# Six-Monthly Financial Report

January to June 2017



Adjusted EBITDA > increases to €1,072.6 million

Earnings forecast for 2017 > unchanged at 0% to +5%

Reimbursement of nuclear fuel rod tax > equity ratio increases to more than 13%

**VNG >** first-time full consolidation



# Performance indicators of the EnBW Group

#### Financial and strategic performance indicators

in € million	01/01 - 30/06/2017	01/01- 30/06/2016	Change in %	01/01- 31/12/2016
External revenue	10,475.8	9,811.4	6.8	19,368.4
Adjusted EBITDA	1,072.6	967.5	10.9	1,938.9
TOP Share of adjusted EBITDA accounted for by Sales in € million/in %	180.8/16.9	138.3/14.3	30.7/-	249.7/12.9
TOP Share of adjusted EBITDA accounted for by Grids in € million/in %	610.6/56.9	523.8/54.1	16.6/-	1,004.1/51.8
TOP Share of adjusted EBITDA accounted for by Renewable Energies in € million/in %	152.4/14.2	153.1/15.8	-0.5/-	295.3/15.2
TOP Share of adjusted EBITDA accounted for by Generation and Trading in € million/in %	102.3/9.5	148.6/15.4	-31.2/-	337.2/17.4
Share of adjusted EBITDA accounted for by Other/Consolidation in € million/in %	26.5/2.5	3.7/0.4	- / -	52.6/2.7
EBITDA	2,639.6	887.8	_	730.7
Adjusted EBIT	543.0	504.0	7.7	1,024.5
EBIT	2,082.6	402.0	-	-1,662.9
Group net profit/loss <sup>1</sup>	1,679.3	-194.2	-	-1,797.2
Earnings per share from Group net profit/loss in €1	6.20	-0.72	-	-6.64
Retained cash flow	1,884.6	289.9	-	949.5
Net (cash) investment	398.5	479.3	-16.9	1,316.9

#### Non-financial performance indicators<sup>2</sup>

	01/01 – 30/06/2017	01/01- 30/06/2016	Change in %	01/01- 31/12/2016
Customers goal dimension				
TOP EnBW/Yello Customer Satisfaction Index <sup>3</sup>	139/164	127/143	9.4/14.7	132/150
TOP SAIDI (electricity) in min/year	14	11	27.3	16
Employees goal dimension				
TOP LTIF <sup>4</sup>	3.1	3.7	-16.2	3.9

#### Employees<sup>5, 6</sup>

	30/06/2017	30/06/2016	Change in %	31/12/2016
Number	21,324	20,263	5.2	20,409

<sup>1</sup> In relation to the profit/loss attributable to the shareholders of EnBW AG.
 <sup>2</sup> The values for the key performance indicators Reputation Index, Employee Commitment Index (ECI), "installed output of renewable energies in GW and the share of the generation capacity in % accounted for by renewable energies" and CO<sub>2</sub> intensity will be exclusively collected at the end of the year.
 <sup>3</sup> EnBW has been working together with a new market research company since 2017. Despite using the same survey methodology and random sampling, current and earlier values are only comparable to a limited extent.
 <sup>4</sup> Variations in the group of consolidated companies; only those companies controlled by the Group are included.
 <sup>5</sup> Number of employees excluding marginally employed persons, apprentices/trainees and inactive employees.
 <sup>6</sup> The number of employees for the ITOs is only updated at the end of the year; for intervals of less than a year, the number of employees from 31/12/2016 is carried forward.

# Q2 2017



# "Through **VNG** we are strengthening our **gas business** along the value added chain.

As a result of the full consolidation of VNG, EnBW has become the number 2 in the gas transport sector and the third-largest German gas supplier. Our engagement in VNG underlines the firm commitment to the Energiewende in our strategy. Due to the well-developed pipeline network operated by VNG, we expect stable and reliable earnings in the regulated transport business."

Thomas Kusterer, Chief Financial Officer

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#### Title page

Energy connects: The task is now to network various different infrastructures both within and beyond the energy sector even more strongly together, s well as to expand renewable energies. On the road to a low-emission energy world, gas plays an important role as the perfect partner for renewable energies. You will find more about the expansion of the gas infrastructure at EnBW on the following two pages.

# Gas is fuelling Lithe Energie

Gas is playing an important role on the road to a low-emission energy world. The acquisition of VNG has made EnBW the third-largest supplier on the German gas market.

When they hear the word Energiewende, most people think of electricity generated by the wind and sun. Natural gas is comparatively climate- friendly and will also play an important role in the conversion of the energy infrastructure. EnBW has been focussing on this area for many years and has expanded it into an important pillar of its business.

An important milestone is the acquisition of VNG-Verbundnetz Gas Aktiengesellschaft based in Leipzig, in which EnBW holds a shareholding of almost 75%. The gas supplier based in eastern Germany with around 1,300 employees has been fully consolidated <u>since 18 May 2017</u>. As a result, EnBW has become the third-largest gas supplier in Germany. The aim is for this division to continue to grow under its own steam from this strong starting position.

The business activities of EnBW and VNG complement each other well – especially in the infrastructure sector, which includes transport grids and storage facilities. In eastern Germany, the VNG grid subsidiary ONTRAS operates 7,000 kilometres of transport pipelines. The cross-regional gas grid operated by EnBW has thus grown to 9,000 kilometres.

# Gas is a long-term and flexible energy source with low CO<sub>2</sub> emissions

The expansion of the gas business underlines the EnBW strategy with its clear commitment to the Energiewende and the associated massive expansion of renewable energies. However, electricity generated from the wind and sun is dependent on the weather. Shortages need to be covered by conventional power

#### VNG-Verbundnetz Gas Aktiengesellschaft

#### Core business

exploration and production, trading, sales and services, transport, storage

#### Facts

Leipzig Headquarters of the company

74.21% EnBW shareholding 1,300 Number of employees

**7,000** km Transport pipeline plants, as well as by the networking of decentralised and renewable power plants in the future.

When the final German nuclear power plant is disconnected from the grid in 2022, these solutions will be even more in demand than today in order to provide reserve power. Gas is then the best alternative on the road towards an age without greenhouse gases.

# wende

Large amounts of  $CO_2$  emissions could also be saved on the heating market if gas as an energy source were to be used more widely and more efficiently. Around 35% of overall energy consumption is accounted for by this area. Emissions can be drastically reduced through the use of modern condensing boilers or through district and local heating concepts. Gas as an energy source plays a key role here.

EnBW has been expanding its gas business for many years. It placed a large gas storage tank into operation in Etzel in northern Germany five years ago. At the same time, the company concluded a supply contract with its Russian partner Novatek. In 2014, EnBW acquired all shares in GasVersorgung Süddeutschland GmbH and terranets bw GmbH, which operates the 2,000 kilometre transport grid in Baden-Württemberg. It then acquired the majority shareholding in VNG.

#### Business success with a long pipeline

The gas infrastructure taken over with the acquisition and which covers large parts of eastern Germany is particularly profitable. The grids business is a regulated market. Operators can thus count on stable earnings in the medium term – a good supplement to the normally fast-moving energy business. In the gas transport sector, EnBW with VNG will become the number 2 in Germany.

In the long term, the gas infrastructure could play an even more important role – when technologies that can generate gas synthetically or through electrolysis using wind energy become marketable. There is also real market potential in the transport sector in the areas of inland shipping and heavy goods vehicles because both of these are difficult to run on electricity from today's perspective. Due to the acquisition of VNG, EnBW is now active in all fields of the gas market – from exploration and production through to trading and transport, and storage through to the end-customer business.



## 3 questions for Markus Baumgärtner Head of the gas value chain

# Why does the acquisition of the majority shareholding in VNG fit the gas strategy of EnBW?

VNG is an outstanding addition to our previous gas activities and supplements them along the entire value added chain. We will become one of the leading gas companies on the market and can achieve further growth under our own steam. We can now enter into more in-depth cooperation discussions following the takeover of VNG and realise additional earnings contributions for the Group.

# What specific targets does EnBW have for its gas business?

We began to purposely expand the gas business into a significant earnings pillar of the EnBW Group in 2010. And today we have now already doubled the financial result from the gas business. We want to triple the operating result by 2020. Our strategy and our activities are focussed on achieving this goal.

# What influence does decarbonisation have on the gas business?

The gas market will also change as part of the process of decarbonisation and in order to achieve the climate targets. We have already positioned ourselves for these developments and have taken this into account in our gas strategy. The gas infrastructure will play a special role as the energy storage system of the future for both fossil natural gas and also for hydrogen and methane generated from renewable energies. Gas is the perfect partner for renewable energies.

#### 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 once again – following the realignment as part of the Energiewende – an increasingly advantageous risk-return profile.

Our core market is Baden-Württemberg, where we are positioned as a market leader. Beyond our core market, we are active throughout Germany and in Europe. EnBW supplies in total around 5.5 million customers with energy. With its strong brands, EnBW enjoys a close relationship with customers, orientating itself to their needs through its efficiency and quality.

EnBW acquired a 74.21% shareholding in VNG-Verbundnetz Gas Aktiengesellschaft, Leipzig, in 2016. Following the full consolidation of the company on 18 May 2017, EnBW has doubled its gas business and become the third-largest supplier on the German gas market. The acquisition of VNG represents an important step in the restructuring and further development of EnBW, both strategically and economically. As a result, the EnBW Group has expanded its business activities to include the areas of gas exploration and gas production.

Detailed information on the business model of EnBW can be found in the **E** Integrated Annual Report 2016 from p. 13.

#### 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. 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. By 2020, a significant share of our earnings – the target value for adjusted EBITDA is between €2.3 and €2.5 billion - is to be generated through strategic initiatives. 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 around 70% in 2020. EnBW intends to invest €14.1 billion in total by 2020 (based on the reference year of 2012). To obtain the financial headroom required for

these extensive investments, we have considerably extended our divestiture programme – involving conventional divestitures, cash flow from participation models and the disposal of assets and subsidies – to around  $\notin$ 5.1 billion (based on the reference year of 2012).

A detailed presentation of the EnBW Group strategy can be found in the Integrated Annual Report 2016 from p. 22.

#### Corporate strategy outlook

EnBW is rigorously and confidently implementing its 2020 strategy. The following is clear at the half-way stage of the strategy period 2013 to 2020: The improvements in efficiency and the growth initiatives designed to place the company on new foundations ready for the future have been implemented to a significant extent or are well on track. A good example of the success of the restructuring of the portfolio is the area of wind energy. In the offshore wind sector, EnBW Hohe See and EnBW Albatros in the North Sea are two further major projects following EnBW Baltic 1 and EnBW Baltic 2. Another offshore wind farm – EnBW He Dreiht – is at the planning stage. In the onshore wind sector, EnBW has now become one of the three most important project developers and operators of wind farms in Germany. In 2016 alone, investments of €480 million were made in the distribution grid to integrate further decentralised generation plants into the supply system, while the security of supply has been improved using intelligent technology – such as automated troubleshooting. Another important part of the restructuring of EnBW is the optimisation of conventional generation and the dismantling of the nuclear power plants. If there is no new and unexpected massive deterioration in the general conditions, EnBW will achieve its goals for 2020 and thus reach one of the most important milestones in the history of the company.

The pace of change on the market is continuing to increase, while new competitors are offering inexpensive and creative solutions and products. In addition, there are trends such as urbanisation, digitalisation and networking. Previously separate and individual systems and infrastructures are converging through digitalisation to form one interactive complete system. The most important prerequisite is a reliable, safe, sustainable and user-friendly operation of the infrastructure. This is where EnBW sees its future role: As a result of its decades of core expertise, EnBW has good prospects for assuming a central role as an infrastructure partner in the future energy world. After 2020, EnBW will focus on growth and innovations for the markets of the future, set its sights on new markets and set new priorities.

#### 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 composition as of 30 June 2017 breaks down as follows:

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

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

Due to the shareholder composition of EnBW AG and the very limited trading volumes in the shares as a result, the EnBW stock market price is only subject to minor fluctuations. The stock market price stood at  $\leq$ 21.80 on 30 June 2017.

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. In June 2017, numerous representatives from the core banks of EnBW participated in the EnBW Bankers' Day, which was held at VNG in Leipzig ( www.enbw.com/bankersday). The Capital Market Day will be held in Stuttgart on 20 September 2017. The EnBW Factbook 2017 will be published at the same time.

#### Society

EnBW is acutely aware of its responsibility towards society. Through its commitment to addressing the concerns and interests of society, it conducts its business in close customer proximity and aligns its activities to the target groups of end customers, business partners and local authorities. It is chiefly involved within its primary business sphere of influence in Baden-Württemberg in this regard. Support for superordinate social issues is concentrated on the core areas of popular sport, education, social issues, the environment, and art and culture.

The influx of refugees into Europe remains a major social, political and economic challenge. 32 refugees in Karlsruhe and Stuttgart have been taking part in an integration programme since January 2017 to prepare them for an apprenticeship at EnBW. 14 of these refugees will start an apprenticeship in autumn 2017. The second year of the career integration

programme began in March 2017, with around 30 participants completing an introductory qualification.

EnBW has already been a sponsor of Science Days for eleven years and a premium partner of Science Days for Children since 2012. In May 2017, more than 35 workshops, shows and participation events for children to discover and learn were held at Europa Park in Rust and offered educators and teachers thematic and methodological ideas for their work.

The 15th Children's and Youth Festival was held in Stuttgart on 24 and 25 June 2017. EnBW has been showcased with its own promotional area at the event since 2012, where it runs activities offering children and young people the opportunity for play, fun and adventure in the areas of knowledge, technology, health, nutrition, creativity or sport.

EnBW provides manpower and financial support to the Energy & Climate Protection Foundation Baden-Württemberg. The foundation holds numerous events that deal with issues relating to the energy industry, as well as the themes of climate protection and renewable energies, digitalisation and innovation. At the Urban Energy Talks 2017 held on 29 June, the focus was placed, for example, on the Energiewende in cities and individual panels discussed the future of housing, the urban infrastructures of tomorrow and urban mobility ( www.energieundklimaschutzbw.de).

In the arts, EnBW works closely together with, amongst others, the Kunstakademie Stuttgart (Stuttgart Art Academy) and regularly offers young artists space in its buildings for their exhibitions. Students on the Industrial Design course presented installations and experimental objects in the foyer of the EnBW building in Fasanenhof in Stuttgart from 20 June to 21 July 2017.

Alongside economic and technical aspects, the Energiewende and the associated phasing out of nuclear energy also encompass elements of social responsibility. EnBW unequivocally assumes responsibility for the safe dismantling of the nuclear power plants it operates. This process is accompanied by intensive and open dialogue with all stakeholder groups to ensure transparency and acceptance. A current example is the transfer of fuel rods from the Obrigheim nuclear power plant to the intermediate storage site in Neckarwestheim. The aim, where possible, is to complete all of the anticipated five transports by ship in 2017. The first fuel elements were successfully transported at the end of June. EnBW already began to inform the public about its plans to transfer the fuel elements from Obrigheim in 2013. This public relations work continued during the process and was intensified once the decision to realise the project was taken in June 2016. Alongside the general public, particular attention was also given to those communities neighbouring the transport route. EnBW has set up a project website for the public. Further information and also short films that explain the processes involved in the transport can be found at 🕙 www.enbw.com/castortransport.

#### In dialogue with our stakeholders (examples)

Stakeholde	r	Opportunity for dialogue	Main themes	Further information
	۲• ،	Annual General Meeting	> Dialogue with shareholders	<u> http://hv.enbw.com</u>
Ghareholders/	•	Telephone conference for analysts and investors, financial reports	<ul> <li>Corporate economic development and position- ing on capital market, publication of the Quarterly Statement and Six-Monthly Financial Report</li> </ul>	<ul> <li>www.enbw.com/investor-update</li> <li>www.enbw.com/financial-publications</li> </ul>
capital market		EnBW Bankers' Day in Leipzig	<ul> <li>Latest developments at EnBW and in the energy sector</li> </ul>	www.enbw.com/bankersday
	۲• ،	EnBW aktuell	<ul> <li>Mid-term review of EnBW 2020 strategy and strategic outlook for post 2020 period</li> </ul>	
<b>—</b> –	,	4th series of "1492"	<ul> <li>Project teams work on cross-departmental projects outside normal Group processes.</li> </ul>	
Employees	L.,	EnBW Innovation Days	<ul> <li>In 72 hours, employees develop the first business models based on their ideas for the third time.</li> </ul>	Page 8
_	, [•	Platform for dialogue and exchanging information with con- tracting and service customers	<ul> <li>For example: Energy Strategy Days, practical day on current billing themes and a forum for existing customers</li> </ul>	
Customers	- <b>-</b> • '	Customer surveying tools such as Customer Thursday or Speed Testing	<ul> <li>Surveys in direct dialogue with customers on current themes and online surveys using market research tools</li> </ul>	
Customers	L <b>。</b> ,	Social media/customer blog& newsletter/customer magazine	<ul> <li>Information on latest news, products, services and events</li> </ul>	<ul> <li>https://twitter.com/enbw</li> <li>www.facebook.com/enbw</li> <li>www.enbw.com/blog</li> </ul>
出	• `	Community 4.0	> Developing future concepts for local authorities	Swww.enbw.com
Local authorities/	L.,	Workshop meetings	<ul> <li>Discussion forum between Netze BW and local authorities</li> </ul>	
oublic utilities	<b>,</b>	Supporting events for children and young people	<ul> <li>For example: Science Days in Europa-Park, Chil- dren's and Youth Festival in Stuttgart, environmental education initiative "Neckar Junior Ranger"</li> </ul>	<ul> <li>www.science-days.de</li> <li>www.kinder-jugendfestival.de</li> <li>www.energieundklimaschutzbw.de</li> </ul>
ŧŤŤŧ _	-• '	Start-up-Gipfel Baden-Württemberg	<ul> <li>EnBW is participating in this major networking event for start-ups.</li> </ul>	www.startupgipfel.de
Society/ environment	-• '	Biodiversity: funding programme: "Stimuli for Diversity"	<ul> <li>100th project for the protection and preservation of habitats for indigenous amphibians and reptiles</li> </ul>	www.enbw.com/biodiversitaet Page 24
	L• ,	Green Innovation and Investment Forum	<ul> <li>Honouring the best green tech ideas in cooperation with bwcon and Umwelttechnik BW</li> </ul>	www.energieundklimaschutzbw.de
ע פע אַנ	• ۱	Development discussions with suppliers	<ul> <li>Dialogue and training events with suppliers to further develop cooperation</li> </ul>	
Suppliers/	-[,	<ul> <li>Dialogue on the responsible handling of coal procurement</li> </ul>	<ul> <li>Continuous dialogue with stakeholders with a focus on Germany and Colombia</li> </ul>	www.enbw.com/kohlebeschaffung Page 8
business partners	, • ،	Joint project "The road to a <2° economy"	<ul> <li>Development of inter-enterprise projects for decarbonisation and reducing emissions with participation from EnBW</li> </ul>	www.stiftung2grad.de
	-• '	EnBW Energy and Business Club (EWC)	> Event on the subject of: "Strategies for the energy policy of the future"	
2	_ <b>_</b> ,	Partner of the Tagesspiegel specialist forum "Energy"	<ul> <li>Topic: "Shutdown but what now? Perspectives on the dismantling of nuclear power plants"</li> </ul>	8 www.tagesspiegel.de
Politics	-• `	Discussion event "Urban Energy Talks 2017"	> Topic: "How will the Energiewende succeed in cities?"	www.energieundklimaschutzbw.de www.dialog-energie-zukunft.de
	-• '	2 debate evenings by the Energy & Climate Protection Foundation	<ul> <li>"The outlook for energy and climate policy" and "The first 100 days: climate policy post-Trump"</li> </ul>	www.energieundklimaschutzbw.de
	L.,	Offshore conference in Berlin in partnership with WELT	<ul> <li>Discussion forum with experts from the energy sector on the subject of offshore wind energy</li> </ul>	

#### Research, development and innovation

The goal of research and development at EnBW is to identify important trends and technological developments at an early stage and to develop the knowledge for subsequent commercial utilisation in pilot and demonstration projects. Therefore, we carry out research projects together with the operational units at EnBW or with customers directly at the site of their subsequent application. This ensures that successful research projects deliver innovations for EnBW. Research, development and innovation also leads in many cases to inventions and patents. The EnBW Group held 174 patents at the end of 2016, while eight new patents were awarded in the first half of 2017. The patents held by EnBW focus mainly on the areas of smart solutions, electromobility and biogas.

A good example of on-site pilot projects is the cooperation between EnBW, the storage system supplier ads-tec and the solar experts from Pohlen Solar with the leading retail company ALDI SÜD. Photovoltaic power plants fitted to the roofs of more than 1,200 branches of this discount store are generating climate-friendly solar electricity, of which 80% is used for the company's own consumption. The solar systems have now been combined with a battery storage system at three branches in the Frankfurt am Main region to create a virtual power plant. EnBW is responsible for energy management and uses a self-developed algorithm to continuously evaluate whether it is cheaper for ALDI SÜD to directly consume the solar electricity, store it or make it available on the energy market. ALDI SÜD aims to further increase its own consumption ratio through the installation of the battery storage system. In this practical test, EnBW has been able to demonstrate the great potential offered by solar power plants and storage systems when they are combined to form a virtual power plant.

The Energiewende urgently requires ways in which to store energy generated from the sun and wind. The EnBW subsidiary Erdgas Südwest GmbH is offering a new biohybrid system that is suitable for a multitude of applications. The aim is to realise this future-oriented concept in Ostrach in the Sigmaringen region from 2018. In an alternative power-to-gas process, Erdgas Südwest GmbH utilises electricity generated from the sun and wind in the biohybrid plant to cool biomethane down to -162 °C and liquefy it. The result is Bio-LNG (liquefied biomethane) that can be used in the chemicals industry, the transport sector or to supply energy to areas without a gas connection. The concept not only relieves the burden on the electricity grid but also links the electricity, heating and transport sectors. It stores renewable energy generated from the sun and wind in Bio-LNG to compensate for the erratic generation of electricity from renewable sources. The system acts as a link between the electricity and gas grids and, as a form of storage, represents an important component of the Energiewende.

The partners Electricité de Strasbourg and EnBW jointly operate the **Soultz-sous-Forêts geothermal power plant** that uses a natural geothermal reservoir at a depth of 5,000 metres. The electrical output of the power plant is 1.7 MW. After

renovating the power plant section in the summer of 2016 – and thus making the switch from research operation to the commercial production of geothermal energy – it is now in permanent operation and achieved 7,400 operating hours over the last twelve months.

In the last two years, EnBW has developed a **milling robot** together with the company Contec for removing coatings and contaminants from concrete walls. Contec specialises in technology for concrete and asphalt surfaces and has acquired the licence to use this EnBW invention. The new method enables the quick, automated processing of vertical surfaces even in difficult to access areas – both in conventional renovation projects and also in the dismantling of concrete buildings at nuclear power plants. The concrete milling robot is now ready for use and will be marketed by Contec.

EnBW develops new business models outside of its core business with the central innovation management system in order to quickly identify new sources of revenue for the Group and bring them to the market. The development of new skills and work processes plays a major role. The aim is to establish an agile innovation culture at EnBW in the long term, supported by selected partnerships and participating interests in start-up companies.

Innovation management places its main focus on the four business fields "Urban Infrastructure", "Networked Mobility", "Virtual Power Plant" and "Connected Home". One further enhancement of innovation management lies in the addition of two other market development tools: Company Builder accompanies internal projects and start-ups that have reached market maturity with key resources and expertise as they scale up. In addition, EnBW uses so-called "late-stage acquisitions" to gain majority shareholdings in market-ready companies with the aim of achieving substantial growth and securing significant market shares on new markets.

The project **WTT CampusOne** that focuses on the subject of digital learning moved into the Innovation Campus two years ago and became the first spin-off company on 1 January 2017. This start-up was founded in 2015 and already generated revenue of more than €1 million in its first year; it was even possible to increase revenue by more than 50% in 2016 compared to the previous year ( www.wtt-campusone.com).

EnBW currently has ten internal start-ups that have already reached a high level of market maturity and achieved their first successes on the market. In the first half of 2017, a further three projects were started at the Innovation Campus: A business model is being developed in the **Citisens** project that uses comprehensive data generation, data processing and analytics based on networks of sensors, e.g. for measuring and analysing environmental data. The development phase runs until the end of September 2017. The aim of the **DetaAct** project is to develop a business model for the intelligent monitoring of public and semi-public areas that is compliant with data privacy laws. For this purpose, a standard IT infrastructure has been combined with an algorithm that will provide solutions that are both cost-effective and suitable for the mass market. The first project phase also runs here until September 2017. Finally, a business model is being developed in the **Vialytics** project for the management of road maintenance (smart sensors for better roads). It comprises a complete digital solution for continuously and automatically monitoring the quality of roads for local authorities. The project grew out of the last ACTIVATR programme and is also being supported further by EnBW. The third round of EnBW **Innovation Days** started on 12 June 2017. Participants had the task of developing an initial business model from an idea in just 72 hours. The aim is to promote the innovative strength, customer proximity and creativity of employees. As well as developing a business idea, its subsequent market test and presentation before a specialist jury, the participants were given a crash course by innovation management so that they could acquire the knowledge EnBW possesses about lean start-up methods that they can then utilise later in their own jobs.

#### Procurement

A large number of suppliers and service providers contribute to the services rendered by EnBW. EnBW places great importance on the efficient and sustainable design of its procurement processes for achieving cost-effective purchasing results.

Procurement plays a vital role in the strategically important expansion of the portfolio of generating plants based on renewable energies – such as at the EnBW He Dreiht offshore wind farm with its multitude of complex procurement items. EnBW was able to achieve significant savings in the area of procurement for onshore and offshore wind power plants. In this important area, we are currently conducting a market analysis in Asia to identify new potential suppliers.

The development of an effective, holistic quality management system serves to fulfil the increasing quality requirements placed on the products and services that need to be acquired, as well as to increase the efficiency and effectiveness of the procurement processes. Key changes in the EU tender procedures – such as the obligation to digitally process an EU tender via an electronic platform – have necessitated corresponding training for the employees in the Purchasing Department. Various training activities are generally used to improve the qualifications of employees, which in turn contributes to achieving the goals of quality management.

Due to the growing focus on results in procurement, suppliers increasingly attempt to make supplementary claims above and beyond the originally agreed order volumes. In order to reduce the risk of unjustifiable supplementary claims, contract management is working on further improving the general quality of the contracts for supplier relationships. One measure is, for example, the close cooperation between the legal, technology and purchasing departments, especially in the field of onshore and offshore wind power plants.

The Procurement Department uses value analysis tools to identify products and trades where EnBW can improve its negotiating position with suppliers in order to generate further cost savings. The main focus here is placed on products, services and trades that are strategically relevant and hold their value. The first projects, such as in the area of electromobility, have been successfully concluded and have achieved sustainable savings potential, while other projects in strategically relevant fields such as grid development are planned.

Responsible raw materials procurement, particularly in the coal sector, is of major importance to EnBW.

As was already the case in 2016, coal imports to Western Europe are increasingly sourced from Russia and Colombia, whereby Russia significantly increased its share of imports in the first half of 2017. This development is also reflected in the volumes of coal delivered to the EnBW power plants. For the first time in many years, EnBW did not source any coal from South Africa.

Origin of coal supplies	to EnBW power plants
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in millions of tonnes	01/01- 30/06/2017	01/01- 30/06/2016	Change in %
Russia	1.38	1.21	14.0
Colombia	0.66	0.63	4.8
USA	0.40	0.20	100.0
Germany	0.03	0.01	_
Poland	-	0.07	_
South Africa	_	0.05	-
Total	2.47	2.17	13.8

EnBW also continued to engage in constructive dialogue with stakeholders on the subject of coal procurement in the first half of 2017. Following the on-site visit to Colombia at the end of 2016, unresolved issues were discussed and investigated in an intensive follow-up process together with the producers and also other non-governmental partners who are involved. EnBW was in direct contact with the producers to discuss the violent incidents in the mining regions early in the year. Dialogue also continued with selected stakeholders in Germany, Colombia and Russia. EnBW underlines its engagement in responsible coal procurement through these measures. The sustainability index database was updated in the first half of 2017 and expanded to include potential business partners. EnBW requested further information from the companies in individual cases.

The projects providing technical support to producers in Colombia in the La Guajira and Cesar mining regions have

been concluded. All of the planned projects were successfully realised in La Guajira. In the Cesar region, all of the plans for improving the local drinking water supply have been developed. Their implementation is now dependent on a collaboration with the local authorities. A final report is currently being compiled.

#### General conditions

The business performance of EnBW is substantially influenced by the development of wholesale market prices for electricity on the global fuel/CO<sub>2</sub> markets and by the demand for electricity. In addition, political-regulatory conditions are hugely important, for example for the promotion of renewable energies or in the grids sector. Due to the upcoming parliamentary elections in September, no major changes are expected in Germany in 2017. In terms of energy policy at a European level, the ongoing consultations on the so-called winter package could, in contrast, still result in meaningful initiatives for EnBW in 2017. The international efforts to strengthen climate protection are equally of considerable importance especially in the long term. There has been a global climate protection agreement since the climate change conferences in Paris and Marrakesh. The withdrawal of the USA – the world's second largest producer of CO<sub>2</sub> emissions – from this agreement represents a temporary setback for climate protection, although a series of US federal states and cities have announced that they will continue unabated with their climate protection efforts.

A detailed explanation of the general conditions for the business activities of EnBW can be found in the D Integrated Annual Report 2016 from p. 44.

#### Sales segment

Energy consumption in Germany has, generally speaking, been slowly falling over the long term – irrespective of the macroeconomic trends. The main causes are the comprehensive measures for **increasing energy efficiency** in private households, companies, the transport sector and the public sector. This trend also continued in the first months of 2017.

The German government published its plans for further shaping energy efficiency as an important pillar of the Energiewende in May 2017 with the **"Funding strategy for energy efficiency and heating from renewable energies"**. This document clarifies the future climate protection plan in relation to energy efficiency and heating from renewable energies in the next legislative period. In the medium term, it is expected that the funding of heat sources based exclusively on fossil fuels will be phased out.

The Bundestag passed a resolution to fund so-called **"tenant** electricity models" at the end of June 2017 which will enable

tenants to also directly use electricity from photovoltaic power plants installed on residential buildings at economical prices. EnBW welcomes this initiative and believes it creates opportunities for offering energy services in this customer segment.

The market penetration of **electromobility** is increasingly gathering speed – due to, amongst other things, the funding agreed last year in the form of purchase subsidies: Since the start of the year, there has been strong growth each month in comparison to the previous year. The same also applies to the expansion of the charging infrastructure, which has received funding of around  $\xi_{300}$  million since 1 March 2017, of which  $\xi_{200}$  million was for quick charging stations.

#### Grids segment

Since 1 January 2017, there has been an obligation for the main metering point operators to gradually install **intelligent metering systems** or modern measuring equipment at end customers by 2032. The EnBW subsidiary Netze BW started installing its first digital meters on 1 June 2017. EnBW believes that the digitalisation of measurement and metering creates the foundation for other customer applications – especially transparency on consumption for final consumers, the eradication of meter reading costs, the introduction of variable tariffs and much more.

The expansion of the transmission and distribution grids is a key task for the Energiewende. The connection of renewable energies will require further construction measures at all levels of the electricity grid. Furthermore, the electricity grid also needs to be equipped for the expected escalation in the number of electric cars. Our distribution grid operator Netze BW – the largest grid operator in Baden-Württemberg – is preparing itself for these pending challenges.

The German transmission system operators (TSO) anticipate in their current **Network Development Plan Electricity (NDP Electricity 2030)** that the electricity grids in Germany will also have to be expanded further in the period post 2025. According to their estimates, further HVDC lines with a capacity of up to 6 GW may be required amongst other things. The resulting costs would mainly be dependent on the extent to which these power lines need to be laid as underground cables. With regard to the gas transmission grid, a revision of the **Network Development Plan Gas (NDP Gas)** was necessary to create the conditions for the future development of the power plant sites in Altbach and Heilbronn am Neckar as possible locations for gas-fired grid reserve power plants. This will require additional investment in 25 kilometres of pipelines and 16 MW of compressor capacity. The volume of investment envisaged in the NDP Gas has thus increased as a result by around €100 million to a total of €4.5 billion. Both of these planned power plants are located in the grid area covered by our gas transmission grid operator terranets bw.

The law on the modernisation of grid fees **(Netzentgelt-modernisierungsgesetz, NEMoG)** passed by the German government on 30 June 2017 envisages the stepwise harmonisation of the transmission grid fees from 2019 until 1 January 2023 in annual stages of around 25%. Furthermore, the remuneration for decentralised feed-ins (so-called avoided grid fees) will be adjusted: The payments for all controllable power plants will be frozen at the grid fees for 2016; in the case of non-controllable power plants (wind and photovoltaic power plants), the payments will then additionally be phased out from 2018 in three stages up to 1 January 2020.

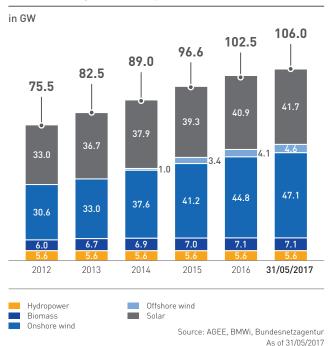
#### Renewable Energies segment

The first German auction for **offshore wind projects** in the transitional system was held at the beginning of April 2017; bids were accepted for a total capacity of 1,490 MW. For the first time worldwide, bids for offshore projects that forgo state funding and generate their earnings exclusively on the market were accepted. The results of this first auction make it clear that offshore wind power has become significantly more competitive in comparison to other technologies. Against this background, the legislative framework and also the expansion targets for offshore wind power in Germany and other countries – such as the Netherlands – will be re-examined because significantly higher expansion rates appear economically possible without the need for state funding.

The first auction for German onshore wind projects in May 2017 with a volume of 800 MW also delivered an unexpected result: 93% of the bids accepted were projects from community energy companies, which was primarily due to the simplified participation conditions for these types of projects. For example, it is not necessary to receive any approval in accordance with the Federal Immission Control Act (BImSchG) in order to submit a bid and they enjoy longer realisation deadlines than other projects (54 months versus 30 months). Another striking aspect was the regional distribution of the successful wind projects: Around 700 of the 807 MW capacity available in the auction was awarded to projects in Lower Saxony, Brandenburg, Schleswig-Holstein, North Rhine-Westphalia and Mecklenburg-West Pomerania. There were no successful bids for projects in Baden-Württemberg. The average volume-weighted funding amount for the successful bids in the first round of auctions was 5.7ct/kWh. Two further auctions are due to be held in Germany this year, each awarding 1,000 MW of capacity. Due to the commissioning deadlines for projects with fixed feed-in remuneration that received their approvals at the latest in 2016, it is anticipated that there will be a major expansion in onshore wind power in 2017 and 2018 of more than 8,000 MW. The longer realisation deadlines for projects from community energy companies mean that significantly lower growth is expected from 2019.

Joint auctions for **photovoltaic and wind energy projects** are a new element introduced by the German government and will be used to auction off 400 MW of capacity annually from 2018. These joint auctions will be subject to complex rules because the sequence in which the bids are accepted will be amended based on various key energy industry figures, such as the specific distribution grid components calculated for each district. This approach is an attempt to take account of the regional grid integration costs caused by the expansion of renewable energies when selecting the successful projects.

#### Installed net output for electricity generation from renewable energies in Germany



#### **Generation and Trading segment**

#### Electricity wholesale market

Following a sharp fall in prices on the wholesale market for electricity in 2015/2016, prices have stabilised at a low level and changed very little in the first half of 2017. The market prices for the 2018 delivery year fluctuated in a range between around  $\notin$ 28/MWh and  $\notin$ 31.50/MWh. The pressure on conventional generation, especially in Germany, remains high even if the generation margin improved slightly during the first half of the year. The trend for electricity generated at large power plants to be driven out of the market by the increasing level of generation from renewable energies is continuing, so that it is becoming ever more difficult to operate these power plants economically.

During the remainder of the year, front year base load prices are expected, depending on development of prices for fuel and  $CO_2$  allowances, to continue to experience sideways movement.

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

in €/MWh	Average H1 / 2017	Average H1 / 2016	Average 2016
Spot	35.52	24.99	28.98
Rolling front year price	29.98	23.90	26.58

#### Gas market

Long-term gas import contracts form the primary basis of Germany's gas supply. Prices primarily track the oil price trends with a time lag. As a result of the increased supply of Liquefied Natural Gas (LNG) from the USA and Australia, the dependency of the gas price on the price of oil has, however, fallen in Europe. The border price index for natural gas published monthly by the German Federal Office of Economics and Export Control (BAFA) stood at  $\pounds$ 16.53/MWh in April 2017, which is 6.1% below the December 2016 figure ( $\pounds$ 17.60/MWh) and 14.6% above the figure for the same month in the previous year ( $\pounds$ 14.43/MWh).

During the summer, the great demand for gas from the gas storage market will continue. Heating requirements will then increase significantly as winter approaches and higher prices are expected on the spot market.

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

in €/MWh	Average H1 / 2017	Average H1 / 2016	Average 2016
Spot	17.05	13.05	14.02
Rolling front year price	16.87	14.57	15.40

#### **Oil market**

Oil production in the USA achieved permanent cost reductions that were greater than those expected. This meant that there were no production shortfalls that could have been caused by a large number of insolvencies. Finally, Iran's return to the international oil market has led to a further increase in supply. In addition, the trend in demand for oil has had a rather dampening effect on oil prices because the dynamic economic growth in Asia – especially in China – has slowed. Oil prices are expected to increase slightly in the second half of 2017.

in US\$/bbl	Average H1 / 2017	Average H1 / 2016	Average 2016
Crude oil (Brent), front month (daily quotes)	52.17	41.21	45.13
Crude oil (Brent), rolling front year price (daily quotes)	53.79	46.57	49.28

#### Coal market

The prices of API #2 quality coal for delivery in the 2018 calendar year (API #2 Cal 18) have fluctuated on the forward market in a range between US\$60/t and US\$70/t and have thus been significantly less volatile than in the previous year. The efforts by the Chinese authorities to more strictly regulate the domestic coal market in the country to avoid extreme prices was a decisive factor in this development. These measures also had a stabilising effect on the international markets. We thus anticipate that prices will level off in the upper third of the trading range of US\$60/t to US\$70/t in the second half of 2017.

Development	of	prices	on th	he coal	markets
Developinent	•••	p11000	· · · · ·	ne cour	

in US\$/t	Average	Average	Average
	H1 / 2017	H1 / 2016	2016
Coal – API #2 rolling front year price	66.32	43.91	53.63

#### CO2 allowances

Under the European emissions trading system, proof must be provided of allowances for the amount of  $CO_2$  emissions from power plants. In the first half of 2017, the price of EU allowances (EUA) fluctuated between  $\notin 4.30/tCO_2$  and almost  $\notin 6/tCO_2$ . The total supply of EUA certificates will exceed the anticipated demand this year. Prices for EUA certificates are likely to fall during the remainder of the year as a result. The current negotiations on the reform of the EU Emissions Trading System (ETS) could provide some impetus for prices to rise.

Development of prices for emission allowances/daily quotes

in €/tCO₂	Average H1 / 2017	Average H1 / 2016	Average 2016
EUA, rolling front year price	4.99	5.70	5.34
CER, rolling front year price	0.26	0.39	0.38

#### Design of the electricity market

In November 2016, the EU Commission presented the legislative package "Clean Energy for all Europeans" (winter package) for the reform of the internal electricity market to adapt the electricity system to the challenges of a decentralised and digitalised energy world and improve the market integration of renewable energies. EnBW welcomes this approach, especially the clearer trust placed in the functionality of market mechanisms and the desire to remove market distortions demonstrated in the winter package.

Market conditions are increasingly necessitating the decommissioning of conventional power plants. At the same time, power plants that have been selected for decommissioning, especially those in southern Germany, are still required to guarantee the stability of the grid and thus secure the supply of electricity. In order to prevent the decommissioning of systemrelevant power plants, the law intends to obligate operators to maintain these facilities as reserve power plants (grid reserve). Therefore, the power plant operator has a right to be reasonably reimbursed for the costs that arise. The grid reserve consisting of existing power plants will be expanded by the construction of 1.2 GW of new reserve power plant capacity. However, the construction of new reserve power plants is still subject to the approval of the EU Commission. If this approval is given, EnBW will participate in the corresponding tender procedure. The Electricity Market Act also includes the introduction of an additional capacity reserve, which will be maintained for times when there is an extreme shortage of generating capacity on the electricity market. EnBW welcomes the establishment of a competitively oriented process for creating the capacity reserve outside of the wholesale market.

#### Nuclear power

The Act on the Reorganisation of Responsibility in Nuclear Waste Management came into force in the middle of June 2017. It establishes new rules for the roles and financial responsibilities of the German government and operators. According to the new law, operators are responsible for the decommissioning and dismantling of their nuclear power plants, as well as for the conditioning and packaging of the radioactive waste. The provisions accumulated for these purposes will remain with the companies. The transport, intermediate storage and final storage of the waste will be the responsibility of the German government in future. As of 3 July 2017, the operators had transferred this obligation to a fund under public law. The payment of a risk premium of around 35% releases the operators from any subsequent liability for the areas of responsibility transferred to the German government. The law is accompanied by a public law contract between the government and the operators that not only clarifies the rules established in the law in more detail but also stipulates the further course of action to be taken regarding the repatriation of reprocessing waste from France and Great Britain. The operators are obligated in the contract to prepare applications for the storage of this waste at selected intermediate storage sites. The transport of the waste will only be carried out when the intermediate storage site for highly radioactive waste have been transferred to the German government; this will not be before 1 January 2019.

On 7 June 2017, the Federal Constitutional Court declared the law for the nuclear fuel rod tax invalid; EnBW has received a tax refund as a result ( $\square$  p. 27).

#### The EnBW Group

Financial and strategic performance indicators

#### **Results of operations**

#### Electricity and gas sales increase due to consolidation

Electricity sales of the EnBW Group (without Grids)

in billions of kWh¹ 01/01–30/06		Sales	Renewable Energies		Generation and Trading		Total (without Grids)		Change in %
	2017	2016	2017	2016	2017	2016	2017	2016	
Retail and commercial customers (B2C)	7.9	7.9	0.0	0.0	0.0	0.0	7.9	7.9	0.0
Business and industrial customers (B2B)	11.8	14.1	0.0	0.0	0.0	0.0	11.8	14.1	-16.3
Trade	0.4	0.3	1.1	1.6	36.1	32.8	37.6	34.7	8.4
Total	20.1	22.3	1.1	1.6	36.1	32.8	57.3	56.7	1.1

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

In the first half of 2017, electricity sales of the EnBW Group were slightly higher than the level in the previous year. Adjusted for consolidation effects, there was a fall of 2.9%. It was possible to more than offset the falling sales in the business and industrial customer sector (B2B) through the effects in trading of the full consolidation of VNG-Verbundnetz Gas Aktiengesellschaft and an increase in trading activity.

However, the effect on the earnings potential of the company is limited. In a persistently challenging competitive environment, electricity sales in business with retail and commercial customers (B2C) reached the same level as in the previous year due mainly to the full consolidation of VNG.

		*						
in billions of kWh 01/01–30/06	Sales			Generation and Trading		Total (without Grids)		
	2017	2016	2017	2016	2017	2016		
Retail and commercial customers (B2C)	7.8	6.4	0.0	0.0	7.8	6.4	21.9	
Business and industrial customers (B2B)	22.3	22.3	16.8	0.0	39.1	22.3	75.3	
Trade	0.1	1.2	61.6	41.7	61.7	42.9	43.8	
Total	30.2	29.9	78.4	41.7	108.6	71.6	51.7	

#### Gas sales of the EnBW Group (without Grids)

The gas sales of the EnBW Group increased significantly compared to the same period of the previous year. Adjusted for consolidation effects, there was however a fall of 31.9%. Gas sales in the retail customer business (B2C) were above the level in the previous year due to a slight increase in the number of customers and the full consolidation of VNG. Sales to business

and industrial customers (B2B) also benefited from the full consolidation of VNG. The level of trading activity was significantly higher than in the previous year, which was in part due to the full consolidation of VNG. However, the effect of the trading activities on the earnings potential of the company is of limited importance.

#### External revenue higher than the previous year due to consolidation effects

External revenue of the EnBW Group by segment

in € million <sup>1</sup>	01/01 – 30/06/2017	01/01- 30/06/2016	Change in %	01/01- 31/12/2016
Sales	3,717.4	4,070.8	-8.7	7,771.1
Grids	3,687.8	3,234.1	14.0	6,643.7
Renewable Energies	244.5	254.5	-3.9	510.6
Generation and Trading	2,821.0	2,246.9	25.6	4,433.9
Other/Consolidation	5.1	5.1	0.0	9.1
Total	10,475.8	9,811.4	6.8	19,368.4

<sup>1</sup> After deduction of electricity and energy taxes.

Adjusted for consolidation effects, external revenue only increased by 0.7% or  $\xi$ 72.5 million.

**Sales:** Revenue in the Sales segment in the first half of 2017 was a little lower than the previous year, mainly as a result of electricity and gas sales falling slightly after adjustment for consolidation effects. Adjusted for consolidation effects, this would have been a fall of 10.1% or  $\notin$ 415.4 million.

**Grids:** Revenue in the Grids segment increased slightly in the reporting period compared to the previous year due to higher revenues from the use of the grids. Adjusted for consolidation effects, this would have been an increase of 11.8% or  $\leq$ 389.9 million.

**Renewable Energies:** In the Renewable Energies segment, revenue fell slightly in the first half of 2017 in comparison to the previous year. This decrease was due mainly to the fact that less electricity was delivered by our hydropower plants and was also sold on the forward market at lower wholesale market prices than was the case for deliveries in the previous year.

**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. Adjusted for consolidation effects, revenue increased by 4.6% or  $\leq$ 123.5 million. There were higher gas revenues due to the growth in trading activities. In contrast, our electricity deliveries were sold on the forward market at lower wholesale market prices than in the previous year.

#### Material developments in the income statement

The balance from other operating income and other operating expenses in the reporting period increased significantly from €-336.6 million in the previous year to €1,447.6 million in the reporting period, which was mainly due to the reimbursement of the nuclear fuel rod tax that was declared unconstitutional in June 2017. The cost of materials stood at €8,532.6 million, which was 9.2% higher than the figure in the previous year. This was primarily attributable to consolidation effects. The financial result improved significantly in the reporting period in comparison to the same period of the previous year by €787.3 million to €250.1 million (previous year: €-537.2 million). The reasons for this development were primarily the interest relating to the legal proceedings for the reimbursement of the nuclear fuel rod tax, interest effects on the nuclear provisions and capital gains from the sale of securities. Overall, earnings before tax (EBT) totalled €2,424.1 million in the first half of 2017, compared with €-64.3 million for the same period in the previous year.

#### Earnings

The Group net profit/loss attributable to the shareholders of EnBW AG increased from  $\notin$ -194.2 million in the comparative period by  $\notin$ 1,873.5 million to  $\notin$ 1,679.3 million in the reporting period. Earnings per share amounted to  $\notin$ 6.20 in the first half of 2017 compared to  $\notin$ -0.72 for the same period in the previous year.

**Adjusted earnings and non-operating result:** The sum of the adjusted earnings figures and non-operating figures gives the figures on the income sheet. 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 and explained in the section on the non-operating result ( p. 15). The business activities relevant to the ongoing management of the company are of paramount 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	01/01- 30/06/2017	01/01- 30/06/2016	Change in %	01/01- 31/12/2016
Sales	180.8	138.3	30.7	249.7
Grids	610.6	523.8	16.6	1,004.1
Renewable Energies	152.4	153.1	-0.5	295.3
Generation and Trading	102.3	148.6	-31.2	337.2
Other/Consolidation	26.5	3.7		52.6
Total	1,072.6	967.5	10.9	1,938.9

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

in %	01/01- 30/06/2017	01/01- 30/06/2016	01/01- 31/12/2016
Sales	16.9	14.3	12.9
Grids	56.9	54.1	51.8
Renewable Energies	14.2	15.8	15.2
Generation and Trading	9.5	15.4	17.4
Other/Consolidation	2.5	0.4	2.7
Total	100.0	100.0	100.0

The adjusted EBITDA of the EnBW Group increased in the first half of 2017 by 10.9% compared to the same period of the previous year and was temporarily above the forecasted range for the 2017 financial year of between 0% and +5%. The first-time full consolidation of the VNG Group contributed €41 million to this increase in earnings. Excluding these consolidation effects, the adjusted EBITDA of the EnBW Group thus only increased by 6.3%. This was predominantly due to positive temporary out-of-period effects in comparison to the previous year.

**Sales:** The adjusted EBITDA for the Sales segment increased temporarily in the first six months of 2017 by 30.7% in comparison to the same period of the previous year. Adjusted for consolidation effects, this would have been an increase of 27.8%. On the one hand, there were positive effects from the withdrawal from the B2B commodity business under the EnBW and Watt brands, while on the other hand, the billing service for other sales and network operators contributed to the improvement in earnings due to lower start-up costs and positive temporary out-of-period effects in comparison to the previous year.

**Grids:** The adjusted EBITDA for the Grids segment increased in the first six months of 2017 by 16.6% in comparison to the same period of the previous year. Adjusted for consolidation effects, there was an increase of 8.2%. This was due mainly to higher earnings from the use of the electricity distribution grids, as well as positive temporary out-of-period effects in comparison to the previous year.

**Renewable Energies:** In the Renewable Energies segment, adjusted EBITDA reached almost the same level in the first six months in comparison to the previous year. The wind yields at our offshore wind farms were higher than the same period of the previous year, while further onshore wind farms have been placed into operation. In contrast, electricity generation from our run-of-river power plants was negatively influenced by lower water levels in comparison to the previous year. In addition, the electricity delivered from our hydropower plants was sold on the forward market at lower wholesale market prices than in the previous year.

**Generation and Trading:** In the Generation and Trading segment, the adjusted EBITDA fell significantly in the first six months of the year by 31.2% in comparison to the previous year. Adjusted for consolidation effects, there was a fall of 29.5%. The main reason for this development was the temporary shutdown of Block 2 of the Philippsburg nuclear power plant (KKP 2) due to damaged ventilation system brackets. However, the annual inspection originally planned

for the summer of 2017 was brought forward and carried out during the temporary shutdown. Moreover, our electricity deliveries were sold on the forward market at lower wholesale market prices than in the previous year. This was offset to some extent by the positive effect of the elimination of the nuclear fuel rod tax, which will increase during the further course of the year.

Non-operating EBITDA of the EnBW Group

in € million	01/01 – 30/06/2017	01/01- 30/06/2016	Change in %
Income/expenses relating to nuclear power	1,317.8	-7.3	
Result from disposals	272.3	11.5	
Restructuring	-29.2	-77.8	62.5
Other non-operating result	6.1	-6.1	
Non-operating EBITDA	1,567.0	-79.7	-

The non-operating EBITDA and the non-operating EBIT increased significantly in the reporting period compared to the previous year. This positive earnings performance can be primarily attributed to the reimbursement of the nuclear fuel rod tax that was declared unconstitutional in June 2017. The sale of 49.89% of the shares in EnBW Hohe See GmbH & Co. KG and the revaluation of the remaining shares also had a positive influence on earnings.

Group net profit of the EnBW Group

in € million	01/01 – 30/06/2017	01/01- 30/06/2016	Change in %	01/01- 31/12/2016
Adjusted EBIT	543.0	504.0	7.7	1,024.5
Adjusted EBITDA	(1,072.6)	(967.5)	10.9	(1,938.9)
Scheduled amortisation and depreciation	(-529.6)	(-463.5)	14.3	(-914.4)
Non-operating EBIT	1,539.6	-102.0	-	-2,687.4
Non-operating EBITDA	(1,567.0)	(-79.7)	-	(-1,208.2)
Impairment losses	(-27.4)	(-22.3)	22.9	(-1,479.2)
EBIT	2,082.6	402.0		-1,662.9
Investment result	91.4	70.9	28.9	117.6
Financial result	250.1	-537.2	-	-1,176.6
Income tax	-686.0	-74.2	_	1,049.4
Group net profit/loss	1,738.1	-138.5	_	-1,672.5
of which profit/loss shares attributable to non-controlling interests	(58.8)	(55.7)	5.6	(124.7)
of which profit/loss shares attributable to the shareholders of EnBW AG	(1,679.3)	(-194.2)	_	(-1,797.2)

The increase in the investment result was due to consolidation effects. The considerable improvement in the financial result compared to the previous year was due to, amongst other things, interest relating to the legal proceedings for the reimbursement of the nuclear fuel rod tax and capital gains from the sale of securities in preparation for the payment to the KFK fund (commission to examine the financing of the phase-out of nuclear power). In addition, the increase in the discount rate from 0.5% to 0.66% for the nuclear provisions led to a lower increase in the remaining nuclear provisions held

by EnBW due to the passage of time. In the same period of the previous year, the reduction in the discount rate still had a negative impact on earnings. Due to their short-term nature, the provisions to be transferred to the KFK fund were also no longer increased to reflect the passage of time in the reporting period.

The income tax expense increased significantly in line with the positive earnings performance.

#### **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:

- > Debt Issuance Programme (DIP), via which bonds are issued: €3.0 billion of €7.0 billion drawn
- > Hybrid bonds: €2.0 billion
- > Commercial paper (CP) programme: €2.0 billion undrawn
- > Syndicated credit line: €1.5 billion undrawn with a term until 2021
- > Bilateral free credit lines: €1.3 billion. The free credit lines have increased significantly due to the full consolidation of VNG. The credit lines are used to finance all business activities in the whole VNG Group, including in particular the financing of the seasonal requirement for working capital in the gas trading business and for hedging liquidity risks.
- > 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 have a well-balanced maturity profile. As part of its financing strategy, EnBW constantly assesses capital market trends with regard to the current interest rate environment and to any potentially favourable refinancing costs.

In February, EnBW exercised the call option on its hybrid bond, which was issued in 2011 and increased in 2012, as of the first call date. The repayment of the security with a total volume of €1.0 billion was carried out on 3 April 2017. No senior bonds are due for repayment in 2017.

Rating and rating trends: Moody's downgraded its rating for EnBW by one level to Baa1 on 24 May 2017. Moody's referred mainly to the deterioration in the financial profile of EnBW in 2016, which was due to the financial burdens of the KFK transaction and also the general market and interest conditions. The EnBW 2020 strategy, the improved composition of the adjusted EBITDA, the continuous implementation of measures to strengthen the credit rating and the support provided by major shareholders were all rated positively. The rating outlook was raised from negative to stable because Moody's believes that EnBW is well positioned in the current rating category.

On 20 June 2017, Standard Poor's (S&P) confirmed its A- rating for EnBW and raised the outlook from negative to stable. S&P recognises how the progressive transformation of EnBW as part of the EnBW 2020 strategy with a focus on the grids business and renewable energies is compensating for the volatility of conventional generating activities. Amongst other things, a recovery in the financial figures beginning in 2017 is expected against the background of the reimbursement of the nuclear fuel rod tax and the conservative financing policy. According to S&P, the KFK transaction can be realised without adversely affecting the strategy or massively impairing the capital structure.

EnBW strives to receive a solid investment-grade rating. By limiting the cash-relevant net investment to the retained cash flow, measured by the internal financing capability, EnBW manages the level of net financial liabilities. EnBW ensures its pension and nuclear provision obligations are covered within the time frames necessary through asset liability management.

#### Investment analysis

Net cash investment of the EnBW Group

in € million <sup>1, 2</sup>	01/01 – 30/06/2017	01/01- 30/06/2016	Change in %	01/01- 31/12/2016
Investments in growth projects <sup>3</sup>	454.1	1,492.3	-69.6	2,070.7
Investments in existing projects	149.7	171.1	-12.5	514.4
Total investments	603.8	1,663.4	-63.7	2,585.1
Conventional divestitures <sup>4</sup>	-222.6	-1,108.1	-79.9	-1,123.6
Participation models	92.6	22.9		32.0
Other disposals and subsidies	-75.3	-98.9	-23.9	-176.6
Total divestitures	-205.3	-1,184.1	-82.7	-1,268.2
Net (cash) investment	398.5	479.3	-16.9	1,316.9

<sup>1</sup>The figures for the previous year have been restated. Alterations of capital in non-controlling interests are also included in the participation models from the Integrated Annual Report 2016 onwards. These stood at €23.5 million in the period from 01/01–30/06/2016.

<sup>2</sup> Excluding equity investments held as financial assets.

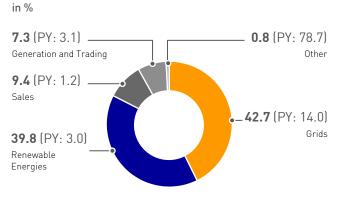
Does not include cash and cash equivalents acquired with the acquisition of fully consolidated companies. These amounted to €0.0 million in the reporting period (01/01–30/06/2016: €0.0 million, 01/01–31/12/2016: €2.1 million).

Does not include cash and cash equivalents relinquished with the sale of fully consolidated companies. These amounted to €51.0 million in the reporting period (01/01-30/06/2016: €1.4 million, 01/01-31/12/2016: €1.4 million).

The investment volume of the EnBW Group fell significantly in the first six months of 2017 compared to the same period of the previous year. In the previous period, it included the acquisition of 74.21% of the shares in VNG-Verbundnetz Gas Aktiengesellschaft.

In terms of the overall gross investment, 75.2% was accounted for by growth projects. The proportion of investments in existing facilities stood at 24.8% and was primarily allocated to existing power plants and grid infrastructure.

Investments by segment



In the **Sales** segment,  $\notin$  56.7 million was invested in the reporting period. In the previous year period, investment in this segment stood at  $\notin$  19.7 million.

#### Liquidity analysis

Free cash flow of the EnBW Group

Investment of  $\pounds$ 258.0 million in the **Grids** segment was slightly higher than the figure for the previous year ( $\pounds$ 232.1 million) and was mainly allocated for the expansion and upgrade of the grids and the connection of facilities for the generation of renewable energies.

In the **Renewable Energies** segment, the investment of  $\notin$ 240.0 million was significantly higher than the figure in the previous year ( $\notin$ 50.6 million) due to the start of construction at the EnBW Hohe See and Albatros offshore wind farms. In addition, there was a significantly higher rate of expansion in the onshore wind farms compared to the previous year.

In the **Generation and Trading** segment, investment stood at  $\notin$  44.1 million (previous year:  $\notin$  51.1 million).

Other investments of  $\leq$ 5.0 million were significantly below the level in the previous year ( $\leq$ 1,309.9 million). In the previous year, this item included the acquisition of the shares in VNG – accounted for in the comparative period using the equity method.

The divestitures were significantly below the figure in the previous year and were primarily related to the implementation of the participation model for the EnBW Hohe See offshore wind farm. In the same period of the previous year, the divestitures mainly included the disposal of a 20% shareholding in EWE Aktiengesellschaft.

in € million <sup>1</sup>	01/01– 30/06/2017	01/01- 30/06/2016	Change in %	01/01- 31/12/2016
EBITDA	2,639.6	887.8	-	730.7
Changes in provisions	-237.8	-132.1	80.0	721.9
Non-cash-relevant expenses/income	-584.3	-45.3	_	-78.1
Income tax received/paid	121.9	-232.5	_	-243.4
Interest and dividends received	216.6	190.2	13.9	345.1
Interest paid for financing activities	-184.1	-191.7	-4.0	-351.3
Contribution to dedicated financial assets	-57.7	-12.3	_	50.7
Funds from operations (FFO)	1,914.2	464.1	_	1,175.6
Change in assets and liabilities from operating activities	-51.2	-840.3	-93.9	-657.5
Capital expenditure on intangible assets and property, plant and equipment	-486.1	-342.4	42.0	-1,189.4
Disposals of intangible assets and property, plant and equipment	42.2	71.7	-41.1	115.5
Cash received from construction cost and investment subsidies and tax refunds from recognised exploration expenditure	33.1	27.2	21.7	61.1
Free cash flow	1,452.2	-619.7	_	-494.7

<sup>1</sup> The figures for the previous year have been restated. From the Integrated Annual Report 2016 onwards, dedicated financial assets are included in both the FFO and also the free cash flow.

The funds from operations (FFO) increased significantly in comparison to the previous year. The increase was mainly due to the reimbursement of the nuclear fuel rod tax on 30 June 2017.

Furthermore, there were income tax refund in the reporting period in contrast to higher payments of income tax arrears in the previous year. The net balance of assets and liabilities from operating activities fell in comparison to the previous year. This was mainly attributable to a lower net balance of trade receivables and payables, which was influenced by the reduction in receivables associated with nuclear provisions and EEG effects. Overall, free cash flow increased in comparison to the same period of the previous year by  $\pounds$ 2,071.9 million.

Retained cash flow of the EnBW Group

in € million¹	01/01 - 30/06/2017	01/01- 30/06/2016	Change in %	01/01- 31/12/2016
Funds from operations (FFO)	1,914.2	464.1		1,175.6
Dividends paid	-29.6	-174.2	-83.0	-226.1
Retained cash flow	1,884.6	289.9		949.5

<sup>1</sup> The figures for the previous year have been restated. From the Integrated Annual Report 2016 onwards, dedicated financial assets are included in both the FFO and also the retained cash flow.

Retained cash flow increased significantly, due primarily to the large increase in the FFO. In addition, lower dividend payments in the reporting period had a positive effect. The retained cash flow reflects the internal financing capability of

EnBW. After consideration of all stakeholder groups, it is available to the company for investment without the need to raise additional debt.

Condensed cash flow statement of the EnBW Group

in € million	01/01– 30/06/2017	01/01- 30/06/2016	Change in %	- 01/01 31/12/2016
Cash flow from operating activities	1,888.2	-362.4		473.6
Cash flow from investing activities	2,744.4	86.3	_	333.9
Cash flow from financing activities	-1,339.5	-516.3	_	-316.6
Net change in cash and cash equivalents	3,293.1	-792.4		490.9
Change in cash and cash equivalents due to changes in the consolidated companies	289.1	0.0	_	0.0
Net foreign exchange difference	-2.0	-1.5	33.3	-0.4
Change in cash and cash equivalents	3,580.2	-793.9	_	490.5

The substantial increase in operating cash flow compared to the previous year was mainly due to the reimbursement of the nuclear fuel rod tax, income tax received and a lower net balance of assets and liabilities from operating activities. In contrast, this item contained payments of tax arrears in the previous year.

Cash flow from investing activities increased significantly in comparison to the same period of the previous year. The cash

inflow was due primarily to the sale of shares in EnBW Hohe See GmbH & Co. KG and higher sales of securities against the background of the expected cash outflow to finance the KFK fund after the reporting date on 3 July 2017.

Cash outflow from financing activities increased significantly in comparison to the previous year. This was mainly due to the repayment of the first hybrid bond in the amount of  $\pounds$ 1.0 billion in April 2017.

#### Net assets

#### Condensed balance sheet of the EnBW Group

in € million	30/06/2017	31/12/2016	Change in %
Non-current assets	25,859.7	25,418.4	1.7
Current assets	15,822.5	12,943.9	22.2
Assets held for sale	87.6	173.0	-49.4
Assets	41,769.8	38,535.3	8.4
Equity	5,500.9	3,216.2	71.0
Non-current liabilities	22,868.0	22,172.0	3.1
Current liabilities	13,398.5	13,123.1	2.1
Liabilities directly associated with assets classified as held for sale	2.4	24.0	-90.0
Equity and liabilities	41,769.8	38,535.3	8.4

As of 30 June 2017, the total assets held by the EnBW Group was higher than the level at the end of the previous year. The increase in non-current assets by €441.3 million was mainly due to changes in the group of consolidated companies. In this context, the carrying amount of entities accounted for using the equity method fell by €649.3 million. The main reason was the change to the consolidation method for VNG from the equity method to full consolidation. This fall was partially offset by the first-time at-equity consolidation of EnBW Hohe See GmbH & Co. KG. The consolidation according to the equity method was necessary due to a loss of economic control. The sale of securities in preparation for the payment to the KFK fund likewise contributed to a decrease in the non-current assets. Current assets also increased in comparison to the end of the previous year. This was primarily attributable to changes in the consolidated companies and an increase in cash or cash equivalents, due mainly to the capital gains from the sale of securities in preparation for the payment to the KFK fund and the reimbursement of the nuclear fuel rod tax. The fall in the assets held for sale by €85.4 million is mainly due to the sale of shares in EnBW Hohe See GmbH & Co. KG. This was offset by the reclassification of EnBW Albatros GmbH & Co. KG, where the sale of shares in the company during the course of 2017 will lead to a loss of economic control.

The equity held by the EnBW Group increased by €2,284.7 million as of the reporting date of 30 June 2017. The equity ratio rose accordingly from 8.3% to 13.2%. This was mainly due to the higher retained earnings, as well as the fall in losses in other comprehensive income. The main reason for the latter effect was the adjustment of the discount rate for pension provisions from 1.9% to 2.1%. Non-current liabilities increased by €696.0 million. The reason for this was the fact that additions to the group of consolidated companies and the increase in deferred taxes overcompensated for the fall in nuclear and pension provisions due to changes in the interest rates. The increase in current liabilities was mainly due to changes in the group of consolidated companies, as well as tax liabilities as part of the reimbursement of the nuclear fuel rod tax. This was offset by the repayment of the hybrid bond. The decrease in liabilities directly associated with assets held for sale was mainly the result of the sale of shares in EnBW Hohe See GmbH & Co. KG.

#### Net debt

Net debt of the EnBW Group

in € million	30/06/2017	31/12/2016	Change in %
Cash and cash equivalents available to the operative business	-2,290.9	-2,264.3	1.2
Current financial assets available to the operative business	-250.4	-329.5	-24.0
Long-term securities and loans available to the operative business	-42.5	-42.5	0.0
Bonds	4,984.0	6,008.1	-17.0
Liabilities to banks	1,622.9	1,455.5	11.5
Other financial liabilities	641.9	465.3	38.0
Valuation effects from interest-induced hedging transactions	-97.6	-109.2	-10.6
Restatement of 50% of the nominal amount of the hybrid bonds <sup>1</sup>	-996.3	-1,496.3	-33.4
Other	-6.6	-42.1	-84.3
Net financial liabilities	3,564.5	3,645.0	-2.2
Provisions for pensions and similar obligations <sup>2</sup>	5,961.7	6,116.7	-2.5
Provisions relating to nuclear power	5,943.3	10,972.0	-45.8
Liabilities relating to the externalisation of nuclear power	4,849.6	0.0	-
Pension and nuclear obligations	16,754.6	17,088.7	-2.0
Long-term securities and loans to cover the pension and nuclear obligations <sup>3</sup>	-5,307.4	-6,130.7	-13.4
Cash and cash equivalents to cover the pension and nuclear obligations	-5,280.9	-1,727.3	-
Current financial assets to cover the pension and nuclear obligations	-361.9	-2,060.0	-82.4
Surplus cover from benefit entitlements	-87.8	-33.4	-
Dedicated financial assets	-11,038.0	-9,951.4	10.9
Receivables relating to nuclear obligations	-333.6	-779.4	-57.2
Net debt relating to pension and nuclear obligations	5,383.0	6,357.9	-15.3
Net debt	8,947.5	10,002.9	-10.6

<sup>1</sup> The structural characteristics of our hybrid bonds meet the criteria for half of the bond to be classified as equity, and half as debt, by the rating agencies Moody's and

Standard & Poor's.

<sup>2</sup> Less the market value of the plan assets of €1,141.8 million (31/12/2016: €1,105.1 million).

<sup>3</sup> Includes equity investments held as financial assets.

As of 30 June 2017, net debt fell significantly by €1,055.4 million compared to the figure posted at the end of 2016. This fall was mainly due to the reimbursement of the nuclear fuel rod tax that was declared unconstitutional in June 2017. In addition, lower pension and nuclear provisions due to the slight increase in the discount rates in the first half of 2017 and the sale of 49.89% of the shares in the EnBW Hohe See GmbH & Co. KG offshore wind farm at the beginning of 2017 contributed to the fall in net debt. This was offset by the repayment of the hybrid bond in April 2017 due to it being partly classified as equity.

As a result of the payment to the KFK fund on 3 July 2017, the nuclear provisions and the dedicated financial assets will each

decrease by around  $\notin$ 4.8 billion. The amount to be paid to the fund increased from the original figure of  $\notin$ 4.7 billion to  $\notin$ 4.8 billion. The reason for this was the final determination of the payment contributions by the German Federal Ministry for Economic Affairs and Energy that took into account differences between the estimated expenditure for 2015 and 2016 and the actual expenditure.

#### **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 2016 – in the notes and explanations of the six-monthly consolidated financial statements.

#### Non-financial performance indicators

We report on the non-financial goal dimensions of EnBW in the areas of customers, 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 2016 ( Integrated Annual Report 2016 from p. 63). Exceptions are the Reputation Index in the customers 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" and  $CO_2$  intensity in the environment goal dimension. The values for these key indicators will be exclusively collected at the end of the year.

#### Customers goal dimension

Key performance indicators

	01/01- 30/06/2017	01/01- 30/06/2016	Change in %	01/01- 31/12/2016
Customer Satisfaction Index for EnBW/Yello <sup>1</sup>	139/164	127/143	9.4/14.7	132/150
SAIDI (Strom) in min/year	14	11	27.3	16

<sup>1</sup> EnBW has been working together with a new market research company since 2017. Despite using the same survey methodology and random sampling, current and earlier values are only comparable to a limited extent.

#### Customer Satisfaction Index

The satisfaction of EnBW customers increased in the first half of 2017. The value for the key performance indicator Customer Satisfaction Index improved in comparison with both the same period of the previous year and also the value for the whole of 2016 and at 139 was slightly above the forecasted range for 2017 (128 to 138). This was attributable to, amongst other things, our sales activities and communication measures in the first half of 2017. The EnBW image campaign under the motto "We're making it happen" was, for example, continued in early 2017. The campaign positions EnBW as a technically competent and active player for the Energiewende that can guarantee customers a secure and sustainable energy supply and offer simple, innovative products and digital services at the same time. An excerpt from this product portfolio – such as charging solutions from EnBW for motorways, charging at home or at work, as well as the EnBW solar+ solution - was presented to a wide audience at Hannover Messe in April 2017. The aim is to consolidate and further increase the good level of customer satisfaction achieved in the first half of 2017 during the remainder of the year. This will be achieved by, amongst other things, continuing the image campaign with a focus on electromobility.

The satisfaction of Yello customers increased again in the first half of 2017, with the Customer Satisfaction Index reaching a new high. This is attributable to, amongst other things, the effective repositioning of the Yello brand since January 2017, which aimed to differentiate Yello more clearly from the competition. The repositioning of the brand was accompanied by the Yello image campaign "More than you think". In addition, the product portfolio at Yello has been supplemented and the free service app kWhapp enhanced. The aim is to maintain or even increase the already high level of satisfaction of the customers of Yello further. To this end, the current campaign "More than you think" will be continued in the second half of the year with new motifs, a new solar product will be launched on the market and digital services will be further enhanced and optimised.

#### 💴 SAIDI

In the interests of our customers, the security of the energy supply is given high priority at EnBW. The key performance indicator SAIDI – measured by the average length of supply interruptions experienced annually by each connected customer – for the grid areas operated by EnBW companies remained very good in the first half of 2017. There were no exceptionally severe storms with large-scale impact in the reporting period.

#### **Current developments**

Together with our customers, we are on the road to the digital energy system of the future. This can be seen above all in the areas of energy industry billing services, all customer processes and the digital product portfolio of EnBW.

EnPower - the first digital billing and customer interaction platform – was launched for NaturEnergiePlus in the middle of June 2017. More than 51,000 customers can now be offered a full digital service. Process and product optimisations enable customers to quickly and easily find products tailored to their requirements with the aid of modern cloud-based IT systems and then book them directly online. The focus has been placed here on simplification, improving efficiency, digitalisation and customisation. New functionalities and services make it possible for customers to carry out almost all steps themselves, such as concluding a contract, entering meter readings and switching or changing address when moving home. New customers can find out the latest status of their contract switch via e-mail, SMS or in future even via WhatsApp using the switch monitoring system. The aim is to launch EnPower for Yello in 2018 and for EnBW in 2019.

The digital energy solution **EnBW solar**+ was successfully launched onto the market in autumn 2016 and will be expanded during the course of 2017 to include the feature Family&Friends. This feature allows our customers to save up their own electricity generation in a virtual storage system and share the available electricity credits with family or friends, donate it to charitable organisations or consume it themselves later. In addition, we are working on solutions to integrate electromobility for our customers. Larger storage systems and also the installation of charging stations will be offered to customers of EnBW solar+ for this purpose.

In order to fulfil our objective of being a holistic supplier for the world of electromobility, we are providing our customers not only with home charging solutions but also most notably with easy access to electromobility – such as via the **EnBW mobility+ app** – and developing a widespread and networked charging infrastructure in the south-west of Germany. The EnBW mobility+ app takes GPS-based recordings of car journeys and tells the user whether an electric car would be suitable for them and where possible which car would fit their driving behaviour. Customers will also be able to use the app in future to locate charging stations in Germany and to pay directly for the electricity.

We are also constantly working on expanding our **direct-current (DC) quick charging stations.** We had already installed 68 quick charging stations at 34 Tank & Rast locations in Baden-Württemberg by the end of June 2017. Around 120 further stations are at the planning or development stage, even outside of Baden-Württemberg.

We have developed a new **alternating current (AC) charging station** that has two charging points. The charging points each have a charging capacity of up to 22 kW. By integrating a Wi-Fi router into the system, our local authority partners and business customers also have the opportunity to provide a public Wi-Fi service in future. The new charging station also handles load management issues with ease when charging multiple vehicles at the same time – thus also guaranteeing optimal grid utilisation.

As part of the introduction of intelligent metering systems and modern measurement facilities, EnBW was one of the first suppliers to have its smart meter gateway administration system certified. Customers also benefit as a result because the gateway administration system is a component of the modular full service solution, which EnBW makes available to

Employees goal dimension Key performance indicator

	01/01-	01/01-	Change	01/01-
	30/06/2017	30/06/2016	in %	31/12/2016
LTIF <sup>1</sup>	3.1	3.7	-16.2	3.9

<sup>1</sup> Variations in the group of consolidated companies; only those companies controlled by the Group are included.

#### TOP LTIF

The key performance indicator LTIF (Lost Time Injury Frequency) fell significantly in the first six months of 2017 in comparison to the same period of the previous year. In contrast, the average days of absence per accident increased slightly from 14.5 days in 2016 to 16.1 days in the reporting period.

EnBW works continuously on minimising dangers in the workplace through training and a programme of measures.

metering point operators and grid operators for implementing the requirements for the digitalisation of the Energiewende.

In the area of **contracting**, the company is expanding its comprehensive range of services in a targeted manner to achieve further growth, especially in the industry and housing sectors. This division is offering additional services – above and beyond contracting – via its Energy Optimisation Service (EOS) and through sales solutions. For example, customer power plants can be holistically optimised or the electricity generated on-site can be marketed by EnBW. The contracting solutions offered by EnBW have been given a newly designed Internet presence since June 2017 at 😢 <u>www.enbw.com/industriekunden</u>). We have already concluded ten contracts for contracting solutions in the current financial year, including the development of customised energy concepts. Among these are two important energy supply contracting deals with large industrial companies, as well as a contract with an automobile manufacturer for operational management contracting.

Yello Strom repositioned the brand in January 2017. Under the tagline "More than you think", this sales brand will henceforth only operate using the name Yello. The development from being purely a supplier of electricity and gas to a supplier offering a broad spectrum of innovative products and services will be reinforced using an integrated advertising campaign. Via the free service app kWhapp, new customers can now also easily and conveniently provide information on their supplier and meter number when concluding a contract. More than 250,000 users have now downloaded kWhapp. The further development of the Yello Webshop and the expansion of the product portfolio have also contributed to the repositioning of Yello. Since June 2017, Yello has been the first German energy company to offer electricity and gas in a bundle with white goods. Alongside previously available smartphones, tablets or the Sony Playstation 4, customers using the Yello Plus tariff can from now on also select a washing machine as a bonus. This option will also be offered to NaturEnergiePlus customers during the further course of the year.

The introduction of the new EHS (Environment, Health and Safety) software at the Group is progressing according to plan and will cover around 10,000 employees by the end of 2018. The roll-out is being accompanied by training courses for management personnel and employees. Another focus in 2017 will be "near accidents". EnBW wants to increase the awareness of all employees in this area: Consistent reporting of these types of incidents and communication amongst employees about dangerous situations could help to further reduce the number of accidents significantly in the future.

#### Further performance indicators for personnel

Employees of the EnBW Group<sup>1</sup>

	30/06/2017	31/12/2016	Change in %
Sales	3,279	3,244	1.1
Grids <sup>2</sup>	8,781	8,330	5.4
Renewable Energies	1,053	1,029	2.3
Generation and Trading	5,546	5,076	9.3
Other	2,665	2,730	-2.4
Total	21,324	20,409	4.5
Number of full-time equivalents <sup>3</sup>	19,862	18,923	5.0

<sup>1</sup> Number of employees excluding marginally employed persons, apprentices/trainees and inactive employees.

<sup>2</sup> The number of employees for the ITOs is only updated at the end of the year; for intervals of less than a year, the number of employees from 31/12/2016 is carried forward. <sup>3</sup> Converted into full-time equivalents.

As of 30 June 2017, the EnBW Group had 21,324 employees. The increase of 4.5% compared to the figure at the end of 2016 was due to the full consolidation of VNG. This effect impacts all of the segments with the exception of Renewable Energies. In Other, this rise will be more than balanced out by efficiency programmes in the functional units at EnBWAG and the planned departure of employees based on earlier restructuring programmes. In the Sales segment, the increase in the number of employees was almost balanced out by the closure of the B2B business under the EnBW and Watt brands. The further expansion of the offshore business led to an increase in the number of employees in the Renewable Energies segment.

After an agreement was reached with the works council committees at the core Group companies in December 2016 for a suspension of profit sharing plans for employees in the period from 2017 to 2020, a corresponding agreement was reached in the second quarter of 2017 with the representative committees for management personnel. As a result, both the management personnel and the employees will forgo 6.3% of their target remuneration for a period of four years. The Board of Management of EnBW and the managing directors of the affected companies are also individually forgoing 6.3% of their respective remuneration. All groups of workers are thus making a personal contribution to relieve the burden on the EnBW Group during a difficult economic period.

Further efficiency measures in the operational areas and functional units are required to achieve additional savings up to 2020. For this purpose, discussions are being held with employee representatives about a diverse range of workplace optimisations and job retention solutions. In those areas facing consistently tough competition, the aim is to find the best possible solutions for reducing costs, achieving greater flexibility and being able to respond appropriately to different market situations. As part of the negotiations about reduction and restructuring tools for the functional units, the company and works council have agreed as a first step to offer semiretirement plans in selected areas in order to achieve the planned workforce reductions by 2020.

An anonymous online survey on the subject of "Risk assessment – psychological stress" was carried out from 24 April to 16 May 2017. It was aimed at almost 14,000 employees, management personnel, apprentices and students at the Cooperative State University (DH) and those completing cooperative degrees. The survey was precipitated by the legal requirement to supplement risk assessments with the aspect of psychological work stress. The survey aims to identify collective psychological stresses at work in order to derive possible areas for action and preventative measures. The results have been available to the Board of Management since the end of June and were also shared with management personnel and the works councils. If there is a need for action to be taken, measures to improve the situation will be developed and implemented over the coming months.

As part of the digital transformation of EnBW, the focus is being placed on leadership development because the tasks, responsibilities and also the self-perception of management personnel will change dramatically. The "Digital Leadership Experience" was specially developed for this purpose and utilises new forms of learning such as boot camps to make aspects of modern leadership directly tangible for participants. Other themes are digital business models and the data-driven development of new services. The aim is to implement digitalisation more quickly within the Group.

#### **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. Environmental 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 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 3.1 GW and the end of 2016. Further onshore wind farms with a capacity of around 40 MW were added in the first half of 2017. Growth of around 250 MW in the onshore sector is planned for the whole year. EnBW is well on track to achieve its objectives in the environment goal dimension by 2020.

Netze BW has already been testing the use of vegetable oil instead of mineral oil for cooling and insulating transformers in grid operation since 2010. It plans to equip a total of 102 local transformer stations in Baden-Württemberg with the eco-transformers by the summer of 2017. Yet they are now going one step further: The environmentally friendly oil will now be combined with controllable local grid transformers, socalled RONTs. This is being tested at the grid station in Rotheidlen in the Ravensburg region. There is a particularly high density of photovoltaic power plants in this area. As a result, this part of Rotheidlen behaves almost like a power plant on days with high levels of sunlight. The load flow can become reversed in periods of low consumption, especially on Sundays and public holidays. This means the danger of voltage fluctuations on the grid is increasing. The new transformers are capable of independently avoiding these types of fluctuations. The operating data from these doubly innovative transformers are being remotely monitored from Stuttgart.

As part of its programme to improve energy efficiency in buildings used by the company itself, EnBW fitted new **control elements to existing boiler systems** at the regional centres in Öhringen and Kirchheim during the last year to optimise heat generation. The new control systems enabled more efficient processes to be developed that have reduced the cycle times and thus the number of times the burner systems are switched on and off. Precise data on the savings made are now available and have been evaluated in accordance with a defined test process. A fuel saving of 9.6% was achieved at the office building in Öhringen, while fuel consumption was reduced by 8.8% at the plant. A fuel saving of 9.7% has been achieved in Kirchheim. More than 110,000 kWh of gas will be saved overall at the two locations annually. The clear reduction in the number of times the burners are started will also lead to decreased wear of the burner and will thus increase the operational life of the entire boiler system.

Germany – like almost all other EU countries – is completely dependent on imports for its phosphate mineral fertilisers. Dwindling supplies of raw phosphate can be replaced by **phosphate recycling.** As part of an EnBW research project, the EnBW subsidiary MSE Mobile Schlammentwässerungs GmbH has developed an innovative process for phosphate recycling and brought it to industrial-scale maturity. The first mobile plant fits in two shipping containers and can be transported easily on articulated lorries to a variety of different deployment locations. It can process up to 100 m<sup>3</sup> of wet sewage sludge per day in continuous operation. A chemical process extracts at least 50% of the phosphate contained in the sludge. It thus fully complies with the statutory regulations. Once it has been subsequently processed and granulated, the result is a very high-quality fertiliser that is ready for immediate use.

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 jointly launched by the LUBW (Baden-Württemberg State Institute for the Environment, Measurements and Nature Conservation) and EnBW. Ten further projects were awarded funding for this year at the end of June. The 2017 funding year will thus see the 100th project for improving the living conditions and preserving the habitats of amphibians and reptiles in Baden-Württemberg realised.

#### Forecast

In the following forecast, we take a look at the expected future 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.

# Expected trends in financial performance indicators

A detailed presentation of the implementation of the strategy over a three-year period can be found in the Integrated Annual Report 2016 on p. 76.

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

Expected development of earnings in 2017 compared to the previous year

	A	Adjusted EBITDA		ted EBITDA for oup accounted / the segments
	H1/2017	2016	H1/2017	2016
Sales	+15% to +25%	+15% to +25%	10% to 20%	10% to 20%
Grids	-5% to +5%	-5% to +5%	45% to 55%	45% to 55%
Renewable Energies	+5% to +15%	+5% to +15%	15% to 20%	15% to 20%
Generation and Trading	-10% to -20%	-10% to -20%	10% to 20%	10% to 20%
Other/Consolidation	-		-	_
Adjusted EBITDA, Group	0% to +5%	0% to +5%		

The earnings forecast for the entire Group and the individual segments for the whole 2017 financial year remains unchanged from that given in the Group management report 2016 ( Integrated Annual Report 2016, p. 76 ff.). The earnings from VNG-Verbundnetz Gas Aktiengesellschaft are included for the first time in the forecast for adjusted EBITDA in 2017. As the first-time consolidation took place during the year on 18 May 2017, it does not contain the first business months where VNG achieves high earnings due to seasonal effects.

In the **Sales** segment, we expect a positive earnings performance in 2017 in comparison to the previous year. On the one hand, there will be positive effects from the withdrawal from the B2B commodity business under the EnBW and Watt brands, as well as optimisation measures in the retail customer business (B2C), while on the other hand, the billing service for other sales and network operators contributed to the improvement in earnings. The first-time consolidation of VNG during the year will only result here in a slight increase in the adjusted EBITDA. Therefore, we expect a stable or a slight increase in the share of the adjusted EBITDA for the Group accounted for by this segment.

The adjusted EBITDA for the **Grids** segment in 2017 is set to reach the same level as the previous year and it will thus continue to be the segment with the highest earnings. Earnings in this segment will be positively influenced by the full consolidation of VNG during the year. This will be offset by the slightly lower earnings from the use of the grids in comparison to the previous year. The share of the adjusted EBITDA for the Group accounted for by this segment will remain stable.

The adjusted EBITDA for the **Renewable Energies** segment will increase further in 2017. We have already placed most of the

electricity deliveries for 2017 from our run-of-river power plants on the forward market. The contribution margins achieved here are lower than those in 2016. In addition, the volume of electricity generated by the run-of-river power plants has fallen due to lower water levels in comparison to 2016. These negative effects can be offset by the expansion of onshore wind farms. Our forecasts are generally based on wind yields that correspond to the long-term average. As the wind conditions in the previous year were below average, there will be higher earnings in comparison to the previous year for this reason alone. However, the level of improvement is dependent on the actual wind strength. In the first half of the year, the wind yield was higher than in the previous year, although it was still below the long-term average. Overall, we continue to expect a stable or a slight 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 will continue to fall in 2017 despite the elimination of the nuclear fuel rod tax. This is due to the fact that we have already placed most of the electricity deliveries for 2017 on the forward market at lower margins than in the previous year. Furthermore, the earnings contribution from VNG will flow into this segment. Despite the temporary shutdown of KKP 2 in the first half of 2017, we still expect to achieve the forecast. The share of the adjusted EBITDA for the Group accounted for by this segment will fall slightly.

The **adjusted EBITDA** for the EnBW Group in 2017 will thus increase again for the first time in a number of years and be between 0% and +5% above the level in 2016. In comparison to the previous year, the continued lower contribution margins for our electricity deliveries this year that were already placed on the forward market could be offset by the positive developments in sales and the expansion in the area of wind

power, as well as expected higher wind yields compared to the previous year.

The **EBITDA** can only be forecast to a limited extent because it is strongly influenced by effects not relevant to the ongoing management of the company for which it is not possible to plan. This includes, for example, allocations to, or reversals of, provisions for onerous contracts. In the first half of the year, there was a positive extraordinary effect due to the reimbursement of the nuclear fuel rod tax, as well as income from the planned sale of shares, most of which could already be realised in the first half of 2017. We currently expect an EBITDA in 2017 that will be  $\leq 1.5$  billion higher than the adjusted EBITDA and thus significantly above our forecast in the Group management report 2016 ( $\square$  Integrated Annual Report 2016, p. 76 ff.).

The **net result for the year** will increase significantly in 2017 compared to the previous year. Based on the status as of today, we anticipate that the result reported for the first half of the year will rise further during the remainder of the year. In contrast to our earlier forecast (E Integrated Annual Report 2016, p. 76 ff.), we anticipate a net result for the year in the positive four-digit million euro range. In comparison to the EBITDA, the accuracy of the forecast for the annual net profit for the year is, however, more dependent on exogenous factors for which it is not possible to plan, such as interest rate changes, as well as reversals of impairment losses and impairment losses, whose necessity will be examined as part of the annual financial statements.

#### Internal financing capability

Key performance indicator

	2017	2016
Internal financing capability in %	≥ 100	72.1

Due to the extraordinary effect from the reimbursement of the nuclear fuel rod tax, the retained cash flow will be positively influenced by this one-off effect and increase further by the end of 2017, while net investment will remain at the planned level of  $\pounds$ 1.3 billion. As a result, the internal financing capability will be significantly above 100% in 2017 and thus remain in line with the forecast in the Group management report 2016 ( $\boxdot$  Integrated Annual Report 2016, p. 78). Irrespective of extraordinary effects, our aim is to achieve an internal financing capability of more than 100%. We will also be striving to achieve this in subsequent years in order to continue to play an active role in shaping the Energiewende. The goal is a solid investment-grade rating.

#### **TOP** ROCE

As the adjusted EBIT (including the adjusted investment result) is expected to remain stable in comparison to the previous year, the ROCE in 2017 will be mainly influenced by the increasing capital employed. This increase is due to growth investment and in particular the full consolidation of VNG. In line with our forecast ( Integrated Annual Report 2016, p. 78), this will result in a lower ROCE in comparison to the previous year, which is expected to be between 6.3% and 7.2%. Based on our strategy, we also expect a high level of investment in subsequent years despite a falling adjusted EBIT. In general, investments lead at first to a decrease in ROCE due to their low initial contribution to earnings.

# Expected trends in non-financial key performance indicators

After the end of the first half of 2017, there are no significant changes to the non-financial performance indicators compared to the expectations formulated for the 2017 financial year in the Integrated Annual Report 2016 (La Integrated Annual Report 2016, p. 78 f.).

#### Report on opportunities and risks

The medium and long-term risks associated with the operation of nuclear power plants by EnBW reduced significantly by the middle of 2017: Following the transfer of the provisions for the intermediate and final storage of radioactive waste and a risk premium of 35% paid to a fund under public law on 3 July 2017, the responsibility for these tasks has now been finally transferred to the German government. Furthermore, the Federal Constitutional Court declared the law for the nuclear fuel rod tax invalid; the opportunity associated with the lawsuit filed by EnBW against this law has thus been realised. In comparison to the report issued at the end of 2016, the remaining opportunities and

risks faced by the EnBW Group were largely unchanged in the first six months of 2017. This was reflected in the external assessments of the EnBW Group carried out by the rating agencies (E p. 16). No risks currently exist that might jeopardise the EnBW Group as a going concern.

Using the Group management report 2016 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. A detailed presentation of the opportunity and risk position can be found in the Integrated Annual Report 2016 from p. 83.

#### Cross-segment opportunities and risks

**Discount rate applied to pension provisions:** At the end of June 2017, the discount rate was 2.1%, which was up 0.2 percentage points on the rate at the end of the reporting date of 31 December 2016 (1.9%). This resulted in the present value of the defined pension benefit obligations falling by  $\leq$ 223.8 million. The uncertain future development of interest rates with its impact on pension provisions may have either a positive or negative effect on the net debt. While monitoring interest rate assessments and interest rate developments, we currently identify a high level of opportunity and low level of risk in this area. This risk could result in a negative effect during the course of 2017 on the net debt in the low three-digit million euro range. The opportunity would have a correspondingly positive effect in the low four-digit million euro range.

Market prices of financial investments: The financial investments managed by the asset management system are exposed to price changes and other loss risks as a result of the volatile financial market environment. If these risks lead to a significant or prolonged decline in the fair value of these assets, this must be recognised in the form of impairments on those securities affected. In the 2017 financial year to date, impairment losses stood at €0.7 million (previous year: €133.3 million). In terms of the market prices for financial investments, we currently identify an equal level of opportunity and risk due to the increased volatility on the financial markets. Through corresponding effects, this could have both a positive and negative impact in 2017 on net debt in the low three-digit million euro range. Due to the implementation of the Act on the Reorganisation of Responsibility in Nuclear Waste Management, there was a significant cash outflow and a corresponding adjustment to the strategic asset allocation in July 2017.

**Political and economic environment in Turkey:** EnBW has been commercially active in Turkey for many years, primarily in the expansion of energy generation from wind power and hydropower. In the past few months, the political conditions in this country, which has great economic potential, have deteriorated noticeably. Therefore, the observance of constitutional principles is no longer consistently guaranteed. The risk has thus been newly added in the Six-Monthly Financial Report 2017. EnBW is monitoring the political and economic developments very closely, especially because it has a duty of care for those employees working in Turkey.

#### **Generation and Trading segment**

**Margin payments:** As a result of unfavourable developments on the market, margin requirements for stock market transactions and bilateral margin agreements can lead to short-term cash outflows. These are settled again at the latest when the underlying futures transactions are fulfilled. This liquidity risk is constantly monitored using stress tests. As a result of fluctuating prices and higher volumes on the wholesale market due to the decision to withdraw from the traditional electricity and gas sales to large customers (B2B) under the EnBW and Watt brands, there will be potential for higher margin payments. In 2017, this could have corresponding effects on the key performance indicator ROCE with either a positive impact in the high double-digit million euro range or a negative impact in the low three-digit million euro range.

At the end of the first half of 2017, the following opportunities and risks presented in the Group management report 2016 were either eliminated or will no longer be included in the Group reporting due to their low level of relevance:

- > Final storage: This risk no longer exists due to the fact that the Act on the Reorganisation of Responsibility in Nuclear Waste Management has come into effect, the corresponding contract has been signed and the risk premium paid by EnBW.
- > Moratorium lawsuit: In signing the contract for financing the costs of the phase-out of nuclear power, EnBW obligated itself to withdraw the moratorium lawsuit.
- > Nuclear fuel rod tax: The Federal Constitutional Court declared the law for the nuclear fuel rod tax invalid on 7 June 2017, which was the subject of the opportunity "lawsuit against the nuclear fuel rod tax". The opportunity has thus been realised as a result of this judgement, while the basis for the risk or the risk of an extension of the nuclear fuel rod tax to the end of the operating life of the nuclear power plants has now been eliminated.
- > EU sanctions against Russia: The risk of possible sanctions with a negative impact on existing business relations with Russian companies cannot be completely excluded, yet due to the continuing unchanged political developments, this risk falls short of the materiality threshold for reporting.
- > Shutdown and early inspection of KKP 2: The damaged ventilation system brackets identified during routine inspections of Block 2 of the Philippsburg nuclear power plant (KKP 2) have been repaired. The power plant has been back in operation since 15 May 2017. This risk thus no longer exists.

# Six-monthly consolidated financial statements

### Income statement

in € million	01/04– 30/06/2017	01/04- 30/06/2016	01/01– 30/06/2017	01/01- 30/06/2016
Revenue including electricity and energy taxes	5,458.4	4,786.3	10,813.4	10,185.6
Electricity and energy taxes	-154.4	-170.0	-337.6	-374.2
Revenue	5,304.0	4,616.3	10,475.8	9,811.4
Changes in inventories	31.4	6.4	57.6	36.6
Other own work capitalised	22.2	21.9	40.3	40.0
Other operating income	1,678.8	81.2	1,994.1	308.4
Cost of materials	-4,337.5	-3,774.1	-8,532.6	-7,814.4
Personnel expenses	-451.0	-436.9	-849.1	-849.2
Other operating expenses	-381.4	-245.0	-546.5	-645.0
EBITDA	1,866.5	269.8	2,639.6	887.8
Amortisation and depreciation	-316.6	-263.6	-557.0	-485.8
Earnings before interest and taxes (EBIT)	1,549.9	6.2	2,082.6	402.0
Investment result	69.1	57.0	91.4	70.9
of which net profit/loss from entities accounted for using the equity method	(14.6)	(-18.0)	(30.2)	(-6.0)
of which other profit/loss from investments	(54.5)	(75.0)	(61.2)	(76.9)
Financial result	239.8	-271.1	250.1	-537.2
of which finance income	(370.5)	(61.1)	(504.2)	(171.3)
of which finance costs	(-130.7)	(-332.2)	(-254.1)	(-708.5)
Earnings before tax (EBT)	1,858.8	-207.9	2,424.1	-64.3
Income tax	-538.7	-20.5	-686.0	-74.2
Group net profit/loss	1,320.1	-228.4	1,738.1	-138.5
of which profit/loss shares attributable to non- controlling interests	(21.4)	(16.8)	(58.8)	(55.7)
of which profit/loss shares attributable to the shareholders of EnBW AG	(1,298.7)	(-245.2)	(1,679.3)	(-194.2)
EnBW AG shares outstanding (million), weighted average	270.855	270.855	270.855	270.855
Earnings per share from Group net profit/ loss (€) <sup>1</sup>	4.79	-0.91	6.20	-0.72

<sup>1</sup> Diluted and basic; in relation to profit/loss attributable to the shareholders of EnBW AG.

# Statement of comprehensive income

in € million	01/04- 30/06/2017	01/04- 30/06/2016	01/01- 30/06/2017	01/01- 30/06/2016
Group net profit/loss	1,320.1	-228.4	1,738.1	-138.5
Revaluation of pensions and similar obligations	178.2	-561.7	284.4	-952.4
Entities accounted for using the equity method	0.0	0.0	0.0	1.4
Income taxes on other comprehensive income	-51.1	-0.7	-81.9	20.1
Total of other comprehensive income and expenses without future reclassifications impacting earnings	127.1	-562.4	202.5	-930.9
Currency translation differences	17.9	-2.0	16.8	-8.1
Cash flow hedge	-5.9	96.9	33.2	133.2
Available-for-sale financial assets	-77.5	42.6	-21.1	-28.1
Entities accounted for using the equity method	-6.2	-38.8	-4.6	-45.0
Income taxes on other comprehensive income	10.3	-29.6	16.8	-47.2
Total of other comprehensive income and expenses with future reclassifications impacting earnings	-61.4	69.1	41.1	4.8
Total other comprehensive income	65.7	-493.3	243.6	-926.1
Total comprehensive income	1,385.8	-721.7	1,981.7	-1,064.6
of which profit/loss shares attributable to non- controlling interests	(28.9)	(15.8)	(65.2)	(50.6)
of which profit/loss shares attributable to the shareholders of EnBW AG	(1,356.9)	(-737.5)	(1,916.5)	(-1,115.2)

## Balance sheet

in € million	30/06/2017	31/12/2016
Assets		
Non-current assets		
Intangible assets	2,009.3	1,636.5
Property, plant and equipment	15,229.0	13,481.9
Entities accounted for using the equity method	1,186.3	1,835.6
Other financial assets	5,694.3	6,428.0
Trade receivables	333.8	357.4
Other non-current assets	434.5	410.1
Deferred taxes		1,268.9
	25,859.7	25,418.4
Current assets		
Inventories		806.8
Financial assets		2,389.5
Trade receivables		3,129.1
Other current assets		2,626.9
Cash and cash equivalents		3,991.6
		12,943.9
Assets held for sale		173.0
		13,116.9
	41,769.8	38,535.3
Equity and liabilities		
Equity		
Shares of the shareholders of EnBW AG		
Subscribed capital		708.1
Capital reserve		774.2
Revenue reserves		1,582.5
Treasury shares		-204.1
Other comprehensive income		-1,543.0
N		1,317.7
Non-controlling interests		1,898.5
AL	5,500.9	3,216.2
Non-current liabilities	10.00/.0	10.011.0
Provisions		13,011.9
Deferred taxes		652.8
Financial liabilities		6,720.2
Other liabilities and subsidies	15,229.0         1,186.3         5,694.3         333.8         434.5         972.5         25,859.7         25,859.7         25,859.7         972.5         25,859.7         972.5         25,859.7         972.5         25,859.7         972.5         25,859.7         972.5         25,859.7         972.5         25,859.7         972.5         25,859.7         972.5         25,859.7         972.5         25,859.7         972.5         15,910.1         15,822.5         87.6         15,910.1         41,769.8         9         708.1         774.2         3,261.8         -204.1         -1,305.8         3,234.2         2,266.7         5,500.9         13,206.8         873.4         6,952.9         1,834.9         22,868.0         13,398.5	1,787.1
Current liabilities	22,000.0	22,172.0
Provisions	1 2/4 7	6,060.2
Financial liabilities		1,208.7
Trade payables		3,193.0
Other liabilities and subsidies		2,661.2
		13,123.1
Liabilities directly associated with assets classified as held for sale		24.0
		13,147.1
	41,/07.8	38,535.3

## Cash flow statement

in € million	01/01- 30/06/2017	01/01- 30/06/2016
1. Operating activities		
EBITDA	2,639.6	887.8
Changes in provisions	-237.8	-132.1
Result from disposals	-272.4	-11.4
Other non-cash expenses/income	-311.9	-33.9
Change in assets and liabilities from operating activities	-51.2	-840.3
Inventories	(-120.4)	(-97.9)
Net balance of trade receivables and payables	(348.9)	(-414.1)
Net balance of other assets and liabilities	(-279.7)	(-328.3)
Income tax received/paid	121.9	-232.5
Cash flow from operating activities	1,888.2	-362.4
2. Investing activities		
Capital expenditure on intangible assets and property, plant and equipment	-486.1	-342.4
Disposals of intangible assets and property, plant and equipment	42.2	71.7
Cash received from construction cost and investment subsidies and tax refunds from recognised exploration expenditure	33.1	27.2
Acquisition/sale of subsidiaries, entities accounted for using the equity method and interests in joint operations	74.6	-714.6
Changes in securities and investments	2,864.0	854.2
Interest received	150.0	129.4
Dividends received	66.6	60.8
Cash flow from investing activities	2,744.4	86.3
3. Financing activities		
Interest paid for financing activities	-184.1	-191.7
Dividends paid	-29.6	-174.2
Increase in financial liabilities	17.1	14.7
Repayment of financial liabilities	-1,056.5	-141.6
Payments from alterations of capital in non-controlling interests	-86.4	-23.5
Cash flow from financing activities	-1,339.5	-516.3
Net change in cash and cash equivalents	3,293.1	-792.4
Change in cash and cash equivalents due to changes in the consolidated companies	289.1	0.0
Net foreign exchange difference	-2.0	-1.5
Change in cash and cash equivalents	3,580.2	-793.9
Cash and cash equivalents at the beginning of the period	3,991.6	3,501.1
Cash and cash equivalents at the end of the period	7,571.8	2,707.2

# Statement of changes in equity

in € million						Othe	er comprehen	sive income <sup>1</sup>			
	Sub- scribed capital and capital reserve	Revenue reserves	Treas- ury shares	Revaluation of pensions and similar obligations	Currency translation differences	Cash flow hedge	Available- for-sale financial assets	Entities accounted for using the equity method	Shares of the share- holders of EnBW AG	Non- con- trolling inter- ests <sup>1</sup>	Total
As of Inte- grated Annual Report 2016: 01/01/2016	1,482.3	3,634.8	-204.1	-1,482.7	-54.4	-256.9	213.1	-63.3	3,268.8	1,854.4	5,123.2
Other comprehensive income				-928.0	-6.0	93.9	-37.3	-43.6	-921.0	-5.1	-926.1
Group net profit/loss		-194.2							-194.2	55.7	-138.5
Total comprehensive income	0.0	-194.2	0.0	-928.0	-6.0	93.9	-37.3	-43.6	-1,115.2	50.6	-1,064.6
Dividends paid		-149.0							-149.0	-43.8	-192.8
Other changes		-106.3						106.1	-0.2	-25.0	-25.2
As of 30/06/2016	1,482.3	3,185.3	-204.1	-2,410.7	-60.4	-163.0	175.8	-0.8	2,004.4	1,836.2	3,840.6
As of 01/01/2017	1,482.3	1,582.5	-204.1	-1,784.6	-48.2	-97.7	383.1	4.4	1,317.7	1,898.5	3,216.2
Other comprehensive income				201.1	13.2	35.4	-7.9	-4.6	237.2	6.4	243.6
Group net profit/loss		1,679.3							1,679.3	58.8	1,738.1
Total comprehensive income	0.0	1,679.3	0.0	201.1	13.2	35.4	-7.9	-4.6	1,916.5	65.2	1,981.7
Dividends paid									0.0	-29.6	-29.6
Other changes									0.0	332.6	332.6
As of 30/06/2017	1,482.3	3,261.8	-204.1	-1,583.5	-35.0	-62.3	375.2	-0.2	3,234.2	2,266.7	5,500.9

<sup>1</sup> Of which other comprehensive income directly associated with the assets held for sale as of 30/06/2017 to the amount of €0.0 million [01/01/2017: €0.0 million, 30/06/2016: €0.0 million, 01/01/2017: €0.0 million, 30/06/2016: €0.0 million, 01/01/2017: €0.0 million, 30/06/2016: €0.0 million, 01/01/2017: €0.0 million, 01/01/2016: €-45.4 million]. Of which attributable to non-controlling interests: €0.0 million (01/01/2017: €0.0 million, 30/06/2016: €0.0 million, 01/01/2017: €0.0 million, 01/01/2016: €-45.4 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 2017, 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 2016 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 2017 was shortened in comparison with that used for the consolidated financial statements as of 31 December 2016.

In addition to the income statement, the statement of comprehensive income, balance sheet, abridged cash flow statement and statement of changes in equity for the EnBW Group are presented separately.

Significant events in the reporting period, such as the change to the discount rate for pension and nuclear provisions and detailed descriptions of the segments and financial result, as well as changes in the assets held for sale and entities accounted for using the equity method, 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–subject to corresponding incorporation in European law – as from the 2017 financial year:

- > Collective standard for the amendment of various IFRS (2016) "Improvements to the IFRS Cycle 2014–2016" with regard to the amendments to IFRS 12
- > Amendments to IAS 7 (2016) "Disclosure Initiative"
- > Amendments to IAS 12 (2016) "Recognition of deferred tax assets for unrealised losses"

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

#### 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 2017 financial year. Their application in the future is subject to their endorsement by the EU into European law.

> IFRS 9 "Financial Instruments": The publication of IFRS 9 (2014) completed IASB's three-phase revision of the rules on the accounting of financial instruments. The standard must be applied for financial years beginning on or after 1 January 2018. Due to the change in requirements for the classification of financial instruments, differences compared to the classification and measurement of financial assets previously required under IAS 39 will arise. In the IFRS 9 implementation project, it is apparent that the at fair value through profit or loss measurement category will, in future, increase in significance. At the transition date, EnBW will not utilise the option for equity instruments and will thus measure them at fair value through profit or loss. The financial assets that were previously classified as "available for sale" and are used as debt instruments should mainly be allocated under the "hold to collect and sell" business model. If the interest test is satisfied, these will be recognised at fair value through profit or loss. Furthermore, transfer to the expected loss model will tend to increase the required risk provisions. An improvement is also expected as a result of the new rules on hedge accounting because certain restrictions in the current rules of IAS 39 have been removed and so a larger range of hedging instruments and hedged items is available. EnBW will utilise the hedge accounting rules in IFRS 9 at the transition date. EnBW will utilise the option of not stating any comparative figures for previous years.

- > IFRS 15 "Revenue from Contracts with Customers" and amendments to IFRS 15 (2016) "Clarifications to IFRS 15 Revenue from Contracts with Customers": In contrast to the current rules, the new standard includes a principles-based five-step model for recognising revenue from contracts with customers. The standard replaces the current rules on revenue recognition in IAS 11 and IAS 18 and the associated interpretations. In terms of transition relief, the Group will utilise the modified retrospective approach. In order to examine the impact of IFRS 15 on the consolidated financial statements, a project was started to systematically document and analyse the types of contracts at the different value-added stages. The business areas at the core Group companies are being examined in phase 1, while the fully consolidated companies where there is a majority shareholding are being examined in phase 2. Both phases of the Group-wide implementation project for IFRS 15 have not yet been fully concluded at EnBW. There may be a need for adjustments to the presentation of multi-component transactions in the Sales segment, which, however, only currently represent minor sale volumes. In addition, it may lead to the capitalisation of costs for acquiring contracts, especially in Sales. With regards to sales tariffs in the retail customer business for the supply of energy, the analysis has shown that the current method of accounting for the base and commodity price can be retained. For the transmission and distribution grids and the trading business of the core Group companies, the analysis of the contracts has not yet identified any transition effects. On the basis of the current state of the project, we only anticipate minor changes to accounting overall.
- > IFRS 16 "Leases": The standard replaces the current standard for accounting for leases IAS 17 and the associated interpretations. The new standard introduces a uniform accounting model, whereby leases are recognised on the balance sheet of the lessee. The lessee recognises a right-of-use to the underlying asset and a lease liability that represents its obligation to make lease payments. There are exemptions for short-term leases and leases where the asset has a low value. EnBW has started its first assessment of the possible effects on the consolidated financial statements. 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. EnBW has not yet decided whether to utilise the exemptions. In terms of transition relief, the Group will utilise the modified retrospective approach as a lessee. It is not possible to estimate the effects on the assets and liabilities at this point in time because, amongst other things, there is uncertainty about potential further leases. The standard must be applied for financial years beginning on or after 1 January 2019. In the EnBW Group, the standard will be applied for the first time in the 2019 financial year. The option of early application will not be utilised. The amendments have yet to be endorsed by the EU.

#### **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	30/06/2017	31/12/2016	30/06/2016
Full consolidation	143	122	117
Entities accounted for using the equity method	21	17	17
Joint operations	3	3	3

Acquisition of fully consolidated companies

#### VNG-Verbundnetz Gas Aktiengesellschaft

In order to strengthen the gas business, EnBW acquired 74.21% of VNG-Verbundnetz Gas Aktiengesellschaft, Leipzig, from EWE Aktiengesellschaft in the second quarter of 2016. After obtaining control by gaining a majority on the Supervisory Board, the company previously accounted for as a joint venture using the equity method is now fully consolidated in the consolidated financial statements as of 18 May 2017. VNG is a horizontally and vertically integrated group of companies in the European gas industry that is particularly active in the areas of exploration and production, gas transport and gas storage, as well as trading and services.

The fair value of the VNG shares at the time of full consolidation was  $\pounds_{1,314.1}$  million. As the disposal of the VNG shares accounted for using the equity method was worth  $\pounds_{1,298.6}$  million, there was investment income of  $\pounds_{15.5}$  million. The value of the non-controlling interest was calculated at fair value based on the identifiable net assets of VNG and stands at  $\pounds_{412.5}$  million. The amount reported for goodwill is preliminary due to the fact that the analysis of the fair value of the assets and liabilities has not yet been concluded. It represents, amongst other things, synergies in the gas business along the entire value added chain. The goodwill recognised is not deductible for tax purposes.

Following its full consolidation, VNG contributed  $\leq 581.1$  million to the sales revenues and  $\leq 9.8$  million to earnings after income taxes in the six-monthly financial statements for 2017. If VNG had been fully consolidated since the beginning of the year, Group revenue would have increased by  $\leq 1,416.3$  million to  $\leq 11,892.1$  million and earnings after income taxes would have increased by  $\leq 36.1$  million to  $\leq 1,774.2$  million.

in € million	Carrying amount according to IFRS	Recognised at acquisition
Intangible assets		
Property, plant and equipment	1,435.0	1,879.8
Other non-current assets	459.4	646.1
Current assets	1,638.2	1,638.2
Total assets	3,571.1	4,448.7
Non-current liabilities	965.5	1,306.3
Current liabilities	1,540.0	1,543.0
Total liabilities	2,505.5	2,849.3
Net assets <sup>1</sup>	1,065.6	1,599.4
Non-controlling interests		412.5
Net assents attributable to the shareholders of EnBW AG		1,186.9
Fair value of the VNG shares		1,314.1
Goodwill		127.2

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

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

The fair value of the trade receivables acquired as part of the business combination stood at  $\notin$  993.4 million. There were no specific bad debt allowances. It is anticipated that the total amount of the trade receivables will be largely collected.

#### Notes to the balance sheet

EnBW paid around €4.8 billion on 3 July 2017 into a fund under public law held by the German government to finance the disposal of nuclear waste. For this reason, this obligation reported under the provisions relating to nuclear power as of 31 December 2016 has been reclassified under other current liabilities and subsidies as of 30 June 2017. This item increased by around €4.8 billion as a result.

#### Contingent liabilities and other financial commitments

Compared to 31 December 2016, contingent liabilities and other financial commitments increased by €13,088.6 million to €34,272.4 million. The increase was primarily attributable to purchase obligations at VNG due to the first-time full consolidation. In addition, the granting of a surety to a wind farm accounted for as a joint venture using the equity method led to an increase.

#### Notes relating to fair value

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		3	0/06/2017		3	1/12/2016
	Fair value	Not within the scope of appli- cation	Carrying amount	Fair value	Not within the scope of appli- cation	Carrying amount
Financial assets	6,259.6	47.0	6,306.6	8,770.0	47.5	8,817.5
Held for trading	(60.7)		(60.7)	(59.4)		(59.4)
Available for sale <sup>1</sup>	(5,975.3)		(5,975.3)	(8,563.0)		(8,563.0)
Loans and receivables	(223.6)		(223.6)	[147.6]		(147.6)
Trade receivables	4,238.1		4,238.1	3,486.5		3,486.5
Other assets	1,901.6	1,348.6	3,250.2	2,240.1	796.9	3,037.0
Held for trading <sup>2</sup>	(1,048.1)		(1,048.1)	(1,506.7)		(1,506.7)
Loans and receivables	(690.9)		(690.9)	(510.0)		(510.0)
Derivatives designated as hedging instruments	(133.3)		(133.3)	(191.8)		(191.8)
Carrying amount in accordance with IAS 17	(29.3)		(29.3)	(31.6)		(31.6)
Cash and cash equivalents	7,571.8		7,571.8	3,991.6		3,991.6
Assets held for sale	0.0	87.6	87.6	6.6	166.4	173.0
Total	19,971.1	1,483.2	21,454.3	18,494.8	1,010.8	19,505.6
Financial liabilities	8,091.0		7,248.8	8,708.0		7,928.9
Measured at amortised cost <sup>3, 4</sup>	(7,982.9)		(7,140.7)	(8,675.1)		(7,896.0)
Carrying amount in accordance with IAS 17	(108.1)		(108.1)	[32.9]		(32.9)
Trade payables	2,370.5	2,060.3	4,430.8	516.5	2,676.5	3,193.0
Other liabilities and subsidies	6,554.3	2,605.6	9,159.9	2,150.6	2,297.7	4,448.3
Held for trading	(1,140.2)		(1,140.2)	(1,519.9)		(1,519.9)
Measured at amortised cost	(5,366.5)		(5,366.5)	(591.2)		(591.2)
Derivatives designated as hedging instruments	(47.6)		(47.6)	(39.5)		(39.5)
Liabilities directly associated with assets classified as held for sale	0.0	2.4	2.4	15.3	8.7	24.0
Total	17,015.8	4,668.3	20,841.9	11,390.4	4,982.9	15,594.2

<sup>1</sup> Available-for-sale financial assets include equity instruments of €974.6 million (31/12/2016: €850.9 million) measured at amortised cost whose fair value cannot be reliably determined.

²0f which €6.9 million (ਤ័1/12/2016: €8.1 million) measured at fair value through profit or loss when reported for the first time.

<sup>3</sup> This includes financial liabilities of €7,449.1 million (31/12/2016: €8,242.8 million) measured at fair value through profit or loss. <sup>4</sup> Of the financial liabilities measured at amortised cost, an amount of €474.6 million (31/12/2016: €483.1 million) is part of fair value hedges.

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.

Hierarchy of input data	_					
in€million <sup>1</sup>		3	0/06/2017		3	1/12/2016
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Financial assets	2,590.6	1,517.2	953.6	4,901.7	1,985.3	891.1
Held for trading	(60.7)			(59.4)		
Available for sale	(2,529.9)	(1,517.2)	(953.6)	[4,842.3]	(1,985.3)	(891.1)
Other assets	8.9	1,172.5	0.0	2.4	1,696.1	0.0
Held for trading		(1,048.1)		(0.2)	(1,506.5)	
Derivatives designated as hedging instruments	(8.9)	(124.4)		(2.2)	(189.6)	
Total	2,599.5	2,689.7	953.6	4,904.1	3,681.4	891.1
Financial liabilities	5,809.2	1,639.9	0.0	6,768.6	1,474.2	0.0
Measured at amortised cost	(5,809.2)	[1,639.9]		(6,768.6)	(1,474.2)	
Other liabilities and subsidies	0.2	1,187.6	0.0	0.2	1,559.2	0.0
Held for trading	(0.2)	(1,140.0)		(0.1)	(1,519.8)	
Derivatives designated as hedging instruments		[47.6]		(0.1)	(39.4)	
Total	5,809.4	2,827.5	0.0	6,768.8	3,033.4	0.0

Hierarchy of input data

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

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 01/01/2017	Changes recognised in equity	Additions	Disposals	Other	As of 30/06/2017
Financial assets	891.1	24.0	139.2	-98.3	-2.4	953.6

In the first six months of the year, gains from Level 3 financial instruments were recognised in the investment result or financial result in the amount of  $\leq$ 14.5 million, of which  $\leq$ 14.5 million is accounted for by financial instruments still held on the reporting date.

#### Segment reporting

#### 01/01-30/06/2017

in € million	Sales	Grids	Renewable Energies	Generation and Trading	Other/ Consolidation	Total
External revenue	3,717.4	3,687.8	244.5	2,821.0	5.1	10,475.8
Internal revenue	509.6	1,307.3	135.2	1,428.8	-3,380.9	0.0
Total revenue	4,227.0	4,995.1	379.7	4,249.8	-3,375.8	10,475.8
Adjusted EBITDA	180.8	610.6	152.4	102.3	26.5	1,072.6
EBITDA	162.4	621.1	407.7	1,414.0	34.4	2,639.6
Adjusted EBIT	150.2	407.1	73.1	-100.2	12.8	543.0
EBIT	127.9	417.6	328.4	1,188.0	20.7	2,082.6
Scheduled amortisation and depreciation	-30.6	-203.5	-79.3	-202.5	-13.7	-529.6
Impairment losses	-3.9	0.0	0.0	-23.5	0.0	-27.4
Capital employed as of 30/06/2017	1,031.9	6,302.2	3,236.1	2,768.0	2,184.8	15,523.0

#### 01/01-30/06/2016

in € million	Sales	Grids	Renewable Energies	Generation and Trading	Other/ Consolidation	Total
External revenue	4,070.8	3,234.1	254.5	2,246.9	5.1	9,811.4
Internal revenue	202.0	1,372.4	132.1	1,187.0	-2,893.5	0.0
Total revenue	4,272.8	4,606.5	386.6	3,433.9	-2,888.4	9,811.4
Adjusted EBITDA	138.3	523.8	153.1	148.6	3.7	967.5
EBITDA	73.5	515.0	152.9	130.0	16.4	887.8
Adjusted EBIT	108.7	344.3	77.8	-16.1	-10.7	504.0
EBIT	22.1	335.0	77.6	-34.7	2.0	402.0
Scheduled amortisation and depreciation	-29.6	-179.5	-75.3	-164.7	-14.4	-463.5
Impairment losses	-21.8	-0.5	0.0	0.0	0.0	-22.3
Capital employed as of 31/12/2016	525.6	5,310.8	3,066.2	2,074.7	3,817.0	14,794.3

Adjusted EBITDA is one of the key internal performance indicators. Adjusted EBITDA is an earnings ratio before interest, tax, depreciation and amortisation and 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- 30/06/2017	01/01- 30/06/2016
Adjusted EBITDA	1,072.6	967.5
Non-operating EBITDA	1,567.0	-79.7
EBITDA	2,639.6	887.8
Amortisation and depreciation	-557.0	-485.8
Earnings before interest and taxes (EBIT)	2,082.6	402.0
Investment result	91.4	70.9
Financial result	250.1	-537.2
Earnings before tax (EBT)	2,424.1	-64.3

Segment reporting is based on internal reporting.

Sales of electricity and gas, as well as the provision of energy-related services, such as billing services or energy supply and energy-saving contracting, 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. In addition to the generation and trading of electricity, the Generation and Trading segment also comprises the provision of system services, gas midstream operations, district heating, environmental services, the area dealing with the dismantling of nuclear power plants, as well as the production of natural gas (a new area taken over with VNG). Our shareholding in VNG that was still accounted for using the equity method as of 31 December 2016 and other 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

EnBW paid around  $\notin$ 4.8 billion on 3 July 2017 into a fund under public law held by the German government to finance the disposal of nuclear waste. This fund will in future hold the required cash funds for financing intermediate and final storage, which is the responsibility of the German government after all payments have been received. Numerous items on the balance sheet will reduce significantly as a result of this payment, although there will be no change to net debt or the income statement.

On 3 July 2017, EnBW received reimbursements of around  $\notin$  0.3 billion for the nuclear fuel rod tax paid in 2015 and 2016. Accordingly, there was a decrease in other current assets and an increase in cash and cash equivalents. This received payment had no impact on the income statement because the total reimbursed amount had already been recognised as of 30 June 2017.

## 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 to 30 June 2017, which are part of the sixmonthly financial report pursuant to section 37w 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 reports is the responsibility of the company's Board of Management. Our responsibility is to issue a certification 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 so that with a certain level of assurance in our critical appraisal we can 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 obtained 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.

Frankfurt am Main, 26 July 2017

KPMG AG Wirtschaftsprüfungsgesellschaft

Janz German Public Auditor Stratmann German Public Auditor

### Declaration by the legal representatives

We assure to the best of our knowledge that, in accordance with the accounting principles applicable for sixmonthly 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.

Karlsruhe, 26 July 2017

EnBW Energie Baden-Württemberg AG

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### Important notes

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#### No offer or investment recommendation

This report has been prepared for information purposes only. It does not constitute an offer, an invitation or a recommendation to purchase or sell securities issued by EnBW Energie Baden-Württemberg AG (EnBW), a company of the EnBW Group or any other company. This report also does not constitute a request, invitation or recommendation to vote or give consent. All descriptions, examples and calculations are included in this report for illustrative purposes only.

#### Forward-looking statements

This report contains forward-looking statements which are based on current assumptions, plans, estimates and forecasts made by the management of EnBW. Forward-looking statements of this kind are therefore only valid at the time they were first published. Forward-looking statements are indicated by the context, but may also be identified by the use of the words "can", "will", "should", "plans", "intends", "expects", "thinks", "estimates", "forecasts", "potential", "continued" and similar expressions. By nature, forward-looking statements are subject to risks and uncertainties that cannot be controlled or accurately predicted by EnBW. Actual events, future results, the financial position, development or performance of EnBW and the companies of the EnBW Group may therefore diverge considerably from the forward-looking statements made in this report. Therefore, it cannot be guaranteed nor can any liability otherwise be assumed that these forwardlooking 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 forwardlooking 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

27 July 2017

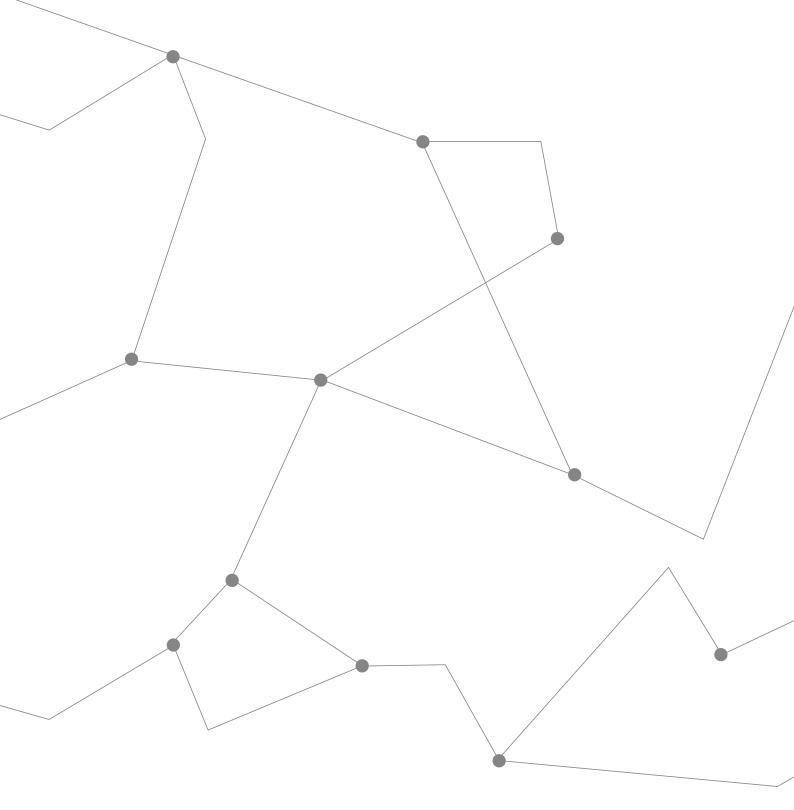
Publication of the Six-Monthly Financial Report January to June 2017

20 September 2017 Capital Market Day

**10 November 2017** Publication of the Quarterly Statement January to September 2017

22 March 2018 Publication of the Integrated Annual Report 2017

8 May 2018 Annual General Meeting 2018



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