	-7.0	1,184.7
Adjusted EBIT	125.1	460.3	80.9	-96.8	-20.1	549.4
EBIT	126.1	465.8	83.1	-67.0	-21.2	586.8
Scheduled amortisation and depreciation	-33.8	-224.6	-83.9	-236.2	-13.1	-591.6
Impairment losses	0.0	0.0	0.0	-5.2	-1.1	-6.3
Capital employed as of 31/12/2018	1,051.2	7,213.9	3,843.2	2,122.6	2,714.6	16,945.5

Adjusted EBITDA is one of the key internal performance indicators. Adjusted EBITDA is an earnings ratio before the investment and financial results, income taxes and amortisation, adjusted for non-operating effects, which accurately reflects the development of results of operations. In the management report, the performance of the segments is explained with the aid of adjusted EBITDA. Adjusted EBITDA can be reconciled to earnings before taxes (EBT) as follows:

in € million	01/01– 30/06/2019	01/01– 30/06/2018
Adjusted EBITDA	1,276.0	1,141.0
Non-operating EBITDA	-204.9	43.7
EBITDA	1,071.1	1,184.7
Amortisation and depreciation	-705.4	-597.9
Earnings before interest and taxes (EBIT)	365.7	586.8
Investment result	74.9	47.3
Financial result	-36.1	-62.2
Earnings before tax (EBT)	404.5	571.9

Segment reporting is based on internal reporting.

Sales of electricity and gas, as well as the provision of services related to the energy industry, such as billing services, energy supply and energy-saving contracting or new energy solutions, are summarised in the Sales segment. The Grids segment encompasses the value-added stages of transmission and distribution of electricity and gas. In addition, the provision of grid-related services and the supply of water is reported in the Grids segment. Activities in the area of power generation using renewable energies are presented in their own segment. This includes the project development, construction and operation of power plants based on renewable energies. The Generation and Trading segment encompasses electricity generation and the trading of gas and electricity, the provision of system services for the operators of transmission grids, the gas midstream business with storage, the operation of reserve power plants, district heating, environmental services and the dismantling of power plants. Until the sale of VNG Norge AS and its subsidiary in the third quarter of 2018, the Generation and Trading segment also included the exploration and production of gas. All activities which cannot be attributed to the separately presented activities of the segments are disclosed together with eliminations between the segments under Other/Consolidation.

The segment figures have been determined in accordance with the accounting policies used in the consolidated financial statements. Internal revenue shows the level of sales between Group companies. Sales between the segments were made at market prices.

Significant events after the reporting date

No events that are considered significant for assessing the results of operations, financial position and net assets of EnBW occurred after 30 June 2019.

Certification following auditor's review

To EnBW Energie Baden-Württemberg AG, Karlsruhe

We have reviewed the interim condensed consolidated financial statements, comprising the income statement, statement of comprehensive income, balance sheet, condensed cash flow statement, statement of changes in equity and selected explanatory notes, together with the interim Group management report of EnBW Energie Baden-Württemberg AG, Karlsruhe, for the period from 1 January 2019 to 30 June 2019, which are part of the six-monthly financial report pursuant to section 115 German Securities Trading Act (WpHG). The preparation of the interim condensed consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS) on interim financial reporting as adopted by the EU and of the interim Group management report in accordance with the requirements of the WpHG applicable to interim Group management reports is the responsibility of the company's legal representatives. Our responsibility is to issue a report on the interim condensed consolidated financial statements and the interim Group management report based on our review.

We conducted our review of the interim condensed consolidated financial statements and the interim Group management report in accordance with German generally accepted standards for the review of financial statements promulgated by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) (IDW). Those standards require that we plan and perform the review to obtain a certain level of assurance in our critical appraisal to preclude that the interim condensed consolidated financial statements have not been prepared, in all material respects, in accordance with the IFRS on interim financial reporting as adopted by the EU and that the interim Group management report has not been prepared, in all material respects, in accordance with the applicable provisions of the WpHG. A review is limited primarily to making inquiries of company personnel and applying analytical procedures and thus does not provide the assurance obtainable from an audit of financial statements. In accordance with our engagement, we have not performed an audit and, accordingly, we do not express an audit opinion.

Based on our review, nothing has come to our attention that causes us to believe that the interim condensed consolidated financial statements have not been prepared, in all material respects, in accordance with the IFRS on interim financial reporting as adopted by the EU and that the interim Group management report has not been prepared, in all material respects, in accordance with the provisions of the WpHG applicable to interim Group management reports.

Stuttgart, 24 July 2019

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Prof. Dr. Wollmert
German Public Auditor

Prof. Dr. Kuhn
German Public Auditor

Declaration of the legal representatives

We assure to the best of our knowledge that, in accordance with the accounting principles applicable for six-monthly financial reporting, the six-monthly consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the Group and that the interim Group management report gives a true and fair view of the business development including the result and situation of the Group and also describes the significant opportunities and risks relating to the anticipated development of the Group in the remaining financial year.

Karlsruhe, 24 July 2019

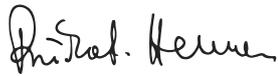
EnBW Energie Baden-Württemberg AG



Dr. Mastiaux



Kusterer



Rückert-Hennen



Dr. Zimmer

Important notes

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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 Six-Monthly Financial Report can also be downloaded from the Internet in German or English. In cases of doubt, the German version shall be authoritative.

Financial calendar

25 July 2019

Publication of the Six-Monthly Financial Report
January to June 2019

16 October 2019

Capital Market Day 2019

8 November 2019

Publication of the Quarterly Statement
January to September 2019

26 March 2020

Publication of the Integrated Annual Report 2019

12 May 2020

Annual General Meeting 2020

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

