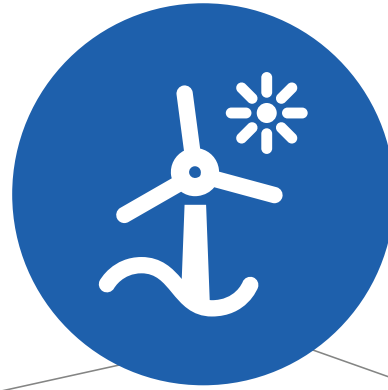
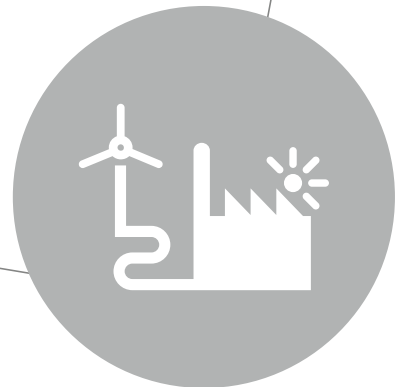
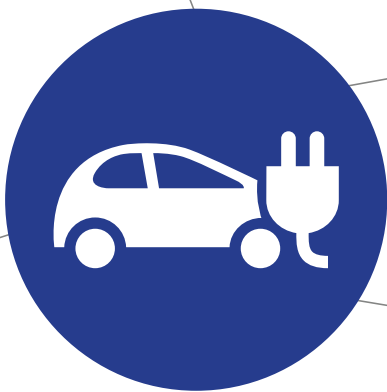


# Integrated Annual Report 2016

Excluding the notes and  
the declaration of corporate management



## Energy connects



# Performance indicators of the EnBW Group

## Financial and strategic performance indicators

in € million	2016	2015	Change in %
External revenue	19,368.4	21,166.5	-8.5
<b>TOP</b> Adjusted EBITDA	1,938.9	2,109.6	-8.1
<b>TOP</b> Share of adjusted EBITDA accounted for by Sales in € million/in %	249.7/12.9	255.3/12.1	-2.2/-
<b>TOP</b> Share of adjusted EBITDA accounted for by Grids in € million/in %	1,004.1/51.8	747.4/35.4	34.3/-
<b>TOP</b> Share of adjusted EBITDA accounted for by Renewable Energies in € million/in %	295.3/15.2	287.4/13.6	2.7/-
<b>TOP</b> Share of adjusted EBITDA accounted for by Generation and Trading in € million/in %	337.2/17.4	777.3/36.8	-56.6/-
Share of adjusted EBITDA accounted for by Other/Consolidation in € million/in %	52.6/2.7	42.2/2.1	24.6/-
EBITDA	730.7	1,918.2	-61.9
Adjusted EBIT	1,024.5	1,181.9	-13.3
EBIT	-1,662.9	277.0	-
Group net profit/loss <sup>1,2</sup>	-1,797.2	158.2	-
Earnings per share from Group net profit/loss in € <sup>1,2</sup>	-6.64	0.58	-
Retained cash flow <sup>1</sup>	949.5	1,717.6	-44.7
Net (cash) investments <sup>1</sup>	1,316.9	493.9	-
<b>TOP</b> Internal financing capability in %	72.1	347.8	-
Net financial liabilities	3,645.0	3,329.0	9.5
Coverage ratio ALM in %	61.0	74.2	-
<b>TOP</b> Return on capital employed (ROCE) in % <sup>1</sup>	7.8	9.5	-
Weighted average cost of capital before tax in %	6.9	6.9	-
Average capital employed <sup>1</sup>	13,715.6	13,627.2	0.6
Value added <sup>1</sup>	123.4	354.3	-65.2

## Non-financial performance indicators

	2016	2015	Change in %
<b>Customers and society goal dimension</b>			
<b>TOP</b> Reputation Index	50.0	48.5	3.1
<b>TOP</b> EnBW/Yello Customer Satisfaction Index	132/150	136/152	-2.9/-1.3
<b>TOP</b> SAIDI (electricity) in min/year	16	15	6.7
<b>Employees goal dimension</b>			
<b>TOP</b> Employee Commitment Index (ECI) <sup>3</sup>	59	60	-1.7
<b>TOP</b> LTIF <sup>3</sup>	3.9	3.8	2.6
<b>Environment goal dimension</b>			
<b>TOP</b> Installed output of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE in %	3.1/23.1	3.1/23.6	-/-2.1
<b>TOP</b> CO <sub>2</sub> intensity in g/kWh	577	606	-4.8

## Employees of the EnBW Group<sup>4</sup>

	31/12/2016	31/12/2015	Change in %
Employees	20,409	20,288	0.6

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

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

<sup>3</sup> Variations in the group of consolidated companies; see also the definition of key performance indicators on page 28.

<sup>4</sup> Number of employees excluding marginally employed persons, apprentices/trainees and inactive employees.

# Profile 2016


**Energy connects.** Trends such as digitalisation, decentralisation and urbanisation are accelerating the pace of change in the energy sector. Digital intelligence is linking aspects of our lives more and more with economic sectors. It is now essential to network various different infrastructures both within and beyond the energy sector even more strongly together – such as broadband, transport or safety. In line with these trends, EnBW will further develop its standing as a competent and reliable infrastructure partner for customers, citizens and local authorities.

EnBW is playing an important role in shaping the Energiewende and is resolutely and confidently implementing its EnBW 2020 strategy: increasing generation from renewable sources of energy, expanding the stable grids business and offering innovative products and services – all underpinned by a comprehensive range of efficiency measures. As one of the largest energy supply companies in Germany, we supply electricity, gas, water and energy-related products and services to approximately 5.5 million customers with a workforce of 20,000 employees – as an integrated and innovative company with a realigned business portfolio and strong roots in Baden-Württemberg.



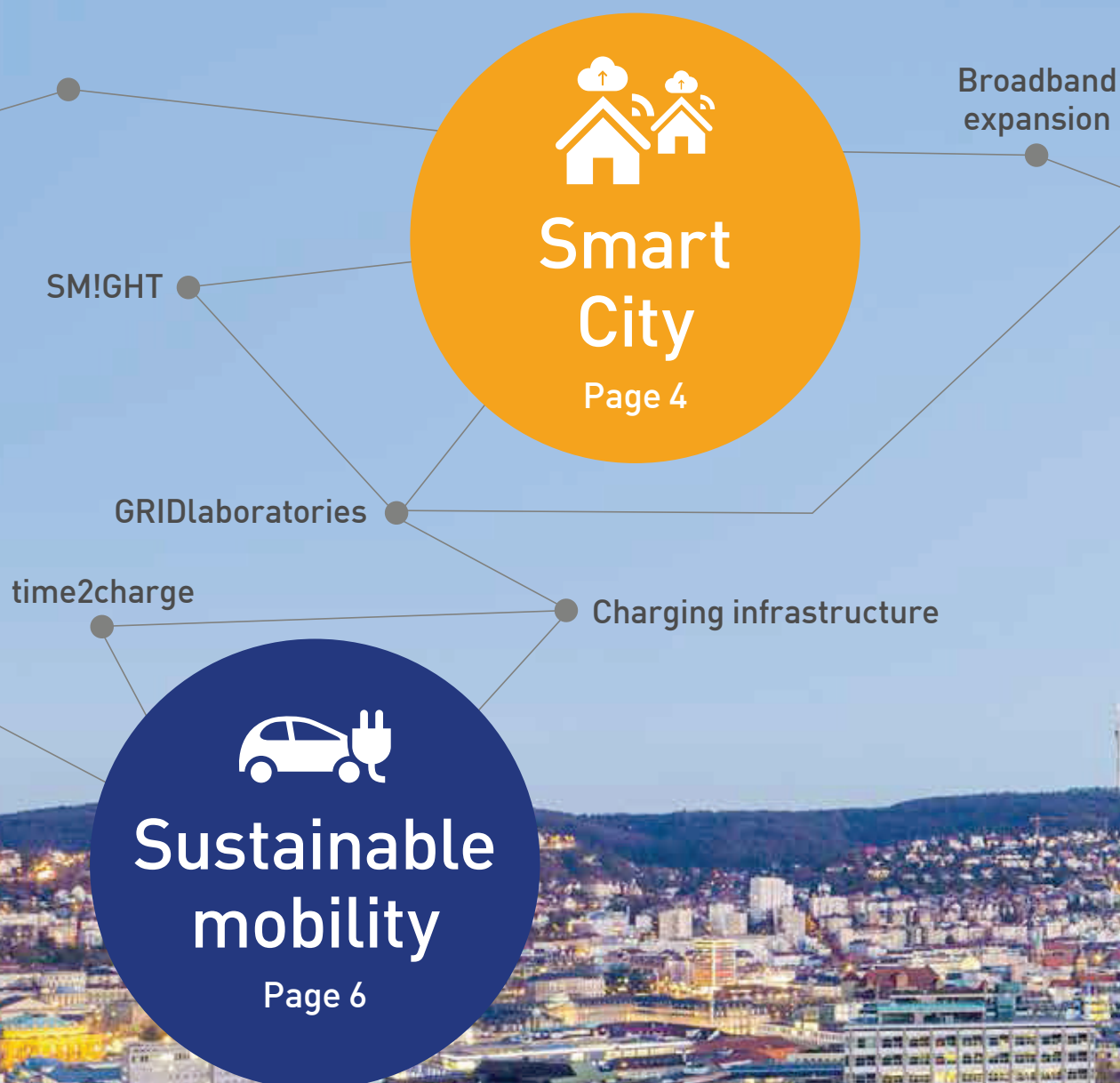
Energy connects


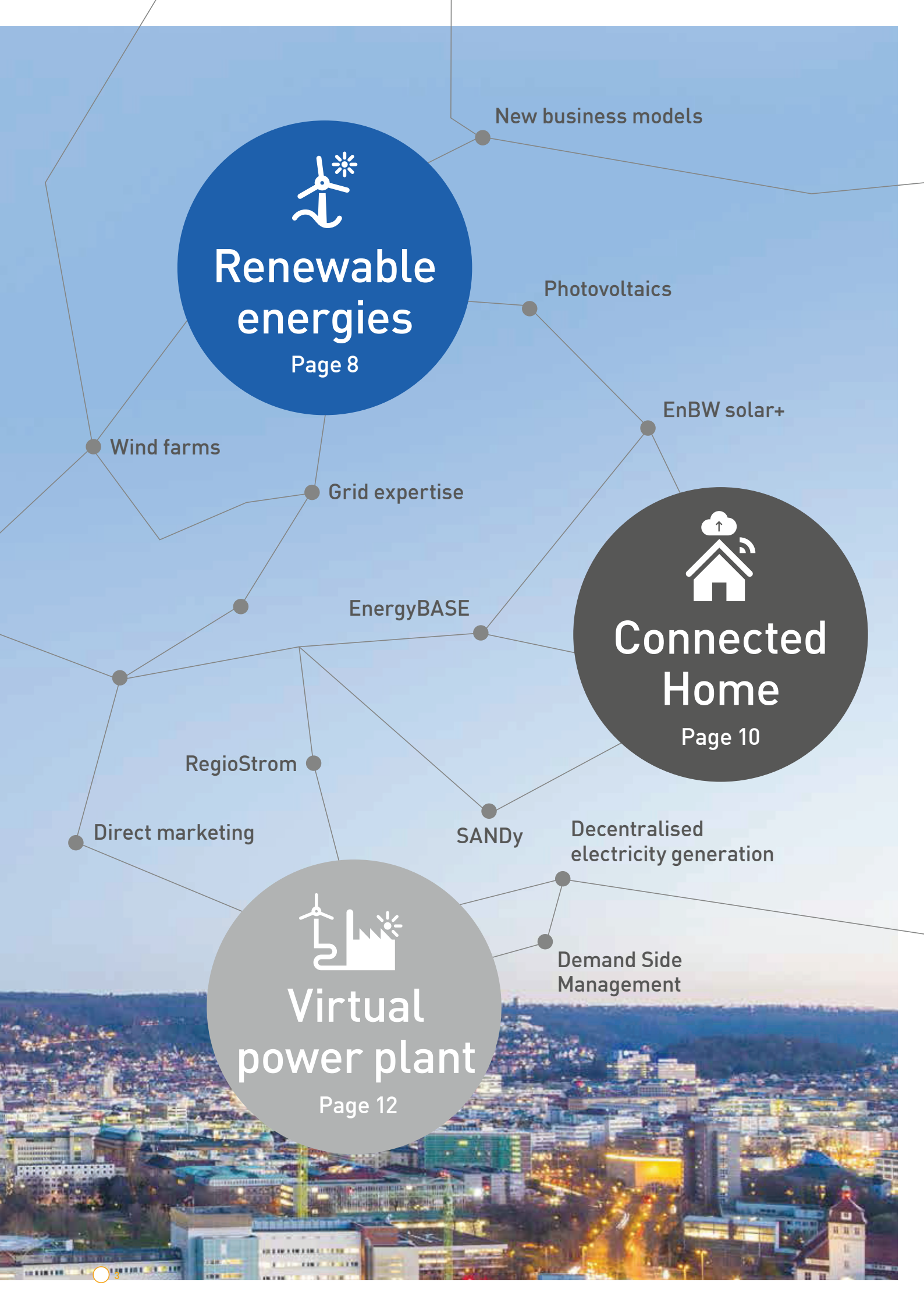
Note: The full set of financial statements of the EnBW Group 2016 including the notes to the consolidated financial statements and the declaration of corporate management including the corporate governance report 2016 are available to download on our website [www.enbw.com/report2016](http://www.enbw.com/report2016).

 A detailed table of contents and an explanation on how to navigate through the report can be found on the rear cover.

# Energy connects

Safely managing large and technically complex systems in the energy sector is the day-to-day business of EnBW. We aim to transfer this expertise to themes related to the infrastructures of the future. Advancing digitalisation means that the energy sector is becoming ever more integrated into areas such as urban planning and transportation. Both households and local authorities will need to plan and control complex networks in future. Our insights into selected projects will demonstrate how EnBW is supporting its customers in achieving this task.





# Renewable energies

Page 8

New business models

Photovoltaics

EnBW solar+

Wind farms

Grid expertise

EnergyBASE



# Connected Home

Page 10

RegioStrom

Direct marketing

SANDy

Decentralised electricity generation



# Virtual power plant

Page 12

Demand Side Management

# Smart City

## 450

kilometres of glass fibre cables will make up the local network for the Karlsruhe region



### Intelligent masts

Urbanisation is a global trend. Urban life is being increasingly organised by networks. **SM!GHT** (Smart.City.Light) – the multifunctional street lighting from EnBW – provides a technological basis for such networks. It can contribute more than just economical LED lighting. The mast is equipped with public Wi-Fi and charging technology for electric vehicles. Passers-by can also call for assistance in an emergency via an alarm button. However, the system is above all a master of data collection: Sensors record environmental information, while a camera monitors traffic density. These measurement values can be evaluated electronically to provide local authorities, for instance, with valuable information for controlling growing volumes of traffic. SM!GHT thus acts as a foundation stone for intelligent local authority infrastructure.

## 2.5

million logins to the SM!GHT Wi-Fi network



By 2050

83

percent of the world's population will live in towns and cities.

In the 50 largest towns in Baden-Württemberg alone, there is potential for the expansion of sustainable infrastructures of more than

3

billion euros.



The market for sustainable infrastructures will represent a volume of

1.5

trillion dollars worldwide by 2020.

Source: Fraunhofer IAO

### Space to live

A networked city does not develop on its own – it needs a plan. And EnBW is creating these plans. Specialists at the Group investigate how new housing developments can be connected to existing heating networks and where street lighting needs to be installed. They assess the appropriateness of installing photovoltaics or solar thermal energy locally or whether a combined heat and power plant would prove worthwhile. The EnBW grid operators are also contributing their expertise in the construction of utility lines to another important area for many regions – the **broadband expansion**. They support local authorities during the planning, construction and operation of broadband networks and handle the connections to end customers. Expanding the grids has for decades been the domain of the EnBW grid subsidiaries – such as Netze BW. Valuable knowledge for the networked cities of the future.

### Laboratories of the future

Electricity grids can now achieve significantly more than they could just a few years ago: They not only supply customers but must also, for example, be able to take up energy from solar power plants and feed it into the next voltage level. More and more electric vehicles also need to be able to charge their batteries. This means that both the electricity lines and future decentralised storage systems need to be properly dimensioned and coordinated with one another. In its **GRIDlaboratories**, the EnBW subsidiary Netze BW is investigating how intelligent technology and new concepts can help electricity grids meet these requirements. At the Electric Fleets GRIDlaboratory in Stuttgart, for example, they are testing how the increasing number of e-cars will impact local distribution grids. Can the charging processes be automatically delayed or carried out at lower outputs? Do the charging times remain acceptable? How can e-cars serve as decentralised storage systems in the electricity grid? Experts at EnBW are carrying out research to find answers to questions such as these together with scientists.



Smart City: energy, transportation and buildings – everything is networked in the Smart City of the future.

Aim of the state government:  
**200,000**  
e-vehicles in Baden-Württemberg  
by 2020



# Sustai

stations are fully networked. Drivers can locate charging stations on a digital map and see whether they are free to use. Charging processes can be precisely planned in this way. The charging stations will become even more intelligent in the near future: If a driver supplies electricity to the grid via a solar power plant at home and thus participates in the energy community, he will be able to charge his vehicle at any charging station with cheap community electricity sourced from renewable energies.

## At source

Sustainable, carbon-neutral mobility will become increasingly important in the city of tomorrow. To ensure that drivers of electric vehicles can reliably reach their destinations, there needs to be a good **charging infrastructure**. That's why EnBW already currently operates more than 400 charging stations – and new ones are constantly being added. Due to the installation of charging stations at 34 motorway service stations operated by Tank & Rast in Baden-Württemberg, EnBW now has a network of fast charging points, while the company will be operating charging stations at the 119 Tank & Rast sites across Germany in 2017. In less than 20 minutes, the new charging stations can provide electric vehicles with enough energy to travel 100 kilometres and even shorter charging times will be possible in a few years. The charging

The new EnBW quick-charging stations were officially placed into operation in February 2017.



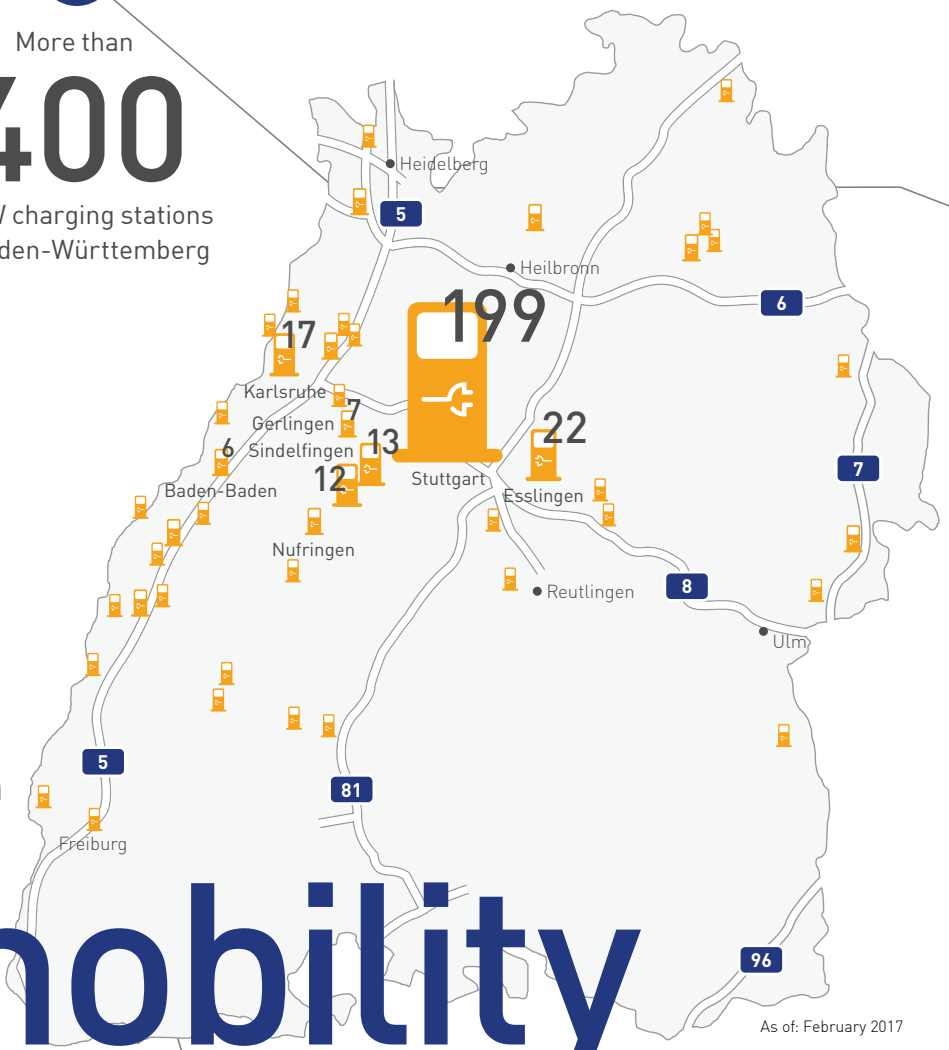




More than

# 400

EnBW charging stations  
in Baden-Württemberg



As of: February 2017

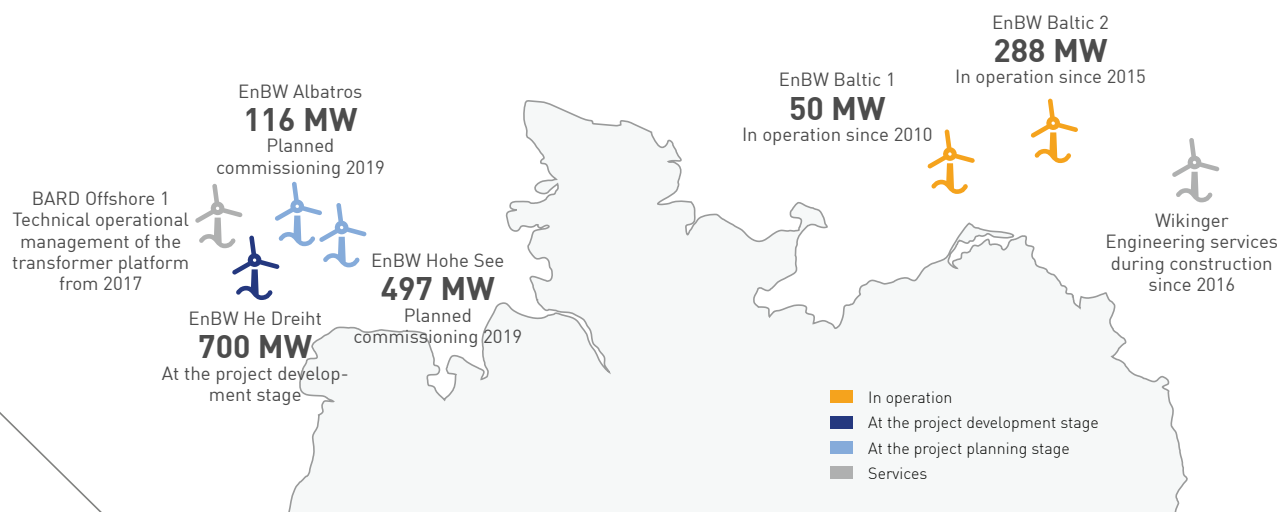
# nable mobility

### Payment streams

Customers want to be able to pay quickly and easily at electric charging stations, without having to register in advance with every charging station operator. EnBW has thus become a partner of Hubject, a service provider offering a direct payment system. It already covers 40,000 charging points on three continents and controls billing across national borders (roaming). Drivers can charge their e-car at every charging station in the network and settle their bill in seconds via smartphone.

### Time to charge

The 1.6 million vehicle fleets operated by German companies comprise 4.5 million cars. Many of these companies want to switch to electromobility, yet they are unsure about how they can act in an environmentally responsible manner while working economically at the same time. EnBW provides them with advice – using the service **time2charge** – where it analyses how the vehicle fleet is currently being used and what is required. If a decision is then made to operate an electric fleet, EnBW installs the charging stations, handles their connection to the grid and looks after the maintenance and repair of the systems. For the German dealerships of the Korean manufacturer Hyundai, for example, EnBW is currently setting up a charging infrastructure that can be used by all drivers of electric vehicles.



By expanding its service portfolio and offering innovative participation models, EnBW plays various roles in the expansion of renewable energies – which is exemplified by our offshore projects.

# Renewa

## Proficient transformation

If electricity from renewable energies needs to be fed into the grid in large volumes, transformer technology plays a decisive role. This is a specialist area where EnBW is highly proficient and which it has been optimising for decades. Due to its **grid expertise**, the Group has received multiple orders from abroad, amongst other things, to connect up solar parks and wind power plants.

## Leaders on land and at sea

EnBW joined the leading group of project developers for wind farms in Germany for the first time in 2017. A total of 16 new **wind farms** with a capacity of around 200 megawatts will be constructed on the mainland alone. The offshore expansion of wind energy that started many years ago is continuing: EnBW is constructing its first wind farm in the North Sea with the Canadian group Enbridge. It is due to be placed into operation in 2019 and can supply an aggregate of around 560,000 households with electricity. Two further projects are at the planning stage. In the Baltic Sea, the turbines in the EnBW wind farms Baltic 1 and Baltic 2 have already been turning for some time.

The Leibertingen solar park provides an aggregate of around 600 households with electricity per year.



# 40

percent share of the generation capacity of the EnBW Group accounted for by renewable energies by 2020



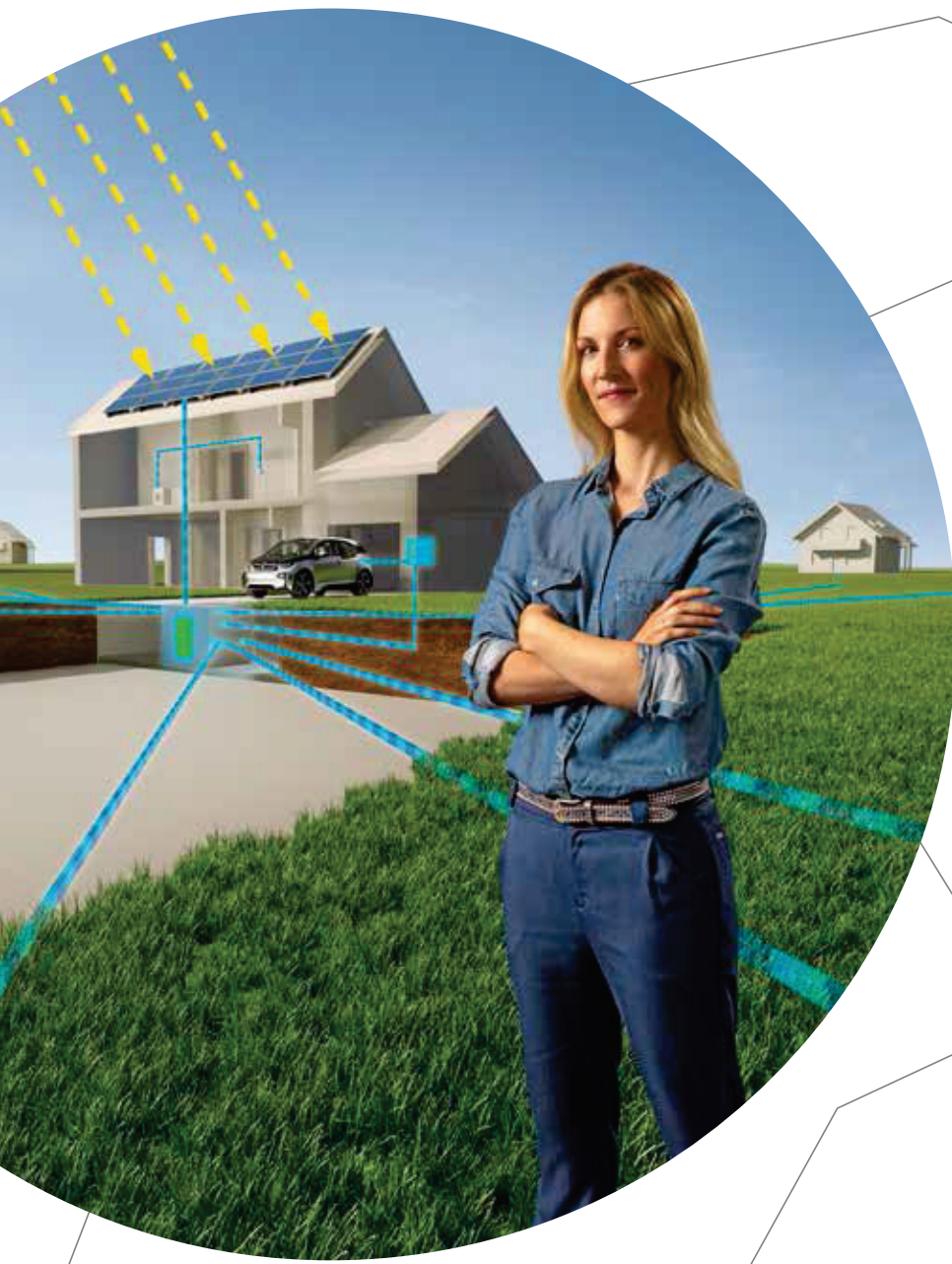
# ble energies

### Sunny partnerships

Anybody who is currently planning to construct a solar park will need the expertise to sell the energy. Operators of open-field **photovoltaic** power plants have to participate, for example, in a state-run tender procedure. Preparing for and participating in this procedure is complex. Specialists at EnBW advise companies and local authorities who generate solar energy and want to feed it into the grid at a profit. They are also testing new forms of cooperation: EnBW provides especially intensive support to its customers for their solar projects for a certain period of time during the start-up phase – offering them technical knowledge and financial assistance.

### Worry-free package

Once a wind turbine starts turning after many years of planning and construction, only a part of the work is done – the turbines still need to be kept in good shape. To this end, EnBW has acquired the Danish service provider Connected Wind Services. This expansion of the portfolio creates more space for developing **new business models** in the area of wind energy.



# 25

year performance guarantee  
on EnBW solar+

# Conne

## Intelligent basis

Anybody who generates electricity on the roof of their house and stores it in the cellar will need to intelligently network both of these components. This task is handled by **EnergyBASE**. The digital control system offered by EnBW decides whether the self-generated electricity should be fed into the storage system, consumed immediately or sold. All three possibilities can be advantageous depending on the electricity price and how much energy the household will require in the next few days. EnergyBASE can calculate the consumption in advance based on what it has learnt in the past.

## Sharing the sun's energy

Excess electricity doesn't have to be kept in the home storage system – it can be sold to someone who doesn't have enough. This type of network where private individuals trade electricity amongst themselves is made possible by **EnBW solar+**. At its heart lies the energy community – a virtual marketplace that can be accessed via an app. Surplus electricity can be sold here to other members or electricity can be bought at especially cheap prices at those times when more is needed. EnBW solar+ is a complete package that consists of the app, a solar power plant on the roof, a stationary storage system and an intelligent management and measurement system (EnergyBASE), as well as comprehensive service, performance and savings guarantees.



Networked in the so-called energy community. Generate, store and share electricity with EnBW solar+.



#### Helping people to help themselves

Solar power plants and storage systems don't need to be purchased by private individuals – they can also be leased. The start-up company DZ-4 based in Hamburg offers a system for the decentralised supply of renewable energies for single-family houses. EnBW holds a share in the company via its subsidiary EnBW New Ventures. During the term of the contract, DZ-4 remains the owner of the system and looks after the technology and operation. This business model is already successful abroad. DZ-4 is the first company to develop this type of business model for the German market. The company supplied its first customers in 2012. It has a fixed range of solar power plants and assists its customers with the financing costs. If desired, DZ-4 can also supply green energy from the grid.

# cted Home

EnBW solar+ is regularly updated with new functions. Furthermore, it will soon also feature new components for electromobility or heat generation. EnBW solar+ is easy to operate for users. The complex processes in the background are managed by EnBW. It handles, for example, measuring and recording the volumes of energy for the grid operator – a complicated task that is part of the daily business of an energy company.

#### SANDy is so smart

The evaluation of data plays a decisive role in the Energiewende. Smart meters make it possible, for example, to record and evaluate information about energy consumption. **SANDy**, a start-up company from EnBW, goes one step further. It provides the

technical basis for the targeted examination of huge volumes of data from a variety of areas. SANDy utilises intelligent algorithms to recognise behavioural patterns that can reveal interesting information relating to energy consumption. One of the many applications: heating systems are still being controlled using fixed time schedules, no matter whether anybody is in the room or not. Therefore, SANDy creates a usage profile using sensors that is constantly updated and sent to the heating control system. If large volumes of data are collected and evaluated in this way, it can provide valuable information to companies for the development of new, customer-friendly products. SANDy thus also marks EnBW's entry into the management of large volumes of data.



# 1.6

million generators of electricity  
from renewable sources  
in Germany



# Virtual power

## Swarm intelligence

Power plants of the future will consist of many small units generating electricity – such as photovoltaic plants, combined heat and power plants, wind turbines or hydropower plants. Organised correctly they form a virtual power plant that can be viewed as a swarm of **decentralised electricity generators**. It can be supplemented by household batteries, heat pumps or links to electromobility. The energy world is being increasingly shaped by such complexly networked and highly agile systems. Intelligent control of the swarm makes it possible to reliably and cheaply supply energy to customers without overloading the grids. The production of weather-dependent renewable energy is thus made more calculable and reliable. Customers can also sell electricity for a profit or obtain it cheaply. Virtual power plants represent a major opportunity for EnBW to transfer its knowledge on the safe operation of complex systems to new digital business models.

## Intentional timing

The price of electricity is dependent on the time – especially when it comes to the volatile generation using renewable energies. This is true for both generators and consumers. It is possible for EnBW to control the electricity demands of its customers if desired so that costs are kept as low as possible, but with the prerequisite that the electricity can be consumed flexibly. This is the case, for example, for water suppliers. They do not need to operate their electrical pumps and storage systems permanently, but can limit their operation to times when the market price for electricity is low or even negative. EnBW develops strategies to control the energy demands of its customers cost-effectively using software (**Demand Side Management**) – whereby the security of supply always has priority. This is not a new subject for EnBW because it has been operating complex drinking water networks for local authorities itself for many decades.

### The right programme

In a decentralised energy world, the power plants operated by all participants need to be connected and digitally controlled. The software for this is supplied by the start-up company Lumenaza based in Berlin. It supplies customers with electricity generated locally from renewable energies and actively includes decentralised generators of electricity. They meet up in a virtual marketplace where the electricity is bought and sold. EnBW holds a share in Lumenaza via its subsidiary EnBW New Ventures.

# plant

### Electricity from the neighbours

EnBW bundles together power plants in the local region to create a virtual power plant. It also handles the energy-related billing. In the Bopfingen region, for example, there is already a **RegioStrom** (regional electricity) community. Here, the electricity produced from renewable sources is also consumed where it is generated. This reduces the burden on the grids and increases trust in the Energiewende by adding value locally. Every consumer thus knows which power plant in the region is providing their electricity. Digital systems offered by EnBW guarantee that a balance between demand and supply is maintained regionally and bottlenecks are reduced. The experiences gained in Bopfingen will flow into other energy communities in the future.



### A networked marketplace

Anybody who generates electricity from renewable sources is often reliant on the expertise of partners – especially regarding new power plants with a capacity of more than 100 kilowatts. This is because these private generators of electricity also have to **directly sell** it on the energy markets and no longer automatically receive feed-in remuneration. Yet this doesn't have to be a disadvantage. If the electricity is sold at optimal conditions, the total revenue may even be higher than it would be with fixed remuneration. However, this involves a lot of administrative work. Small and large generators of electricity then rely on marketing partners such as EnBW. An additional module can send live data from the system and control the system remotely. EnBW is thus able to forecast the electricity produced by its customers, control the production together with other power plants in the swarm based on demand and sell the generated energy.

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# Letter to shareholders



Dr. Frank Mastiaux  
Chairman of the Board of Management

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

In 2013, we began to profoundly restructure EnBW setting clear targets for 2020. This restructuring process had two main approaches from the very beginning: improving efficiency on the one hand and orientating our activities to the growth markets of the Energiewende on the other. We have had to battle against permanently deteriorating conditions, especially rapidly falling electricity prices, during this process. In the past financial year, we also had to deal with the financial consequences of the law of reorganising responsibility for nuclear waste management. It has led to especially high extraordinary effects, which were reflected in a Group net loss of 1.8 billion euros. Nevertheless, we can see today that the rigorous implementation of our 2020 strategy is paying off. We once again achieved an operating result that was within our expectations in 2016, which in view of the at times dramatic deterioration in the general conditions was “only” 8 percent below the figure in the previous year. The Grids, Renewable Energies and Sales segments now account for up to 80 percent of the Group operating result. This shows the success of the restructuring of our company. Something that is even more important is the fact that we expect to turn the corner in terms of earnings in 2017. We want to at least maintain our operating result at a stable level for the first time in four years and have the ambition to achieve an increase in operating earnings of up to 5 percent. From 2017 onwards, we will thus also be on course for 2020 regarding our earnings performance, and are confident that we will achieve the strategic and operational targets that we set ourselves for this time period.

## Implementation of the EnBW 2020 strategy is well on track

The efficiency measures that have been implemented and set in motion since 2012 to make savings of 1.4 billion euros up to 2020 are not the only thing that will make a contribution in this area. Major projects such as our third offshore wind farm EnBW Hohe See, which we will construct in the North Sea by 2019, and also the further expansion of our grids business, as well as numerous new products and business opportunities in sales through to promising partnerships in the area of electromobility, will ensure that we will successfully conclude our restructuring by 2020 and achieve the envisaged operating result of between 2.3 and 2.5 billion euros. Our company and our employees have demonstrated over the past few years that they can recognise and adapt to changes at an early stage. We want to increasingly build on this ability, which will be a decisive factor for success in future competition. Therefore, we have already looked very closely early on at market developments and trends for the years after 2020.

The pace of change in our sector continues to increase. Reasons for this include, for example, advancing digitalisation, decentralisation and urbanisation. Customer expectations are also moving in a clear direction: Our customers expect tailored solutions that are delivered immediately and not just standard products and services. Digital intelligence will link the supply of electricity, gas and heating to a much greater extent in the future. Electromobility is connecting the energy and transport sectors, while private households with their own generating capacity and a desire for autonomy are joining together in communities to share their energy and thus form virtual power plants. As we all know sharing is the new having.

The climate conferences in Paris and Marrakesh clearly advocated global decarbonisation. And this will also accelerate the Energiewende, which has now become an irreversible global process on a number of levels. The international capital markets are beginning to adapt to these changes. The international Task Force on Climate-related Financial Disclosures is, for example, developing regulations for climate-related financial reporting. I am delighted that EnBW is represented on this task force by my colleague on the Board of Management Thomas Kusterer.

## An infrastructure partner with digital system competence

The digital convergence of individual energy systems and energy infrastructures requires the overarching ability to safely control, operate and sustainably develop complex systems and infrastructures both individually and as a whole. It is precisely here that our core expertise gained over many decades lies. Therefore, we are prepared to take on a pivotal position in the energy world of tomorrow. Other sectors beyond the energy industry will also require this knowledge in future – such as broadband, transport or safety. Strategically, we will significantly boost our standing as a competent and reliable infrastructure partner for customers, citizens and local authorities.

## Special situation in 2016 – turning point in 2017

The operating result of EnBW – as described at the beginning and as expected – fell once again. However, we anticipate that the operating result will stabilise or show the first signs of improvement in 2017. We were able to already improve some important non-financial goal dimensions. For example, the Reputation Index of EnBW – our standing in the eyes of important stakeholder groups and the wider public – increased in 2016. We added this important indicator for the first time as a key performance indicator in 2016. The way we conduct our corporate activities in future will be even more strongly influenced by the bearing they have on our reputation.

Due to the law of reorganising responsibility for nuclear waste management, we were pushed to the very limits of our company's financial capabilities in 2016. Nevertheless, we expressly welcome the fact that clear and binding regulations with respect to the responsibilities for the dismantling, disposal and final storage of nuclear power plants now apply. We will benefit from this development in future years because the risks facing our business model have reduced decisively.

It is our goal over the next few years to once again progressively move from a phase of restructuring and saving to one of growth. This is not only supported by my colleagues and I on the Board of Management but also the entire team at EnBW.

Yours sincerely,



Chairman of the Board of Management  
Dr. Frank Mastiaux

goal-oriented  
progression

consistently  
thinking ahead

How can we  
change even more  
**quickly?**

How can we  
exploit future  
**prospects**  
even better?

high degree of transparency

direct  
feedback

Good OFFERS

always learning

permanent improvement

clear communication

endless curiosity

continuous reflection

How can we turn more **employees** into entrepreneurs?

What can we do to make **processes** even more efficient?



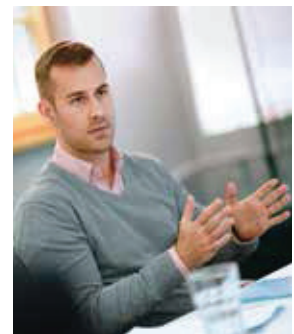
**Dr. Hans-Josef Zimmer**

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

## Dr. Hans-Josef Zimmer on ➤ Thinking differently

“The current pace of change in our sector demands quick decision making and the willingness to keep on learning, especially of us on the Board of Management. Looking at the bigger picture helps us to see how other companies are dealing with the themes of digitalisation, changing customer behaviour or urbanisation.”

Looking at the bigger picture is important. Visiting companies such as the start-up Reparando based in Stuttgart inspires the development of new ideas and calls existing approaches into question.





Exchanging experiences with the managers of Reparando Vincent Osterloh and Jakob Schoroth.



**Dr. Frank Mastiaux**  
Chairman of the Board of Management,  
Chief Executive Officer since 1 October 2012,  
appointed until 30 September 2022,  
born in 1964 in Essen,  
lives in Stuttgart.

## Dr. Frank Mastiaux on ➤ Change of perspective

“Broadening your point of view and constantly scrutinising familiar concepts as well as yourself are important for making progress. Always being curious enough to listen to other people’s perspectives, for example by talking to young companies, can also provide new stimulus.”

Thomas Kusterer on  
➤ Performance

“An important basis for the future viability of every company is securing their financial position. This can be achieved using efficient and lean processes but also by maintaining a strict focus on the customer and your own business.”



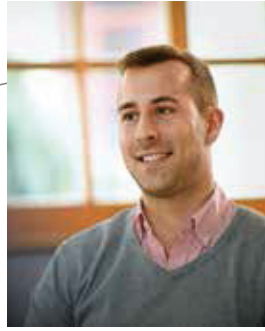
**Thomas Kusterer**  
Member of the Board of Management,  
Chief Financial Officer since 1 April 2011,  
appointed until 31 March 2019,  
born in 1968 in Pforzheim,  
lives in Ettlingen.



Desks side by side, soldering irons and all manner of tools. The workshop is also the office.





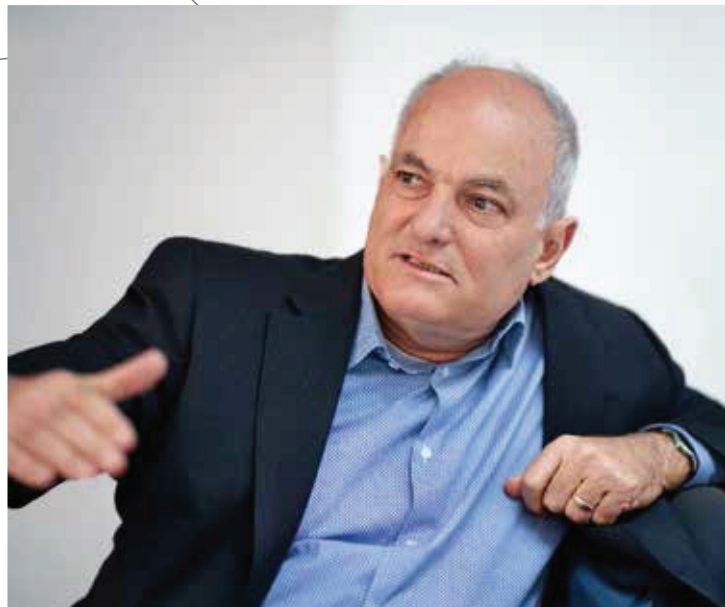


The four members of the Board of Management of EnBW spend almost three hours with the founders of the young company.



## Dr. Bernhard Beck on ➤ Organisation

“A modern and successful organisation is characterised by the fact that it provides the freedom for creativity and independent action but also demands speed and resolve during its implementation.”



**Dr. Bernhard Beck LL.M.**  
Member of the Board of Management,  
Chief Personnel Officer since 1 October 2002,  
appointed until 30 September 2017,  
born in 1954 in Tuttlingen,  
lives in Stuttgart.

## Report of the Supervisory Board (condensed)



Lutz Feldmann  
Chairman of the Supervisory Board

The Supervisory Board dutifully and comprehensively performed all of the tasks incumbent on it in the 2016 financial year as required by law and the Articles of Association. It regularly advised the Board of Management on its management of the company and continuously accompanied and monitored all important management measures for the Group. In the process, the Supervisory Board was involved in all decisions of fundamental importance to the company and the Group.

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

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

In the past financial year, the Supervisory Board dealt extensively with verbal and written reports and proposals for resolutions issued by the Board of Management at its seven ordinary meetings on 18 March 2016, 9 May 2016, 10 June 2016, 6 July 2016, 21 September 2016, 7 November 2016 and 9 December 2016, one inaugural meeting on 10 May 2016 and two extraordinary meetings on 22 April 2016 and 7 October 2016. Furthermore, it requested reports and information from the Board of Management on individual topics, which were comprehensively provided in a timely manner in each case. The key topics of the discussions and resolutions in the plenary meetings beyond the themes mentioned above were:

- > In-depth consultations and discussions with the Board of Management about the strategic positioning of EnBW AG and the EnBW Group
- > A comprehensive examination of the energy policy of the German government and its effect on EnBW AG and the EnBW Group, especially the resulting financial burden, amongst other things in relation to the activities of the “Commission to examine the financing of the phase-out of nuclear power” (KFK) and the law of reorganising responsibility for nuclear waste management, as well as the deterioration in the general economic and financial conditions in the energy industry
- > The new version of the company pension scheme for members of the Board of Management
- > Consultations on the transfer and storage of fuel elements currently stored at the former Obrigheim nuclear power plant to the intermediate storage site at the Neckarwestheim nuclear power plant
- > Consultations on the ULTRANET project that is being carried out by the independent transmission operator TransnetBW GmbH (site for the construction of a transformer station)
- > Approval of the issuing of two long-term hybrid bonds in euros and US dollars with volumes of around €1 billion to refinance existing debt
- > Approval of the budget for the 2017 financial year and acknowledgement of the medium-term planning for the period 2017 to 2019 consisting of the income statement, balance sheet and cash flow statement
- > Resolution on the participation of Enbridge Inc. in the planned EnBW Hohe See offshore wind farm
- > Examination of the package of measures proposed by the Board of Management for improving the company's operating result, as well as for the ongoing optimisation of the operating processes of the EnBW Group
- > Consultations on the participation in the tender procedure for the Kriegers Flak offshore wind farm (Denmark)
- > Approval of the required measures for the erection of the EnBW Hohe See offshore wind farm (in the production and installation phases)
- > Approval for final decommissioning of the combined cycle gas turbine plant Rheinhafen Steam Power Plant 4 S in Karlsruhe
- > Intensive consultations on and approval of the withdrawal from the B2B commodity business under the EnBW and Watt brands
- > Consultations on the status and the results of the investigations being carried out internally and by the authorities in relation to misconduct by individuals engaged by an external service provider commissioned by EnBW Kernkraft GmbH, who were employed to inspect the measurement equipment on a recurring basis at the Philippsburg Block 2 nuclear power plant and the measures derived from these investigations
- > Regular reporting on major investment projects, as well as other projects that form part of the generation strategy
- > Regular reports on the status of the divestiture projects
- > Consultations on the investment projects in Turkey (joint venture Borusan EnBW Enerji yatirimlari ve Üretim A.S.) and the impact of political events and developments on the Turkish business of EnBW
- > Extensive consultations on current sales issues, particularly about the further development of the organisation and strategic aspects of product development in the B2C electricity and gas sector (sales to private and commercial customers), as well as the status of the intended measures to improve efficiency
- > Resolution on the change to the rules of procedure for the Supervisory Board regarding extending the personnel committee and filling positions on the committees of the Supervisory Board following the retirement of old members or after the appointment of additional new members of the Supervisory Board

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

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

## Work of the committees

In order for the Supervisory Board to optimally perform its functions, it has set up committees which once again met regularly in the 2016 financial year. The respective members of the committees are listed on [page 109](#) of the Integrated Annual Report 2016. The Chairpersons of the committees regularly reported on the work of the committees at each subsequent plenary meeting of the Supervisory Board.

## Corporate governance

The Supervisory Board also approved the joint corporate governance report together with the Board of Management in the 2016 financial year, which has been published on the website of EnBW AG as part of the declaration of corporate management in accordance with section 289a (1) sentence 2 German Commercial Code (HGB) at [www.enbw.com/corporate-governance](http://www.enbw.com/corporate-governance).

## Audit of the annual and consolidated financial statements

Following a thorough examination by the audit committee, the Supervisory Board undertook a detailed review of the annual financial statements and consolidated financial statements as of 31 December 2016 that were audited and issued with an unqualified audit opinion by KPMG AG Wirtschaftsprüfungsgesellschaft, and of the combined management report for the 2016 financial year. The final results of its own reviews did not lead to any reservations on behalf of the Supervisory Board. It approved the audit results of the independent auditor, endorsed the annual financial statements prepared by the Board of Management as of 31 December 2016 – which have thus been ratified – and the consolidated financial statements as of 31 December 2016, as well as the combined management report for the 2016 financial year.

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

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

Karlsruhe, 27 March 2017  
The Supervisory Board



Lutz Feldmann  
Chairman

# About this report

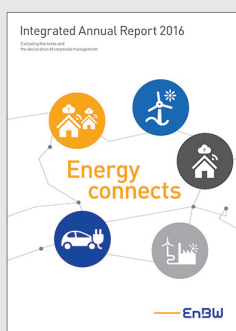
## Integrated reporting

EnBW follows an integrated reporting approach with this Integrated Annual Report. As an enhancement to traditional annual reporting, the Integrated Annual Report also takes ecological and social aspects of the company's activities into account as well as economic aspects. We have published an Integrated Annual Report based on the recommendations of the International Integrated Reporting Council (IIRC) since the 2014 financial year, with the aim of achieving a holistic representation of the company's performance. This represents a milestone on our path towards more concise, transparent and comprehensive reporting to meet the increased needs of stakeholders for more information. We have taken this process further with the Integrated Annual Report 2016. An overview of the latest developments in our integrated reporting can be found on [page 11](#). The most important information on sustainability is included in the Integrated Annual Report, while more detailed information on sustainability has been prepared and made available on the EnBW website at: [www.enbw.com/verantwortung](http://www.enbw.com/verantwortung).

Using the EnBW 2020 strategy as a basis, EnBW applies the concepts behind integrated reporting to strive for the comprehensive integrated management of the company. By presenting financial and non-financial corporate goals – the achievement of which is measured using key performance indicators – we are seeking to promote integrated thinking within the company and underline the importance of being comprehensively oriented towards our performance and stakeholders. The corporate performance of EnBW is thus not only measured by financial results, as the short to long-term success of the company is also dependent on the decisions EnBW takes in response to the constantly changing economic, ecological and social environment. More about integrated reporting at EnBW can be found at [www.enbw.com/integrierte-berichterstattung](http://www.enbw.com/integrierte-berichterstattung).

The contents of this Integrated Annual Report exclusively serve to provide information and do not constitute an offer or an investment recommendation. Please take this into consideration and also refer to the other important notes on [page 122](#).

## Financial publications 2016



### Integrated Annual Report 2016

This Integrated Annual Report is published in print and in PDF format. It contains the combined management report of the EnBW Group and EnBW AG, as well as the condensed version of the consolidated financial statements without the notes to the financial statements. Selected content from this report and additional information on aspects of sustainability can be found on our website at [www.enbw.com/report2016](http://www.enbw.com/report2016).



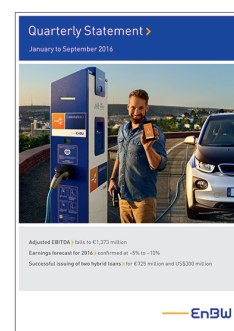
### Financial statements of the EnBW Group 2016

This document is published in PDF format and contains the full set of consolidated financial statements.



### Financial statements of EnBW AG 2016

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



### Quarterly Statements and Six-Monthly Financial Report

We publish the Quarterly Statement January to March, Quarterly Statement January to September and Six-Monthly Financial Report online at [www.enbw.com/financial-publications](http://www.enbw.com/financial-publications).

All our financial publications and other documents relating to these financial statements for the 2016 financial year are available for you to read and download on our websites [www.enbw.com/report2016](http://www.enbw.com/report2016) and [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

## Basis for the presentation of the report

The information about the results of operations, net assets and financial position of the EnBW Group is based on the requirements of the International Financial Reporting Standards (IFRS), and, where applicable, German commercial law and German Accounting Standards (GAS). Internal control mechanisms ensure the reliability of the information presented in this report. Furthermore, this Integrated Annual Report is based on the recommendations for reporting principles and reporting elements contained within the IIRC framework.

The selection of and level of detail given to the topics described in this Integrated Annual Report is based, as in previous years, on their materiality. Building on the materiality analysis that was conducted for the first time in 2013 with the assistance of central stakeholders of EnBW and an internal survey conducted amongst the senior management of EnBW, this process has been continuously transferred to the strategy process (p. 35).

In the 2016 financial year the reporting of sustainability topics has been carried out in accordance with the G4 guidelines issued by the Global Reporting Initiative (GRI), including the Electric Utilities Sector Supplement. Our sustainability reporting also complies with the “Communication on Progress” requirements for the UN Global Compact.

All data and calculation methods used for this Integrated Annual Report are based on German and international standards for financial and sustainability reporting. The responsible specialist units applied representative methods in each case for the collection of all data and information for the reporting period. The reporting period comprises the 2016 financial year. We took into account all relevant information up to 7 March 2017. Along with EnBW AG, with its headquarters in Karlsruhe, Germany, the group of consolidated companies of EnBW for its financial reporting also includes all of its important subsidiaries. The reporting limits for non-financial performance indicators correspond to the scope of consolidation for financial reporting, unless otherwise stated. Above and beyond external financial reporting, we have taken other circumstances into

account in this Integrated Annual Report, as in previous years (“In dialogue with our stakeholders” on page 35 ff., “Non-financial performance indicators” on page 63 ff., and “Report on opportunities and risks” on page 80 ff.), in order to provide a holistic representation of the performance of the company.

More information about the reporting regulations of the GRI is available at [www.globalreporting.org](http://www.globalreporting.org) and [www.enbw.com/gri-index](http://www.enbw.com/gri-index).

## Independent auditing and evaluation

The condensed financial statements for the 2016 financial year that form part of the Integrated Annual Report do not include the notes to the consolidated financial statements and the declaration of corporate management including the corporate governance report. The full set of consolidated financial statements – including the notes to the consolidated financial statements – and the combined management report for the company and the Group, both for the 2016 financial year, were audited by KPMG AG Wirtschaftsprüfungsgesellschaft as the auditor and Group auditor elected by the Annual General Meeting of EnBW Energie Baden-Württemberg AG on 10 May 2016. Based on its audit, KPMG AG Wirtschaftsprüfungsgesellschaft arrived at the overall conclusion that the audit did not lead to any reservations and issued an unqualified audit opinion. The full set of consolidated financial statements and the combined management report for the company and the Group for the 2016 financial year, as well as the unqualified audit opinion issued by the auditor, are accessible to the public on the website of EnBW Energie Baden-Württemberg AG at [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

The Integrated Annual Report was created based on the G4 guidelines issued by the Global Reporting Initiative (GRI) – “core” option. Further information on the GRI Content Index can be found at [www.enbw.com/gri-index](http://www.enbw.com/gri-index). Further information on the fulfilment of other sustainability standards is available on the EnBW website at [www.enbw.com/weitere-kennzahlen](http://www.enbw.com/weitere-kennzahlen).

# Continued development of integrated reporting

EnBW has been an active supporter of integrated reporting since the foundation of the International Integrated Reporting Council (IIRC) in August 2010. This is demonstrated by the membership and active work of Thomas Kusterer, member of the Board of Management of EnBW, on the IIRC Council and the participation of EnBW in the IIRC Business Network. We help to communicate and spread the concept and core elements of integrated reporting at IIRC events and other national and international conferences and regularly respond to enquiries from academics and practitioners on this topic. Through the introduction of integrated reporting, EnBW is committed to making its annual reporting more understandable and informative, while paying particular attention to providing more information on sustainability (non-financial aspects) across all parts of management reporting (p. 9 f.). Alongside the optimisation of the reporting process, integrated reporting also reinforces holistic communication and the management of the company's performance.

Together with the existing legal requirements, the IIRC reporting principles and elements create the foundations for integrated reporting. The Integrated Annual Report 2016 of EnBW contains the combined management report of the EnBW Group and EnBW AG in accordance with the commercial law regulations. The declaration of corporate management including the corporate governance report is not included in this Integrated Annual Report, although it is available for download on our website ([www.enbw.com/report2016](http://www.enbw.com/report2016)). Some recommendations found in the IIRC re-

porting principles can not be fully implemented because the different regulations are not compatible with each other.

Based on our EnBW Report 2015, the focus of the developments in the Integrated Annual Report 2016 were, in particular, continuing to interlink information (interdependencies), stabilising the already achieved presentations and monitoring and adapting the key performance indicators. Through the participation of the EnBW Chief Financial Officer on the international Task Force on Climate-related Financial Disclosures (TCFD), EnBW actively supports the strengthening of climate-related risk reporting by companies ([www.fsb-tcfd.org](http://www.fsb-tcfd.org)). The introduction of a new key performance indicator on climate protection and the expansion of the report on opportunities and risks represent the first implementation steps in this direction in this report.

We will also strive to continuously improve our integrated reporting in future years. In 2017, we are thus planning to closely link integrated reporting with the fulfilment of the requirements for the so-called disclosure of non-financial information, which large, capital market-oriented companies will have to submit in future. This will lead to the enhancement of non-financial reporting.

Further information on the integrated reporting carried out at EnBW is available at: [www.enbw.com/integrierte-berichterstattung](http://www.enbw.com/integrierte-berichterstattung).

## Main elements of the further development of the Integrated Annual Report 2016 of EnBW

Topic	Further development
Key performance indicators (p. 25)	> Reviewing the set of performance indicators and adding the new key performance indicators internal financing capability, Reputation Index and CO <sub>2</sub> intensity
Representation of interdependencies (p. 29 ff.)	> Preparation using new examples with first approaches towards a quantifiable representation
Reporting on opportunities and risks (p. 88 ff.)	> Stabilisation of the interlinking of financial and non-financial themes established in the previous two years, especially supplementing the report on opportunities and risks to include compliance themes

# Combined management report

of the EnBW Group and EnBW AG

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Materiality analysis	35	<b>Forecast</b>	<b>76</b>
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Significant events after the reporting date form part of the EnBW Group and are available to download at [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

The declaration of corporate management including the corporate governance report 2016 is not included in this Integrated Report 2016, although it is available for download on our website [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

The cross-references marked with orange icons do not form part of the audited management report.

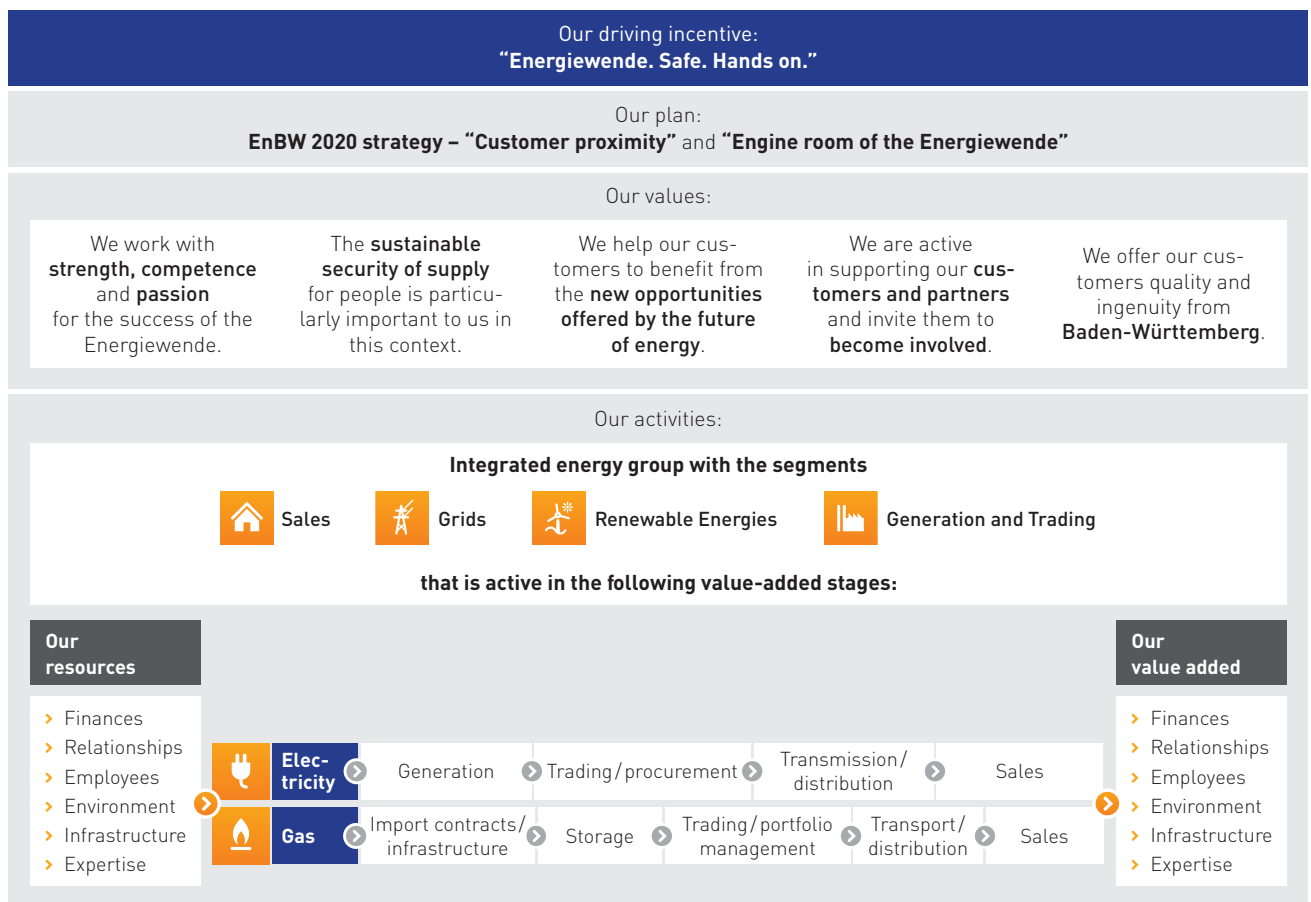


## Fundamentals of the Group

# Business model

### Business principles

#### Business model



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. We draw on a variety of resources – from finances through to expertise – for our corporate activities. As a result of the efficient application of these resources, we create value for ourselves and our stakeholders. EnBW has a diversified business portfolio with a once again – following the realignment as part of the Energiewende – increasingly advantageous risk-return profile.

We have closely analysed future revenue sources in the energy industry to further develop our business portfolio. According to our estimations, revenue flows in the energy industry will shift considerably. Renewable energies, grids and the decentralised solution business are growing in importance (p. 44). On this basis, we have developed the EnBW 2020

strategy guided by the principle “Energiewende. Safe. Hands on.”, which charts the course for the future development of our business model and strengthens the future viability of the company. The two principles of “Customer proximity” and the “Engine room of the Energiewende” lie at the heart of the EnBW 2020 strategy. “Customer proximity” places the customer at the centre of our activities to an even greater degree, through a focused orientation on the core elements of innovation and cooperative partnership models. In the “Engine room of the Energiewende”, we rely above all on operational excellence and strict efficiency and cost orientation for the achievement of defined quality levels, to ensure the efficient and safe operation, construction and dismantling of energy supply plants (p. 22f.).



With strength, competence and passion, EnBW is committed to the success of the Energiewende and guarantees a sustainable and reliable supply of energy at all times. We invite our customers and partners to join us in shaping the future energy landscape and benefit from new opportunities. We convince our customers through quality and creativity, and are acutely aware of our responsibility towards our employees. We are active along the entire electricity and gas value chain. Thanks to our comprehensive and profound system competence, we remain excellently positioned despite the fundamentally changed framework conditions resulting from the Energiewende. Due to the increasing decentralisation of the energy system, we have firmly anchored customer orientation and joint business development with partners into our company. Our current activities are governed by the fostering of dialogue, the principle of partnership and a solution-based approach.

## Value added

### Value added for EnBW and its stakeholders

The aim of the corporate activities of EnBW is to add value in the short, medium and long term. This reflects corporate success, as well as competitiveness and future viability, and does not only depend on the company itself but also on the business environment, relationships with stakeholders and the application of a variety of different resources. As a result of the efficient use of these resources within the scope of our activities, we create value for ourselves and our stakeholders. We associate the concept of sustainable economic development with our aspiration to conduct all of our business activities in a responsible way. This is closely associated with our reputation, or rather the public opinion our stakeholder groups hold about EnBW. Further information on the interrelationships between our key performance indicators can be found in the chapter "Interdependencies" (p. 29 ff.).

#### Value added for EnBW and its stakeholders

Resources of EnBW	Significant activities in 2016	Value added	
		for EnBW	for stakeholders
<b>Finances</b> A constantly solid financial structure (equity, borrowed capital, positive cash flow levels) for financing our business activities	<ul style="list-style-type: none"> <li>Issuing of two hybrid bonds in Europe and Asia for €725 million and US\$300 million</li> <li>Extending the term of €1.5 billion syndicated credit line</li> <li>Repaying a €500 million bond</li> </ul>	<ul style="list-style-type: none"> <li>TOP Securing profitability</li> <li>TOP High level of financial discipline</li> <li>TOP Raising the value of the Group</li> </ul>	<ul style="list-style-type: none"> <li>Dividends for our shareholders</li> <li>Paying interest punctually to our third-party lenders</li> <li>Wages, salaries and pensions for active and former employees</li> <li>Paying tax to the state</li> </ul>
 Financial position > page 54 ff.	Targets for the key performance indicators > page 26 f.	Value added statement > page 16	
<b>Relationships (customers/society)</b> Our approx. 5.5 million customers are the central focus of our philosophy and actions. We actively promote dialogue with our stakeholders and thus build trust and social acceptance.	<ul style="list-style-type: none"> <li>Entering the digital product world (sales launch of EnBW solar+) and expansion of e-mobility (cooperation with Tank &amp; Rast)</li> <li>Expanding solutions for local authorities</li> <li>Withdrawing from the B2B commodity business under the EnBW and Watt brands</li> <li>Responsible procurement</li> <li>"We're making it happen" image campaign</li> <li>"Making it happen" bus with EnBW employees providing support where it is needed</li> <li>Expansion of the grids: Decision by TransnetBW to construct the transformer station for the HVDC transmission technology for ULTRANET in Philippsburg</li> </ul>	<ul style="list-style-type: none"> <li>TOP Increasing share of result from "Customer proximity"/Sales</li> <li>TOP Increasing customer satisfaction: "Customer proximity"</li> <li>TOP Improving reputation</li> <li>Efficient, sustainable and responsible procurement</li> </ul>	<ul style="list-style-type: none"> <li>TOP Increasing customer satisfaction: "Customer proximity"</li> <li>TOP SAIDI: Maintaining supply reliability</li> <li>Engaging in social issues with activities for our end customers, business partners and local authority target groups</li> <li>Numerous awards for our sustainability reporting</li> </ul>
 Overview of the segments > page 20 f.	Targets for the key performance indicators > page 26 f.	In dialogue with our stakeholders > page 35 ff.	

Value added for EnBW and its stakeholders

Resources of EnBW	Significant activities in 2016	Value added	
		for EnBW	for stakeholders
<p><b>Employees</b> The expertise, experience and diversity of our 20,409 employees contribute to the success of the company, supported by an effective and efficient HR policy</p>	<ul style="list-style-type: none"> <li>&gt; Fourth Group-wide employee survey (MAB)</li> <li>&gt; Withdrawing from the B2B commodity business under the EnBW and Watt brands</li> <li>&gt; Promoting diversity and inclusion through various measures and events</li> <li>&gt; Employees at the centre of the "We're making it happen" image campaign</li> <li>&gt; Projects and campaigns on occupational safety and health protection</li> <li>&gt; Various initiatives on the theme of leadership development</li> </ul>	<ul style="list-style-type: none"> <li>&gt; <b>TOP</b> Stabilising employee commitment (ECI)</li> <li>&gt; <b>TOP</b> Improving occupational safety (LTIF)</li> <li>&gt; Always having the right employees with the right skills in the right place</li> <li>&gt; Setting targets for proportion of women in the first and second management levels</li> <li>&gt; Women's network "Frauen@EnBW"</li> <li>&gt; One-day event on "Diversity &amp; Innovation"</li> <li>&gt; "berufundfamilie" certificate from the Hertie Foundation</li> </ul>	<ul style="list-style-type: none"> <li>&gt; <b>TOP</b> Measuring employee identification with the company based on the Employee Commitment Index</li> <li>&gt; Joining the "Diversity Charter"</li> <li>&gt; Engagement in the "Initiative Chefsache" network</li> <li>&gt; Offering trainee and degree places</li> <li>&gt; Integration programme for refugees</li> </ul>
<p> Employees goal dimension &gt; page 64 ff.</p>	<p>Targets for the key performance indicators &gt; page 26 f.</p>	<p>In dialogue with our stakeholders &gt; page 35 ff.</p>	
<p><b>Environment</b> Using the natural resources wind, water and sun to generate energy</p>	<ul style="list-style-type: none"> <li>&gt; Expanding the onshore portfolio</li> <li>&gt; Participating in the Task Force on Climate-related Financial Disclosures</li> <li>&gt; Committing to the full implementation of the climate agreement in Paris at the UN Climate Conference in Marrakesch: EnBW wants to take action as a pioneering company</li> <li>&gt; Amphibian protection programme/ constructing fish passes in rivers</li> <li>&gt; Responsible procurement</li> </ul>	<ul style="list-style-type: none"> <li>&gt; <b>TOP</b> Expanding Renewable Energies (RE)</li> <li>&gt; <b>TOP</b> Reducing CO<sub>2</sub> intensity</li> <li>&gt; Carbon footprint</li> <li>&gt; Safe dismantling of nuclear power plants</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Expanding and integrating RE for our customers and society</li> <li>&gt; <b>TOP</b> Reducing CO<sub>2</sub> intensity</li> <li>&gt; Energy-efficient products for our customers</li> <li>&gt; Responsible handling of the resource water</li> </ul>
<p> Environment goal dimension &gt; page 67 ff.</p>	<p>Targets for the key performance indicators &gt; page 26 f.</p>	<p>Overview of the segments &gt; page 20 f.</p>	
<p><b>Infrastructure</b> We are one of the most important energy companies in Germany and Europe thanks to our power plants, electricity and gas grids and gas storage systems</p>	<ul style="list-style-type: none"> <li>&gt; Commissioning of the Lausward Combined Cycle Gas Turbine power plant</li> <li>&gt; Acquiring VNG (planned full consolidation 2017)</li> <li>&gt; Acquiring and constructing 7 onshore wind farms with a total of 89 MW</li> <li>&gt; Publication of the route for SuedLink by TransnetBW</li> <li>&gt; Commissioning of the long-distance North Black Forest Pipeline by terranets bw</li> <li>&gt; Upgrading and connecting renewable energy power plants</li> </ul>	<ul style="list-style-type: none"> <li>&gt; <b>TOP</b> Expanding Renewable Energies (RE)</li> <li>&gt; <b>TOP</b> Raising the value of the Group</li> <li>&gt; <b>TOP</b> Reducing CO<sub>2</sub> intensity</li> <li>&gt; Driving the Energiewende</li> </ul>	<ul style="list-style-type: none"> <li>&gt; <b>TOP</b> Supply reliability for our customers (SAIDI) (maintained by investments in upgrading grids and expanding transmission grids)</li> <li>&gt; <b>TOP</b> Reducing CO<sub>2</sub> intensity</li> <li>&gt; Investing in the expansion of RE for customers and society</li> <li>&gt; Contracting third-party companies and suppliers</li> </ul>
<p> The EnBW Group &gt; page 50 ff.</p>	<p>Targets for the key performance indicators &gt; page 26 f.</p>	<p>Overview of the segments &gt; page 20 f.</p>	
<p><b>Expertise</b> We develop models for new future business areas through our research and innovation activities</p>	<ul style="list-style-type: none"> <li>&gt; Research activities</li> <li>&gt; Innovation Campus</li> <li>&gt; Developing storage for the smart energy world</li> <li>&gt; Digital Leader Award SMIGHT</li> </ul>	<ul style="list-style-type: none"> <li>&gt; <b>TOP</b> Securing profitability and increasing share of result from "Customer proximity"/ Sales by identifying new sources of revenue</li> <li>&gt; Early identification of medium to long-term market opportunities and trends</li> </ul>	<ul style="list-style-type: none"> <li>&gt; New intelligent products for the benefit of our customers</li> <li>&gt; EnBW as a provider of venture capital for the development of the portfolio (opening up to the outside: New Ventures)</li> </ul>
<p> Research and innovation &gt; page 39 ff.</p>	<p>Targets for the key performance indicators &gt; page 26 f.</p>	<p>Overview of the segments &gt; page 20 f.</p>	

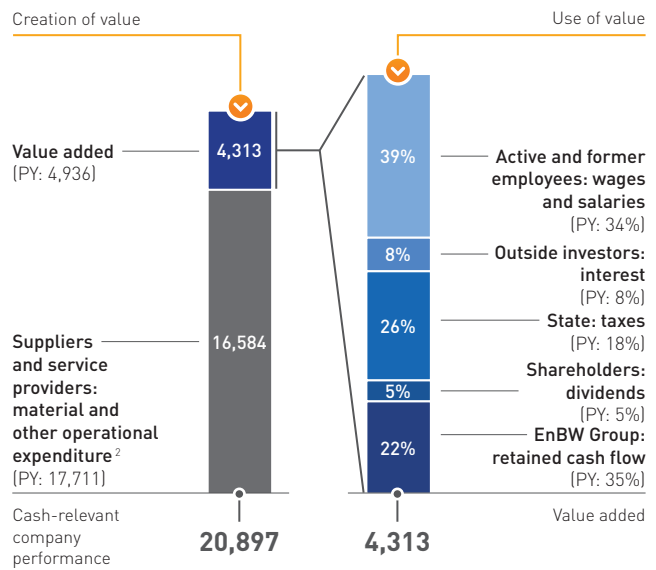
## Value added statement

The value added statement indicates the degree to which EnBW contributes to the prosperity of society and to further economic development, particularly in Germany and Baden-Württemberg. It clearly demonstrates the value we create for our stakeholders through our business activities. Further information on the dialogue with our stakeholders is summarised in the chapter “In dialogue with our stakeholders” (p. 35ff.).

We define value added as the cash-relevant business performance of EnBW in the past financial year minus cash-relevant expenses. The value added is derived from the cash flow statement and corrected based on the use of funds. The value added generated by the EnBW Group amounted to 20.6% in the reporting year (previous year restated: 21.8%). As well as being used in the form of wages, salaries and pension payments for active and former employees, a significant share is dedicated to payments to the state in the form of income taxes, electricity and energy taxes and nuclear fuel rod tax. After consideration of all stakeholder groups, the retained cash flow of the EnBW Group is available to the company for future investments without the need to raise additional outside capital.

## Value added of the EnBW Group

in € million<sup>1</sup>



<sup>1</sup> The figures for the previous year have been restated. From the Integrated Annual Report 2016 onwards, the contribution to dedicated financial assets is included in both the material and other operational expenses and also the retained cash flow.

<sup>2</sup> Includes interest and dividends received, as well as the contribution to dedicated financial assets.

## Group structure and business radius










EnBW is largely organised according to the model of an integrated company. The structure of the EnBW Group was substantially streamlined through the merger of important Group companies as part of the management concept ONE EnBW which we implemented in 2014. EnBW AG is now managed through business units and functional units: Core operating activities along the entire energy industry value chain are concentrated in the business units. The functional units carry out Group-wide support and governance tasks. The EnBW Group consists of EnBW AG as the parent company and

122 fully consolidated companies, 17 companies accounted for using the equity method and 3 joint operations. Further information on the organisational structure can be found in the chapter “Corporate governance” under “Management and supervision” on [page 32f.](#)

### Core market of Baden-Württemberg

Our core market is Baden-Württemberg. We are active here along the entire energy industry value chain and are positioned as the market leader. In the process, we are supported by a series of important subsidiaries.

#### Important subsidiaries of EnBW in the core market of Baden-Württemberg

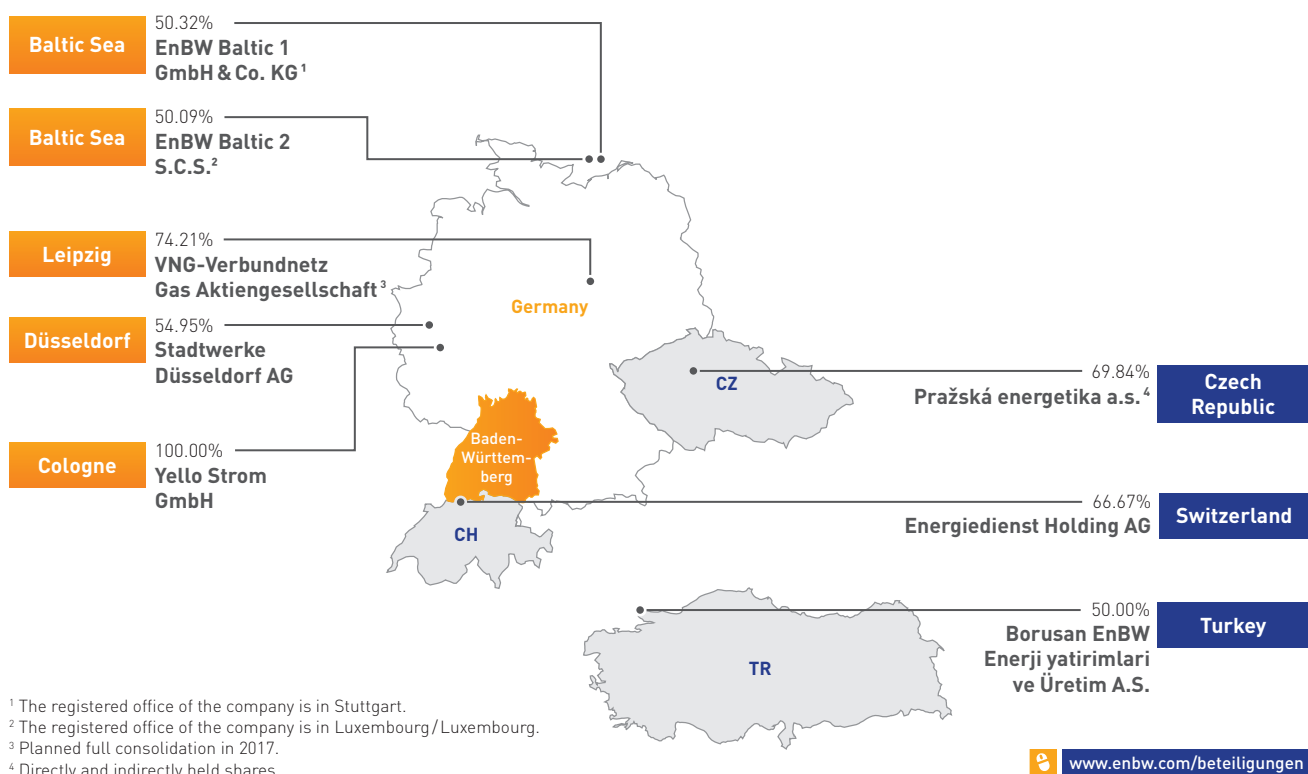
Subsidiary		Head-quarters	Share in %	Profile	Link
 <b>Netze BW</b>	Netze BW GmbH	Stuttgart	100.00	Planning, construction and operation of distribution grids, grid-related services	<a href="http://www.netze-bw.de">www.netze-bw.de</a>
 <b>EnBW</b>	EnBW Kommunale Beteiligungen GmbH	Stuttgart	100.00	Cooperation with more than 40 municipal utilities and regional suppliers	<a href="http://www.enbw.com">www.enbw.com</a>
<b>TRANSNET BW</b>	TransnetBW GmbH	Stuttgart	100.00	Independent Transmission Operator (ITO)	<a href="http://www.transnetbw.de">www.transnetbw.de</a>
 <b>ZF AG</b>	ZEAG Energie AG	Heilbronn	98.65	Energy supply company	<a href="http://www.zeag-energie.de">www.zeag-energie.de</a>
 <b>EnBW IODR</b>	EnBW Ostwürttemberg DonauRies AG	Ellwangen	99.73	Energy supply company	<a href="http://www.odr.de">www.odr.de</a>
 <b>terranets bw</b>	terranets bw GmbH	Stuttgart	100.00	Independent Transmission Operator (ITO)	<a href="http://www.terranets-bw.de">www.terranets-bw.de</a>
 <b>GVS</b> Gasversorgung Süddeutschland	Gasversorgung Süddeutschland GmbH	Stuttgart	100.00	Supplier of natural gas and gas industry services	<a href="http://www.gvs-erdgas.de">www.gvs-erdgas.de</a>
 <b>Erdgas Südwest</b>	Erdgas Südwest GmbH	Karlsruhe	79.00	Energy supply company	<a href="http://www.erdgas-suedwest.de">www.erdgas-suedwest.de</a>
 <b>NetCom BW</b>	NetCom BW GmbH	Ellwangen	74.90	Telecommunications provider including broadband and Internet services	<a href="http://www.netcom-bw.de">www.netcom-bw.de</a>
 <b>EnBW</b>	EnBW Kernkraft GmbH	Obrigheim	99.80	Operation, post-operation, decommissioning and dismantling of nuclear power plants	<a href="http://www.enbw.com">www.enbw.com</a>

## Germany and Europe

Beyond our core market, we are also active in Germany and Europe: Through our subsidiaries Yello Strom GmbH and NaturEnergie+ Deutschland GmbH we can reach customers throughout the whole of Germany. Energiedienst Holding AG, in which EnBW is the majority shareholder, supplies customers in South Baden and Switzerland. Stadtwerke Düsseldorf AG, a further company in which EnBW holds a majority stake, serves customers in the capital of North Rhine-Westphalia. VNG-Verbundnetz Gas Aktiengesellschaft, currently accounted for in

the EnBW Group using the equity method, is a horizontally and vertically integrated group of companies in the European gas industry. EnBW Baltic 1 GmbH & Co. KG and EnBW Baltic 2 S.C.S. contribute to energy generation from renewable sources through their wind farms located in the Baltic Sea. A shareholding in Pražská energetika a.s., the third-largest electricity supply company in the Czech Republic, means that EnBW is also active on the Czech market. We participate in the growth market of Turkey through our joint venture with the Borusan Group.

### Important locations outside Baden-Württemberg



## Customers and brands

EnBW supplies around 5.5 million customers with energy and provides them with energy-related services. The product range includes energy services, efficiency services and system services. EnBW is one of the leading providers of energy and environmental services in Germany. Another focus is placed on the development of our cooperation with municipal utilities and local authorities in Baden-Württemberg.

EnBW differentiates between two customer groups: The B2C customer group includes retail customers, commercial enterprises, the housing industry and agriculture. The B2B customer group encompasses, for example, major commercial enterprises and industrial customers, as well as redistributors, municipal utilities, local authorities and public entities.



With its strong brands, efficiency and quality, EnBW enjoys a close relationship with customers and is consistently oriented

to their needs. As an active partner for the energy system of the future, EnBW sells electricity, gas, district heating and drinking water in the B2C sector under the EnBW brand ( [www.enbw.com](http://www.enbw.com)). These products and services focus on Baden-Württemberg. EnBW primarily sells electricity and gas to retail and commercial customers throughout Germany through the Yello brand ( [www.yello.de](http://www.yello.de)). The needs of ecologically oriented customers are addressed across Germany through the NaturEnergiePlus brand ( [www.naturenergieplus.de](http://www.naturenergieplus.de)). In addition, the strategic focus of all B2C brands is placed on future-oriented business fields that reach beyond simply supplying electricity and gas.

In the B2B sector, EnBW is active in Baden-Württemberg through the GVS, Energiedienst, ODR, ZEAG, Erdgas Südwest and NetCom BW brands. Furthermore, EnBW is represented by the GVS, Stadtwerke Düsseldorf and PRE brands. EnBW withdrew from traditional electricity and gas sales to business customers under the EnBW and Watt brands in 2016.


## Our operative segments

### Sales segment


The Sales segment encompasses 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 or new energy solutions. In this area, we particularly exploit our broad energy industry and process-based expertise, as well as our existing relationships with our customers. We have already participated successfully in the growing willingness for companies to outsource billing services to third parties. We will also quickly and flexibly meet the wishes of our customers in future, for example through the further development of our existing services and through new services.

In the area of B2C sales, EnBW is placing its strategic focus on future-oriented business fields that reach beyond simply supplying electricity and gas. We are resolutely pushing forward digitalisation in order to offer customers individual solutions tailored to their needs that are distinguished by their high level of functionality, their simplicity and the fact that they invoke a degree of emotional attachment and offer permanent access to energy.






### Grids segment

The Grids segment encompasses the transmission and distribution of electricity and gas, the provision of grid-related services, e.g. the operation of grids for third parties, and the supply of water. Value added in the Grids segment is based on the existing infrastructure and the process know-how necessary to operate and expand this infrastructure efficiently. Furthermore, value added is anchored in the numerous close relationships with local authorities and citizens. We will further expand our grid business at all voltage levels in the course of the Energiewende and thus contribute to supply reliability. For example, our subsidiary TransnetBW GmbH is currently involved together with partners in planning two high-performance north-south connections based on high-voltage DC transmission technology ( HVDC). Partnerships will also play a more important role in the distribution grid in future as we efficiently manage our customers' grid installations and infrastructures and prepare them to meet new requirements.

### Renewable Energies segment

The company's activities in the area of power generation from renewable energy sources – where we utilise the natural resources of water, wind and sun – are combined under the Renewable Energies segment. We are significantly expanding renewable energies and broadening our activities along the value chain. The principle of partnership plays a central role in this context and we offer potential investors such as local authorities and private citizens, whom we attract with the aid of targeted models, the chance to participate in renewable energy projects. The value we add in this segment encompasses project development, construction and efficient operation, as well as the  repowering of the plants in the future.

### Generation and Trading segment

The Generation and Trading segment encompasses electricity generation and the trading of gas and electricity, the provision of  system services for the operators of transmission grids, the gas midstream business, district heating, environmental services and the dismantling of power plants. This business is primarily based on the generation of electricity and heat from our coal, gas, pumped storage and nuclear power plants and our operational and optimisation expertise. We organise the procurement of fuels – particularly coal – in a sustainable manner ( p. 42f.). Due to still unattractive wholesale market prices and  spreads ( p. 48), we will reduce our power plant capacities in the area of conventional generation (coal, oil, gas) in the medium term. Some of the power plants, which were earmarked for decommissioning due to economic reasons, will need to remain available in reserve for a limited time to ensure the stability of the system as part of the new design of the electricity market ( p. 45f.). In combination with the power plants that remain on the market, these power plants will guarantee the security of supply in Baden-Württemberg. Moreover, we intend to exploit the growth opportunities presented by the Energiewende with greater intensity in this segment. As equal partners, we support our customers in the integration of their power plants into the market using our services and expertise – such as in the area of direct marketing.

Overview of the segments

**Sales**

**Tasks**

Sale of electricity, gas, energy-related services and energy industry billing services; energy efficiency consultancy; cooperation with local authorities; collaboration with public utilities

**Significant results in 2016**

- > Entering the digital product world with the sales launch of the product EnBW solar+
- > Expansion of electromobility via the cooperation with Tank & Rast to enlarge the charging infrastructure
- > Further expansion of the range of services, such as in the area of energy industry billing services
- > Expansion of solutions for local authorities with a focus on broadband, electromobility and the development of districts
- > Withdrawal from the B2B commodity business under the EnBW and Watt brands

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**Sales in 2016**

52.3 billion kWh Gas (B2C/B2B)	43.2 billion kWh Electricity (B2C/B2B)
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**Number of B2C and B2B customers**

Around **5.5 million**

**Key figures in 2016**

<b>3,244</b> employees (as of 31/12/2016)	<b>€249.7 million</b> adjusted EBITDA in 2016
<b>€52.0 million</b> investment in 2016	<b>12.9%</b> share of adjusted EBITDA in 2016

**Development of adjusted EBITDA**

**Grids**

**Tasks**

Transport and distribution of electricity and gas; provision of grid-related services; water supply; guaranteeing the security of supply and system stability

**Significant results in 2016**

- > ULTRANET HVDC project: In cooperation with EnBW Kernkraft GmbH (EnKK) and the manufacturer of the transformer station, Transnet BW determined the suitability of the Philippsburg nuclear power plant site and started the implementation of the project
- > SuedLink HVDC project: As underground cabling must be given preference over overhead cable, the route needed to be replanned. The possible corridors were published in September 2016
- > Commissioning of the long-distance North Black Forest Pipeline for Baden-Württemberg by terranets bw
- > Successful completion of testing of intelligent metering systems by Netze BW in 38 local authorities

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**Grid lengths in 2016**

153,000 km	
Electricity transmission and distribution grid	
17,000 km	
Gas transmission and distribution grid	

**Transport volume in 2016**

<b>64.5 billion kWh</b> electricity	<b>33.0 billion kWh</b> gas
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**Key figures in 2016**

<b>8,330</b> employees (as of 31/12/2016)	<b>€1,004.1 million</b> adjusted EBITDA in 2016
<b>€802.9 million</b> investment in 2016	<b>51.8%</b> share of adjusted EBITDA in 2016

**Development of adjusted EBITDA**



**Renewable Energies**

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

**Significant results in 2016**

- > Expanding the onshore portfolio: EnBW expands the area of renewable energies with the acquisition and construction of 7 onshore wind farms with 46 turbines and a total capacity of 89 MW in various regions of Germany
- > Strengthening the maintenance and servicing business in the wind power sector with the acquisition of the manufacturer-independent Danish service provider Connected Wind Services A/S

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**Generation portfolio in 2016<sup>1</sup>**

<b>6,870</b> GWh generation	<b>1,504</b> MW installed output
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**Key figures in 2016**

<b>1,029</b> employees (as of 31/12/2016)	<b>€295.3</b> million adjusted EBITDA in 2016
<b>€294.7</b> million investment in 2016	<b>15.2%</b> share of adjusted EBITDA in 2016

**Development of adjusted EBITDA**

€0.2  
billion

2012

➔

+250%

€0.7  
billion

2020

**Generation and Trading**

**Tasks**  
Advisory services, construction, operation and decommissioning/dismantling of thermal generation plants; electricity and gas trading; risk management of market-related risks; development of gas midstream business, district heating; waste management/environmental services; provision of system services; direct marketing of renewable energy power plants

**Significant results in 2016**

- > Commissioning of the Lausward Combined Cycle Gas Turbine power plant in Düsseldorf with an efficiency of over 61% (net) and a district heating supply system of up to 300 MWth
- > Investment decision of around €75 million for the modernisation of the power plant site in Stuttgart-Gaisburg: Construction of a low emission and efficient CHP power plant with a heating capacity of up to 210 MW
- > Decision to decommission Block 4 S of Rheinhafen Steam Power Plant (RDK) in Karlsruhe

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**Generation portfolio in 2016<sup>1</sup>**

<b>45,581</b> GWh generation	<b>12,010</b> MW installed output
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**Key figures in 2016**

<b>5,076</b> employees (as of 31/12/2016)	<b>€337.2</b> million adjusted EBITDA in 2016
<b>€111.1</b> million investment in 2016	<b>17.4%</b> share of adjusted EBITDA in 2016

**Development of adjusted EBITDA**

€1.2  
billion

2012

➔

-80%

€0.3  
billion

2020

<sup>1</sup> The sums stated for the generation and installed output in the Renewable Energies and Generation and Trading segments are not identical to the totals for the EnBW Group. Some of the generation plants are assigned to other segments. The total generation of the EnBW Group is 52,795 GWh, of which 8,257 GWh or 15.6% is generated from renewable energy sources. The total installed output of the EnBW Group is 13,582 MW, of which 3,140 MW or 23.1% is from renewable energy power plants. The total generation and installed output for the Group are illustrated in detail in the chapter "The EnBW Group" on page 67f.

# Strategy, goals and performance management system

## Strategy

### Market conditions and structures

Market conditions in the energy sector have been undergoing a period of profound change for a number of years. The desire to achieve autonomy and generate energy in a decentralised manner, as well as falling energy consumption due to improved energy efficiency, are leading to new patterns of demand amongst customers and new patterns of consumption. An increase in price and cost awareness and a continued strong focus on sustainability support this development. Cities and communities are also playing a role in this change.

The trend towards decentralisation is benefiting from regulatory funding mechanisms and from technological advances that have led to a sharp decline in the costs associated with decentralised energy generation, particularly with regard to photovoltaic power plants, but also in the area of wind power plants and combined heat and power plants. The role of centralised electricity generation is fundamentally changing as a result and is leading to considerably fewer operating hours in power plants. Nuclear power generation will be phased out by 2022, with plants being successively and safely decommissioned and dismantled.

As a consequence, energy supply companies require new business models and the revitalisation of their corporate cultures (p. 13f.). For the provision of services, dialogue-oriented communication, digitalisation and increased cooperation with partners are, for example, becoming key areas of focus for energy supply companies.

According to our long-term assessment of the individual market sectors, the total comprehensive income of the energy industry in Germany will increase slightly in nominal terms up to 2020. However, the aforementioned trends will result in significant shifts in earnings between the individual stages of the value chain. The contribution to earnings of all thermal generation in Germany will fall considerably up to 2020. The growth in earnings from renewable energies (especially onshore/offshore wind and photovoltaic) and grids – particularly as a result of the major expansion of the transmission grids – will offset this development. The sales business for standard products is under pressure, which is particularly due to the continued increase in own energy generation and energy efficiency. However, the overall sales market is anticipated to grow slightly up to 2020 due to the increasing importance of new and digital business models, as well as new market opportunities – such as in the area of electromobility.

### Strategy process

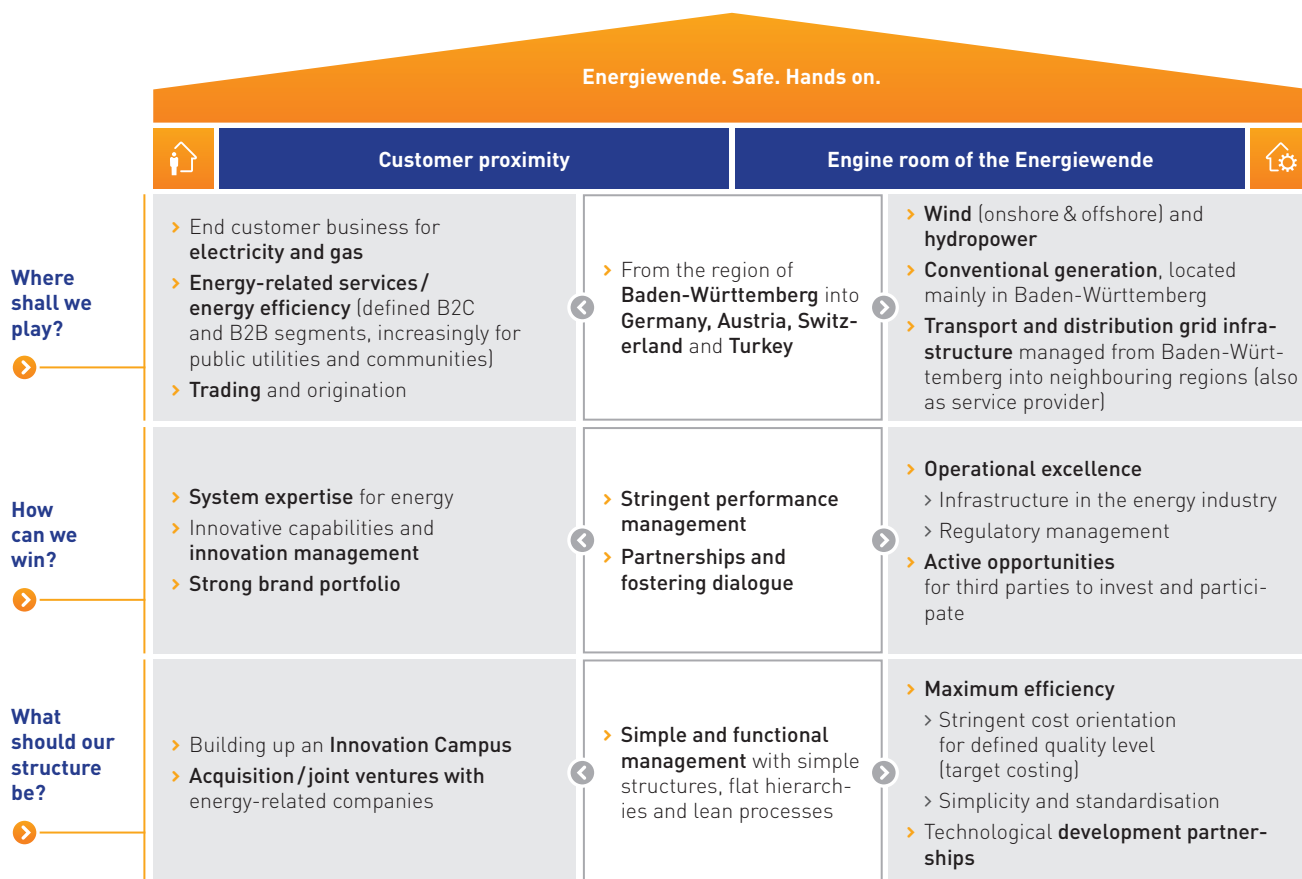
The development of strategy at EnBW is governed by a uniform and structured process. This begins with our vision which is guided by the principle “Energiewende. Safe. Hands on.” to describe our long-term objective. The Group strategy describes our strategic positioning and how we differentiate ourselves from our competitors. Sustainability is also an integral component of our Group strategy so that we can guarantee the creation of economic, ecological and social value for our stakeholders. We shape the composition and strategic development of our business portfolio through our portfolio strategy. Our strategic goals are then defined and operationalised in a final step through the design of our business, investment and functional strategies.

### Strategy process



## Guiding principle and Group strategy

EnBW 2020 strategy



The EnBW Group strategy developed in accordance with our guiding principle encompasses two operative and complementary models encapsulated in the EnBW Strategy House:

**Customer proximity:** The EnBW 2020 strategy places the focus on customers to an even greater degree. Targeted innovation management and short development times for new products and services will become key components. Cooperation with municipal utilities and local authorities should be expanded, primarily on the basis of partnership cooperation models. EnBW aims to gain an advantage over its competitors through the development of system and complete solutions for specific customer segments and a strong brand portfolio. An Innovation Campus supports the rapid development of forward-looking products. It is characterised by its focus on market proximity, bringing together the necessary expertise from the areas of research and development right through to sales and also by its entrepreneurial thinking. In the area of energy-related services, in particular, selective company acquisitions will complement existing expertise and round off the range of products and services offered (p. 39 ff.).

**Engine room of the Energiewende:** Safety, simplicity and flexibility are crucial when it comes to operating system-relevant infrastructure. EnBW relies on operational excellence and a strict focus on efficiency and cost-orientation to achieve defined

standards and levels of quality. Partnerships formed in the area of technological development serve to minimise costs and risks. In addition, EnBW actively offers the opportunity to invest in grids and power plants, especially to local authorities. In the “Engine room of the Energiewende”, EnBW uses its expertise to guarantee a reliable supply of energy – which also needs to be ensured during the transformation of the energy landscape.

### Portfolio strategy

#### Restructuring the business portfolio

EnBW aims to more than double the share of its generation capacity accounted for by renewable energies from 19% (based on the reference year of 2012) to more than 40% in 2020. The capacities of our onshore wind farms will be increased significantly in the target markets of Germany and Turkey. Offshore wind power represents a further opportunity for growth. By investing extensively in grid expansion, we will be making a substantial contribution to the infrastructure required by the energy system and thus to the security of supply.

Innovative products and services will form another important pillar of the company’s business. By 2020, a significant share of our earnings – the target value 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

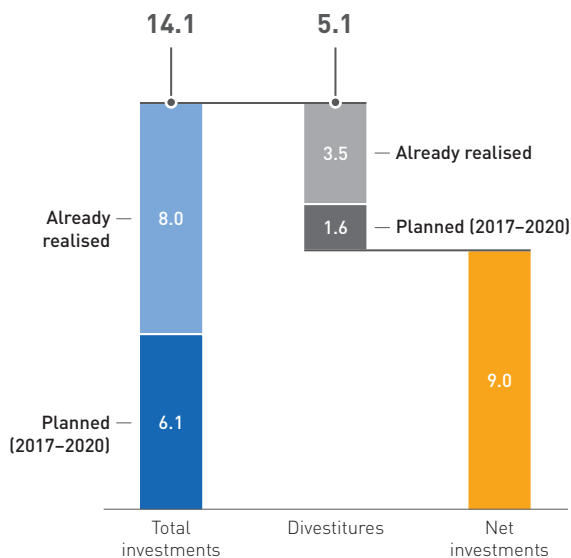
adjusted EBITDA accounted for by the regulated grid business and renewable energies will increase from around 40% (based on the reference year of 2012) to around 70% in 2020. This will improve the risk-return profile of EnBW.


### Extensive investments and divestitures

EnBW intends to invest €14.1 billion in total by 2020 (based on the reference year of 2012). In this context, the focus will be placed on expanding renewable energies on an industrial scale. Moreover, we will also concentrate on the expansion and upgrading of our transmission and distribution grids right through to so-called  smart grids. Beyond our core market of Baden-Württemberg, we will be focusing our investment activities on Germany, Switzerland, the Czech Republic and Turkey. In order to obtain the financial headroom required for such extensive investments, we have significantly extended our divestiture programme – involving conventional divestitures, cash inflow from participation models, the disposal of assets and subsidies – with our EnBW 2020 strategy to around €5.1 billion (based on the reference year of 2012).

Investments and divestitures as part of the expansion of the portfolio

in € billion



You can find further information on this subject in the “Forecast” on  page 76.

## Corporate strategy outlook

### Expansion of the gas business

As part of the restructuring of shareholdings with EWE Aktiengesellschaft, Oldenburg, EnBW divested itself of a 20% shareholding in EWE in 2016. EWE-Verband has also undertaken to acquire the remaining 6% of EWE’s stock from EnBW by 2019. In return, EnBW acquired a 74.21% shareholding in VNG-Verbundnetz Gas Aktiengesellschaft, Leipzig, in 2016. Following the planned full consolidation of VNG during the course of 2017, EnBW will double its gas business and become the third-largest gas supplier on the German market. The

acquisition of VNG represents an important step in the restructuring and further development of EnBW, both strategically and economically.

### EnBW 2020 is well on track

As an integrated energy supply company, 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. 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.

### Next phase of the Energiewende

The climate conferences in Paris and Marrakesh have set clear goals for global decarbonisation. The Energiewende has become an irreversible global process. Digitalisation and decentralisation are becoming the decisive drivers of the further development of the energy markets. In this phase of the Energiewende, it is the market, customers and technology that are leading the way. The pace of change on the market is increasing significantly, while new competitors are offering inexpensive and creative solutions and products. In addition, there are trends such as urbanisation, digitalisation and networking. At the same time, customers are becoming more demanding, expect individual solutions and are themselves becoming electricity producers to an ever greater extent. Moreover, their requirements for reliability and safety remain high. Solar technology is being increasingly combined with storage technologies in private households. Digital intelligence is networking the supply of electricity, gas and heat right through to charging solutions for electric cars to create an autonomous supply of energy. Electricity and gas consumers are becoming independent energy producers and energy managers. Private households are forming communities that generate, exchange and trade energy, and are thus becoming virtual power plants. Whole sectors of the economy are becoming networked together. 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.

### An infrastructure partner with digital system competence

The digital convergence of individual energy systems and infrastructure requires the ability to safely control, operate and further develop these systems both individually and as a whole. Energy companies will become competent and reliable partners who handle these tasks for customers, citizens and local authorities. 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.

## Goals and performance management system

We will safeguard the implementation of our 2020 strategy by means of a holistic goal and performance management system. This system reflects the overall performance of the company and strengthens integrated thinking within EnBW. At the same time, it underpins the comprehensive and transparent focus on performance and stakeholders within our company.

### Performance management system

Since 2013, corporate management has been continually expanded through the addition of non-financial and strategic goals to now also encompass the strategy, customers and society, employees and environment dimensions as well as the finance goal dimension. The centrepiece of this integrated corporate management is the performance management system (PMS). As of 2015, the PMS incorporates all tools used in strategic and operational management. The financial and non-financial Group goals have been broken down into consistent target agreements at all management levels since 2015. The quarterly performance reviews conducted at a Board of Management level introduced in 2013 were revised in 2015 and have since included operative performance indicators that will promote the achievement of targets for the financial and non-financial key performance indicators. In 2016, this concept was fully implemented. In terms of external communication, the PMS feeds into the integrated reporting of the financial and non-financial performance of EnBW based on the reporting framework of the International Integrated Reporting Council (IIRC). This Integrated Annual Report 2016 incorporates the financial and non-financial aspects of our business activities.

### TOP Further development of the key performance indicators

EnBW has up to now managed to retain its “A” ratings using the **E** dynamic leverage ratio, measured as the ratio of adjusted **E** net debt to **E** adjusted EBITDA with a target in 2020 of < 3.3 years. As a result of a non-cash-relevant increase in the pension and nuclear provisions – due primarily to the current low interest rate – and also the impact for the law of reorganising responsibility for nuclear waste management, net debt has increased by several billion euros since 2011. These effects demonstrate that the dynamic leverage ratio is only suitable as a controlling indicator to a limited extent in the current market environment. The planned restructuring of the Group should be implemented independently of non-cash-relevant fluctuations in long-term provisions.

Therefore, EnBW will utilise the **E** internal financing capability in future as a key performance indicator. This describes the ratio between **E** retained cash flow and cash-relevant **E** net investment. This new control mechanism will enable EnBW to retain its financial discipline independently of interest rate-related volatility. The goal is a solid **E** investment-grade rating.

The successful growth of the business as an energy company not only requires a strong market position and a broad customer base but, above all, in view of the radical changes to the energy landscape, also social acceptance. EnBW has thus expanded its previously reported key performance indicator Brand Attractiveness Index from the 2016 reporting period into a Reputation Index. This index reaches above and beyond the customers goal dimension and reflects a diverse range of other activities, influencing factors and assessments from a variety of stakeholder groups. Accordingly, the customers goal dimension is also being broadened to become the customers and society goal dimension. To ensure comparability in the reporting, we will also continue to publish the Brand Attractiveness Index for the core brands of EnBW and Yello in future as an additional performance indicator (**L** p. 64).




EnBW already clearly committed itself to the Energiewende in 2013 with the 2020 strategy. The central focus here in the medium and long-term is low CO<sub>2</sub> or zero emission electricity generation. The EnBW business model is aligned to the national and international goals for climate protection, such as those defined in the Paris Agreement (**L** p. 44). Alongside a focus on increasing the proportion of renewable energies, which has already been a key performance indicator in the environment goal dimension for managing the company for many years, the inclusion of the new key performance indicator **E** CO<sub>2</sub> intensity reflects the special importance of climate change as a social, political and also economic challenge.

### TOP Target values for the key performance indicators

The key performance indicators enable us to measure the degree to which goals are achieved and to manage our company. Through the realignment of EnBW (**L** p. 13f.) towards increased renewable energies, the grid business and business focussing on “Customer proximity” – with clearly defined and quantitative targets for 2020 (based on the reference year of 2012) – we will become the first point of contact for energy issues and ensure the continued competitiveness of EnBW through convincing products, a return to an increasingly advantageous risk-return profile and even stronger regional anchoring.

**TOP** Financial and non-financial key performance indicators and targets

Goal	Key performance indicator	2016	Target in 2020	
<b>Finance goal dimension</b>				
Secure profitability	Adjusted EBITDA in € billion	1.9	2.3–2.5	The operating result is to return to the average level achieved before the Energiewende. The total regulated business (Grids and Renewable Energies segments) together contributes around 70% to this result.
High level of financial discipline	Internal financing capability in %	72.1	≥ 100	The level of net financial liabilities is controlled by limiting net investment to the level of retained cash flow. The Group can thus finance its own restructuring internally.
Raise the value of the Group	ROCE in %	7.8	8.5–11	Return on capital employed (ROCE) is higher than the cost of capital. EnBW is creating value for its stakeholders.
 Financial key performance indicators > pages 52 and 58ff. <span style="margin-left: 150px;"> Expected trends in financial key performance indicators &gt; page 77</span> <span style="float: right;"> Report on opportunities and risks &gt; page 80ff.</span>				
<b>Strategy goal dimension<sup>1</sup></b>				
Share of result from "Customer proximity"/Sales	Share of overall adjusted EBITDA in € billion/in %	0.2/13	0.4/15	The operating result for the Sales segment doubles from €0.2 billion (reference year: 2012) to €0.4 billion in 2020 and represents around 15% of the Group operating result. Innovations make this possible.
Share of result from Grids	Share of overall adjusted EBITDA in € billion/in %	1.0/52	1.0/40	The operating result for the Grids segment increases by 25% from €0.8 billion (reference year: 2012) to €1.0 billion in 2020 and represents around 40% of the Group operating result. The share accounted for by the stable and regulated business is expanding.
Share of result from Renewable Energies	Share of overall adjusted EBITDA in € billion/in %	0.3/15	0.7/30	The operating result for the Renewable Energies segment increases by 250% from €0.2 billion (reference year: 2012) to €0.7 billion in 2020 and represents around 30% of the Group operating result. EnBW is more sustainable.
Share of result from Generation and Trading	Share of overall adjusted EBITDA in € billion/in %	0.3/17	0.3/15	The operating result for the Generation and Trading segment falls by 80% from €1.2 billion (reference year: 2012) to €0.3 billion in 2020 due to changed framework conditions and only represents around 15% of the Group operating result.
 Strategic key performance indicators > page 52 <span style="margin-left: 150px;"> Expected trends in strategic key performance indicators &gt; page 77</span> <span style="float: right;"> Report on opportunities and risks &gt; page 80ff.</span>				

Goal	Key performance indicator	2016	Target in 2020	
<b>Customers and society goal dimension</b>				
Reputation	Reputation Index	50.0	55.4	In parallel with the restructuring of the business model, EnBW aims to continuously improve its reputation.
Customer proximity	EnBW/Yello Customer Satisfaction Index	132/150	> 136/ > 159	EnBW and Yello customers are satisfied customers with a high level of customer loyalty. EnBW and Yello are organisations strongly oriented towards customers and meet the needs and wishes of their customers through tailored solutions and products.
Supply reliability	SAIDI (electricity) in min/year	16	< 25	EnBW regards the maintenance of supply quality to its customers as its chief priority. The high degree of supply reliability in the grid area operated by EnBW is based on comprehensive investment in grids and plants and our abundant system expertise.
 Non-financial key performance indicators > page 63 f.		Expected trends in the customers and society goal dimension > page 78		Report on opportunities and risks > page 80 ff.
<b>Employees goal dimension</b>				
Employee commitment	Employee Commitment Index (ECI) <sup>2</sup>	59	65	The commitment of our employees to EnBW is very strong and there is faith in the future viability of the company.
Occupational safety	LTIF <sup>2</sup>	3.9	≤ previous year	The number of accidents at work and the resulting days of absence remains stable or is falling.
 Key non-financial performance indicators > page 64 ff.		Expected trends in the employees goal dimension > page 78 f.		Report on opportunities and risks > page 80 ff.
<b>Environment goal dimension</b>				
Expand Renewable Energies (RE)	Installed output of RE in GW and the share of the generation capacity accounted for by RE in %	3.1/23.1	5.0/ > 40	The share of the generation capacity accounted for by renewable energies has doubled compared with 2012. Onshore and offshore wind power and hydropower are at the forefront of this development.
Climate protection	CO <sub>2</sub> intensity in g/kWh	577	-15% to -20%	EnBW actively contributes to climate protection by successively reducing the CO <sub>2</sub> intensity of its own generation of electricity (excluding nuclear power) by 15 to 20% by 2020 compared to 606 g/kWh in the reference year 2015.
 Key non-financial performance indicators > page 67 ff.		Expected trends in the environment goal dimension > page 79		Report on opportunities and risks > page 80 ff.

<sup>1</sup> Other/Consolidation accounts for €0.1 billion/+3% of the overall adjusted EBITDA.

<sup>2</sup> Variations in the group of consolidated companies; see also the definition of key performance indicators on page 28.

## TOP Definition of key performance indicators

The financial and strategic key performance indicators within the PMS are the **adjusted EBITDA**, the share of the adjusted EBITDA accounted for by each business segment, the **internal financing capability** and **ROCE**.

The **adjusted EBITDA** refers to the earnings adjusted for non-operating effects before the investment and financial results, income taxes and the expenses for depreciation and amortisation (p. 51 and 77). Adjusted EBITDA is a key performance indicator for the finance goal dimension. The key performance indicators for the strategy goal dimension, which refer to the share of adjusted EBITDA accounted for by each business segment, are derived directly from it. The key performance indicator **internal financing capability** is defined as the **retained cash flow** in relation to the cash-relevant **net investment** and represents the most significant performance indicator for the Group's ability to finance its activities internally (p. 58f. and 78). The retained cash flow (after covering ongoing costs and dividend payments) is available to the Group for net investment without the need to raise additional outside capital. The **ROCE** (return on capital employed) is the ratio of **adjusted EBIT** including the adjusted investment result to the average capital employed and forms the basis for determining the value added, reflecting the development of the company's value from a financial point of view (p. 62f. and 78).

In addition to the financial key performance indicators, the PMS also includes non-financial key performance indicators.

The customers and society goal dimension comprises the Reputation Index, the Customer Satisfaction Index and the SAIDI (System Average Interruption Duration Index) (p. 63 and 78).

In order to calculate the **Reputation Index**, a total of around 5,000 people – from the stakeholder groups relevant for the EnBW brand of customers, the wider public, industrial companies, opinion leaders and investors – were asked about their attitudes to the EnBW brand by an external market research institute. Results were collected for each stakeholder group about the distinctiveness of the brand and the assessment of the competence of and emotional attitude towards the EnBW brand. These are merged together to form a Reputation Index. The individual reputation indices for each stakeholder group are weighted equally to form a consolidated and reported Reputation Index. The key performance indicator **Customer Satisfaction Index** comprises an integrated analysis of the average satisfaction of private end consumers of electricity over the year, which is directly linked to customer loyalty. It is compiled and derived from customer surveys carried out by an external provider. This key indicator

is compiled for the Group's two core brands of EnBW and Yello. **SAIDI** serves as the key performance indicator of supply reliability. It expresses the average length of supply interruption in the electricity distribution grid experienced annually by each connected customer. SAIDI includes all unscheduled downtimes with interruptions to supply lasting more than three minutes for end consumers. The calculation methodology is based on regulations issued by the VDE (German Association for Electrical, Electronic & Information Technologies) for reporting supply interruptions in electricity grids.

The Employee Commitment Index (ECI) and LTIF (Lost Time Injury Frequency) are utilised as performance indicators in the employees goal dimension (p. 64f. and 78 f.). The **ECI** expresses the degree to which employees are committed to EnBW. It is compiled using employee surveys and is based on standardised questions that address the degree to which employees identify with their company, including: satisfaction with their employer-employee relationship, attractiveness of the employer, identification with the company, motivational climate, competitiveness and future viability. The ECI is compiled every two to three years for those companies controlled by the Group (except ITOs) as part of a full employee survey – as was also the case in 2016. Representative random sample surveys are completed in the periods between the full surveys. The **LTIF** is calculated on the basis of LTI (Lost Time Injuries) which denotes the number of accidents during working hours which have occurred exclusively because of a work assignment from the company and result in at least one day of absence. LTIF indicates how many LTIs have occurred per one million working hours performed. This key indicator takes all employees at those companies controlled by the Group into account, except external agency workers and contractors.

The key performance indicators in the environment goal dimension of **installed output of renewable energies (RE)** and **the share of the generation capacity accounted for by RE** have now been supplemented by **CO<sub>2</sub> intensity** (p. 67f. and 79). The first are measures of the expansion of renewable energies and refer to the installed output of the power plants and not to their weather-dependent contribution to electricity generation. The calculation basis for the key performance indicator CO<sub>2</sub> intensity is the emissions of CO<sub>2</sub> from own generation of electricity for the Group, as well as the volume of electricity generated by the Group without the contribution made by the nuclear power plants. This performance indicator is calculated as the ratio between the emissions and the generated volume of electricity and thus specifically describes the amount of CO<sub>2</sub> released per kilowatt hour. By discounting the electricity generated by nuclear power plants, the performance indicator will not be influenced by the phasing out of nuclear energy in the coming years.

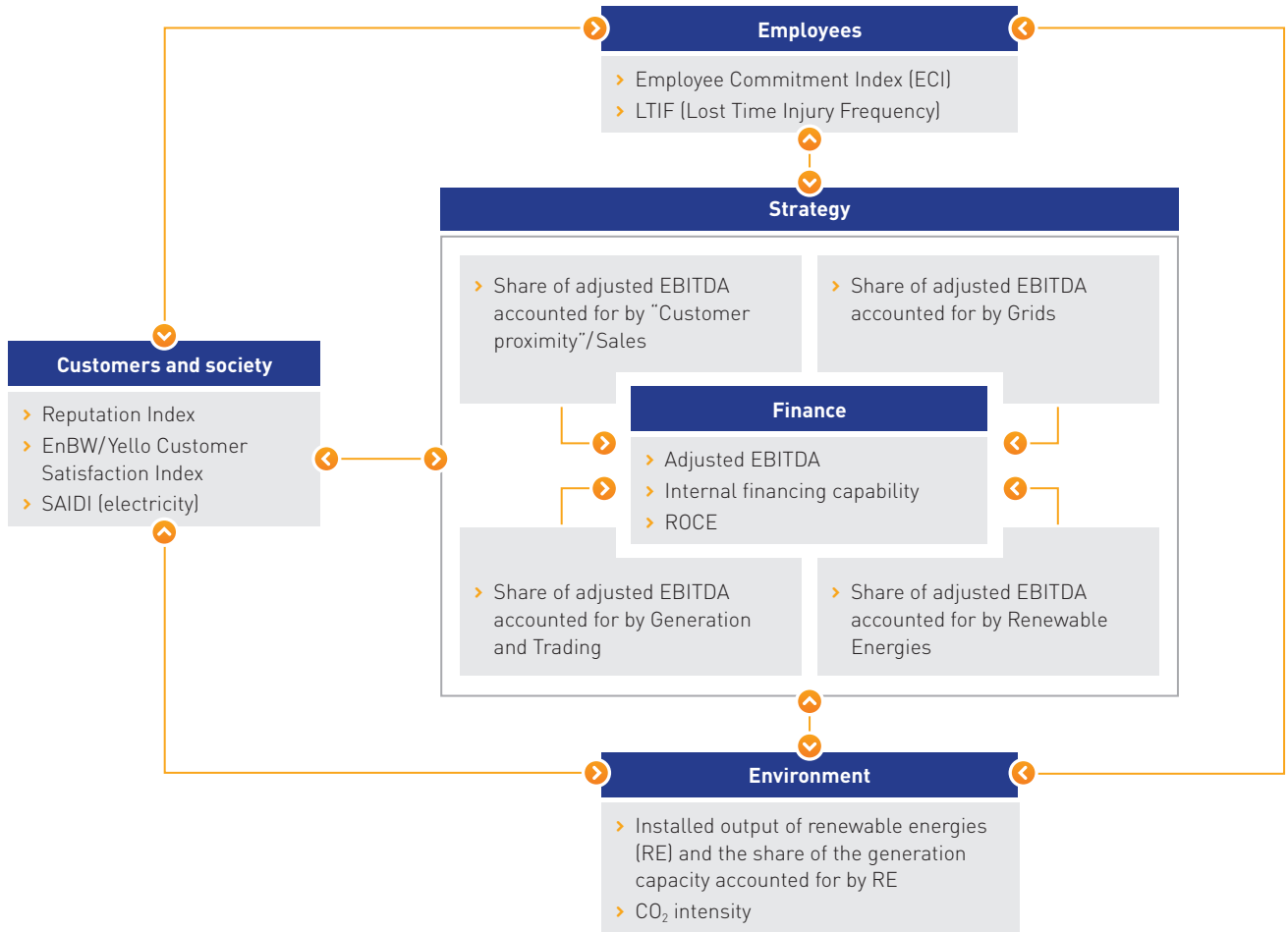


**TOP Interdependencies between the key performance indicators**

We are convinced that in order to give a comprehensive portrayal of the company, it is not only necessary to describe the economic, ecological and social context but also to illustrate and provide an analysis of interdependencies in this

report. Integrated reporting also requires that information on the various goal dimensions be linked together. At the same time, this type of reporting encourages a holistic corporate management approach within EnBW and positions us as a responsible and sustainable company with a viable future to the outside world.

Theoretical interdependencies between key performance indicators

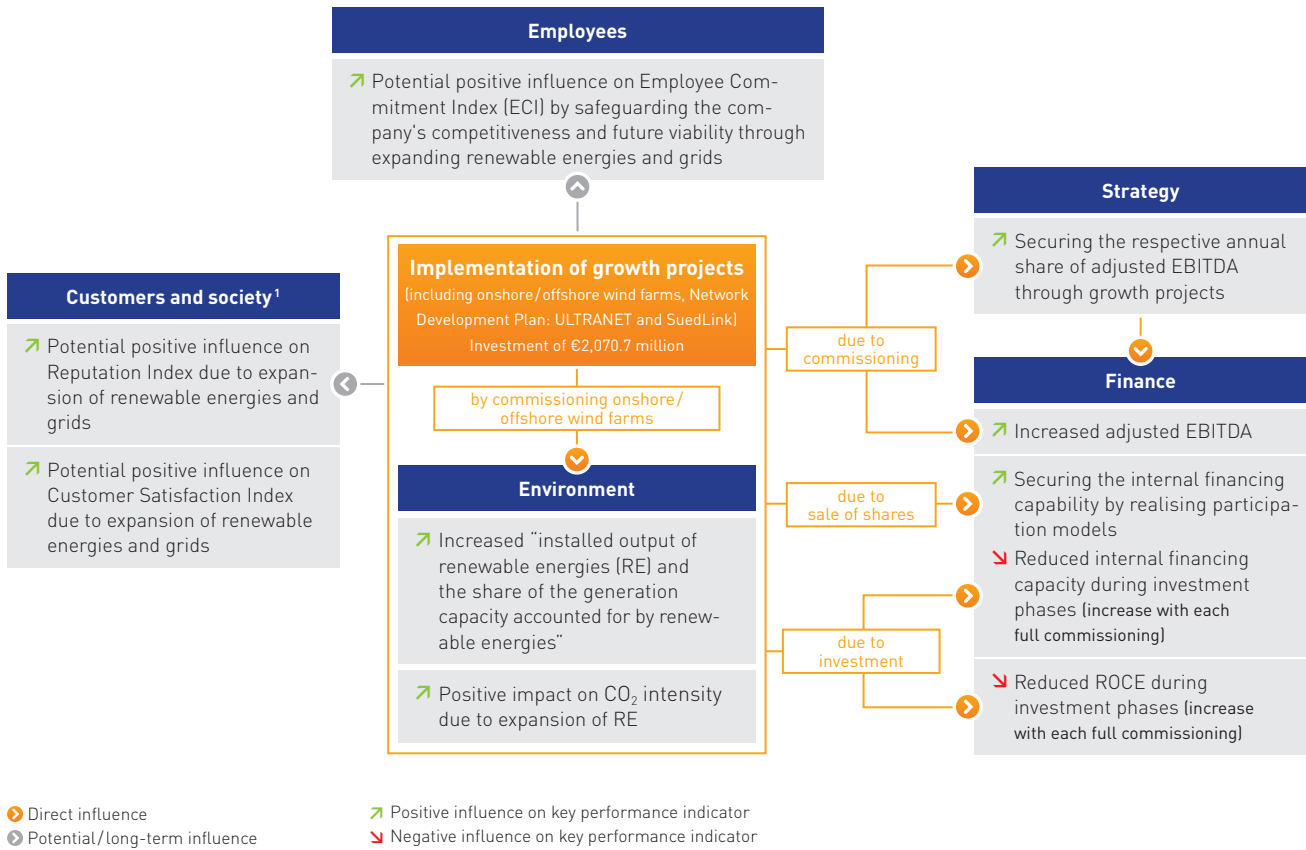


In order to illustrate these interdependencies, EnBW utilises the key performance indicators for its goal and performance management system, which include financial and non-financial factors in the finance, strategy, customers and society, employees and environment dimensions. The theoretical interdependencies between the key performance indicators are represented in the diagram above.

strategy key performance indicators are essentially directly measurable and are represented in the following example diagrams by orange arrows. These have been quantified as far as possible since the 2016 financial year. The interdependencies with the non-financial key performance indicators are difficult to measure and generally tend to be potential or longterm in nature. In the 2016 financial year, these interdependencies were not monitored individually. These interdependencies are presented based on internal discussion with the relevant specialist areas and those responsible for the performance indicators. For this reason, they are represented less boldly with grey arrows. The green arrows show a positive influence on the key performance indicator, while the red arrows show a negative influence.

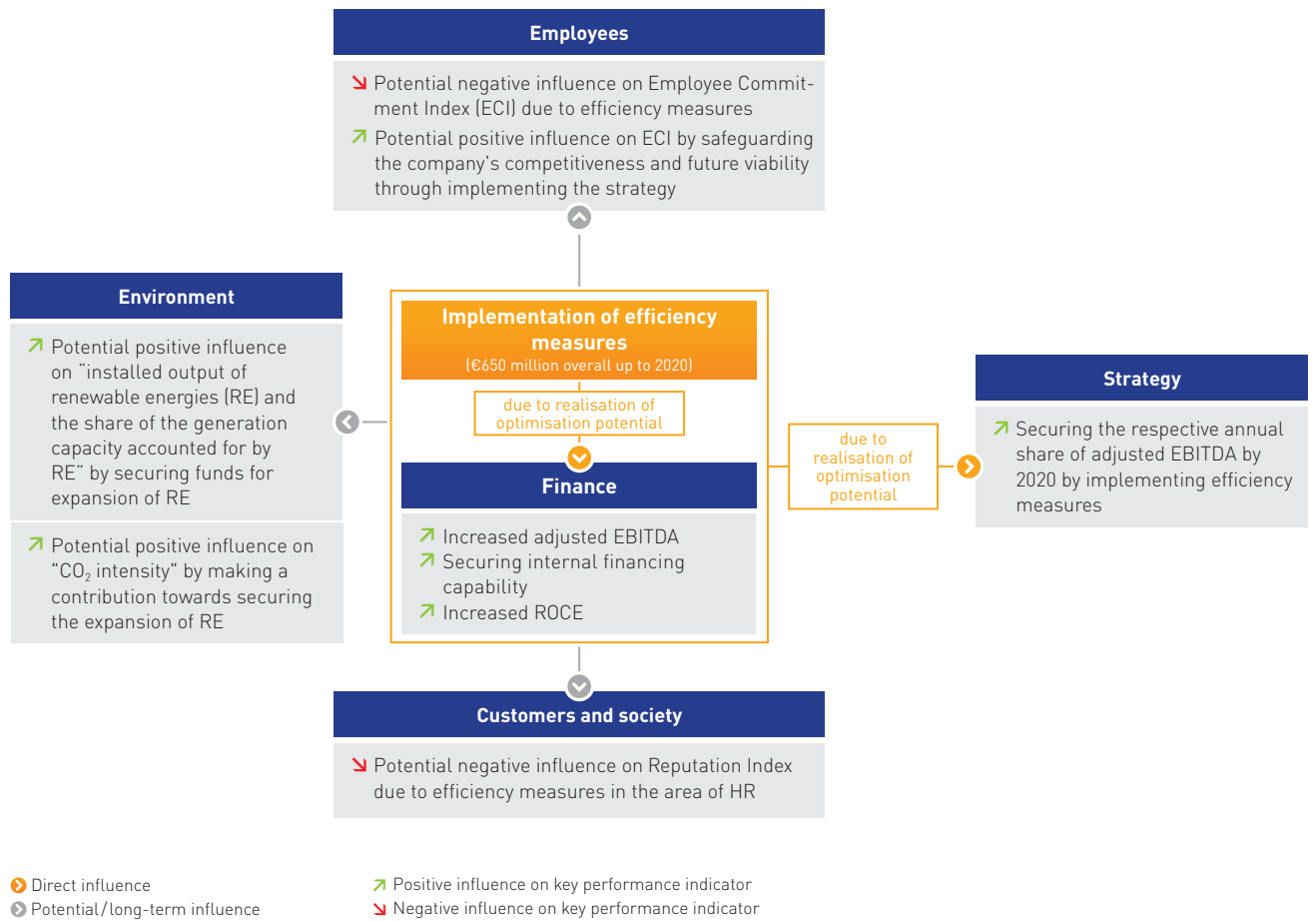
We have illustrated these interdependencies since 2015 using concrete examples that were important for the financial year in question, and can thus also be found in other sections of the report. The interdependencies are explained based on the key performance indicator that is immediately influenced in each example. The interdependencies between the financial and

Interdependencies between key performance indicators using the implementation of growth projects as an example



<sup>1</sup> Especially in relation to the construction of onshore wind farms, we also anticipate a potential negative influence on the Reputation Index due to the risk of the rejection of individual projects in the local vicinity. However, this type of localised risk is more than compensated for by the overall potential positive influence on the Reputation Index.

Interdependencies between key performance indicators using efficiency measures as an example



# Corporate governance

## Corporate management

Good corporate governance is an essential part of the corporate culture at EnBW. We are convinced that responsible and transparent corporate governance strengthens the trust and confidence that customers, capital providers, employees and the general public place in the company, thereby contributing to its long-term success. The Board of Management and Supervisory Board have the responsibility of managing and supervising the company above and beyond merely fulfilling statutory requirements, but to do it in accordance with recognised benchmarks for good corporate governance and in harmony with the principles of a social market economy, guaranteeing the continued existence of the company and ensuring a sustainable increase in its added value. Therefore, EnBW also meets all the recommendations of the German Corporate Governance Code (Deutscher Corporate Governance Kodex).

As in previous years, Dr. Bernhard Beck, the member of the Board of Management responsible for corporate governance, monitored conformity with the Code at EnBW and reported extensively to the Board of Management and Supervisory Board on all current themes pertaining to corporate gover-

nance. Both boards acknowledged his report and addressed the recommendations and suggestions in the Code. They subsequently approved the company's annual declaration of compliance pursuant to section 161 German Stock Corporations Act (AktG) on 9 December 2016. The current declaration of compliance and the declarations from previous years are published at [www.enbw.com/entsprechenserklaerung](http://www.enbw.com/entsprechenserklaerung).

The "Remuneration report" is contained in the management report on page 90 ff. of this report.

## Management and supervision

### Board of Management

As of 31 December 2016, the Board of Management of EnBW AG consisted of four members. The Board of Management is jointly responsible for managing Group business. In addition to the role of CEO, the tasks performed by the Board of Management are split into the remits of "finance", "personnel, law and compliance, auditing" and "technology".

Allocation of responsibilities at Board of Management level (as of 31/12/2016)

CEO	Finance	Personnel, law and compliance, auditing	Technology
<b>Dr. Frank Mastiaux</b>	<b>Thomas Kusterer</b>	<b>Dr. Bernhard Beck</b> (Chief Personnel Officer)	<b>Dr. Hans-Josef Zimmer</b>
<ul style="list-style-type: none"> <li>&gt; Corporate development/ sustainability</li> <li>&gt; Strategy/energy industry</li> <li>&gt; Communication/policy</li> <li>&gt; Transformation/IT/ procurement/infrastructure</li> <li>&gt; Innovation management</li> <li>&gt; Sales, marketing and operations</li> <li>&gt; Gas value chain</li> <li>&gt; Escalation: risk management and trading</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Accounting</li> <li>&gt; Tax</li> <li>&gt; Controlling</li> <li>&gt; Finance</li> <li>&gt; Investor relations</li> <li>&gt; Mergers and acquisitions</li> <li>&gt; Risk management/ICS</li> <li>&gt; Trade</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Personnel and executive management</li> <li>&gt; Law</li> <li>&gt; Auditing</li> <li>&gt; Compliance management/data protection</li> <li>&gt; Regulatory management</li> <li>&gt; Boards/shareholder relationships</li> <li>&gt; Equity investment management</li> <li>&gt; Health management</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Generation (renewable, conventional, nuclear)</li> <li>&gt; Waste management/environmental services</li> <li>&gt; Electricity and gas transmission grids</li> <li>&gt; Distribution grids (electricity and gas)</li> <li>&gt; Grid technology</li> <li>&gt; Research and development</li> <li>&gt; Occupational safety/environmental protection/crisis management</li> </ul>

[www.enbw.com/board-of-management](http://www.enbw.com/board-of-management)

### Supervisory Board

The Supervisory Board of EnBW AG consists of 20 members in accordance with section 8 (1) of the Articles of Association. In accordance with the German Co-determination Act (MitbestG), an equal number of members represent share-

holders and employees. Three employee representatives are nominated by the ver.di trade union. The Supervisory Board appoints the members of the Board of Management and advises them on their management of the company. It discusses business performance, planning and strategy of the company together with the Board of Management at regular intervals and

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

Further information on the Board of Management and Supervisory Board can be found in this report under the section on “Corporate bodies” (p. 108ff.), as well as in the declaration of corporate management including the corporate governance report and the Report of the Supervisory Board ([www.enbw.com/corporate-governance](http://www.enbw.com/corporate-governance)).

## Annual General Meeting

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

Shares of EnBW AG are listed on the General Standard segment of the Frankfurt Stock Exchange. A stake of 46.75% of the share capital in EnBW AG is owned by each of both the State of Baden-Württemberg – via its wholly owned subsidiary NECKARPRI GmbH and, in turn, via its wholly owned subsidiary NECKARPRI-Beteiligungsgesellschaft mbH – and by Zweckverband Oberschwäbische Elektrizitätswerke (Zweckverband OEW) via its wholly owned subsidiary OEW Energie-Beteiligungs GmbH.

Overall, the shareholder structure is unchanged as of 31 December 2016 when compared to the previous year.

### Shareholders of EnBW

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.

## Compliance

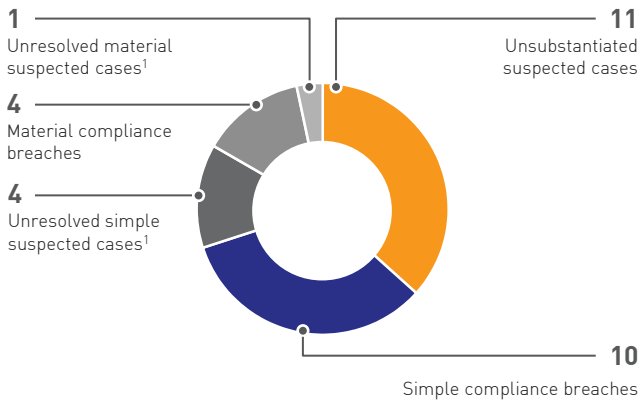
Good compliance is a matter of course at EnBW and forms an integral part of the business activities. We are convinced that emphasising the compliance culture – as one of the main focuses of the established Compliance Management System (CMS) – makes a significant contribution to securing the sustainable success of the company.

The CMS at EnBW serves to reduce risks and avoid liability issues and loss of reputation. It focuses on company and sector-specific risks and priorities, is continually monitored and adapted, and covers the companies of the EnBW Group in which there is a controlling interest from a compliance perspective and which are involved in managing personnel. The goals of the compliance activities at EnBW are, in particular, the prevention, detection and sanctioning of corruption, the prevention of violations against competition and antitrust laws, the prevention of money laundering and data protection. Especially during this time of great change in the sector and at the company, our compliance activities support the sense of responsibility in management personnel and employees: raising awareness amongst employees that knowledge about relevant regulations and the timely utilisation of internal advisory services at EnBW is important for safeguarding the success of the company against compliance risks. New challenges are being faced in this area, such as those relating to digitalisation and new products (ensuring products and processes that conform to data protection laws), local authority engagement (raising awareness amongst relevant employees about the legal regulations regarding concessions) or also those dealing with changes in the corporate and management culture (management workshops).

In the reporting year, 22 (79%) of the total of 28 companies of the EnBW Group in which there is a controlling interest from a compliance perspective and which are involved in managing personnel were included in the CMS. The annual Compliance Risk Assessments (CRA) examined the corruption, antitrust law, fraud and data protection risks. They were carried out in 2016 at the same 22 Group companies and act as the basis for the compliance programme at EnBW, as well as for the company-specific preventative and risk-controlling activities. The CRA have used the methodology of the Group risk management system since 2015. In accordance with a modern GRC (Governance, Risk Management and Compliance) approach, the identification and evaluation of risks as well as reporting was jointly carried out in coordination in 2016. The summary of the compliance risks is contained in the “Report on opportunities and risks” (p. 85).

Whistle-blowers always have a right to the confidential and prompt handling of any reported compliance breaches or suspected cases and can either contact an external ombudsman (who guarantees complete anonymity with respect to EnBW) or the Compliance Department.

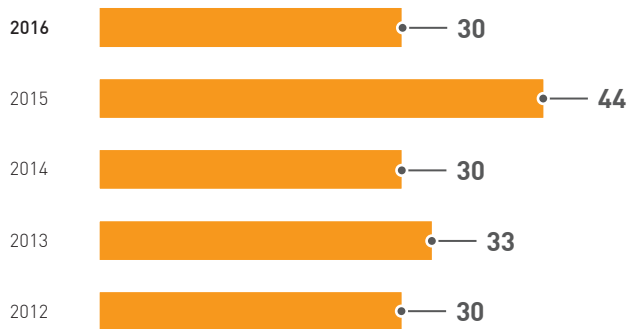
**Number of compliance breaches and suspected cases**



<sup>1</sup> As of February 2017.

EnBW received 30 indications of compliance breaches and suspected cases in the reporting year, one of which was submitted via the ombudsman. They related primarily to sales and internal matters, and did not lead to any evidence for cases of corruption. Due to their level of materiality, 5 of the 30 cases were handled by the compliance committee task force. Disciplinary measures were taken in four other cases.

**Number of indications of compliance breaches received**

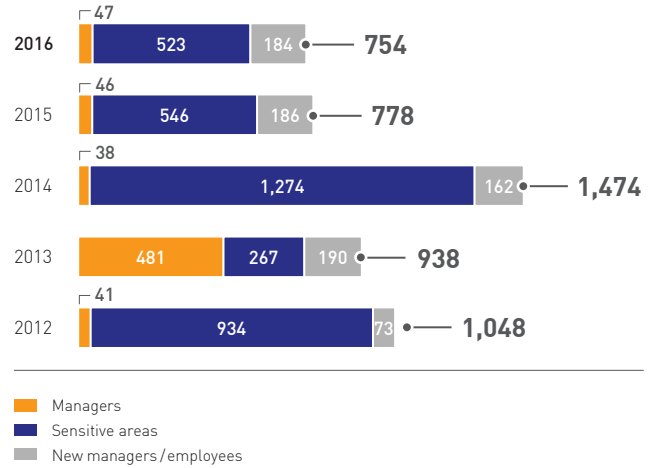


The number of indications received in 2016 was once again back to the level in the years 2012 to 2014. The increase in indications in 2015 due to an increased level of sensitivity (especially for data protection issues) remained an extraordinary effect and did not continue into the reporting year.

EnBW is convinced that the achievement of its strategic goals is only possible if it has employees and management personnel who are aware of the risks and take responsibility themselves. Therefore, all affected employee groups have been receiving training on a recurring basis for the last six years according to a coordinated and risk-based training plan on how to handle corruption, deal with antitrust law risks, address the issue of crimes carried out by public officials and understand data protection regulations.

Face-to-face workshops were held in 2016 for sensitive target groups in the EnBW areas of renewable energies and procurement, as well as at the associated company Erdgas Südwest, and around 520 employees and management personnel were provided with business-relevant compliance know-how. The completion of an e-learning course or participation in face-to-face introductory training courses is obligatory for new employees. The third management personnel compliance campaign started at the end of 2016. It targets all management employees – even those from large corporations in which the Group does not have a controlling interest – and emphasises the importance of a solid compliance culture during periods of change.

**Participants in face-to-face compliance training events**



The advisory services offered by the Compliance Department, which form another key element of the compliance and prevention measures, were also utilised in 2016 to the same high degree as in previous years. The compliance hotline, which is reachable by e-mail or telephone and deals with matters on a personal level, received 1,065 enquiries relating to the key issues of gifts, donations and sponsoring, as well as to further topics such as competition or antitrust laws or conflicts of interest.

In the reporting year, advice on legal issues in the area of data protection was provided, for example, to accompany the smart meter project conducted by Netze BW; the Compliance Department thus continued to contribute to the digitalisation of the Energiewende. Advice on the development of new products and new business fields formed another important focus. Particular attention was paid here to various new developments from the field of innovation. There was an equally high number of requests for advice in the reporting year.

The EnBW Group faced neither antitrust law penalty procedures nor third-party antitrust lawsuits in the 2016 financial year. Law enforcement agency investigations of individual employees and former members of corporate bodies relating to the so-called Russian business deals and the so-called sales tax carousel in CO<sub>2</sub> allowance trading were also ongoing in 2016. An end to or any results arising from these investigations are not yet in sight.

# In dialogue with our stakeholders

## Our stakeholders

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

This dialogue is conducted using a variety of communication channels – ranging from conferences to social media platforms. In active dialogue with our stakeholders, we listen to their interests and their expectations of EnBW and take these into account in the strategic positioning of our company and in our business decisions. At the same time, we inform all stakeholders about the company's needs and the prerequisites for providing an efficient, reliable and sustainable supply of energy. It is also important for us to listen to critical opinions such as those expressed within the framework of our Energy & Climate Protection Foundation. Mutual understanding, social acceptance and trust are increased further through this purposeful exchange of insights and perspectives. In addition, it also means that central developments and key topics can be identified at an early stage.

## Materiality analysis

Based on the systematic materiality analysis that was carried out for the first time in 2013, EnBW has continuously expanded its processes over the last few years for identifying material topics and linking them simultaneously with the development of the company's strategy. Material aspects are determined using the framework provided by the International Integrated Reporting Council (IIRC) and in accordance with the G4 Sustainability Reporting Guidelines published by the Global Reporting Initiative (GRI). Other current developments flow into the determination of future key issues, such as the work of the [E](#) Task Force on Climate-related Financial Disclosures (TCFD) on climate-related risk reporting.

On the one hand, topics are considered material if they have a significant influence on long-term value added and thus the performance and future viability of EnBW. On the other hand, aspects reflecting any important economic, environmental and social impacts the organisation may have and that significantly influence the perception of stakeholders are also taken into account. Information on the materiality analysis process in accordance with GRI can be found at [www.globalreporting.org/information/g4](http://www.globalreporting.org/information/g4).

The following topics are material for EnBW in the 2016 financial year:

- > **Corporate strategy and contribution to the Energiewende:** EnBW continues to work on resolutely implementing its strategy. It is pushing forward the Energiewende in each of the individual steps of the value chain using targeted measures. The restructuring of the portfolio is making clear progress: The Grids and Renewable Energies segments are accounting for more than two thirds of the [E](#) adjusted EBITDA for the first time. Another example is the strengthening of the gas business through the acquisition of a majority shareholding in VNG-Verbundnetz Gas Aktiengesellschaft. In addition, EnBW has withdrawn from the B2B commodity business under the EnBW and Watt brands. The aim is to develop a future-oriented EnBW that can remain robust even during the most difficult market conditions and concentrate to an even greater extent on innovation and growth ([L](#) p. 22 ff.).
- > **Efficiencies and optimisation:** Further targeted efficiency measures with a volume of €400 million have been launched, the majority of which have already been implemented. In a third phase, additional earnings-enhancing measures to the order of €250 million will now be implemented by 2020. The areas of priority are sales, generation and trading and administrative functions.
- > **Phasing out of nuclear power and disposal package:** The Bundestag approved the law of reorganising responsibility for nuclear waste management in December 2016. The legal and contractual implementation of the recommendations made by the KFK commission is a decisive step towards the planned phasing out of nuclear power that will provide all those involved with more certainty when it comes to planning and taking action ([L](#) p. 49 and 53).

The material topics will also be rigorously followed up in the operative segments (p. 19 ff.):

- > **Sales:** Measures to increase customer proximity in the B2C sector and improve customer satisfaction. Construction and operation of charging stations and expansion of the range of services in the area of electromobility.
- > **Grids:** Guaranteeing a reliable supply of energy in Baden-Württemberg. Investment in reinforcing and upgrading the grids, especially the distribution grids.
- > **Renewable Energies:** Continuing the successful growth in the areas of offshore and onshore wind power. Building up the maintenance and servicing business in the area of wind power.
- > **Generation and Trading:** Safeguarding the reliable supply of energy through conventional and nuclear power generation. Boosting efficiencies, such as the modernisation of the power plant site in Stuttgart-Gaisburg, starting the planning for dismantling the power plant units that are currently still in operation and developing new business sectors.

Improving sustainability performance secures the future viability of the company:

- > **Development of new business segments:** Implementation of selected projects in the areas of research and development, as well as innovation management. The focus here will be placed, on the one hand, on building up expertise for medium and long-term market opportunities and, on the other hand, on identifying new sources of revenue for the Group and bringing them to the market (p. 39 ff.).
- > **Commitment to climate protection:** EnBW supports the global efforts to protect the climate and emphatically supports ambitious climate protection targets. The company is making a contribution to climate protection through its corporate strategy that resolutely focuses on the further expansion of renewable energies and innovative and sustainable business models (p. 45). In addition, EnBW actively participates in the Task Force on Climate-related Financial Disclosures (TCFD) (p. 84 f.).
- > **Responsible coal procurement:** Commitment to improving the working and living conditions in mining regions through targeted measures such as dialogue with stakeholders, corporate social responsibility (CSR) clauses in contracts and local engagement (p. 42f.).
- > **Further development of the sustainability concept:** The conceptual orientation of sustainability will form the next stage in the development of sustainability at EnBW. The aim is to interlink sustainability with the Group strategy and core business even more rigorously. For this purpose, the non-financial key performance indicators will be examined regularly and key issues defined by the CSR committee. Alongside the fulfilment of external sustainability standards, the focus in future will be placed even more strongly on integrating sustainability aspects into the operating business units and thus throughout the value added chain.

- > **Employee commitment, promoting diversity and occupational safety:** Carrying out regular employee surveys and deriving adequate measures. Promoting diversity and inclusion at the company, for example by promoting women in management positions (p. 66f.). Continuous improvement of occupational safety.
- > **Dialogue with stakeholders and integrated reporting:** Continuous and systematic dialogue with internal and external stakeholders through various dialogue platforms. Ongoing development of integrated reporting, amongst other things, by depicting the interdependencies between financial and non-financial key performance indicators (p. 29 ff.) and a meaningful report on opportunities and risks (p. 88).

EnBW uses the materiality analysis process to ensure that the viewpoints and expectations of all stakeholders are taken into account. The importance of stakeholder perspectives is also illustrated by the expanded diagram that shows the resources and the effects they have on value added for the stakeholders of EnBW (p. 14 f.).

## EnBW as part of 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 mainly 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. EnBW has considerably reduced its sponsoring commitments and the overall outlay dedicated to this purpose in recent years, a move which also reflects the economic situation of the company. For example, sponsorship of top-class sport has been reduced considerably and particular attention given to popular sport instead.

As part of the “We’re making it happen” campaign, EnBW supported a total of nine social or charitable projects in 2016 with the “Making it happen” bus. Associations and charitable organisations could apply for assistance with their projects. The winners were selected via Internet voting and provided with support in the form of manpower, motivation and materials worth up to €5,000 per winner by the ten-man EnBW team ([www.enbw.com/wir-machen-das-schon](http://www.enbw.com/wir-machen-das-schon)).

In order to mark its 20th year in 2017, EnBW reflected on the work it has done to promote young artists during this period with a series of exhibitions called “Insights into artist’s workshops” (Ateliereinblicke). All previous participants in exhibitions contributed a piece of art from their previous exhibition and also a new piece of work to this exhibition. The exhibition, which was held from 18 November 2016 to 24 February 2017, vividly portrayed how the viewpoints of artists develop.



EnBW provides manpower and financial support to the Energy & Climate Protection Foundation Baden-Württemberg. The foundation also held numerous events in 2016 dealing with questions about the energy industry, as well as on the themes of climate protection and renewable energies, digitalisation and innovation. Around 100 interested members of the public took part in each of the debate evenings ([www.energieundklimaschutzbw.de](http://www.energieundklimaschutzbw.de)).

Although the influx of refugees into Europe, especially to Germany, has lessened over the last few months, it remains a major social, political and economic challenge. Long-term perspectives for asylum seekers are just as important as short-term humanitarian assistance. EnBW is engaged here on multiple levels: In the first half of 2016, around 150 refugees took part in introductory days or introductory internships in Karlsruhe and Stuttgart. Around 30 of these refugees completed an integration programme in Karlsruhe and Stuttgart to prepare them for an apprenticeship at EnBW. Four new positions for training instructors have been created for this purpose. In September 2016, 16 refugees selected from the pre-study placement started their one year introductory

qualification in preparation for their technical apprenticeship at EnBW in Karlsruhe and Stuttgart. Furthermore, EnBW is continuing to support employees who are voluntarily providing assistance to refugees and encouraging them to network with each other in order to coordinate aid measures, exchange experiences and mobilise other helpers.

**Examples of the sponsoring activities by EnBW**

Key issues	Example projects	Further information
Popular sport	EnBW Junior Premier League	<a href="http://www.enbw.com/oberliga">www.enbw.com/oberliga</a>
Education	Knowledge portal	<a href="http://www.enbw.com/energie-entdecken">www.enbw.com/energie-entdecken</a>
Social issues	"Making it happen" bus	<a href="http://www.enbw.com/wir-machen-das-schon">www.enbw.com/wir-machen-das-schon</a>
Environment	Amphibian protection programme "Impulse für die Vielfalt"	<a href="http://www.enbw.com/biodiversitaet">www.enbw.com/biodiversitaet</a>
Art/ Culture	release and art in support of release e. V. (help with drugs)	<a href="http://www.enbw.com/kunst">www.enbw.com/kunst</a>

# Stakeholder dialogue

## In dialogue with our stakeholders (examples)

Stakeholder	Opportunity for dialogue	Main themes	Further information
 Shareholders/ capital market	> Financial reports	> Financial and non-financial development of the company	 <a href="http://www.enbw.com/financial-publications">www.enbw.com/financial-publications</a>
	> Annual General Meeting	> Discharge Board of Management/Supervisory Board, resolution on appropriation of earnings	 <a href="http://hv.enbw.com">http://hv.enbw.com</a>
	> Telephone conferences/updates for analysts and investors	> Presentation of corporate economic development, positioning of EnBW on capital market	 <a href="http://www.enbw.com/conferencecall">www.enbw.com/conferencecall</a>  <a href="http://www.enbw.com/investor-update">www.enbw.com/investor-update</a>
	> Banking Day and Capital Market Day	> Current themes in the sector and EnBW strategy	 <a href="http://www.enbw.com/event-ir">www.enbw.com/event-ir</a>
 Employees	> EnBW aktuell	> Information on intensifying efficiency measures and the realignment of sales	
	> Group-wide management forum	> Information and collaboration platform for managers with live blog for employees	
 Customers	> "Customer Thursday"	> Monthly discussion with customers and interested parties on current themes, customer feedback	
	> EnBW Smile	> World of experience for customers and registered employees with exclusive offers from the areas of art and culture, sport or gastronomy	 <a href="http://www.enbw.com/smile">www.enbw.com/smile</a>
	> Energy Strategy Days	> Congress with workshops and discussions with contracting customers and interested parties	
	> Social media/customer blog & newsletter/customer magazine	> Information on latest news, products, services and events	 <a href="http://www.facebook.com/enbw">www.facebook.com/enbw</a>
	> Practical day and forum for existing customers	> Platform for dialogue and exchanging information with service customers on current billing themes	
 Local authorities/ public utilities	> Kooperationsnetz Baden-Württemberg e. V. [cooperation network]	> Association for developing innovative solutions in the energy sector	 <a href="http://www.kooperationsnetz-bw.de">www.kooperationsnetz-bw.de</a>
	> Baden-Württemberg Energy Team	> Open platform for the transfer of knowledge and discussion forum for supply companies	 <a href="http://www.energie-team.org">www.energie-team.org</a>
 Society/ environment	> Support for prizes/awards	> Participation in initiatives such as the German Innovation Award or the Heinrich Hertz Award	 <a href="http://www.der-deutsche-innovationspreis.de">www.der-deutsche-innovationspreis.de</a>  <a href="http://www.kit.edu/kit/20048.php">www.kit.edu/kit/20048.php</a>
	> Energiewende blog and social media activities	> Dialogue platforms such as blogs, Facebook, Twitter, YouTube	 <a href="http://www.twitter.com/enbw">www.twitter.com/enbw</a>  <a href="http://www.dialog-energie-zukunft.de">www.dialog-energie-zukunft.de</a>
	> Organisation of discussion events	> For example "Urban Mobility Talk" or "Who will pay for the Energiewende, and what will it cost us?"	 <a href="http://www.energieundklimaschutzbw.de">www.energieundklimaschutzbw.de</a>
	> CODE_n new.New Festival	> Participation by EnBW as innovation partner through themes such as sustainable mobility and Smart City	 <a href="http://www.enbw.com/newnew-festival">www.enbw.com/newnew-festival</a>
	> Information/dialogue events for the public	> About the pump storage power plant in Forbach, wind projects or dismantling of nuclear power plants	
	> Stimuli for Diversity	> Conservation programme for amphibians and reptiles	 <a href="http://www.enbw.com/biodiversitaet">www.enbw.com/biodiversitaet</a>
	> German Sustainability Days	> Participation in 4th Sustainability Week, information events at the Rudolf-Fettweis Plant in Forbach	 <a href="http://www.aktionstage-nachhaltigkeit.de">www.aktionstage-nachhaltigkeit.de</a>  <a href="http://www.naturenergieplus.de">www.naturenergieplus.de</a>
 Suppliers/ business partners	> Responsible handling of coal procurement	> Continuous dialogue with stakeholders with a focus on Germany and Colombia	 page 43  <a href="http://www.enbw.com/kohlebeschaffung">www.enbw.com/kohlebeschaffung</a>
	> Supplier Day	> Development discussions with strategically important suppliers	
 Politics	> EnBW Energy and Business Club (EWC)	> Events on the themes of EEG 3.0, financing phasing out nuclear energy and the role of energy storage systems for the energy system of the future	
	> Energy & Climate Protection Foundation debate evenings	> Themes such as electromobility, digitalisation, acceptance, dismantling of nuclear power plants and disposal of radioactive waste	 <a href="http://www.energieundklimaschutzbw.de">www.energieundklimaschutzbw.de</a>
	> Organisation of specialist events/dialogue forums	> For example, conference with the Vice President of the European Commission or with the Massachusetts Institute of Technology (MIT)	

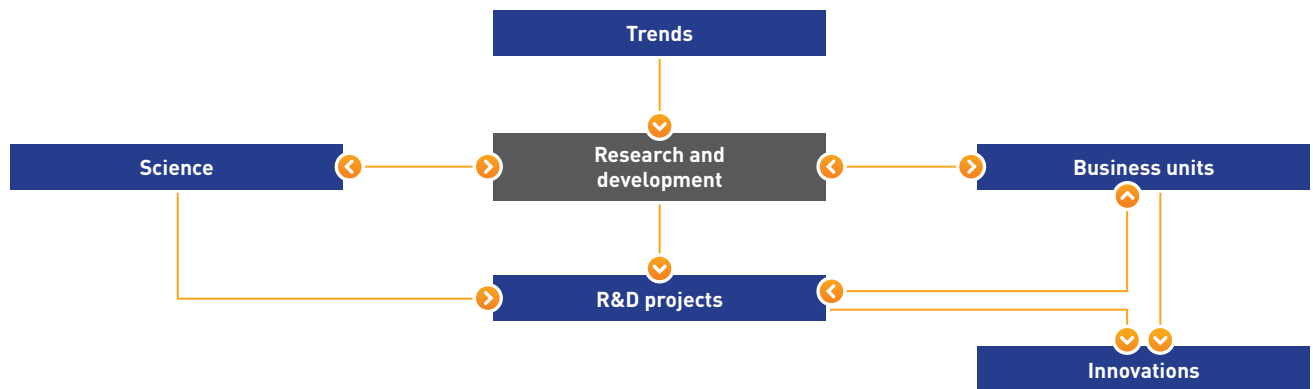
# Research, development and innovation

## Goals, guidelines and the research and development processes

The goal of research and development at EnBW is to identify important trends and technological developments at an early stage and to acquire the knowledge for subsequent commercial utilisation in pilot and demonstration projects. For this pur-

pose, research projects are carried out in collaboration with the operational units at EnBW or with customers – directly at the site of their subsequent application. They form a project portfolio that is centrally coordinated for all EnBW units. This ensures that successful research projects deliver innovations for EnBW. The research and development activities are integrated into an external and internal network of partners.

The research process at EnBW



## Research and development – focal points and selected results

### Decentralised power generation and heating

**CALLUX:** The CALLUX research project ended as planned in 2016. As part of the project, EnBW installed 155 fuel cell heating devices for customers and partners in Baden-Württemberg. The knowledge gained in the practical tests formed the basis for the new EnBW product BrennstoffzellePlus (Fuel Cell Plus). With it, EnBW offers a completely worry-free package which enables customers to combine new technology and systems from a variety of manufacturers to produce heat and electricity for their own home.

**Micro gas turbines:** EnBW has been cooperating with scientists at the German Aerospace Center (DLR) since 2008 as part of the Decentralised Energy research platform. The development and testing of a pilot plant that can utilise biomass from land management directly on-site for supplying energy ended in 2016. As part of the project, an already existing wood gasification plant was fitted with a micro gas turbine for the first time. A specially developed combustion chamber burns the gas generated from the biomass in a highly efficient way that produces very low levels of pollutants. The project funded by the German government has demonstrated that the micro

gas turbine can function as an alternative to a gas motor for the generation of electricity and heat from wood gas.

### Renewable Energies

**Soultz-sous-Forêts geothermal power plant:** The partners Electricité de Strasbourg and EnBW renovated a section of the power plant in 2016 and held an inauguration ceremony in September. Operation in research mode has thus ended and the plant has been switched to the commercial production of geothermal energy. The power plant uses a natural geothermal reservoir at a depth of 5,000 metres. The electrical output of the power plant is 1.7 MW and it has been in continuous operation since September 2016.

**Bruchsal geothermal power plant:** The power plant recommenced operation in October 2016 after corrosion problems had made the replacement of a connecting pipe between the power plant and the borehole necessary. From 2017, the power plant will not only generate electricity but also provide a public facility in the local vicinity with heating. EnBW is thus expanding its geothermal expertise to include the supply of heating to customers. The experience gained in the construction and operation of the demonstration plants enables EnBW to construct further plants for the sustainable supply of electricity and heating for its own use and for customers.

## Storage systems for the smart energy world

**Electromobility:** As part of the “SLAM – Quick-Charging Network for Road Axes and Metropolises” research project funded by the German Federal Ministry for Economic Affairs and Energy, more than 60 of a total of 68 quick-charging stations have already been installed by EnBW at 34 motorway service stations in Baden-Württemberg. SLAM aims to develop business models for the operation of quick-charging stations and make higher charging outputs of more than 150 kW possible in the future. The cooperation with Germany’s largest service station operator Autobahn Tank & Rast GmbH is an important component of the e-mobility strategy at EnBW. The project aims to convey to customers that they can quickly and easily charge their electric cars everywhere.

**Active storage systems:** EnBW is investigating how green electricity can be used to cover regional demands to a greater extent than ever before with the help of storage systems in a variety of research projects. In autumn 2016, three household customers were fitted with storage systems in order to develop an intelligent control system that can adapt to the availability of electricity on the grid and postpone the times electricity is drawn from the grid without any loss in comfort.

## Hydrogen as an energy source and storage system

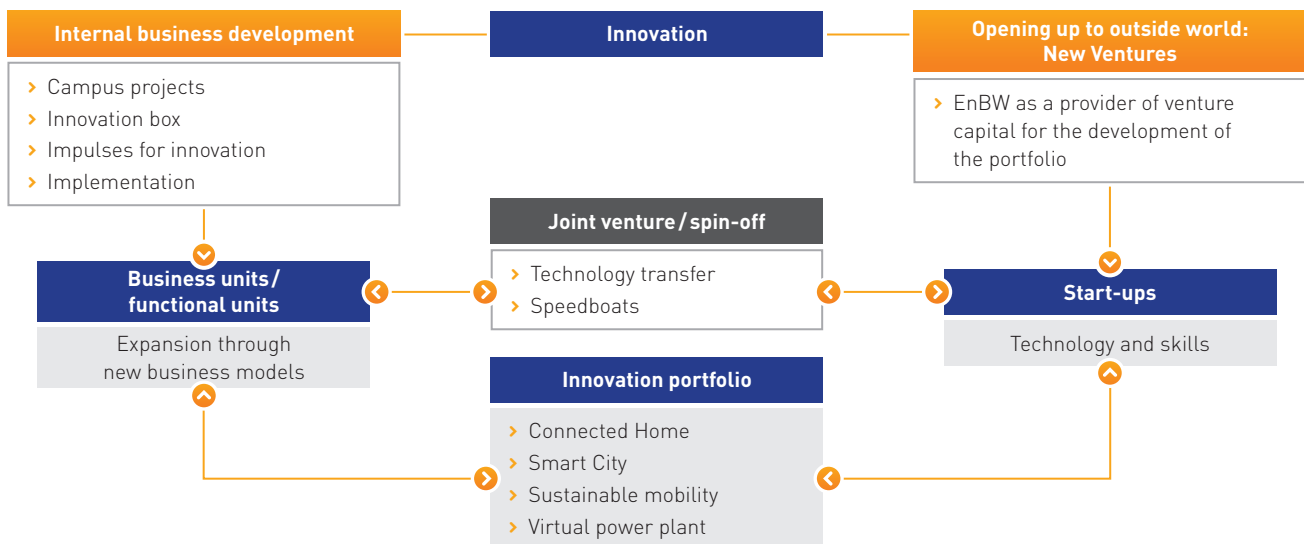
EnBW has been investigating the possibilities for generating and storing hydrogen from green electricity (sector coupling) with

funding from the German government since 2011. For example, EnBW has installed a hydrogen filling station in both Stuttgart and Karlsruhe. The projects ended as planned in December 2016 and in them it was possible to resolve many technological issues. Even after the end of the project, EnBW will continue to supply the hydrogen buses operated by Stuttgarter Straßenbahn AG at the bus extension to the Stuttgart filling station that was built with state funding. EnBW is continuing its work to make hydrogen more economical as an energy storage system and energy source in competition with other energy sources.

## Goals, guidelines and the innovation management process

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. The innovation process is split into two main areas: the internal generation of new business ideas and the opening up of EnBW to the outside world under the heading “New Ventures”.

The innovation process at EnBW



## Innovation – key points and results

**new.New Festival 2016:** EnBW supports the initiative to further develop Baden-Württemberg as location for start-ups and innovation. For this reason, EnBW was the partner for innovation at this year’s new.New Festival that was held at the Center for Art and Media Karlsruhe (ZKM) in Karlsruhe. The festival provided the market-ready start-ups at EnBW with the opportunity to network with other leading commercial

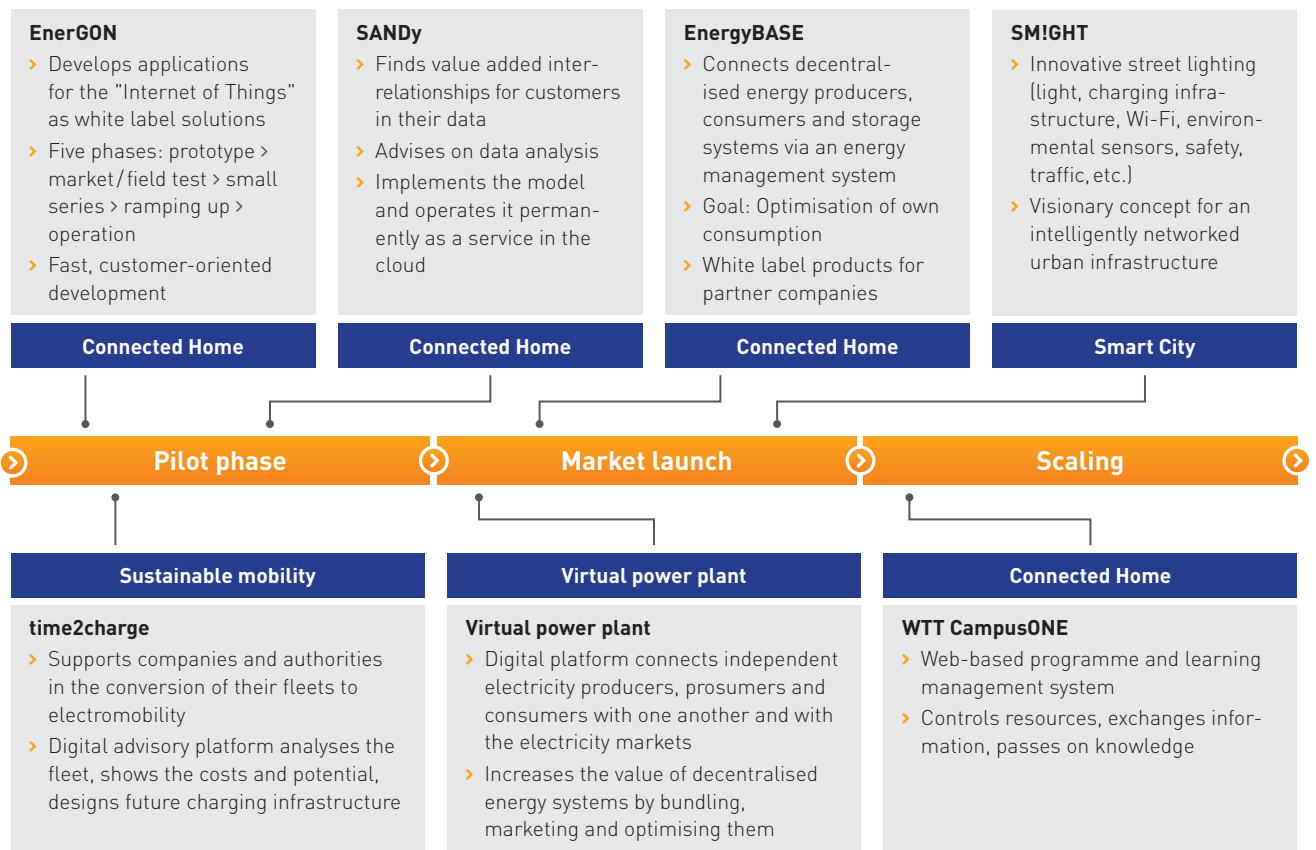
enterprises. EnBW underlined its leading role as an innovative energy company with its participation in the festival.

**ACTIVATR programme for new ideas:** In cooperation with the start-up company Pioniergeist GmbH, Stuttgart, and renowned companies from the automobile and mechanical engineering sector, EnBW launched the statewide programme for new ideas called “ACTIVATR” in April 2016. One result has been the foundation of the start-up company Binando. The Binando

business model is based on the development of an intelligent waste management solution with the help of fill-level sensors and intelligent routing for the waste management industry. The team is currently conducting two pilot projects to validate the business model with follow-up funding from EnBW. The project is initially evaluating the savings potential that the customer can achieve by optimising their route and thus the profitability of the business model.

**time2charge:** The digital advisory platform enables companies and authorities to analyse their vehicle fleets and convert them to electric mobility so that they become more sustainable. The platform can show the precise fleet costs and the potential offered by an electric fleet and design the corresponding charging infrastructure. time2charge achieved its first significant market success with the conclusion of a cooperation contract with Hyundai Motor Deutschland GmbH. EnBW is responsible for equipping around 560 dealerships and service points with charging stations and for their subsequent operation.

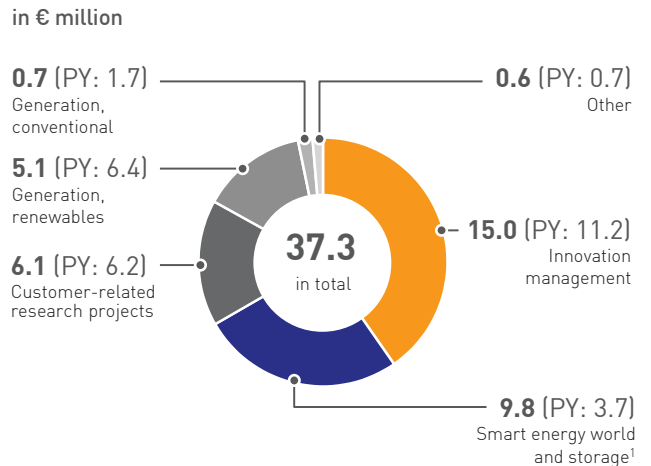
Current projects at the EnBW Innovation Campus



Expenditure and personnel

The EnBW Group spent €37.3 million (previous year: €29.9 million) on research, development and innovation in the 2016 financial year. The reasons for this increase are the intensified activities in the area of electromobility. EnBW received government research funding of €3.8 million (previous year: €3.6 million). A total of 38 staff – as in the previous year – were employed in the areas of research, development and innovation in 2016. A further 72 employees (previous year: 46) were involved in innovation projects. 155 employees (previous year: 109 employees) were involved in research and development projects as part of their operational work. This increase demonstrates that research, development and innovation have become more closely integrated into operative areas than ever before.

Expenditure on innovation, research and development



<sup>1</sup> Includes e.g. e-mobility and hydrogen.

# Procurement

## Efficient and sustainable procurement processes

A large number of suppliers and service providers contribute to the services rendered by EnBW. The cash-relevant procurement volume of the EnBW Group in 2016 amounted to around €2.4 billion (previous year: around €2.2 billion). EnBW places great importance on the efficient and sustainable design of its procurement processes for achieving cost-effective purchasing results.

### Training offensive and quality management

In order to meet the growing requirements of the market, all procurement employees continuously undergo training measures. In addition, the development of an effective, holistic quality management system aims to fulfil the increasing quality requirements placed on the Procurement Department. The focus is placed on the following themes in the development phase:

- > Transparency with respect to the implementation of procurement-relevant agreements, targets, procurement processes and services
- > Increasing the quality of the procurement processes
- > Auditing important key suppliers or audits if there are performance defects

### Contract and claim

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. It is possible to improve the contracts and the associated business processes using the experience gained through claims management.

### Framework contracts

The Procurement Department evaluates submitted offers and compares them as far as possible with the current development of market prices based on stock market data or benchmarks. The aim is for EnBW to secure better purchasing conditions in comparison to the general market trends.

To ensure successful negotiations in the medium term, the Procurement Department is increasingly utilising framework contracts with selected suppliers, which also delivers additional benefits with respect to operating efficiency.

### Value analysis

The Procurement Department uses value analysis techniques 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 keep their value.

### Pre-qualification

The pre-qualification process for suppliers has been revised, paying particular attention to the requirements for the sustainable and responsible selection of our business partners. An approval process involving all relevant governance areas (including environmental protection, occupational safety, compliance, data protection, law) was established in order to satisfy the heightened external requirements.

## Responsible raw materials procurement in the coal sector

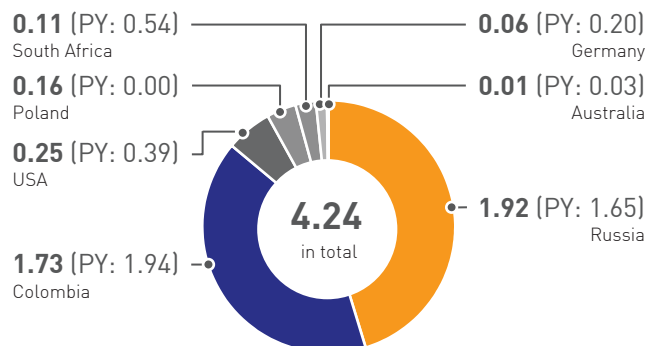
### Origin of coal supplies

Hard coal will continue to play an important role for EnBW as a source of energy to ensure a reliable and economic supply of electricity. 4.24 million t of coal was delivered to EnBW power stations in 2016 (previous year: 4.75 million t of coal). This corresponds to a procurement volume of €230 million.

The goal of EnBW is to maintain a balanced procurement portfolio to avoid becoming dependent on individual producing countries, producers or dealers and the associated price and supply risks. EnBW covers the largest part of its coal requirements through contracts with trade intermediaries. These contracts usually define a standard level of quality but the purchaser is only made aware of the origin of the coal upon delivery. To a lesser extent, there are also direct business relationships with selected coal producers.

### Origin of coal supplies to EnBW power plants

in millions of tonnes



Coal was sourced primarily from Colombia and Russia in the past year. EnBW sourced Colombian coal in 2016 through various contracts primarily with the producer Prodeco, who belongs to the Glencore commodities group. The fact that the three-largest coal producers have their own shipping ports means that the origin of Colombian coal can be precisely traced. The origin of coal sourced from Russia can only be localised to the mining region due to the large number of coal mines and coal producers in the country. The Russian coal sourced by EnBW originates from the Kusnezker Basin. Most of the American coal originates from coal mines in the Illinois Basin, where the controversial method of mountaintop removal mining is not used. In South Africa, the coal mines are located in the Mpumalanga Province. You can access more information on coal procurement at [www.enbw.com/kohlebeschaffung](http://www.enbw.com/kohlebeschaffung).

### Code of conduct governing responsible procurement

EnBW aims to ensure that the generation of electricity from hard coal is as sustainable as possible across the entire value chain. The code of conduct governing the responsible procurement of hard coal and other raw materials is used as a basis ([www.enbw.com/verhaltenskodex](http://www.enbw.com/verhaltenskodex)). EnBW expects its business partners to observe this code of conduct and respect the principles underlying it in all areas of their business activities, including their own business relationships. The aim is to improve the protection of human rights with regards to working and living conditions along the entire value added chain. For coal consumers and producers, this contributes to the reduction of the legal, operational and reputational risks and to long-term economic success.

The code of conduct governing responsible business behaviour is based on recognised international guidelines and standards for the protection of human rights, ensuring the rights of indigenous peoples, improving conditions for employees, environmental protection and guaranteeing good corporate

management and compliance. The Guiding Principles on Business and Human Rights of the United Nations and the findings of the process for developing a National Action Plan for Business and Human Rights in Germany support EnBW in taking on its human rights responsibilities in the procurement process. The code of conduct has been used for new raw material procurement processes since the 2015 financial year. In addition to regular auditing of the sustainability performance of business partners, a multi-stage auditing process will come into force in the event of suspected breaches of the code which can lead to termination of the business relationship.

### Implementation of the code of conduct

Numerous measures ensure that the code of conduct is implemented. The application of the code of conduct was further reinforced through the development of internal operational guidelines in order to improve the reliability of the processes. The sustainability index database for coal producers was updated and now covers all important producers. In 2016, the Committee for Sustainable Procurement met twice and discussed the sustainability performance of all important supply companies.

### Dialogue with stakeholders and local involvement in Colombia

In Colombia, EnBW has been continuously developing its local activities. At the beginning of 2016, EnBW received responses from the Colombian producers to a comprehensive list of questions. The responses were also discussed with non-governmental organisations (NGO) and served, amongst other things, as the basis for answering a variety of enquiries from stakeholders. As part of a further stakeholder mission to Colombia at the end of November 2016, discussions were held with the three main coal producers, union representatives, NGOs, and other governmental and non-governmental entities. The findings from this mission confirmed that continuous dialogue with all stakeholder groups is an important prerequisite for improving the working and living conditions in the mining regions against the background of a complex overall situation in Colombia and the peace process. In particular, the fragile state of security in Colombia that has led to a feeling of insecurity amongst the local population in the mining regions was discussed with the coal producers. The producers have clearly distanced themselves from any acts of violence and, where possible and necessary, have guaranteed their support, for example by supporting the local authorities or setting up partnership projects to increase local security.

The core measures for business partner auditing and stakeholder management have been designed to be specifically linked with local involvement. For example, the first projects to improve the supply of water to the Cesar and La Guajira regions, which are affected by the mining and transport of coal, have been implemented by the producers.

## Business report

# General conditions

## External influences

The business performance of EnBW is primarily influenced by the development of the wholesale market price for electricity, as well as the political/regulatory framework conditions such as those relating to funding for renewable energies or in the grids sector – and also the weather conditions. The price of electricity is not only dependent on demand but also on the development of the global fuel/CO<sub>2</sub> markets. In addition, the global energy sector is experiencing a period of fundamental change due to the transition to increasingly carbon-neutral methods of energy generation. On the sales side of the business, there is very intensive competition – especially in business with industry and redistributors.

## Macroeconomic trends

### Economies

The economies relevant for the business activities of EnBW experienced different levels of macroeconomic growth in 2016: While economic growth in Germany and Switzerland increased moderately, the growth momentum in the Czech Republic and Turkey decelerated noticeably.

The rate of growth in the global economy is set to accelerate in 2017. In the national markets relevant for EnBW, the rate of macroeconomic growth in 2017 is expected to reach a similar level to 2016. Overall, the economic trends are expected to have a slightly positive influence on the business activities of EnBW.

#### Development of gross domestic product (GDP)

in %	2017	2016	2015
World	3.4	3.1	3.2
Eurozone	1.6	1.7	2.0
Germany	1.8	1.9	1.7
Switzerland	1.7	1.5	0.8
Czech Republic	2.7	2.5	4.6
Turkey	2.0	2.0	4.0

## Development of interest rates

The development of interest rates in the 2016 financial year was significantly influenced by the expansive monetary policy of the European Central Bank (ECB). In the middle of March, the ECB lowered the base rate to 0% and raised the penalty rate – paid by commercial banks to the ECB on their deposits – from 0.3% to 0.4%. In addition, its ongoing bond-buying programme was widely expanded. Due to the continuing low interest-rate environment, companies had to further reduce the discount rate, especially for pension and nuclear provisions. The resulting evaluation effect led to a significant increase in the pension and nuclear provisions. This effect is non-cash-relevant but did however increase the net debt of the companies.

The average of the consensus forecasts for the ECB main financing rate for the end of 2017 remained unchanged at 0.0%.

## Development of the sector and competitive situation

The energy sector is undergoing a period of radical change. In Germany and the surrounding European countries, the Energiewende is fundamentally changing the political and regulatory conditions, while the structure of the market and the competition are in a state of flux. In the area of generation, the rise in renewable energies is reshaping the energy landscape. On the sales side, competition in business with retail customers remains acute in both the electricity and gas sectors: The number of suppliers from outside the sector is increasing and customers have a very high level of price sensitivity. Many cities and communities are also pursuing the re-municipalisation of their electricity, gas and water supplies. In this challenging environment, companies in the sector need to review their business models and orientate themselves to the new market conditions (p. 13 f. and 22).



International, national, regional and new competitors

Competitor segment	Companies	Characteristics
International competitors	E.ON/Uniper, RWE/innogy, Vattenfall, Enel, Engie, Iberdrola, EDF	<ul style="list-style-type: none"> <li>&gt; Broad-based, internationally oriented growth strategy</li> <li>&gt; Growth especially in renewable energies, grids and sales/solutions</li> </ul>
National competitors ("DACH" region)	EnBW, Verbund, ALPIQ, EVN	<ul style="list-style-type: none"> <li>&gt; Stable national position, activities in selected foreign markets</li> <li>&gt; Focus on market development, for example in renewable energies, grids, sales and/or solutions</li> </ul>
Regional competitors	MWV, SWM, Thüga, Stadtwerke Stuttgart, EWE	<ul style="list-style-type: none"> <li>&gt; Focus on regional markets</li> <li>&gt; Main focus of the business activities mostly in area of grids and sales</li> </ul>
New competitors	1&1, Tesla, Google, NEXT Kraftwerke, sonnen, wpd	<ul style="list-style-type: none"> <li>&gt; Entry of new market participants increases competition and leads to a fragmentation of the value chain</li> </ul>

## Cross-segment framework conditions

### Climate protection

In December 2015, 195 countries successfully reached an internationally binding climate protection agreement at the United Nations Climate Change Conference in Paris. The core element of the agreement is the commitment to limit the rise in global temperature to "well below 2 °C" and if possible even to only 1.5 °C above preindustrial levels. In the second half of this century, the aim is to make the world carbon neutral, i.e. free of emissions.


At the UN climate conference in Marrakesh in November 2016, the 196 participating countries affirmed their commitment to the "full implementation" of the Paris Agreement in a final declaration. The final declaration contains a roadmap for the practical implementation of the Paris Agreement with progress set to be reviewed in 2017 and the parties taking stock of their progress in 2018. There is uncertainty in relation to the future attitude of the USA – the world's second-largest source of CO<sub>2</sub> emissions – towards climate protection. In contrast, China – by far the largest emitter of CO<sub>2</sub> – committed itself to continue its ambitious climate protection strategy "whatever the circumstances".

Germany has set itself ambitious targets but is currently behind schedule on the required track to achieving them. The Climate Action Plan 2050 agreed by the German government in November 2016 sets ambitious sector targets for the reduction of greenhouse gases by 2030. However, it is expected that important measures – such as the handling of fossil-fired power plant capacities, the expansion of electromobility or the readjustment of the tax and levy system – will only be developed after the parliamentary elections in autumn 2017.

The strategy being followed by EnBW of concentrating its investments on renewable energies, expanding the grids and developing new and increasingly digitalised business models promotes the achievement of the targets set at the Climate Change Conference, while the strategy itself is being promoted by the international efforts for climate protection.

### Design of the electricity market

The European Commission initiated the consultation process on the future design of the European market in 2015 in order to adapt the market to challenges posed by a decentralised and digitalised energy world. EnBW ensured it was intensively involved in the consultation process started by the European Commission and welcomes this approach – especially the cross-border consideration of the security of supply and the opening of national capacity mechanisms. Concrete proposals for legislation or policy measures (winter package) were published by the European Commission on 30 November 2016.

By passing the Electricity Market Act at the beginning of July 2016, the German government decided to create an  Energy-only-Market (EOM 2.0). The EOM 2.0 is an electricity market where electricity can be sold as previously, but only the electricity itself is remunerated and not generating capacities. The EOM 2.0 aims to remove distortions that still exist on the market and that hinder pricing. This pronounced market orientation of the electricity market is welcomed by EnBW. We view the planned reform of the electricity market as a low-risk and cost-effective option for continuing to guarantee a secure supply by strengthening market forces.

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 system-relevant 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 up to 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.

### European Energiewende

The European Commission presented a comprehensive package of legislative proposals and reports (winter package) on 30 November 2016 entitled "Clean Energy For All Europeans" that has implications for all stages of the energy value chain. The focus has been placed on a binding improvement in energy efficiency of 30% by 2030 and a target of at least 27% of final energy consumption accounted for by renewable energies. The main proposals of the legislative package are:

- > A European electricity market designed to integrate renewable energies competitively and via price signals
- > The removal of priority feed-ins for renewable energies and CHP combined heat and power (CHP)
- > Strengthening competition in balancing energy markets
- > The fundamental separation of grid operation and the facilities providing system services
- > Stronger European concentration of the tasks of transmission system operators

The European Commission has initiated a two-year legislative process through the publication of the drafts, which will have a lasting influence on the German Energiewende until 2020. EnBW believes that its position in relation to the design of the electricity market and the focus on the generation of renewable energies has been vindicated.

### Sales segment

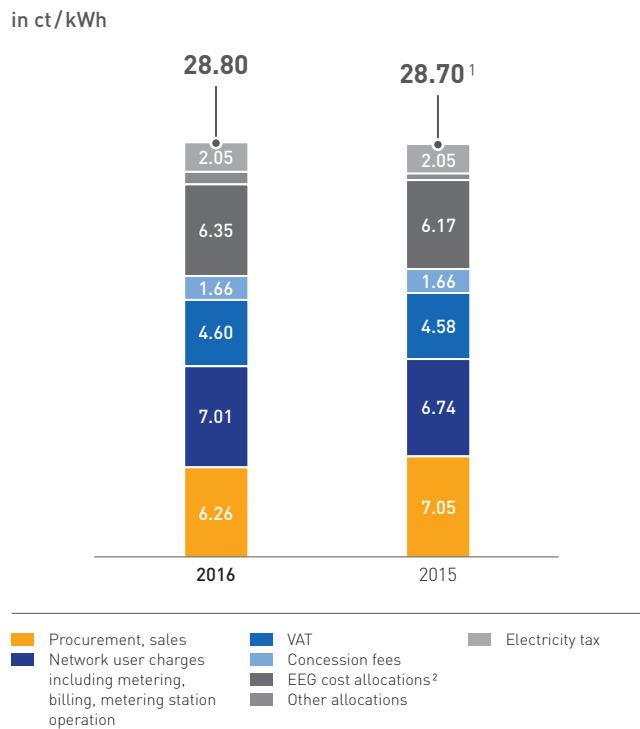
#### Electricity and gas prices for retail and industrial customers

According to an analysis of electricity prices by the German Association of Energy and Water Industries (BDEW) published in November 2016, the average monthly electricity bill for a household with an annual consumption of 3,500 kWh in 2016 came to €83.99 compared to €83.70 in the previous year. Taxes and levies accounted for more than half of this amount. EnBW increased the price for the basic supply of electricity by around 2.4% as of 1 January 2016 because an increase in the grid user charges and state levies such as the EEG and

CHP cost allocations could not be fully offset by the lower wholesale price for electricity. For industrial customers receiving a medium-voltage supply, the average electricity price including electricity taxes rose according to calculations made by BDEW by 1.4%, from 15.23 ct/kWh in the previous year to 15.44 ct/kWh in 2016.

According to calculations by the German Federal Statistical Office in 2016, natural gas prices for private households had fallen by 2.9% compared to the previous year; the price of natural gas for industrial customers fell by 11.3%.

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



<sup>1</sup> The figures for the previous year have been restated. Source: BDEW  
<sup>2</sup> Application of the German Compensation Mechanism Ordinance (AusglMechV) since 2010. As of November 2016

### Structural changes

Despite the continued overall positive economic environment, the demand for energy in Germany is gradually declining due to the use of energy-efficient devices and processes. This has led to a continuously high level of competitive pressure in all segments. In the area of energy services, however, there will be new applications for electricity for electromobility, urban infrastructure and in other business fields. In the long term there may even be an increase in demand as fossil fuels are replaced by electricity – such as through the use of heat pumps – and due to the politically desired expansion of electromobility. More than 20% of new buildings are now equipped with heat pumps. In order to accelerate the market penetration of electromobility, additional incentives have been introduced: For example, increased funding for electric cars in the form of purchase subsidies was agreed in early 2016. Furthermore, the German

government aims to provide funding of around €300 million for the expansion of the charging infrastructure. However, this funding has only led to limited growth up to now.

The Federal Ministry for Economic Affairs and Energy (BMWi) published its **Green Paper on Energy Efficiency** on 12 August 2016. It poses key questions and discussion points on the central challenges of and approaches for reducing energy consumption in Germany in the long term. Similar to the process for the design of the electricity market, the green paper also aims to initiate a consultation process that will end with the development of a medium to long-term strategy for reducing energy consumption in Germany (White Paper on Energy Efficiency). As with the white paper on the design of the electricity market, it can be assumed that the consultation process will lead to a comprehensive package of political measures. EnBW believes that the green paper process is an opportunity to remove existing hindrances on the market in the areas of energy efficiency and flexibility marketing and thus to strengthen the energy services sector. The increasing digitalisation of the energy supply system is acting as a basis for the development of innovative business models. The digitalisation law that came into force on 2 September 2016 includes an obligation for the installation of **smart meters** in progressive stages. Firstly, large consumers with annual consumption of more than 10,000 kWh will receive digital smart meters from 2017. Smart meters will then become obligatory for private households with an annual consumption of 6,000 kWh or more from 2020. Netze BW successfully tested the roll-out of smart meter systems for single-rate meters under real conditions for local authorities and private customers in 2016 (ROMI project). In the subsequent pilot phase running until the middle of 2017, the functionality and stability of the devices will be improved further. The roll-out across the region will start from the middle of 2017.

## Grids segment

The basis for the success of the Energiewende will be the expansion of the energy grids to meet demand. This primarily concerns the electricity grids. In particular, the connection of renewable energies will require further construction measures at both the transmission and distribution grid level. Within the reform of the incentive regulations and the determination of the rates of return on equity for the third regulatory period, important framework conditions for the gas and electricity grid operators have, from a regulatory perspective, now been defined.

For the **transmission grids**, the Federal Requirements Plan Act has now given priority to underground cables ahead of new overhead lines where this is possible and appropriate. According to assessments made by the transmission system operators (TSO), this will cause a delay of approximately three years to the completion of the high-voltage DC transmission lines (**HVDC**). The concerns of citizens and local authorities will be comprehensively addressed in dialogue events. Our transmission system operator, TransnetBW, is participating in the process for expanding the grid with its SuedLink and ULTRANET projects.

The measures for the **expansion of the grids** require a high level of investment in the grid infrastructure. The Federal Network Agency lowered the rates of return on equity for the third regulatory period by more than two percentage points for these investments on 12 October 2016. In addition, the regulatory framework for the distribution grids was developed further as part of the reform of the incentive regulations. The defined rates for return on equity apply to operators of gas grids from 1 January 2018 and for electricity grid operators from 1 January 2019. They will fall for new facilities from 9.05% to 6.91% and for old facilities from 7.14% to 5.12%. The regulatory rates for return on equity remain constant for the whole regulatory period of five years. The fall in the rate of return has a negative effect on the profitability of investments and will increase the level of strain on our grids business.

The reform of the Incentive Regulation Ordinance (ARegV) was approved in August 2016. It regulates the investment conditions for distribution grid operators. The most important new aspect is that an annual comparison of investment expenditure will replace a flat-rate budget for the financing of the **distribution grids** in the future. By removing the previously existing time delay on the recognition of investments, it will be possible to refinance the investments directly via the grid fees. The adjustments to the regulatory regime for network charges for electricity and gas are due to become effective from the third regulatory period (electricity in 2019, gas in 2018). EnBW and its subsidiary Netze BW have actively participated in the consultations for the reform of the ARegV.

The German Federal Cabinet agreed the draft bill for the law on the modernisation of **grid fees** (Netzentgeltmodernisierungsgesetz, NEMoG) on 25 January 2017. The law will remove the remuneration for decentralised feed-ins (so-called avoided grid fees) step by step up to 2030. The idea behind the avoided grid fees is that decentralised generation can reduce the electricity consumption from upstream grid levels and thus avoid grid costs. The remuneration for the decentralised plants is financed via the grid fees. EnBW believes that the draft bill does not reflect the requirements placed on the electricity grids as part of the Energiewende. It is sensible for controllable producers of electricity such as **CHP** power plants, pump stations or gas turbines to benefit from the effect of reducing grid costs and this effect should be retained. In contrast, the continued payments during the intended transition period to volatile, non-controllable producers of electricity (such as solar and wind energy power plants) are in conflict with a fair distribution of the grid costs.

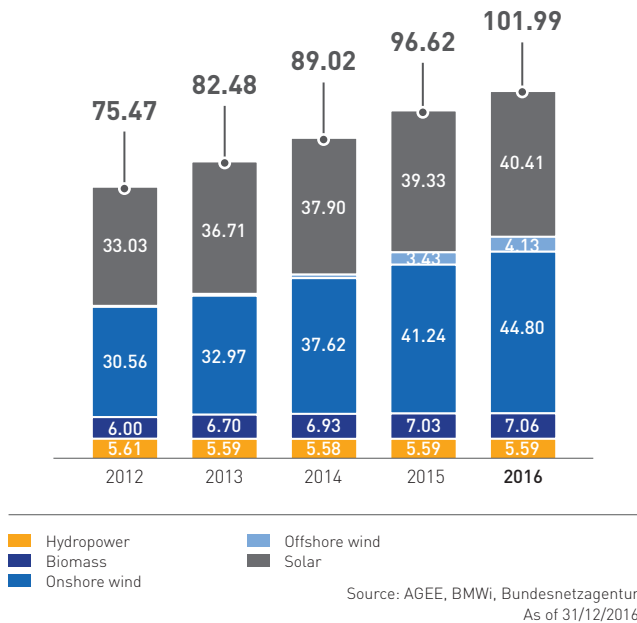
## Renewable Energies segment

The expansion of renewable energies is progressing steadily. According to the German Working Group on Energy Balances (AGEB), its share of overall electricity generation only increased slightly due to the weather conditions to 29.5% (previous year: 29%) in 2016 despite the further expansion in capacity. Generation from photovoltaic power plants fell by 1.0%. Electricity generation from wind power only increased by 0.8% due to unfavourable wind conditions. EnBW is

planning expansion in the area of renewable energies of around 300 MW in 2017 (p. 76f.).

Installed net output for electricity generation from renewable energies in Germany

in GW/year



The revised German Renewable Energies Act (EEG) 2016 was passed by the Bundestag and Bundesrat on 8 July 2016. The funding of renewable energies will be provided based on a competitive auction system in future, which will replace the existing fixed feed-in tariffs. The design of the auctions aims to maintain the envisaged expansion corridor for renewable energies, enabling more intensive competition and guaranteeing a diverse range of stakeholders. In our estimation, the switch to the new funding system will significantly change the success factors for market participants. The size of the portfolio and the ability to cooperate will play a significantly larger role. Even against the background of the new funding conditions, EnBW will play an active role in the expansion of renewable energies.

For onshore wind power plants, there is a transitional period for the completion of already approved projects up to the end of 2018. In the case of projects that have not yet been approved, the funding will be switched over to an auction process. Three rounds of auctions will thus be held in 2017. Aside from the very challenging criteria for the prequalification of new wind turbines in accordance with the Federal Immission Control Act (BImSchG), the gross expansion limit of 2,800 MW per year (or 2,900 MW from 2021) could lead to a situation where net growth will stagnate or even be negative in certain years. In addition, a so-called grid expansion zone will be defined for onshore wind farms for the first time, within which the new construction of wind power plants will be limited until the grids have been expanded sufficiently to eliminate any bottlenecks within Germany. With a high proportion of its projects in southern Germany, EnBW welcomes the designation of a grid expansion zone because it offers comparative advantages for less densely utilised wind energy regions.

For offshore wind power plants, the target of 15 GW of installed output by 2030 has been defined. There will also be a period of transition to competitive auctions for offshore wind power plants: All wind farms that are placed into operation by 2020 will receive funding in accordance with the EEG 2014. Transitional auctions will be held for wind turbines that are connected to the grid between 2021 and 2024, while the central auction process will apply to new projects from 2025. EnBW will realise its EnBW Hohe See and Albatros projects as planned by 2019 and participate in the tender procedures for subsequent projects (p. 76).

For photovoltaic power plants, there are only plans to directly regulate the expansion volumes for large power plants with an installed output of more than 1 MWp. Here, the central auction model will also apply. Actual expansion will also be dependent, however, on the investment decisions made about small power plants, whose profitability is being increasingly shaped by own consumption models. An expected trend for the cost of battery storage systems to decrease in combination with lower funding subsidies will make such models more and more attractive. EnBW is offering an innovative product called EnBW solar+ that optimally combines a photovoltaic power plant and a storage system.

## Generation and Trading segment

### Electricity wholesale market

In the first quarter of 2016, the prices on the wholesale market for electricity experienced a significant fall, in parallel with falling fuel prices, and recorded a ten-year low. In the second quarter, wholesale prices recovered due to increasing fuel prices and were able to compensate for the losses in the first quarter. A moderate fall in the third quarter was followed by a significant increase in the fourth quarter, which stemmed from a combination of increasing coal prices and expectations of a shortage on the French market. The expectation of possible scarcity in France arose because of additional inspections on components at 19 nuclear power plants and the expected poor availability of the power plants as a result. The pressure on conventional generation nevertheless continues to be high, especially in Germany. The electricity generated by large power plants is at times being largely forced out of the market by renewable energies. The wholesale market price for electricity is expected to fall again from the second quarter of 2017 – after the French nuclear power plants have been reconnected to the grid.

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

in €/MWh	Average 2016	Average 2015
Spot	28.98	31.62
Rolling front year price	26.58	30.96

## Gas market

Alongside long-term gas import contracts, which form an important basis for Germany's gas supply, the increasing global supply of liquefied natural gas (LNG) is playing a growing role. As a result, this could place long-term contracts linked to the price of oil under pressure. The border price index for natural gas published monthly by the German Federal Office of Economics and Export Control (BAFA) stood at €17.00/MWh in November 2016, which was 7.2% below the December 2015 figure (€18.32/MWh) and 10.6% below the figure for the same month in the previous year (€19.02/MWh). As a result of the oversupply on the gas markets, we do not anticipate that prices will recover further in the short term.

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

in €/MWh	Average 2016	Average 2015
Spot	14.02	19.81
Rolling front year price	15.40	20.06

## Oil market

The oil market continued to be characterised by oversupply in 2016. However, the possibility of a cap on production by OPEC and some non-OPEC countries including Russia was actively discussed and received media coverage from early in the year. This speculation and high unplanned losses in production in, amongst other countries, Nigeria, Libya and Canada, meant the front month price once again reached a level of around US\$52/bbl up to the start of June, following a year-low price in January of US\$27.88/bbl. Hereinafter, the Brent price experienced sideways movement in a range between US\$42/bbl and US\$52/bbl until OPEC and some non-OPEC countries including Russia finally agreed on 30 November 2016 to some caps in production with effect from 1 January 2017. The front month price then rose by the end of 2016 to US\$56/bbl. We thus anticipate that oil prices will remain relatively constant at the current level.

### Development of prices on the oil markets

in US\$/bbl	Average 2016	Average 2015
Crude oil (Brent), front month (daily quotes)	45.13	53.60
Crude oil (Brent), rolling front year price (daily quotes)	49.28	60.45

## Coal market

Following a low in the first quarter of 2016 when coal prices for front year delivery fell below US\$40/t, the coal market recovered considerably during the further course of the year and had already increased to almost US\$60/t by the middle of the year. It continued to improve until November and reached a year high of almost US\$78/t. However, it was not able to sustain this level

and following significant intermittent losses was trading at US\$70/t at the end of the year. The generally increasing demand for coal and the effect of state-imposed production caps in China are the main reasons for the price developments after the first quarter. We do not anticipate a significant increase – based on the current level – in coal prices in 2017.

### Development of prices on the coal markets

in US\$/t	Average 2016	Average 2015
Coal – API #2 rolling front year price	53.63	54.64

## CO<sub>2</sub> allowances

Under the European Emissions Trading System, sufficient emission allowances must be submitted to cancel out the amount of CO<sub>2</sub> emissions from power plants. In line with the prevailing downward trend, the price of emission allowances (EU Allowances – EUA) fell to less than €5/tCO<sub>2</sub> by the middle of February. During the further course of the year, prices were volatile and ranged between almost €7 and slightly below €4/tCO<sub>2</sub>. In this context, individual events such as the Brexit decision caused significant movement in prices. Due to the oversupply of CO<sub>2</sub> emission allowances on the market, prices are not expected to increase in 2017. In the long term, the ETS Post 2020 Reform, as it stands in current negotiations, could cause prices to rise.

### Development of prices for emission allowances/daily quotes

in €/t CO <sub>2</sub>	Average 2016	Average 2015
EUA, rolling front year price	5.34	7.70
CER, rolling front year price	0.38	0.48

## Nuclear power

The Bundestag and Bundesrat approved the law of reorganising responsibility for nuclear waste management in the middle of December 2016 which is anticipated to come into force in the first half of 2017. It states that the intermediate and final storage of the radioactive waste and the necessary financial funds for these tasks be transferred to the federal state as a safeguard. As a result of the additional payment of a risk premium, the operators of the nuclear power plants should no longer be obligated to make any subsequent contributions to the fund. The operators will still be responsible in future for the complete financing and management of decommissioning, dismantling and specialist packaging of the radioactive waste. The statutory regulations will be supplemented by a public law contract between the government and the operators.

Further details about the statutory regulations and their impact on EnBW will be presented in the chapter “The EnBW Group” (p. 50 ff.).

# The EnBW Group

## Financial and strategic performance indicators

### Results of operations

#### Slightly falling electricity sales, positive gas sales due to trading activities

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

in billions of kWh <sup>1</sup>	Sales		Renewable Energies		Generation and Trading		Total (without Grids)		Change in %
	2016	2015	2016	2015	2016	2015	2016	2015	
Retail and commercial customers (B2C)	15.0	15.5	0.0	0.0	0.0	0.0	15.0	15.5	-3.2
Business and industrial customers (B2B)	28.2	31.5	0.0	0.0	0.0	0.0	28.2	31.5	-10.5
Trade	0.7	0.7	3.3	3.0	67.6	64.7	71.6	68.4	4.7
<b>Total</b>	<b>43.9</b>	<b>47.7</b>	<b>3.3</b>	<b>3.0</b>	<b>67.6</b>	<b>64.7</b>	<b>114.8</b>	<b>115.4</b>	<b>-0.5</b>

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

In the 2016 financial year, electricity sales of the EnBW Group were slightly lower than the level in the previous year. This reduction is primarily attributable to falling sales in the business and industrial customer sector (B2B). In a persistently challenging competitive environment, electricity sales in

business with retail and commercial customers (B2C) also fell slightly. In contrast, it was possible to increase sales from trading activities slightly. However, its effect on the earnings potential of the company is of limited importance.

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

in billions of kWh	Sales		Generation and Trading		Total (without Grids)		Change in %
	2016	2015	2016	2015	2016	2015	
Retail and commercial customers (B2C)	10.8	10.5	0.0	0.0	10.8	10.5	2.9
Business and industrial customers (B2B)	41.5	69.9	0.0	0.0	41.5	69.9	-40.6
Trade	2.1	1.5	84.7	53.3	86.8	54.8	58.4
<b>Total</b>	<b>54.4</b>	<b>81.9</b>	<b>84.7</b>	<b>53.3</b>	<b>139.1</b>	<b>135.2</b>	<b>2.9</b>

The gas sales of the EnBW Group increased slightly in 2016 compared to the previous year. Gas sales in the retail customer business (B2C) were slightly above the level in the previous year due to an increase in the number of customers. Trading activities increased significantly compared to the previous year. In contrast, sales to business and industrial customers

(B2B) fell substantially, due mainly to the elimination of portfolio optimisations in the previous year. However, the effect of the portfolio optimisations and trading activities on the earnings potential of the company is of limited importance.

## External revenue decreases, although external revenue from Grids and Renewable Energies increases

### External revenue of the EnBW Group by segment


in € million <sup>1</sup>	2016	2015	Change in %
Sales	7,771.1	9,061.2	-14.2
Grids	6,643.7	6,350.6	4.6
Renewable Energies	510.6	447.0	14.2
Generation and Trading	4,433.9	5,300.4	-16.3
Other/Consolidation	9.1	7.3	24.7
<b>Total</b>	<b>19,368.4</b>	<b>21,166.5</b>	<b>-8.5</b>

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


**Sales:** Revenue in the Sales segment was significantly lower in the 2016 financial year compared to the previous year, mainly as a result of falling electricity and gas sales.


**Grids:** Revenue in the Grids segment increased in 2016 compared to the previous year due to higher revenues from the use of the grids.

**Renewable Energies:** In the Renewable Energies segment, revenue increased significantly in the 2016 financial year in comparison to the previous year. This was mainly attributable to the year-round contribution of our offshore wind farm EnBW Baltic 2, which was placed into full operation in the second half of 2015. However, a compensation payment was received from 50Hertz Transmission GmbH for the late connection of EnBW Baltic 2 to the grid in the previous year.

**Generation and Trading:** Revenue in the Generation and Trading segment fell significantly in 2016 in comparison to the previous year. This decrease is mainly due to the fact that the electricity to be delivered from our power plants in 2016 was sold on the  forward market at lower wholesale market prices than was the case for deliveries in the previous year.

### Material developments in the income statement






The negative balance from other operating income and other operating expenses increased from €332.7 million in the previous year to €417.4 million in the reporting period. This was primarily due to lower income from reversals of impairment losses, the result from divestitures and currency translation, negative valuation effects from  derivatives, as well as the fall in administrative and selling costs and other overheads. The cost of materials stood at €16,681.3 million, which was 3.9% below the figure in the previous year. This was primarily attributable to lower sales and was in line with revenue. The increase in amortisation and depreciation to €2,393.6 million is primarily attributable to higher impairment losses on power plants due to the legislative package of reorganising responsibility for nuclear waste management. The

investment result stood at €117.6 million, which was €96.4 million higher than the figure in the previous year. This was mainly due to higher write-downs on investments in the previous year. The financial result deteriorated in the reporting period in comparison to the same period of the previous year by €1,152.6 million to €-1,176.6 million. The reason for this was mainly the significantly lower income from the sale of financial instruments in comparison to the previous year, higher write-downs on financial assets and a significantly worse interest result due to the fall in the real interest rate for the nuclear provisions. Overall, earnings before tax (EBT) totalled €-2,721.9 million in the 2016 financial year, compared with €274.2 million in the previous year. The complete consolidated financial statements can be found at  [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

### Earnings

The Group net profit/loss attributable to the shareholders of EnBW AG fell in the 2016 financial year by €1,955.4 million to €-1,797.2 million compared to the figure in the same period of the previous year of €158.2 million (previous year restated). Earnings per share amounted to €-6.64 in 2016 compared to €0.58 in the previous year (previous year restated).

### 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 "Non-operating result" ( p. 53). The business activities relevant to the ongoing management of the company are of particular importance for internal management and for the external communication of the current and future earnings potential of EnBW. We use the  adjusted EBITDA – earnings before the investment and financial results, income taxes and amortisation, adjusted for non-operating effects – as the key reporting indicator for disclosing this information.

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

## Adjusted EBITDA of the EnBW Group by segment

in € million	2016	2015	Change in %	Forecast 2016
Sales <sup>1</sup>	249.7	255.3	-2.2	0% to -10%
Grids	1,004.1	747.4	34.3	more than +20%
Renewable Energies <sup>1</sup>	295.3	287.4	2.7	0% to +10%
Generation and Trading	337.2	777.3	-56.6	less than -20%
Other/Consolidation	52.6	42.2	24.6	-
<b>Total</b>	<b>1,938.9</b>	<b>2,109.6</b>	<b>-8.1</b>	<b>-5% to -10%</b>

<sup>1</sup> The forecasts for the Sales and Renewable Energies segments were adjusted during the year.

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

in %	2016	2015	Forecast 2016
Sales <sup>1</sup>	12.9	12.1	10% to 15%
Grids	51.8	35.4	45% to 55%
Renewable Energies <sup>1</sup>	15.2	13.6	10% to 20%
Generation and Trading	17.4	36.8	15% to 25%
Other/Consolidation	2.7	2.1	-
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	

<sup>1</sup> The forecasts for the share accounted for by the Sales and Renewable Energies segments were adjusted during the year.

The **TOP** adjusted EBITDA for the EnBW Group fell in the 2016 financial year in line with our expectations.

**Sales:** Contrary to our original forecast (less than -20%), the adjusted EBITDA for the Sales segment fell less significantly in comparison to the previous year and was thus within the range of our corrected forecast made in the third quarter. The fall in earnings was primarily due to the sale of EnBW Propower GmbH together with the Eisenhüttenstadt CHP plant as of 31 December 2015. This effect was alleviated to some extent by higher out-of-period earnings in comparison to the previous year and the first positive effects of the withdrawal from the B2B commodity business under the EnBW and Watt brands. The segment's share of the adjusted EBITDA for the Group increased slightly within the range of our adjusted forecast and our original forecast (5% to 15%) in comparison to the previous year.

**Grids:** The adjusted EBITDA for the Grids segment increased significantly in 2016 compared to the previous year. This development was, on the one hand, attributable to the elimination of the negative extraordinary items in the high double-digit million euro range accounted for in the second

half of 2015. These included expenses for compensation payments as part of the management of transmission losses and the negative impact of the retroactive adjustment of the water price in Stuttgart. On the other hand, higher earnings from the use of the electricity and gas grids had a positive impact. The increase is primarily due to the fact that higher pension provisions in accordance with the German Commercial Code (HGB) as a result of the low-interest phase were taken into account. The share of the adjusted EBITDA for the Group accounted for by this segment increased significantly in line with our forecast.

**Renewable Energies:** The adjusted EBITDA for the Renewable Energies segment only increased slightly compared to the previous year, diverging from our original forecast (+10% to +20%) but within the range of our adjusted forecast. The electricity delivered from our hydropower plants in 2016 was sold on the **TOP** forward market at lower wholesale market prices than in the previous year. It was possible to more than offset this negative earnings performance by the year-round earnings contribution from our offshore wind farm EnBW Baltic 2. However, the increase in earnings was lower than expected because the wind strength was below the long-term average. The share of the adjusted EBITDA for the Group accounted for by this segment increased in comparison to the previous year and was within the range of both our original forecast (15% to 20%) and our adjusted forecast.

**Generation and Trading:** In the Generation and Trading segment, the adjusted EBITDA fell significantly in comparison to the previous year in accordance with our forecast. On the one hand, our electricity deliveries were sold on the forward market at lower wholesale market prices in 2016 than in the previous year while, on the other hand, an electricity procurement agreement in the nuclear sector that expired at the end of the third quarter of 2015 also had a negative effect. The share of the adjusted EBITDA for the Group accounted for by this segment fell significantly in line with our forecast.



**Non-operating EBITDA impacted by the law initiated by the KFK****Non-operating EBITDA of the EnBW Group**

in € million	2016	2015	Change in %
Income/expenses relating to nuclear power	-860.6	43.8	-
Income from the release of other provisions	18.9	82.7	-77.1
Result from disposals	28.4	52.1	-45.5
Addition to the provisions for onerous contracts relating to electricity procurement agreements	-198.1	-295.0	32.8
Income from reversals of impairment losses	5.9	59.5	-90.1
Restructuring	-110.4	-20.8	-
Other non-operating result	-92.3	-113.7	18.8
<b>Non-operating EBITDA</b>	<b>-1,208.2</b>	<b>-191.4</b>	<b>-</b>

The loss in non-operating EBITDA increased significantly in the reporting year compared to the previous year. This negative earnings performance was mainly influenced by the legislative package of reorganising responsibility for nuclear waste management. The non-operating cost of materials was impacted greatly by the risk premium defined in the legislative package. In addition, the restructuring expenses that were mainly due to EnBW withdrawing from the sales

business to large customers had a negative effect on the non-operating EBITDA. This was offset to a minor extent by lower provisions for onerous contracts for long-term electricity procurement agreements compared to the previous year and the elimination of costs relating to the planned acquisition of a company in the previous year that were accounted for under the other non-operating result.

**High Group net loss also influenced by the law initiated by the KFK****Group net profit of the EnBW Group**

in € million <sup>1</sup>	2016	2015	Change in %
Adjusted EBIT	1,024.5	1,181.9	-13.3
Adjusted EBITDA	(1,938.9)	(2,109.6)	-8.1
Scheduled amortisation and depreciation	(-914.4)	(-927.7)	-1.4
Non-operating EBIT	-2,687.4	-904.9	-
Non-operating EBITDA	(-1,208.2)	(-191.4)	-
Impairment losses	(-1,479.2)	(-713.5)	107.3
<b>EBIT</b>	<b>-1,662.9</b>	<b>277.0</b>	<b>-</b>
Investment result	117.6	21.2	-
Financial result	-1,176.6	-24.0	-
Income tax	1,049.4	-40.0	-
<b>Group net profit/loss</b>	<b>-1,672.5</b>	<b>234.2</b>	<b>-</b>
of which profit/loss shares attributable to non-controlling interests	(124.7)	(76.0)	64.1
of which profit/loss shares attributable to the shareholders of EnBW AG	(-1,797.2)	(158.2)	-

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

The impairment losses relate mainly to power plants – due to the implementation of the legislative package of reorganising responsibility for nuclear waste management and the adjustment of the evaluation of the service life of our conventional power plants following discussions about future decarbonisation. Furthermore, the impairment losses in the reporting period were also connected with the new alignment of the sales business to a minor extent. The increase in the investment result was influenced by the elimination of the evaluation effects relating to the restructuring of shareholdings with EWE Aktiengesellschaft in the previous

year. The high shortfall in the financial result was also due to the legislative package of reorganising responsibility for nuclear waste management. As a result, the remaining nuclear provisions have been discounted with a significantly lower and, at some times, negative real interest rate. The reduction in this interest rate led to remaining provisions held by EnBW increasing by €1,081.5 million in the reporting year. The result in the previous year was strongly influenced by tax-free profits from the disposal of securities. These disposals were carried out against the background of positive developments on the stock market and a potential change in the taxation of

diversified shareholdings. Overall, the EBIT and the financial result were impacted negatively by €2,414.5 million in the 2016 financial year due to the legislative package of reorganising responsibility for nuclear waste management.

## Financial position

### Financial management of EnBW

#### Basis and objectives

Financial management is responsible for securing the existing financial assets of the EnBW Group and their development, for the optimisation of financing, as well as for guaranteeing a sufficient level of liquidity reserves. This ensures that the Group is able to meet its payment obligations at all times without restriction. The financial transactions permitted by the Board of Management of EnBW, and the specified scope within which they may be carried out, define the Treasury guidelines of the EnBW Group. The guidelines are applicable to all business entities that are either consolidated in full or with which EnBW AG has a profit and loss transfer agreement. The guidelines also act as basic principles for all other business entities. The centralised financial management system serves to minimise risks, provide transparency and optimise costs.

In the operating business, derivatives are generally deployed for hedging purposes only: for example, for forward contracts for electricity and primary energy source trading. This also applies for foreign exchange and interest rate derivatives. Propriety trading is only permitted within narrow, clearly defined limits.

Another important aspect of financial management is to manage financial assets (asset management) in order to cover the corresponding obligations to make provisions.

#### Treasury

The treasury controls all processes in all business entities that are consolidated in full, or with which EnBW AG has a profit and loss transfer agreement. Liquidity management is based on a rolling liquidity planning system and applies within a previously defined scope of validity. The Treasury is also responsible for the central management of credit lines and bank guarantees, the issuing of guarantees and letters of comfort, as well as interest rate risk and currency management.

#### Interest rate risk and currency management

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

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

Generally, currency positions resulting from operations are closed by appropriate forward exchange contracts. Overall, currency fluctuations from operating activities do not have any major effect on the operating result of EnBW. Foreign exchange risks are monitored on a case-by-case basis within the framework of the currency management system. Details on the risk management system are presented in note 24 of the notes to the consolidated financial statements at [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

#### Asset management

Our aim is to cover the Group's non-current pension and nuclear provisions within an economically feasible period of time by means of appropriate financial assets. EnBW uses an Asset Liability Management model (ALM model) based on cash flows to determine the effects on the balance sheet, income statement and cash flow statement over the next 30 years. Alongside the anticipated return on financial assets, the actuarial valuations of pension provisions and external expert appraisals on costs for nuclear disposal are taken into account. The goal of this model is to limit the effect the utilisation of the pension and nuclear provisions may have on the operating business. Accordingly, funds are also taken from the financial assets for this purpose. This model also allows simulations of various alternative scenarios. As of 31 December 2016, the dedicated financial assets for pension and nuclear provisions totalled €9,951.4 million (previous year: €9,790.2 million). Alongside the dedicated financial assets, there are plan assets to cover certain pension obligations with a market value of €1,138.5 million as of 31 December 2016 (previous year: €1,113.8 million).

We strive to reach the defined investment targets with minimum risk. We also continued our efforts to optimise the risk/return profile of the financial assets throughout 2016. The main part of the dedicated financial assets is distributed as investments across nine asset classes. The financial assets are bundled in two master funds with the following investment targets:

- > Risk-optimised investments, with a performance in line with market trends
- > Consideration of the effects on the balance sheet and income statement
- > Broad diversification of the asset classes
- > Reduction of costs and simplification of administrative processes

Due to the expected cash outflow of around €4.7 billion to finance the KFK fund, financial assets were liquidised and invested on the money market. EnBW can pass on around €350.6 million of this sum to a contractual partner in connection with electricity supplies.

**Financing facilities**

In addition to the internal financing capability with a retained cash flow of €949.5 million in 2016 (previous year restated: €1,717.6 million) and its own funds, the EnBW Group has the following instruments at its disposal to cover its overall financing needs (as of 31 December 2016):

- > Debt Issuance Programme (DIP), via which bonds are issued: €3.0 billion of €7.0 billion drawn
- > Hybrid bonds: €3.0 billion
- > Commercial paper (CP) programme: €2.0 billion undrawn
- > Syndicated credit line: €1.5 billion undrawn, a final extension of the term of credit until 2021 became effective in 2016
- > Bilateral free credit lines: €348 million
- > Project financing and low-interest loans from the European Investment Bank (EIB)

**Established issuer on the debt capital market**

EnBW has sufficient and flexible access to the capital market at all times. In October 2016, EnBW issued two hybrid bonds to investors in Europe and Asia each with a term of 60.5 years:

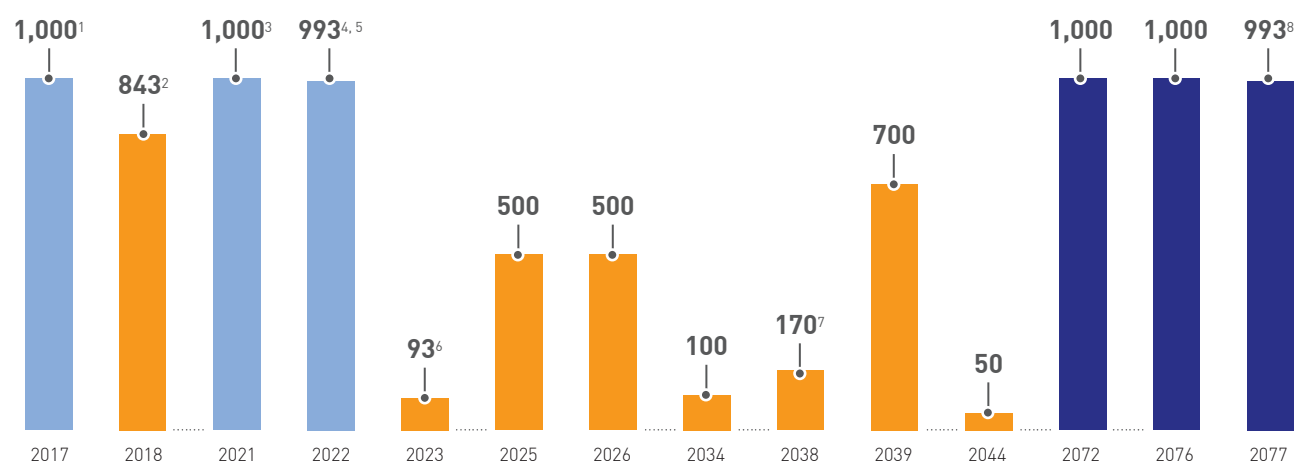
- > €725 million (coupon of 3.375%)
- > US\$300 million (coupon of 5.125%)

The issue date was 5 October 2016, while the first interest payment date is 5 April 2017. In view of the possible first call date of the outstanding hybrid bond in April 2017, the sum due has already been refinanced with sufficient forward planning. Half of the amount of each of the hybrid bonds are recognised as equity by the rating agencies Moody’s and Standard & Poor’s. They represent an important element of the capital structure of EnBW.

Bonds due on 19 October 2016 to the amount of €500 million were repaid from existing liquidity. The EnBW bonds have a well-balanced maturity profile.

**Maturity profile of EnBW bonds**

in € million



<sup>1</sup> First call date: hybrid maturing in 2072.  
<sup>2</sup> Includes CHF 100 million, converted as of the reporting date of 31/12/2016.  
<sup>3</sup> First call date: hybrid maturing in 2076.  
<sup>4</sup> First call date: hybrid maturing in 2077.  
<sup>5</sup> Includes US\$300 million (swap in €).  
<sup>6</sup> Includes CHF 100 million, converted as of the reporting date of 31/12/2016.  
<sup>7</sup> JPY 20 billion (swap in €).  
<sup>8</sup> Includes US\$300 million, converted as of the reporting date of 05/10/2016.

■ First call dates for hybrid bonds  
 ■ Senior bonds  
 ■ Hybrid bonds

Documentation of short-term and long-term borrowings on the capital market under the established DIP and CP programmes of EnBW AG, as well as all other credit documentation with banks (e.g. syndicated lines of credit) includes internationally standardised clauses. The issuing of a negative covenant, as well as a pari passu clause, to all creditors forms a key element of the financing policy of EnBW. The use of undrawn credit lines is not subject to restrictions.

As part of its financing strategy, EnBW constantly analyses and assesses capital market trends with regard to the current interest rate environment and to any potentially favourable refinancing costs.

Details on financial liabilities are presented in note 21 and explanations on other financial commitments are presented in note 25 of the notes to the consolidated financial statements at [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

### Rating and rating trends

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. The company thus maintains its high level of financial discipline, irrespective of the interest rate-related volatility of the pension and nuclear provisions (p. 22 ff.). EnBW has covered its pension and nuclear provision obligations within the time frames necessary via its asset liability management model for more than ten years (p. 54). The effect the utilisation of the pension and nuclear provisions may have on the operating business is limited

using an ongoing contribution from the financial assets of €300 million (plus an inflation supplement). If the provisions are fully covered by the financial assets, no further funds will be taken from operating cash flow as part of the model.

With a solid investment-grade rating, we want to:

- > offer reliable opportunities for financing partners
- > be regarded as a dependable business partner in our trading activities
- > achieve the lowest possible capital costs
- > implement an appropriate number of projects and thereby maintain the future viability of the company.

### Overview of the ratings for EnBW – rating/outlook

	2016	2015	2014	2013	2012
Moody's	A3/negative	A3/negative	A3/negative	A3/negative	A3/negative
Standard & Poor's	A-/negative	A-/stable	A-/stable	A-/stable	A-/stable
Fitch	A-/stable	A-/stable	A-/stable	A-/stable	A-/stable

The rating agencies confirmed their ratings during the course of 2016:

### Assessment by the rating agencies

Moody's (22/08/2016)	Standard & Poor's (13/06/2016)	Fitch (25/01/2016)
The conventional generation market remains challenging, the EnBW 2020 strategy aims to compensate for the negative effect of the changes to the market	Strong competitive position on the regional market	Strengthening of the future business profile due to a focus on growth in the area of renewable energies and the regulated grids business
EBITDA mix subject to low risk, increasing share of stable profit streams	Increasing share of regulated activities and greater cash flow stability through the full integration of VNG 2017	Strong liquidity position, lower leverage than competitors and flexible financing policy
Continuous implementation of measures to retain creditworthiness	Volatile market conditions in the generation sector mitigated by growing renewable energy capacities and system-relevant EnBW conventional power plants	Better coverage of provisions than German competitors due to earmarked financial investments
Strong support due to stable shareholder composition	Coverage ratio for pension and nuclear provisions of more than 70% will fall due to externalisation of nuclear energy	Structural challenges in area of electricity generation, risks in the implementation of the company's strategy
Additional financial strain due to the phasing out of nuclear energy		

The current ratings reflect the restructuring of the EnBW portfolio towards low-risk activities. The following aspects, amongst others, contribute to this goal:

- > the planned increase in the share of EBITDA accounted for by regulated business (Grids segment and Renewable Energies segment) to around 70% by 2020

- > a solid financial profile
- > a conservative financial policy with flexible mechanisms for distributing dividends
- > a stable shareholder composition
- > an asset liability management model based on cash flow for covering the pension and nuclear provision obligations of EnBW

## Investment analysis

### Net cash investments of the EnBW Group

in € million <sup>1,2</sup>	2016	2015	Change in %
Investments in growth projects <sup>3</sup>	2,070.7	1,026.1	101.8
Investments in existing projects	514.4	435.5	18.1
<b>Total investments</b>	<b>2,585.1</b>	<b>1,461.6</b>	<b>76.9</b>
Conventional divestitures <sup>4</sup>	-1,123.6	-35.6	-
Participation models	32.0	-713.7	-
Other disposals and construction cost subsidies	-176.6	-218.4	-19.1
<b>Total divestitures</b>	<b>-1,268.2</b>	<b>-967.7</b>	<b>31.1</b>
<b>Net (cash) investments</b>	<b>1,316.9</b>	<b>493.9</b>	<b>-</b>

<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. This stood at €6.1 million in the previous year.

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

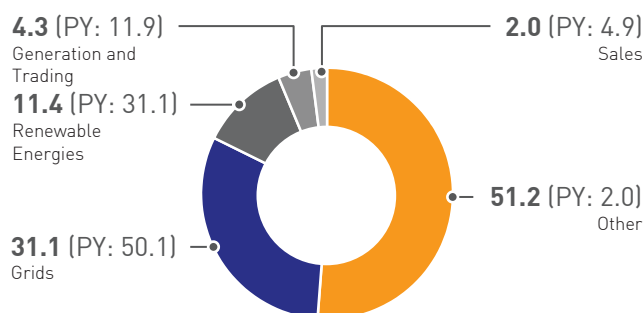
<sup>3</sup> Does not include cash and cash equivalents acquired with the acquisition of fully consolidated companies. These amounted to €2.1 million in the reporting period (previous year: €0.0 million).

<sup>4</sup> Does not include cash and cash equivalents relinquished with the sale of fully consolidated companies. These amounted to €1.4 million in the reporting period (previous year: €6.5 million).

The investment volume of the EnBW Group increased significantly compared to the previous year due to the completion of the acquisition of 74.21% of the shares in VNG-Verbundnetz Gas Aktiengesellschaft (VNG) in April 2016. Around 80.1% of overall **gross investment** was attributable to growth projects; the proportion of investments in existing facilities stood at 19.9% and was primarily allocated to existing power plants and grid infrastructure.

### Investments by segment

in %



In the reporting year, €52.0 million was invested in strengthening the **Sales** segment. In the previous year, investment in this segment stood at €71.5 million.

Investment of €802.9 million in the **Grids** segment was higher than the figure for the previous year (€732.8 million) and was mainly allocated for the expansion and upgrade of the grids and the connection of facilities for the generation of renewable energies.

Investment in the **Renewable Energies** segment of €294.7 million was significantly lower than in the previous

year (€455.0 million) because the offshore wind farm EnBW Baltic 2 was completed in the summer of 2015 and the EnBW Hohe See wind farm is still in the design phase.

Investment in the **Generation and Trading** segment stood at €111.1 million, which was significantly lower than in the previous year (€174.3 million) due to the completion of the Lausward CCGT power plant.

Other investments of €1,324.4 million were significantly higher than the level in the previous year (€28.0 million) because the acquisition of the shares in VNG – accounted for using the equity method – as part of the restructuring of shareholdings was completed in April 2016.

The **divestitures** were significantly above the figure in the previous year due to the associated disposal of a 20% share of EWE Aktiengesellschaft (EWE), as well as the sale of EnBW Propower GmbH together with the Eisenhüttenstadt CHP plant as of 31 December 2015, for which the purchase price was only received in January 2016.

The divestitures from participation models contain payments from alterations of capital in non-controlling interests of €25.6 million (previous year €6.1 million). At the beginning of 2016, there was also a subsequent purchase price adjustment (with a repayment of €8.0 million) in relation to the sale of shares in EnBW Baltic 2 S.C.S. with an original sales price of €719.8 million at the end of 2015.

Capital commitments for the acquisition of intangible assets and property, plant and equipment amounted to €478.5 million as of 31 December 2016 (previous year: €501.9 million). Commitments to acquire entities totalled €553.3 million (previous year: €660.5 million). The capital commitments are financed from  retained cash flow.

## Liquidity analysis

### Free cash flow of the EnBW Group

in € million <sup>1</sup>	2016	2015	Change in %
<b>EBITDA</b>	<b>730.7</b>	<b>1,918.2</b>	<b>-61.9</b>
Changes in provisions	721.9	145.6	-
Non-cash-relevant expenses/income	-78.1	-120.0	34.9
Income tax paid/received	-243.4	112.2	-
Interest and dividends received	345.1	380.6	-9.3
Interest paid for financing activities	-351.3	-375.1	-6.3
Contribution to dedicated financial assets	50.7	-74.2	-
<b>Funds from operations (FFO)</b>	<b>1,175.6</b>	<b>1,987.3</b>	<b>-40.8</b>
Change in assets and liabilities from operating activities	-657.5	-137.7	-
Capital expenditure on intangible assets and property, plant and equipment	-1,189.4	-1,416.4	-16.0
Disposals of intangible assets and property, plant and equipment	115.5	140.2	-17.6
Cash received from construction cost and investment subsidies	61.1	78.2	-21.9
<b>Free cash flow</b>	<b>-494.7</b>	<b>651.6</b>	<b>-</b>

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

The **€** funds from operations (FFO) fell significantly in comparison to the previous year. This was mainly due to the payment of tax arrears in the reporting year, while tax refunds were received in the previous year. In addition, there was also a reduction in the cash-relevant **€** adjusted EBITDA. The net balance of assets and liabilities from operating activities increased compared to the same period of the previous year mainly as a result of higher net balance of trade receivables and payables that was influenced by **€** EEG effects. In

addition, greater extraordinary items such as changes to collateral requirements as part of our trading activities increased the net balance of assets and liabilities from operating activities. This was offset by lower investment in intangible assets and property, plant and equipment in comparison to the same period of the previous year. Overall, **€** free cash flow fell in comparison to the same period of the previous year by €1,146.3 million.

### Retained cash flow of the EnBW Group

in € million <sup>1</sup>	2016	2015	Change in %
<b>Funds from operations (FFO)</b>	<b>1,175.6</b>	<b>1,987.3</b>	<b>-40.8</b>
Dividends paid	-226.1	-269.7	-16.2
<b>Retained cash flow</b>	<b>949.5</b>	<b>1,717.6</b>	<b>-44.7</b>

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


### TOP Internal financing capability of the EnBW Group

	2016	2015	Change in %
Retained cash flow in € million	949.5	1,717.6	-44.7
Net (cash) investment in € million	1,316.9	493.9	-
<b>Internal financing capability in %</b>	<b>72.1</b>	<b>347.8</b>	<b>-</b>

As a result of the fall in the FFO, **€** retained cash flow also fell significantly. Dividend payments fell in comparison to the previous year. The retained cash flow reflects the **€** internal financing capability of EnBW. After consideration of all stakeholder groups such as employees for example, it is available to the company for investment without the need to raise additional debt (**€** p. 16).

The lower internal financing capability in the reporting year was the result of higher **€** net investment in comparison to the previous year. As part of the restructuring of shareholdings, there was the acquisition of shares in VNG and the associated disposal of shares in EWE in the reporting year. Adjusted for this effect in the net investment, the internal financing capability stood at 100.8% and thus within our


target of  $\geq 100\%$ . Net investment in the previous year contained the sale of shares in EnBW Baltic 2 S.C.S. Adjusted for this extraordinary effect, the internal financing capability for the previous period stood at 141.5%.

The  internal financing capability is the key performance indicator for the Group's ability to finance its activities internally. In the future, we aim to achieve an internal financing capability of  $\geq 100\%$  each year by, for example, adjusting future participation models so that, in contrast to the EnBW Baltic 2 S.C.S. participation model, potential partners are already participating in the construction phase.

#### Condensed cash flow statement of the EnBW Group

in € million	2016	2015	Change in %
Cash flow from operating activities	473.6	1,918.3	-75.3
Cash flow from investing activities	333.9	-814.2	-
Cash flow from financing activities	-316.6	-798.5	60.4
<b>Change in cash and cash equivalents<sup>1</sup></b>	<b>490.9</b>	<b>305.6</b>	<b>60.6</b>
Net foreign exchange difference	-0.4	10.3	-
<b>Change in cash and cash equivalents<sup>1</sup></b>	<b>490.5</b>	<b>315.9</b>	<b>55.3</b>


<sup>1</sup> Includes cash and cash equivalents from assets held for sale.

Analogous to the  FFO, the operating cash flow fell compared to the previous year, which was mainly due to the higher net balance of assets and liabilities from operating activities.

In 2016, cash flow from investing activities returned an inflow of cash, while there was an outflow of cash in the previous year. This inflow of cash was due primarily to higher sales of securities against the background of current developments on the market and the expected cash outflow to finance the KFK fund.

In comparison to the reporting year, the higher cash outflow from financing activities in the previous year was mainly due

to the planned repayment of a bond with a volume of €750 million, while in 2016 the planned repayment of a bond with a volume of €500 million was offset by the issuing of two hybrid bonds with volumes of €725 million and US\$300 million, respectively.

The solvency of the EnBW Group was ensured at all times throughout the 2016 financial year thanks to the company's available liquidity and its internal financing capability, as well as external sources available for financing. The company's future solvency is secured by its solid financial position ( p. 54 ff.).

## Net assets

### Condensed balance sheet of the EnBW Group

in € million <sup>1</sup>	31/12/2016	31/12/2015	Change in %
<b>Assets</b>			
Non-current assets	25,418.4	25,587.8	-0.7
of which intangible assets	(1,636.5)	(1,744.9)	-6.2
of which property, plant and equipment	(13,481.9)	(13,508.1)	-0.2
of which entities accounted for using the equity method	(1,835.6)	(826.1)	122.2
of which other financial assets	(6,428.0)	(8,309.3)	-22.6
of which deferred taxes	(1,268.9)	(93.4)	-
Current assets	12,943.9	11,554.5	12.0
Assets held for sale	173.0	1,015.9	-83.0
	<b>38,535.3</b>	<b>38,158.2</b>	<b>1.0</b>
<b>Equity and liabilities</b>			
Equity	3,216.2	5,123.2	-37.2
Non-current liabilities	22,172.0	23,791.7	-6.8
of which provisions	(13,011.9)	(14,478.1)	-10.1
of which deferred taxes	(652.8)	(670.7)	-2.7
of which financial liabilities	(6,720.2)	(6,810.0)	-1.3
Current liabilities	13,123.1	9,242.5	42.0
of which provisions	(6,060.2)	(1,342.8)	-
of which financial liabilities	(1,208.7)	(758.2)	59.4
Liabilities directly associated with assets classified as held for sale	24.0	0.8	-
	<b>38,535.3</b>	<b>38,158.2</b>	<b>1.0</b>

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

As of 31 December 2016, the total assets held by the EnBW Group were slightly higher than the level in the previous year. The carrying amount of entities accounted for using the equity method increased by €1,009.5 million. The reason for this was primarily the acquisition of 74.21% of the shares in VNG-Verbundnetz Gas Aktiengesellschaft (VNG). This was offset by a reduction in the assets held for sale of €842.9 million mainly due to the disposal of a 20% shareholding in EWE Aktiengesellschaft (EWE) as part of the acquisition of the shares in VNG. The fall in other financial assets was primarily the result of the legislative package of reorganising responsibility for nuclear waste management. This led to the sale of securities and the reclassification of the securities from “held to maturity” to “available for sale”. The deviation in deferred taxes compared to the 2015 financial year was due to the origination or reversal of temporary differences between IFRS and tax accounting. This was mainly the result of changes to non-current liabilities in the area of personnel provisions, provisions for onerous contracts and nuclear provisions, as well as extraordinary tax items.

The equity held by the EnBW Group fell by €1,907.0 million as of the reporting date of 31 December 2016. This was mainly due to the fall in revenue reserves of €2,052.3 million to €1,582.5 million. The main reason for this development was the higher annual net loss. In comparison to the previous year's reporting date, the equity ratio thus decreased from 13.4% (previous year restated) to 8.3%. Excluding non-controlling interests this was 3.4% (previous year restated: 8.6%). The decrease in non-current provisions is mainly attributable to the reclassification of the nuclear provisions into current provisions due to the legislative package of reorganising responsibility for nuclear waste management. In this context, there was also an increase in the current provisions of €4.7 billion. This was offset to some extent in the non-current provisions by an increase in pension provisions, due mainly to the adjustment of the discount rate from 2.3% at the start of the year to 1.9% at the end of the year. The current financial liabilities increased primarily as a result of the reclassification of hybrid bonds that have their first call option in 2017 from the non-current financial liabilities. This was offset by the repayment of a bond with a volume of €500 million.



## Net debt

As of 31 December 2016, net debt, which is relevant from a ratings perspective, increased significantly by €3,267.4 million compared to the figure posted at the end of 2015. This increase was mainly attributable to higher nuclear provisions due to the implementation of the legislative package of reorganising responsibility for nuclear waste management. In addition, the pension provisions increased primarily as a result of the reduction in the discount rate from 2.3% on 31 December 2015 to 1.9% on 31 December 2016. Furthermore, net financial liabilities increased due to the negative free cash flow and the payment of the cash settlement to EWE and EWE-Verband in April 2016 as part of the restructuring of shareholdings.

The net debt increased significantly in connection with the pension and dismantling provisions due to the implementation of the legislative package of reorganising responsibility for nuclear waste management.

The coverage ratio describes the ratio of the long-term securities and loans (including investments held as financial investments) used to cover the pension and dismantling provisions, cash and cash equivalents and current financial assets including the surplus cover for benefit obligations in relation to the pension and dismantling obligations less the receivables associated with nuclear provisions. Against the background of the externalisation of the medium and long-term nuclear provisions on the balance sheet and the payment of a risk premium, the coverage ratio fell from 74.2% on 31 December 2015 to 61.0% on 31 December 2016. As part of its ALM model, EnBW is still in a position to cover its future cash outflows for pension and dismantling provisions without burdening the cash flow from operating activities to an above-average extent.

### Net debt of the EnBW Group

in € million	31/12/2016	31/12/2015	Change in %
Cash and cash equivalents available to the operative business	-2,264.3	-2,429.5	-6.8
Current financial assets available to the operative business	-329.5	-670.3	-50.8
Long-term securities and loans available to the operative business	-42.5	0.0	-
Bonds	6,008.1	5,492.2	9.4
Liabilities to banks	1,455.5	1,588.5	-8.4
Other financial liabilities	465.3	487.5	-4.6
Valuation effects from interest-induced hedging transactions	-109.2	-106.1	2.9
Restatement of 50% of the nominal amount of the hybrid bonds <sup>1</sup>	-1,496.3	-1,000.0	49.6
Other	-42.1	-33.3	26.4
<b>Net financial liabilities</b>	<b>3,645.0</b>	<b>3,329.0</b>	<b>9.5</b>
Pension and dismantling provisions <sup>2</sup>	17,088.7	13,955.9	22.4
Long-term securities and loans to cover the pension and dismantling provisions <sup>3</sup>	-6,130.7	-8,035.0	-23.7
Cash and cash equivalents to cover the pension and dismantling provisions	-1,727.3	-1,071.6	61.2
Current financial assets to cover the pension and dismantling provisions	-2,060.0	-683.6	-
Receivables associated with nuclear provisions	-779.4	-759.2	2.7
Surplus cover for benefit obligations	-33.4	0.0	-
<b>Net debt relating to pension and dismantling provisions</b>	<b>6,357.9</b>	<b>3,406.5</b>	<b>86.6</b>
<b>Net debt</b>	<b>10,002.9</b>	<b>6,735.5</b>	<b>48.5</b>

<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. However, Standard & Poor's assess the equity nature of the hybrid bond with a call option in April 2017 at 0% since the new issue of bonds in October 2016 because the rating agency views the latter as replacement bonds.

<sup>2</sup> Less the market value of the plan assets of €1,138.5 million (31/12/2015: €1,113.8 million).

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

### Dynamic leverage ratio

As of 31 December 2016, the dynamic leverage ratio rose as a result of the significant increase in net debt due to the implementation of the legislative package of reorganising responsibility for nuclear waste management from 3.19 on 31 December 2015 to 5.16. Therefore, the development of the dynamic leverage ratio was neither within the range of our adjusted forecast of 3.7 to 4.2 made after the first half of 2016 nor our original forecast of 3.2 to 3.6 (the adjustment resulted from an adjustment to the net debt) (p. 25).

### ROCE and value added

The cost of capital before tax represents the minimum return on average capital employed (calculated on the basis of the respective quarterly figures for the reporting year and the year-end figure for the previous year). Positive value is added when the return on capital employed (ROCE) exceeds the cost of capital. The cost of capital is determined from the weighted average cost of equity and debt together. The value of equity is based here on a market valuation and thus deviates from the value recognised in the balance sheet. The cost of equity is based on the return of a risk-free investment and a company-specific risk premium. The latter is calculated as the difference between a risk-free investment and the

return for the overall market, weighted with a company-specific beta factor. The terms according to which the EnBW Group can raise long-term debt are used to determine the cost of debt.

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

#### Value added to the EnBW Group for 2016 by segment

	Sales	Grids	Renewable Energies	Generation and Trading	Other/ Consolidation	Total
Adjusted EBIT including adjusted investment result <sup>1</sup> in € million	193.2	668.2	130.1	44.8	40.2	1,076.5
Average capital employed in € million	617.4	5,085.1	2,995.8	2,072.8	2,944.5	13,715.6
<b>ROCE in %</b>	<b>31.3</b>	<b>13.1</b>	<b>4.3</b>	<b>2.2</b>	<b>-</b>	<b>7.8</b>
Weighted average cost of capital before tax in %	8.3	5.8	7.5	8.4	-	6.9
<b>Value added in € million</b>	<b>142.0</b>	<b>371.2</b>	<b>-95.9</b>	<b>-128.5</b>	<b>-</b>	<b>123.4</b>

<sup>1</sup> Investment result of €36.9 million, adjusted for taxes (investment result/0.71 - investment result; with 0.71 = 1 - tax rate 29%). Does not include write-ups and write-downs on investments, the result from the sale of equity investments, the share of the result from entities accounted for using the equity method not relevant to the ongoing management of the company and the result from equity investments held as financial assets.

#### Value added to the EnBW Group for 2015 by segment<sup>1</sup>

	Sales	Grids	Renewable Energies	Generation and Trading	Other/ Consolidation	Total
Adjusted EBIT including adjusted investment result <sup>2</sup> in € million	199.2	451.3	161.1	409.5	77.2	1,298.3
Average capital employed in € million	800.5	4,669.3	2,820.7	2,377.2	2,959.5	13,627.2
<b>ROCE in %</b>	<b>24.9</b>	<b>9.7</b>	<b>5.7</b>	<b>17.2</b>	<b>-</b>	<b>9.5</b>
Weighted average cost of capital before tax in %	8.2	5.9	7.5	8.4	-	6.9
<b>Value added in € million</b>	<b>133.7</b>	<b>177.4</b>	<b>-50.8</b>	<b>209.2</b>	<b>-</b>	<b>354.3</b>

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

<sup>2</sup> Investment result of €82.6 million, adjusted for taxes (investment result/0.71 - investment result; with 0.71 = 1 - tax rate 29%). Does not include write-ups and write-downs on investments, the result from the sale of equity investments, the share of the result from entities accounted for using the equity method not relevant to the ongoing management of the company and the result from equity investments held as financial assets.

Against a background of continued difficult market and industry conditions, the value added generated by the EnBW Group fell in the 2016 financial year compared to the previous year to €123.4 million. The adjusted EBIT including the adjusted investment result fell as expected, while the average capital employed rose slightly. The risk-adjusted weighted average cost of capital remained unchanged compared to the previous year. The slight increase in the capital employed meant that the ROCE was below our expectation for the 2016 financial year with 7.8% (forecast 2016: 8.3% to 9.2%).

**Sales:** Value added in the Sales segment increased in 2016 by €8.3 million. This was primarily due to the fall in the average capital employed. The fall in the average capital employed was primarily attributable to the decrease in current trade receivables and the sale of EnBW Propower GmbH together with the Eisenhüttenstadt CHP plant.

**Grids:** Value added in the Grids segment increased in the reporting year by €193.8 million in comparison to 2015. This was caused by the increase in ROCE of 3.4 percentage points. This rise was due to the significant increase in adjusted EBIT including the adjusted investment result in comparison to the previous year. The increase in average capital employed was due to the expansion of the transmission and distribution grids.

**Renewable Energies:** Value added in the Renewable Energies segment decreased in comparison to the previous year to €-95.9 million. Investments in the expansion of onshore wind power led to an increase in the capital base in the reporting year. The ROCE for this segment was 4.3% with an unchanged weighted average cost of capital of 7.5%.

**Generation and Trading:** The Generation and Trading segment achieved value added of €-128.5 million in the 2016 financial year. The adjusted EBIT including the adjusted investment result fell by €364.7 million to €44.8 million. At the same time, the capital base fell primarily due to impairment losses on property, plant and equipment.

## Non-financial performance indicators

### Customers and society goal dimension

#### Key performance indicators

Key performance indicators				
	2016	2015	Change in %	Forecast 2016
Reputation Index	50.0	48.5	3.1	-
Customer Satisfaction Index for EnBW/Yello	132/150	136/152	-2.9/-1.3	128-138/ 150-155
SAIDI (Strom) in min/year	16	15	6.7	15

**TOP Reputation Index:** The index increased noticeably in 2016 to 50.0 index points and thus stands at a medium level. This positive development underlines the effectiveness of the activities carried out by EnBW for communicating with important stakeholder groups.

**TOP Customer Satisfaction Index:** The satisfaction of the customers of EnBW almost reached the same good level as the previous year in 2016 and was thus within the forecasted range for the reporting year. At the start of 2016, EnBW implemented differential pricing measures that caused a temporary drop in the index value. Customer satisfaction then recovered during the course of the year: The EnBW image campaign carried out in the spring and autumn under the motto “We’re making it happen” helped to strengthen the sales and corporate brand EnBW. The campaign was supported by regionally targeted sales measures. The satisfaction of the customers of Yello stood at almost the same level in 2016 as in the previous year and was thus at the lower end of the forecasted range. This relatively weak development was caused by pricing measures introduced by competitors at the start of 2016. Nevertheless, the fall in the level of satisfaction of the customers of Yello was less than the market average. However, the Yello advertising campaign on TV and online during the course of 2016 as well as targeted customer-loyalty measures, such as the new service app kWhapp, contributed to the fact that the satisfaction of customers of Yello almost reached the same level as the previous year.

**TOP SAIDI:** Measured by the length of supply interruptions experienced per connected customer, a similarly good level for SAIDI was achieved in 2016 in the grid area operated by EnBW as in the previous year. The deviation from the level achieved in the previous year as well as from the forecasted level were within the normal range. There were no exceptionally heavy storms in the reporting year and supply interruptions remained at a normal level.

### Other performance indicators

Until the middle of 2016, the **Brand Attractiveness Index** for the Group's two core brands – EnBW and Yello – was reported as a key performance indicator in the customers goal dimension. We expanded it during the 2016 financial year into a **Reputation Index** but will continue to report the Brand Attractiveness Index as an additional performance indicator.

**Brand Attractiveness Index:** The Brand Attractiveness Index measures the annual average figure for the attractiveness of our brands as perceived by consumers and is compiled by an external service provider. The brand attractiveness of EnBW increased to a value of 44 and was thus one index point higher than in the previous year (43). Therefore, it lies in the upper range of the target corridor of 40 to 45 for 2016. The fact that EnBW once again carried out conventional advertising campaigns in 2016 following a break of many years contributed to the improved attractiveness of the brand. It was possible to improve the attractiveness of the Yello brand significantly from an index value of 35 to a value of 38 so that it lies in the middle of the forecasted range for 2016. One reason for this was the slightly higher advertising expenses and the good performance of the emoji campaign. In parallel, this subsidiary is developing from being solely a supplier of electricity to a company with a broad range of products and services and is making this change clear by repositioning the brand. "More than you think" is the new slogan of Yello: Alongside electricity, its range of products and services now include gas, product packages and smart digital services. The new brand image has been supported since the start of 2017 by an integrated online and television campaign.

EnBW follows **three principles** for selling new energy solutions:

- > Thinking ahead: We want to bring the customer step by step into the new product world as their preferred partner.
- > Networking: The focus is placed on the holistic networking of all product solutions and their logical interrelationships.
- > Promise: We deliver a promise of comprehensive service and quality for every product.

For example, we successfully launched a worry-free package for household customers that enables them to independently supply their own electricity via a photovoltaic plant and battery storage system together in an electricity community in the form of the product **EnBW solar+** in 2016. The product enables our customers to make their own personal contribution to the Energiewende.

Progress has also been made in the area of electromobility. EnBW recently equipped its more than 700 charging points in Germany with the direct payment system "**intercharge direct**". Even without a contract or a prepaid charging card, drivers of electric vehicles can have easy access to charging stations offered by EnBW. The fact that the charging stations are digitally networked means that all charging points operated by EnBW can also be found in the navigation systems and charging point apps offered by other suppliers. The charging points can be used both spontaneously or with a contract.

Since the end of 2015, Yello has had the innovative app **kWhapp** on offer and also opened up this service to non-customers in June 2016. More than 100,000 users have downloaded the kWhapp since then. The app allows users to keep an eye on their electricity consumption and thus their energy costs. Yello receives valuable responses from customers via a feedback channel, communicates directly with them through it and can thus continuously update the app – based on the requirements of customers.

### Employees goal dimension

#### Key performance indicators

Key performance indicators	2016	2015	Change in %	Forecast 2016
Employee Commitment Index (ECI) <sup>1</sup>	59	60	-1.7	≥ 60
LTIF <sup>1</sup>	3.9	3.8	2.6	≤ previous-year figure

<sup>1</sup> Variations in the group of consolidated companies; see also the definition of key performance indicators on page 28.

**TOP Employee Commitment Index (ECI):** The fourth employee survey (MAB) was held from 19 September to 7 October 2016. The key elements of the survey were, just as in the previous MAB, the level of commitment of the employees to the Group and to their respective company and the main themes that influence this index, such as the quality of work-related activities and tasks or management behaviour and feedback. The Employee Commitment Index (ECI) from the MAB 2016 lies at a level comparable to that of the ECI for the Flashlight Survey 2015. The forecast of ≥ 60 points was narrowly missed, although the desired stabilisation of the ECI was achieved. In external comparison, employee commitment was in the middle range of the benchmark values (middle range: 59 to 65 ECI points; 80% of the benchmark companies lie between 53 and 70 ECI points).

The analysis demonstrates that, despite the high market pressure, EnBW has managed to maintain a good level of overall satisfaction and a good motivational climate. There were slight falls in relation to the themes of attractiveness of the employer, identification with EnBW and assessment of the current and future competitiveness of the company, which can be attributed to the major changes in the sector. The results of the MAB clearly prioritise the following areas for action, that were also already identified within the change process: further development and readjustment of the organisation, pushing forward the leadership programme top-down through the hierarchy, cultural change as a prerequisite for better adapting to market changes and utilising high-quality information and communication as an important accompaniment to the change process.

**TOP LTIF:** The LTIF of 3.9 in 2016 was a little higher than in the previous year (3.8) and thus deviated slightly from our forecast of  $\leq$  value from the previous year. In contrast, the average days of absence per accident fell slightly from 15.3 days to 14.5 days.

There were regrettably three fatal accidents in 2016. One concerned an employee of EnBW, while two other accidents involved employees of third-party companies who were working on behalf of the EnBW Group.

The main goals of EnBW in the area of occupational safety are to avoid accidents and work-related illness, to create a safe working environment and clearly regulate the responsibilities, roles and processes that are anchored in the Group guidelines "Occupational safety and health protection". We derive concrete measures in the area of occupational safety based on these goals.

The Group project to introduce the new EHS (Environment, Health and Safety) software in the area of occupational safety

was successfully concluded in 2016. In the next 18 months, it will be rolled out to around 10,000 employees. Important elements of the EHS are the documentation of risk assessments and hazardous substance management. The follow-up project to the "Occupational safety initiative" (InA 2) has been carried out by Netze BW. The key elements of this project were inspections by management of behavioural conduct, the introduction of a safety briefing and strengthening the role of the safety officers. In addition, the project "Working safely on the grid" (SaiN) was started and is designed to ensure that employees working on behalf of the grid operating company are trained sufficiently.

In the area of conventional and renewable energy generation, weekly inspections are being conducted by management with a focus on occupational safety. In addition, the "100 days without accidents" campaign started in 2015 is being continued. The 100 day goal was achieved a total of nine times across a number of power plants.

## Other performance indicators

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

	31/12/2016	31/12/2015	Change in %
Sales	3,244	3,300	-1.7
Grids	8,330	8,086	3.0
Renewable Energies	1,029	815	26.3
Generation and Trading	5,076	5,167	-1.8
Other	2,730	2,920	-6.5
<b>Total</b>	<b>20,409</b>	<b>20,288</b>	<b>0.6</b>
Number of full-time equivalents <sup>2</sup>	18,923	18,763	0.9

<sup>1</sup> Number of employees excluding apprentices/trainees and inactive employees.

<sup>2</sup> Converted into full-time equivalents.

As of 31 December 2016, the EnBW Group had 20,409 employees. As new appointments are only being made in strategic growth fields, the number of employees was just slightly higher than the level at the end of 2015. The growing importance of regulated business is reflected by the increase in activities in this area. The increase in the number of employees in the Grids segment is mainly attributable to this increase in activities and the purchase of two fully consolidated companies via Pražská energetika a.s. (PRE). The increase in the number of employees in the Renewable Energies segment is primarily due to the acquisition of the company Connected Wind Services A/S. The falling number of employees in Other mainly resulted from the planned departure of employees based on an earlier restructuring programme. The withdrawal from the B2B commodity business under the EnBW and Watt brands and the deconsolidation of Energiedienstleistungen Rhein-Neckar GmbH (ERN) are the main reasons for the fall in the number of employees in the Sales segment. This decrease was offset to some extent by the movement of employees from Generation and Trading segment into the Sales segment as a result of restructuring within the EnBW Group.

Employee turnover increased slightly, which was primarily due to the planned retirement of employees based on an earlier restructuring programme.

### Turnover

in %	2016	2015	Variance
Employee turnover ratio	5.2	5.0	0.2

Further performance indicators for employees can be found on our website at [www.enbw.com/weitere-kennzahlen](http://www.enbw.com/weitere-kennzahlen), such as the regional distribution or age structure of our employees.

### The main features of our HR policy

**Leadership:** The market conditions for the energy industry are changing faster than ever. Alongside expertise, leadership skills are the most important quality needed for overcoming the associated challenges. EnBW has set the goal of consistently developing its management, which has a new motto for 2016 with the triad of "Drive – Work together – Deliver". "Drive" stands for pushing forward the change process at

EnBW by conveying its deeper meaning and displaying leadership skills. “Work together” means promoting a high level of team spirit and having the will to also make others successful. “Deliver” means that results will be achieved reliably and as agreed.

In the 2016 financial year, EnBW anchored these leadership principles within the company using targeted measures to bring them to life. These measures included leadership workshops with the participation of top management and the Board of Management. Leadership was the key focus of the management forum held at the end of November 2016 and a 360 degree feedback concept has been introduced that enables managers to receive feedback from their superiors, colleagues and employees. The level of participation was 93%. The feedback provides each manager with information on how they are perceived and helps to identify areas that need to be improved and to derive suitable measures to do this. These initiatives will not be a one-off campaign and leadership will also continue to be a key focus at the company in the future.

**Safeguarding and promoting expertise:** An important goal for EnBW is to make sure it is an attractive employer in order to secure the expertise it requires and retain this expertise within the company. In 2016, EnBW was honoured by the business magazine FOCUS as one of the 1,000 top employers in Germany. In the industry rankings, EnBW achieved 23rd place – ahead of RWE (32nd place) and E.ON (48th place). The ratings are based on an extensive study in which employees and workers of all ages and all hierarchical levels were questioned on themes such as social benefits, salaries, promotion prospects and the working atmosphere. Furthermore, EnBW was also certified by the Top Employers Institute as a Top Employer Germany 2016 following a multi-stage validation phase consisting of a comprehensive catalogue of criteria and an external audit. The company was ranked here within the top quarter.

Expertise also serves to develop new business ideas for EnBW. A good example is the successful concept “1492@EnBW”. As a result of this interdisciplinary cooperation, it has already been possible to transfer a number of projects to the EnBW Innovation Campus to take them through to market maturity. This has also attracted public attention: The film “AUGENHÖHEwege”, which had its première at the beginning of March 2016, shows companies that have already brought the new working worlds of tomorrow to life today. The “1492@EnBW” initiative has made EnBW AG one of those companies.

**Diversity** at EnBW also contributes to being better able to fulfil market requirements and thus to secure the future of the company. EnBW promotes diversity and an inclusive atmosphere in order to maintain and improve productivity, performance, innovation and its attractiveness as an employer. With respect to gender, EnBW AG has obligatory targets for the proportion of women in management positions at the first two levels below the Board of Management.

#### Diversity at EnBW

in %	2016	2015	Change
Proportion of women in the overall workforce	25.4	25.4	0.0
Proportion of women in management positions	12.5	10.9	1.6
Proportion of women in management positions at EnBW AG			
First level below the Board of Management <sup>1</sup>	4.5	4.3	0.2
Second level below the Board of Management <sup>1</sup>	13.0	10.0	3.0
Total part-time employees <sup>2</sup>	8.9	8.5	0.4
of which women <sup>2</sup>	85.1	86.5	-1.4
of which men <sup>2</sup>	14.9	13.5	1.4

<sup>1</sup> The values refer to EnBW AG.

<sup>2</sup> Excluding those in semi-retirement.

For EnBW AG, the Board of Management set the target in 2015 of increasing the proportion of women at the first level (top management) from 4.2% (as of April 2015) to 7.5% and at the second level (upper management) from 8.0% (as of April 2015) to 10.6% by 31 December 2016. These targets were exceeded at the level of upper management with 13.0% by 31 December 2016. At the level of top management, there were two positions to be filled in 2016 as predicted. Both of them were characterised by the requirement for a high level of expertise in a specialist field. Female candidates were found but the decision was taken in favour of male candidates after interview. The proportion of women at the first level was 4.5% (as of 31 December 2016) and it was thus not possible to achieve the target. For the period 1 January 2017 until 31 December 2020, the Board of Management has set the target of increasing the proportion of women in top management and upper management to 20% in each case. Above and beyond the statutory requirements, the Board of Management focuses on diversity when filling management positions at the EnBW Group and also strives to give appropriate consideration to women. EnBW believes that it is both sensible and important to not only appoint women to the two management levels below the Board of Management but also to other levels of the hierarchy. Even during a period when personnel is being downsized and restructured, it will be ensured for all appointments that the final group of candidates for all management levels will, as far as possible, contain at least one suitable female candidate. Alongside other measures for external recruiting, EnBW is relying on the network Femtec.

EnBW is promoting its female management employees through, amongst other things, the following measures: the internal EnBW women's network “Frauen@EnBW”, the mentoring programme between management and young female professionals, counselling and supporting female employees who are interested in their first management position, active participation in external initiatives such as the “Diversity Charter” and the “Initiative Chefsache” network. The

theme of combining a career and private life has been consciously promoted by EnBW for a number of years. This work was once again positively acknowledged by the Hertie Foundation in 2016 with the award of the “berufundfamilie” certificate to EnBW AG. A one-day event on the theme of “Diversity & Innovation” featuring two female entrepreneurs from start-up companies was extremely popular.

An important part of the HR policy is **promoting young talent**. The core companies of EnBW (EnBW AG, Netze BW and EnBW Kernkraft) were the recipients of new recruits and fresh expertise in September 2016. 184 trainees and 35 students from the Cooperative State University (DH) started their training course or degree studies. The intake this year is focussing on technical apprenticeships and degree courses. Around 225 mainly technical training and degree places at the core companies have been advertised for recruitment in 2017.

#### Promotion of young talent

in %	2016	2015	Change
Training ratio including DH students	4.3	4.4	-0.1
Ratio of working students/ interns	4.2	4.4	-0.2

**Effective and efficient HR policy:** Given that EnBW could no longer remain economically competitive with its existing cost structures, especially in the sales business, EnBW decided to withdraw from traditional electricity and gas sales to business customers under the EnBW and Watt brands in June 2016. 375 employees were affected by this decision, for whom a reconciliation of interests and a social plan were agreed. It contains arrangements for all areas and sites, such as the possibility of concluding contracts to enter semi-retirement or other severance agreements. In accordance with the existing collective pay agreements, compulsory redundancies were excluded.

In view of the further deteriorating conditions, EnBW aims to achieve further costs savings by 2020 – above and beyond the already successfully concluded improvements in efficiency. There are once again plans to make significant savings within the administrative functions. EnBW will use very different approaches in the implementation of these savings targets: It will utilise structural effects when tasks are eliminated in the business units and push forward the improvement of processes. In addition, the company will investigate whether services provided by the functional units can be eliminated and examine the possibilities for alternative ways of working, also with external partners. Individual packages of measures are currently being developed and will be successively implemented.

#### Health management

##### Sickness ratio

in %	2016	2015	Change
Sickness ratio	4.8	4.7	0.1

The sickness ratio did not change significantly compared to the previous year and remained stable.

The welfare of employees has always been an important issue for EnBW. As part of occupational health and safety management, the company offers a variety of activities in the areas of occupational safety and health protection in the core companies and is adopting new approaches: For example, occupational medicine and health management together with the staff restaurants started the campaign “Health & Nutrition” in April 2016. Amongst other things, the campaign includes numerous interactive road shows, nutrition courses headed by doctors including cooking together with the professionals from the EnBW kitchens, “Fit weeks” held in parallel and individual medical advice based on a specially developed “Energy Pass”. The holistic activities demonstrate how every employee can sustainably enhance their health.



#### Environment goal dimension

##### Key performance indicators

##### Key performance indicators

	2016	2015	Change in %	Forecast 2016
Installed output of RE in GW and the share of the generation capacity accounted for by RE in %	3.1/23.1	3.1/23.6	0/-2.1	3.1/23
CO <sub>2</sub> intensity in g/kWh	577	606	-4.8	-

**TOP Installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE:** In the reporting year, the installed output of renewable energies remained almost stable at around 3.1 GW and was thus at the level of the forecast. It increased slightly, mainly as a result of the acquisition and construction of seven onshore wind farms with a total of 46 turbines and a total capacity of 89 MW. The installed output of the EnBW Group also increased to a total of 13.6 GW, primarily due to the commissioning of the Lausward Combined Cycle Gas Turbine (CCGT) power plant. As a result, the share of the generation capacity accounted for by renewable energies fell – as forecast – to 23.1%.

**TOP CO<sub>2</sub> intensity:** The  CO<sub>2</sub> intensity of own generation of electricity excluding nuclear power fell in comparison to the previous year by 4.8% to 577 g/kWh. The fall was due to the higher generation from renewable sources and the simultaneous reduction in electricity generation from fossil fuels in comparison to 2015. Special factors that should be taken into account for 2016 are the lower availability of the hard coal power plants and the lower  Clean Dark Spread.

Own generation of the EnBW Group fell significantly in 2016 compared to the previous year to around 52.8 TWh. This was caused by the significant reduction in own generation from hard coal and nuclear energy, while generation based on renewable energies increased. The share of own generation

#### Breakdown of the generation portfolio of the EnBW Group<sup>1</sup> (as of 31/12)

Electrical output <sup>2</sup> in MW	2016	2015
<b>Renewable Energies</b>	<b>3,140</b>	<b>3,055</b>
Run-of-river power plants	1,032	1,036
Storage/pumped storage power plants using the natural flow of water <sup>2</sup>	1,322	1,322
Wind onshore	336	247
Wind offshore	336	336
Other renewable energies	114	114
<b>Thermal power plants<sup>3</sup></b>	<b>10,442</b>	<b>9,872</b>
Brown coal	875	875
Hard coal	3,956	3,956
Gas	1,784	1,180
Other thermal power plants	349	383
Pumped storage power plants that do not use the natural flow of water <sup>2</sup>	545	545
Nuclear power plants	2,933	2,933
<b>Installed output of EnBW Group (without standby reserve)</b>	<b>13,582</b>	<b>12,927</b>
of which renewable in %	23.1	23.6
of which low CO <sub>2</sub> in % <sup>4</sup>	17.1	13.3

<sup>1</sup> The generation portfolio includes long-term procurement agreements and generation from partly owned power plants.

<sup>2</sup> Output values irrespective of marketing channel, for storage: generation capacity.

<sup>3</sup> Including pumped storage power plants that do not use the natural flow of water.

<sup>4</sup> Excluding renewable energies; only gas power plants and storage power plants that do not use the natural flow of water.

#### Other performance indicators

In addition to the key performance indicators in the area of the environment, EnBW utilises a broad range of further environmental indicators for measuring, controlling and reporting. The most important performance indicators are listed in the following table. A comprehensive presentation of the environmental performance indicators for EnBW can be found on the Internet at [www.enbw.com/umweltschutz](http://www.enbw.com/umweltschutz).

There is also information available on our wide-ranging environmental activities relating to energy efficiency, the conservation of biological diversity, and the protection of nature and species, such as our EnBW amphibian protection programme or activities to protect birds in the grids sector. In addition, further information relating to the Global Reporting Initiative (GRI G4) can be found on the Internet.

EnBW AG has an environmental management system certified according to ISO 14001. It specifies the fundamental requirements that will enable EnBW to continuously improve its

accounted for by renewable sources increased significantly, which was attributable to the increased generation in the wind sector, especially as a result of the year-round generation of our EnBW Baltic 2 offshore wind farm and the higher generation from run-of-river power plants.

#### Own generation of the EnBW Group<sup>1</sup> by primary energy source

in GWh	2016	2015
<b>Renewable Energies</b>	<b>8,257</b>	<b>7,535</b>
Run-of-river power plants <sup>2</sup>	5,284	5,080
Storage/pumped storage power plants using the natural flow of water	1,052	994
Wind onshore	413	385
Wind offshore	1,265	760
Other renewable energies	243	316
<b>Thermal power plants<sup>3</sup></b>	<b>44,538</b>	<b>48,248</b>
Brown coal	5,802	5,734
Hard coal	12,625	14,330
Gas	3,199	817
Other thermal power plants	174	285
Pumped storage power plants that do not use the natural flow of water	1,722	1,799
Nuclear power plants	21,016	25,283
<b>Own generation of the EnBW Group</b>	<b>52,795</b>	<b>55,783</b>
of which renewable in %	15.6	13.5
of which low CO <sub>2</sub> in % <sup>4</sup>	9.3	4.7

<sup>1</sup> Own electricity generation includes long-term procurement agreements and partly owned power plants.

<sup>2</sup> The figure for the previous year has been restated.

<sup>3</sup> Including pumped storage power plants that do not use the natural flow of water.

<sup>4</sup> Excluding renewable energies; only gas power plants and storage power plants that do not use the natural flow of water.

environmental protection including the necessary processes and the interdependencies between these processes. It also specifies the fundamental requirements for fulfilling legal and other binding obligations relevant to energy and the environment. In addition, the system defines the environmental targets including the associated performance indicators and measures for the achievement of the defined targets.

**Carbon footprint:** Direct CO<sub>2</sub> emissions are determined mainly by the deployment of power plants. The increase in electricity generation from renewable energies and the decrease in generation from fossil fuels led to a moderate reduction in direct CO<sub>2</sub> emissions from 16.5 to 16.2 million t CO<sub>2</sub>eq. The indirect Scope 2 CO<sub>2</sub> emissions fell slightly to 1.1 million t CO<sub>2</sub>eq. The Scope 3 CO<sub>2</sub> emissions were mainly influenced by the gas consumption of our customers. Due to the significant decrease in gas sales, the Scope 3 CO<sub>2</sub> emissions also fell considerably. Numerous EnBW activities also avoid CO<sub>2</sub> emissions: primarily that of generating electricity from renewable energy sources. The increase in generation from



renewable energy sources led to an increase in the avoided CO<sub>2</sub> emissions in 2016 compared to the previous year from 5.4 million tCO<sub>2</sub>eq. to 5.9 million tCO<sub>2</sub>eq.

**Energy consumption:** The total final energy consumption includes the consumption of final energy for the business activities of EnBW. It does not include conversion and transportation losses such as primary energy sources for electricity generation or grid losses. The total final energy consumption is mostly influenced by pump energy as well as the company's own consumption requirements and the operating consumption of the power plants. In comparison to the previous year, final energy consumption fell from 2,851 GWh to 2,784 GWh. The main reason for this was the reduction in own consumption and operating consumption of the power plants due to lower electricity generation from fossil fuels.

The proportion of renewable energies in the final energy consumption increased from 47% in 2015 to 54% in 2016. This was due to an increase in the pump energy in the pumped storage power plants operated by Vorarlberger Illwerke, which utilises green electricity. Moreover, the share of electricity generation in Germany accounted for by renewable energies also increased.

The energy consumption of our buildings per employee fell from 9,623 kWh/employee in 2015 to 9,456 kWh/employee in 2016. This decrease was the result of a diverse range of measures for increasing the energy efficiency of our buildings.

**Environmental protection expenditure:** We report environmental expenditure in line with the requirements of the statistical offices and using the guidelines published by our sector association – the BDEW. Investment in environmental protection decreased from €424 million in the previous year to €315 million in 2016. This was primarily attributable to the lower investment for environmental protection relating to the EnBW Baltic 2 offshore wind farm in 2016 compared to 2015 after it was placed into operation in September 2015.

**Electromobility at EnBW:** Since July 2016, 50 new e-Golfs from Netze BW and Stuttgart Netze have been on the road in Baden-Württemberg. EnBW is thus the largest private fleet customer for electric vehicles from Volkswagen. In order to charge the e-Golf, a number of Netze BW sites have been equipped with corresponding charging infrastructure. The charging current is sourced from renewable energies. At an estimated distance travelled of around 10,000 kilometres, each electric car saves around one tonne of CO<sub>2</sub> annually. In a research project in Stuttgart, Netze BW now aims to investigate how such a large electric fleet can best be managed and what impact it will have on the electricity grid.

#### Environmental performance indicators<sup>1</sup>

	Unit	2016	2015
<b>Carbon footprint</b>			
Direct CO <sub>2</sub> emissions (Scope 1) <sup>2</sup>	millions of t CO <sub>2</sub> eq	16.2	16.5
Indirect CO <sub>2</sub> emissions (Scope 2) <sup>3</sup>	millions of t CO <sub>2</sub> eq	1.1	1.2
Other indirect CO <sub>2</sub> emissions (Scope 3) <sup>4, 5</sup>	millions of t CO <sub>2</sub> eq	12.4	18.0
CO <sub>2</sub> emissions avoided <sup>5, 6</sup>	millions of t CO <sub>2</sub> eq	5.9	5.4
CO <sub>2</sub> intensity of business journeys and travel <sup>7</sup>	g CO <sub>2</sub> /km	180	184
<b>Energy consumption</b>			
Final energy consumption <sup>8</sup>	GWh	2,784	2,851
Proportion of renewable energies in final energy consumption	%	54	47
Energy consumption of buildings per employee <sup>9</sup>	kWh/MA	9,456	9,623
<b>Environmental protection expenditure<sup>10</sup></b>			
Investments in environmental protection	€ million	315	424
Current environmental protection expenses <sup>5</sup>	€ million	311	304

<sup>1</sup> Unless otherwise indicated, the data reflect the business entities and plants of the consolidated Group.

<sup>2</sup> Preliminary data.

<sup>3</sup> Includes greenhouse gas emissions through electricity grid losses and through electricity consumption of plants in the gas and electricity grid, water supplies and buildings.

<sup>4</sup> Includes greenhouse gas emissions through consumption of purchased electricity volumes by customers, consumption of gas by customers, fuel provision and business travel.

<sup>5</sup> The figure for the previous year has been restated.

<sup>6</sup> Includes avoided CO<sub>2</sub> emissions through the expansion of renewable energies, through energy efficiency projects with customers/partners and through the generation and sale of biogas.

<sup>7</sup> Includes all business travel and business activities (Scope 1 and Scope 3).

<sup>8</sup> Includes final energy consumption of production including pump energy, energy consumption of grid facilities (electricity, gas and water) excluding grid losses, energy consumption of buildings and vehicles.

<sup>9</sup> Calculated partially on the basis of assumptions and estimations.

<sup>10</sup> Pursuant to the German Environmental Statistics Act (UStatG) and BDEW guidelines on the recognition of investment and ongoing expenditure relating to environmental protection (April 2007).

# EnBW AG

The financial statements of EnBW AG have been prepared in accordance with the regulations in the German Commercial Code (HGB), taking into account the amendments of the German Accounting Directive Implementation Act (BilRUG), and in accordance with the regulations in the German Stock Corporation Act (AktG) and the law governing the electricity and gas industries in Germany (Energy Industry Act – EnWG). The regulations for large corporations apply.

The financial statements as audited by the KPMG AG Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, as well as the management report of EnBW AG contained in the Group management report, will be published in the German Federal Gazette (Bundesanzeiger).

For statements that are not explicitly described in the following sections, especially those relating to the strategy of the company and economic and political conditions, please refer to the information provided for the EnBW Group (p. 22 ff. and 42 ff.).

The annual net profit which indicates the company's ability to pay a dividend is an important performance indicator for EnBW AG.

The full financial statements of EnBW AG are available for download at ([www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads)).

The structure of the income statement has been changed in accordance with BilRUG. As a result, extraordinary income from the previous year has been reported under other operating income. Other values for the previous year have been left as they were before BilRUG. The figures for the previous year for the items listed below in the condensed income statement are not comparable with the reporting year. If BilRUG had been applied in the previous year, it would have resulted in the following figures for the previous year.

in € million <sup>1</sup>	2015 after application of BilRUG	2015 before applica- tion of BilRUG	2015 Change
Revenue	20,465.7	20,069.0	396.7
Other operating income	634.2	1,030.7	-396.5
Cost of materials	-19,323.2	-19,239.0	-84.2
Other operating expenses	-709.4	-793.6	84.2
Extraordinary income	0.0	0.2	-0.2

<sup>1</sup> In accordance with German commercial law.

## Results of operations of EnBW AG

### Condensed income statement of EnBW AG

in € million <sup>1</sup>	2016	2015
Revenue	16,288.5	20,069.0
Cost of materials	-15,513.0	-19,239.0
Amortisation and depreciation	-591.4	-502.3
Other operating result	131.8	-295.5
<b>Earnings before interest and taxes</b>	<b>315.9</b>	<b>32.2</b>
Financial result	-532.5	-679.8
Tax	-15.3	302.4
<b>Annual net loss</b>	<b>-231.9</b>	<b>-345.2</b>

<sup>1</sup> In accordance with German commercial law.

EnBW AG reports an annual net loss of €231.9 million. This represents an improvement of €113.3 million in comparison to the previous year and is mainly influenced by €283.7 million higher earnings from operating activities. The effect of the fall in revenue was partially compensated for by the decrease in the cost of materials. In addition, it includes the reversal of provisions relating to nuclear power of €737.3 million resulting from a re-evaluation of the rate of increase of costs for the remaining provisions relating to nuclear power held by EnBW AG. The financial result improved by €147.3 million. The tax expense in the financial year was €15.3 million, following a tax income of €302.4 million in the previous year and thus represents a negative change of €317.7 million.

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

The revenue (after the deduction of electricity and energy taxes) of €16,288.5 million primarily includes revenue from electricity sales of €8,527.5 million and from gas sales of €6,721.8 million. Electricity and gas sales comprise both sales activities in the form of the direct delivery of energy to end customers and also trading business involving deliveries to trading partners and stock exchanges.

Of the revenues from sales activities, which are almost at the same level as in the previous year, €1,929.4 million was attributable to electricity and €247.1 million to gas.

In the retail and end customer sector (B2C), electricity sales of 7.3 billion kWh were 0.4 billion kWh below the level in the previous year, mainly due to the decreasing contract portfolio. However, the price adjustment on 1 January 2016 was able to largely compensate for this negative effect on the sales side. Gas sales also fell slightly in the same period by 0.2 billion kWh to 3.8 billion kWh.

The fall in gas sales from 0.7 billion kWh to 0.2 billion kWh in the business and industrial customer sector (B2B) arises primarily as a result of the termination of an important contract, which has also led to a decrease in revenue from this business field in comparison to the previous year.

The trading business of EnBW AG continued to decline in the financial year. While the trading volume for electricity fell significantly in the financial year, the trading volume for gas rose in the same period. The continuously falling procurement and sales prices over the last few years, especially for gas, were the main reason for the further decrease in revenue of EnBW AG of €3,780.5 million and the cost of materials of €3,726.0 million in the financial year compared to the previous year.

The cost of materials includes costs for electricity procurement of €6,477.9 million and costs for gas procurement of €6,579.1 million.

As well as scheduled amortisation and depreciation, amortisation and depreciation includes impairment losses of €232.9 million, mainly on power plants and electricity procurement agreements. In comparison to the previous year, these impairments were €100.4 million higher, due mainly to changed assumptions about the profitability of the power plants.

The financial result primarily comprises revenue from profit and loss transfers of €286.3 million, income from equity investments of €234.2 million and income from other securities and loans held as financial assets of €111.9 million. This is mostly offset by interest expenses resulting from increases in non-current provisions relating to nuclear power and pensions and similar obligations due to the passage of time of €724.4 million, as well as intercompany settlement transactions as part of the centralised financial and liquidity management of €229.5 million. The decrease in interest expenses of €480.1 million in the nuclear power sector and the €425.5 million lower impairment losses on financial assets in comparison to the previous year are offset by €512.1 million lower returns on the investment fund and falling income from profit and loss transfers of €199.6 million.

Tax of €15.3 million mainly comprises current corporate income tax and trade tax. The positive tax result of €302.4 million in the previous year primarily included tax refunds from previous years and the reversal of provisions for tax audit risks. The option of recognising deferred tax assets was not exercised for the active surplus of deferred tax assets.

## Net assets of EnBW AG

### Balance sheet of EnBW AG

in € million <sup>1</sup>	31/12/2016	31/12/2015
<b>Assets</b>		
<b>Non-current assets</b>		
Intangible assets	930.7	1,116.6
Property, plant and equipment	1,315.8	1,543.9
Financial assets	20,017.6	20,803.9
	<b>22,264.1</b>	<b>23,464.4</b>
<b>Current assets</b>		
Inventories	559.0	601.2
Receivables and other assets	3,297.2	3,474.3
Securities	1,466.9	1,224.4
Cash and cash equivalents	2,884.9	2,318.3
	<b>8,208.0</b>	<b>7,618.2</b>
<b>Prepaid expenses</b>	<b>285.6</b>	<b>192.4</b>
<b>Surplus from offsetting</b>	<b>144.2</b>	<b>85.4</b>
	<b>30,901.9</b>	<b>31,360.4</b>
<b>Equity and liabilities</b>		
<b>Equity</b>		
Subscribed capital	708.1	708.1
Treasury shares	-14.7	-14.7
Issued capital	(693.4)	(693.4)
Capital reserve	776.0	776.0
Revenue reserves	1,161.5	1,161.5
Retained loss/earnings	-63.5	317.4
	<b>2,567.4</b>	<b>2,948.3</b>
<b>Extraordinary items</b>	<b>21.6</b>	<b>22.3</b>
<b>Provisions</b>	<b>13,751.0</b>	<b>14,175.2</b>
<b>Liabilities</b>	<b>14,300.0</b>	<b>13,945.6</b>
<b>Prepaid expenses</b>	<b>261.9</b>	<b>269.0</b>
	<b>30,901.9</b>	<b>31,360.4</b>

<sup>1</sup> In accordance with German commercial law.

The net assets of EnBW AG as of 31 December 2016 are significantly influenced by non-current assets (particularly financial assets), receivables and other assets, as well as by cash and cash equivalents. These are primarily offset by non-current liabilities and provisions relating to nuclear power and for pensions and similar obligations.

Financial assets primarily consist of shares in affiliated entities of €12,727.5 million, securities for the non-current assets of €4,108.6 million and loans to affiliated entities of €1,702.4 million.

Trade receivables of €1,207.6 million mainly comprise receivables for trading activities and consumption accruals for electricity and gas deliveries not yet invoiced. The trade receivables are €119.2 million lower than the value in the previous year, which is primarily due to the further decrease in trading volumes of EnBW AG.


The cash and cash equivalents of EnBW AG totalling €2,884.9 million mainly consist of positive bank balances, which are invested as fixed-term deposits totalling €2,121.6 million. More details on the composition of this item can be found under "Financial position of EnBW AG".

Provisions relating to nuclear power of €6,960.6 million are recorded for EnBW AG, which arise due to public law obligations and requirements in the operating licences. Furthermore, provisions for pensions and similar obligations of €3,951.9 million combine obligations from the company pension scheme and other company agreements made by major subsidiaries and EnBW AG. The resulting annual expenses for retirement benefits are paid by the subsidiaries concerned in each case.

The increase in the provisions for pensions and similar obligations of €242.3 million is due mainly to interest rate effects. For the provisions relating to nuclear power, there is an increase of €293.9 million in the provisions to be transferred to the disposal fund, primarily due to increases arising from the legislative implementation of the KFK recommendation. The remaining provisions relating to nuclear power held by EnBW AG have decreased by €486.0 million mainly as a result of a re-evaluation of the rate of increase of costs leading to a reduction in the rate from 3.5% to 1.4%. There were also compensatory effects from increases in the provisions due to the passage of time.

Of the liabilities totalling €14,300.0 million, €7,056.1 million have a remaining term of more than one year. Overall, there are liabilities of €9,511.7 million to affiliated entities, which primarily result from intercompany settlement transactions within the framework of the centralised financial and liquidity management, as well as from loan agreements.

The increase in liabilities of €354.4 million mainly relates to the issuing of two further hybrid bonds with a total volume of €992.6 million. This was offset to a significant extent by the repayment of a liability to the Dutch financing subsidiary EnBW International Finance B.V. of €500.0 million to repay one of the bonds issued by the subsidiary.

There are non-current liabilities of €2,956.9 million to EnBW International Finance B.V. as part of the  Debt Issuance Programme (DIP), €1,992.6 million from the issuing of three hybrid bonds and €809.1 million from loan agreements with credit institutions.


Non-current provisions relating to nuclear power and for pensions and similar obligations to the total amount of €7,188.7 million are mainly offset by shares in investment assets, which are recorded as securities for non-current assets. This mixed fund focusing on assets in the eurozone countries is mainly direct or indirect investments in fixed-interest securities and shares. After the return of share certificates from the fund assets of €723.6 million were recorded in the financial year, the carrying amount of the fund assets fell by the same amount to €3,122.4 million. Furthermore, these long-term obligations are offset by directly held fixed and variable interest securities for non-current assets, as well as by other equity investments, which had a total carrying amount on the reporting date of €1,927.4 million.

The goal is to cover these non-current pension and nuclear provisions with appropriate financial assets within an economically feasible time period. Overall, non-current assets of €22,264.1 million are offset by long-term debt of €14,244.8 million.

The liquidity of EnBW AG on the reporting date guarantees the solvency of the company for the payment of current liabilities from the operative business.

## Financial position of EnBW AG

The liquidity of EnBW AG increased from €2,318.3 million by €566.6 million to €2,884.9 million in comparison to the previous year in anticipation of planned payments in the 2017 financial year. As part of the law of reorganising responsibility for nuclear waste management made according to the recommendations of the “Commission to examine the financing of the phase-out of nuclear power” (KFK), EnBW AG will make payments of around €4.7 billion to the German government. In addition, the repayment of a hybrid bond with a volume of €1.0 billion is planned in April 2017.


The cash flows of EnBW AG arise fundamentally from both its own operating business and also balance payments in and out of the bank accounts of EnBW AG made by its subsidiaries as part of the intercompany  cash pooling system within the framework of the central financing and liquidity management.

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

The change in financial assets includes the return of share certificates from the fund assets of €723.6 million.

Significant additions to the shares in affiliated entities led to a cash outflow of €961.4 million. This was offset by a cash inflow of €513.6 million due to the sale of shares in a shareholding.

In the financial year, two new hybrid bonds with a total volume of €992.6 million were issued, the full amount of which increases the liquidity.

A bond issued by EnBW International Finance B.V. as part of the  DIP with a total volume of €500.0 million was repaid on time by the company. The associated liability to EnBW International Finance B.V. in this context decreased accordingly.

As dividends, a total of €149.0 million was distributed to the shareholders of EnBW AG.

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

In our judgement, the development of the results of operations, financial position and net assets of EnBW AG as of 31 December 2016 is satisfactory after taking into account the effects described below that are not relevant to the ongoing management of the company. The annual net loss for 2016 stands at €231.9 million and is significantly influenced by these effects, which arose both at EnBW AG itself and also at its subsidiaries which had an impact on EnBW AG due to profit and loss transfer agreements. The main effects not relevant to the ongoing management of the company were the expenses relating to the law of reorganising responsibility for nuclear waste management of €383.2 million (€295.0 million of which

is disclosed under cost of materials of EnBW AG) and the higher interest expenses for pension provisions and provisions relating to nuclear power totalling €494.2 million (€437.3 million of which is disclosed under interest expense of EnBW AG). Mainly as a result of the amended assessment of the profitability of the power plants, there were impairment losses on property, plant and equipment and financial assets of EnBW AG totalling €268.8 million. In addition, the restructuring expenses totalling €138.1 million (€15.8 million of which is disclosed under financial result of EnBW AG) and impending losses for pending transactions to the amount of €64.0 million (disclosed under the cost of materials of EnBW AG) had a negative effect. This was offset by revenue from the reversals of provisions relating to nuclear power of €1,006.0 million (€737.3 million of which is disclosed under other operating income of EnBW AG), which were mainly attributable to a re-evaluation of the rate of increase of costs for the remaining provisions relating to nuclear power held by EnBW, and to other reversals of provisions at EnBW AG totalling €181.9 million. There is thus an annual net loss for 2016 adjusted for effects not relevant to the ongoing management of the company of around €70 million, which is around €20 million below the expected adjusted earnings.

In accordance with the amended regulations in section 253 HGB, a 10-year average discount rate is to be applied to provisions for pension obligations. The difference between the valuation of the provisions for pension obligations with a 7-year and a 10-year average discount rate is ineligible for distribution as dividends and stands at €571.6 million as of 31 December 2016. Overall, the amount ineligible for distribution as dividends according to section 253 (6) and section 268 (8) HGB as of 31 December 2016 is €670.8 million.

Based on the annual net loss of €231.9 million and taking into account the profit carried forward of €168.4 million, there is a retained loss of €63.5 million.

We anticipate an annual net profit of around €250 million in 2017. The net result for the year will be negatively influenced by higher interest expenses for non-current provisions. As a result of the low-interest phase, the average interest rate will fall further in the future. In 2017, we expect a resulting negative impact on earnings of around €450 million to €550 million. These negative impacts on earnings will be offset by income not relevant to the ongoing management of the company of around €550 million. Adjusted for these effects, the annual net profit will be between €150 million and €250 million. The amount from the valuation of the provisions for pension obligations that is ineligible for distribution as dividends will stand at around €718.5 million by 31 December 2017.

In 2018 and 2019, we expect further negative impacts on earnings due to the falling average interest rate.

## Opportunities and risks

As the business performance, economic situation and opportunities and risks relating to the future development of EnBW AG do not deviate from the business performance, economic situation and opportunities and risks relating to the future development of the EnBW Group, the management report of EnBW AG is combined with that of the EnBW Group (p. 80 ff.).

## Comments on reporting

The consolidated financial statements of EnBW AG are prepared in accordance with section 315a (1) HGB using the International Financial Reporting Standards (IFRS) set by the International Accounting Standards Board (IASB), the adoption of which is mandatory in the EU as of the reporting date.


As a vertically integrated energy company in the sense of EnWG, EnBW AG engages in other activities within the electricity sector, other activities within the gas sector and other activities outside of the electricity and gas sectors in accordance with section 6b (3) sentence 3 and sentence 4 EnWG.

## EnBW share and dividend policy



As a result of the small proportion of EnBW shares in free float ([www.enbw.com/shareholder-structure](http://www.enbw.com/shareholder-structure)), events on the financial markets and the development of the DAX generally have no influence on the development of the EnBW share price. The energy policy conditions remain challenging for German energy supply companies. Accordingly, the price of EnBW shares was €20.58 at the start of 2016, falling by the end of the year to €19.70 ([www.enbw.com/stock-chart](http://www.enbw.com/stock-chart)).

The trust placed in EnBW by capital market participants is based on the value generated by the company. Against this background, EnBW pursues the goal of disclosing a positive retained cash flow in each financial year and refraining from building up any additional net financial liabilities. The size of the dividend is based on the earnings performance of the company and the internal financing capability. Based on the annual net loss of EnBW AG of €231.9 million and taking into account the profit carried forward of €168.4 million, there is a retained loss of €63.5 million for the financial year and thus no dividends will be paid for the 2016 financial year. We anticipate an improvement in the earnings performance and economic situation in the next few years. Therefore, we will strive to distribute an adequate dividend.






# Overall assessment of the economic situation of the Group


The energy sector has been undergoing a period of profound change for a number of years. In Germany and the surrounding European countries, the Energiewende has fundamentally changed the political and regulatory conditions. The climate conferences in Paris and Marrakesh have set clear goals for global decarbonisation. Renewable energies are making significant advances and the continued low prices and  spreads on the wholesale markets for electricity are keeping the pressure on conventional power plants at a high level. At the same time, market and competitive structures are changing, while new technological developments – namely digitalisation – are revolutionising the energy industry. The energy landscape is becoming more decentralised and sustainable, as well as becoming increasingly interconnected with other economic sectors. As a consequence, energy supply companies require new business models and the revitalisation of their corporate cultures.

Through the EnBW 2020 strategy, our company already aligned itself in the middle of 2013 to tackle these challenges and above all to play an active role in shaping the Energiewende. At the half way stage of the 2020 strategy, EnBW is well on track to achieving about the same level of earnings in 2020 as in 2012 – with a restructuring of the business portfolio – and thus to safeguarding the future viability of the company.

The operating business of the EnBW Group developed as expected in 2016 and as forecast at the start of the year. The  adjusted EBITDA for the EnBW Group fell in 2016 compared to the previous year by 8.1%. The forecasts at the segment level – which were in part adjusted during the year – were also met. The Grids and Renewable Energies segments now account for around two thirds of the operating result. The growing importance of regulated business provides our business portfolio with an increasingly advantageous risk profile. However, a series of effects not relevant to the ongoing management of the company had an impact on the overall satisfactory performance of the operating business. Alongside the effects described above, the impact of the legislative package of reorganising responsibility for nuclear waste management had the most notable effect on  EBITDA. In addition, allocations to provisions for onerous contracts for long-term electricity procurement agreements were also necessary in 2016. There were also restructuring expenses, primarily related to EnBW withdrawing from the sales business to large customers. Furthermore, the legislative package of reorganising responsibility for nuclear waste management also had an impact on the impairment losses and the high negative financial result. In total, there was a Group net loss attributable

to EnBW AG shareholders for the 2016 financial year of €1,797.2 million, compared with a net profit of €158.2 million in the previous year (previous year restated). Earnings per share amounted to €-6.64 in 2016 compared to €0.58 in the previous year (previous year restated).

The financial position of the company remains sound. The solvency of the EnBW Group was ensured at all times throughout the 2016 financial year thanks to the company's available liquidity and the external sources available for financing. As measured with the new key performance indicator  internal financing capability, EnBW aims to limit cash effective  net investment to the level of the  retained cash flow. This will ensure the company retains its high level of financial discipline. The temporary fall in the internal financing capability in 2016 was primarily due to the strategically important acquisition of the shares in VNG (planned full consolidation in 2017) as part of the restructuring of shareholdings. The decline in  ROCE in the 2016 financial year was mainly due to the lower  adjusted EBIT including the adjusted investment result.

As part of the implementation of the EnBW 2020 strategy, EnBW utilises a holistic goal and performance management system across the five dimensions of finance, strategy, customers and society, employees and environment. It defines clear and measurable goals for the year 2020. As part of the continuous further development of the goal and performance management system in 2016, the key performance indicator Brand Attractiveness Index in the customers and society goal dimension was extended to create a Reputation Index and the key performance indicators in the environment goal dimension were supplemented with the key performance indicator  CO<sub>2</sub> intensity – both these key performance indicators improved in 2016. Customer satisfaction, SAIDI, employee commitment, LTIF and installed output remained almost stable in 2016 compared to the previous year, which we classify as a success in view of the difficult underlying conditions.

In the estimation of the Board of Management, the operating business of the EnBW Group developed satisfactorily in 2016. EnBW welcomes the introduction of clearer and more binding legal regulations with respect to the responsibilities for the dismantling, disposal and final storage of nuclear power plants. However, this has resulted in massive extraordinary effects on our 2016 financial statements. We will continue to rigorously implement our EnBW 2020 strategy and we assume from our current perspective that the goals being pursued through it will be achieved with a high degree of probability.

# Forecast

In our forecast we take a look, as far as possible, at the expected future growth and development of EnBW in the years 2017 to 2019.

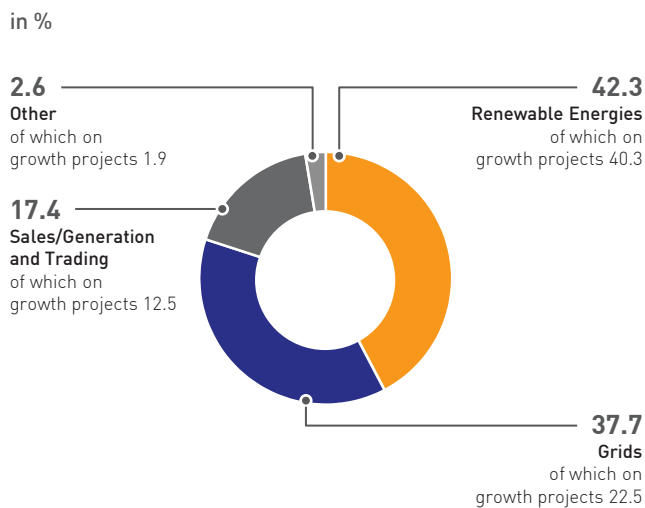
The expected economic, political and regulatory conditions are presented in the chapter “General conditions” (p. 44 ff.). Potential factors influencing the forecast are described in detail in the “Report on opportunities and risks” (p. 80 ff.).

## Expected trends in financial and strategic performance indicators

### Implementation of the strategy for a three-year period

In order to continue to play an active role in structuring the Energiewende, **gross investment** of €5.2 billion is planned for the 2017 to 2019 period. This represents on average €1.7 billion per year. €1.2 billion (23%) of this investment will be on existing projects and €4.0 billion (77%) on growth projects. Around 80% of the gross investment is earmarked for regulated business.

#### Total investments 2017–2019



Around 38% of the investment will flow into the Grids segment, of which 23% will relate to growth projects. In order to make the transport of renewable energies from the north to the south of Germany possible, investment will be made in the transmission grid to realise two corridors that are part of the **Network Development Plan** in which our subsidiary

TransnetBW is involved. In the planning period, this relates to the ULTRANET project in particular. In addition, extensive investment in the expansion and upgrading of the existing grids is planned.

Approximately 42% of the total investment will be attributable to the Renewable Energies segment – almost exclusively for growth investment. This includes funds for the realisation of the offshore wind farms EnBW Hohe See and Albatros with a total output of 609 MW, which should be placed into operation in 2019. In addition, funds have been allocated for the erection of onshore wind farms from our comprehensive project pipeline (p. 79).

Around 17% of the total investment will be attributable to the Sales segment and the Generation and Trading segment. In contrast to the traditional business of energy supply companies that focuses intensively on centralised energy production in plants, less investment is required in sales to develop EnBW into a supplier of decentralised solutions. A substantial proportion of this investment is earmarked for the universal introduction of smart meters. In the Generation and Trading segment, the most important projects in the planning period include the modernisation of the combined heat and power plant in Stuttgart-Gaisburg to guarantee the supply of district heating for the greater Stuttgart area.

This investment programme reflects our strategy for massively expanding renewable energies and ensuring security of supply in the regulated areas of the transmission and distribution grids.

In order to finance the overall volume of investment totalling around €5 billion, **divestitures** amounting to €1.3 billion are planned in the years 2017 to 2019. This includes divestitures in the onshore sector, which build on our already realised participation models. The remaining divestitures will involve the sale of property, the receipt of construction cost subsidies and the disposal of subsidiaries.

Following divestitures of €3.5 billion realised by the end of 2016 and through the planned divestitures totalling €1.3 billion, it is expected that 94% of the €5.1 billion divestitures planned by 2020 will have been achieved by 2019 (p. 24).

The sum of the gross investment and the divestitures gives the **net investment**, which is €3.9 billion or €1.3 billion on average per year. The net investment will be fully financed from the company's own funds (p. 78).



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

Development in 2017 (adjusted EBITDA and the share of adjusted EBITDA accounted for by the segments) compared to the previous year

	Earnings performance (adjusted EBITDA) compared to the previous year		Development of the share of adjusted EBITDA for the EnBW Group accounted for by the segments	
	2017	2016	2017	2016
Sales	+15% to +25%	€249.7 million	10% to 20%	12.9%
Grids	-5% to +5%	€1,004.1 million	45% to 55%	51.8%
Renewable Energies	+5% to +15%	€295.3 million	15% to 20%	15.2%
Generation and Trading	-10% to -20%	€337.2 million	10% to 20%	17.4%
Other/Consolidation	-	€52.6 million		2.7%
<b>Adjusted EBITDA, Group</b>	<b>0% to +5%</b>	<b>€1,938.9 million</b>		<b>100.0%</b>

The earnings from VNG-Verbundnetz Gas Aktiengesellschaft (VNG) are included for the first time in the forecast for adjusted EBITDA in 2017. However, the actual level of this earnings contribution depends on the timing of the first-time consolidation. As the planned first-time consolidation will take place during the year, it is not expected to 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 will contribute to the improvement in earnings. The planned first-time consolidation of VNG during the year will only result 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 will be positively influenced by the planned first-time consolidation of VNG during the year. In contrast, the slightly lower earnings from the use of the grids in comparison to the previous year will lead to a deterioration. We expect a stable or a slight decrease in the share of the adjusted EBITDA for the Group accounted for by this segment.

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 margins achieved here are lower than those in 2016. This negative effect 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. 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 **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. As those months where VNG achieves high earnings due to weather conditions will not flow into the result for this segment, we anticipate a negative contribution to earnings. 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 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.

Due to the full year consolidation of VNG, we anticipate a positive growth in the adjusted EBITDA for the Group in 2018. However, falling wholesale market prices will continue to have a negative impact. We expect – based on the status as of today – a growth in earnings in the range of between +5% and +10% compared to 2017.

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 that cannot be planned for, such as allocations to or reversals of provisions for onerous contracts. We currently anticipate an EBITDA in 2017 that will be higher than the adjusted EBITDA by an amount in the low to mid three-digit million euro range. This is primarily due to income from planned sales.

The **net result for the year** in 2017 is expected to increase significantly in comparison to the previous year and – based on the status as of today – lie in the positive three-digit million euro range. Reasons for this are the elimination of negative effects not relevant to the ongoing management of the company, lower interest expenses accrued from the nuclear provisions and a higher EBITDA. 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 that cannot be planned for, such as reversals of impairment losses and impairment losses, as well as interest rate changes.

### TOP Internal financing capability

#### Key performance indicator

	2017	2016
Internal financing capability in %	≥ 100	72.1

Based on an adjusted EBITDA of around €2 billion, we anticipate **€** retained cash flow of around €1.3 billion for 2017. We expect that we will be able to finance our **€** net investment of around €1.3 billion per year from our own funds. Therefore, we anticipate an **€** internal financing capability of ≥ 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

#### Key performance indicator

	2017	2016
ROCE in %	6.3 – 7.2	7.8

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. Alongside growth investment, this increase is due in particular to the planned full consolidation of VNG. In comparison to the previous year, this will result in a lower ROCE, 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 falling earnings. In general, investments lead at first to a fall in ROCE due to their low initial contribution to earnings.

## Expected trends in non-financial performance indicators

### Expected trends in the customers and society goal dimension

#### Key performance indicators

	2017	2016
Reputation Index	51.4	50.0
Customer Satisfaction Index EnBW/Yello	128 – 138/ 145 – 155	132/150
SAIDI (Strom) in min/year	15	16

**TOP Reputation Index:** The Reputation Index should improve continuously over the coming years. We anticipate an increase in the Reputation Index to 51.4 index points for the 2017 reporting year. The results from market research into the image campaign launched in 2016 already show it has had a positive impact on the perception of the EnBW brand. We anticipate that this positive perception of the EnBW brand will also have a positive influence on the reputation of EnBW over the course of time. In addition, EnBW is establishing a systematic reputation management system in 2017 that will ensure that reputation is taken into account in all relevant business decisions.

**TOP Customer Satisfaction Index:** The satisfaction of the customers of EnBW reached almost the same level in 2016 as in the previous year. EnBW will continue to offer innovative and sustainable energy solutions in 2017 and thus establish itself even more strongly as a partner for customers. The EnBW image campaign started in 2016 will continue in the current year and be accompanied by other sales measures to increase customer satisfaction and customer loyalty. The aim is – despite the difficult market conditions – for EnBW to maintain customer satisfaction at the level targeted in the forecast. However, exogenous factors could negatively impact customer satisfaction in the future, such as discussions about the future of coal-fired power generation, the development of state levies or delays to the expansion of the grids. The satisfaction of the customers of Yello reached a top level in 2016. The aim is to maintain this good result in 2017 and subsequent years by repositioning the brand, including the new communication motto “More than you think” and the corresponding development and expansion of the product portfolio.

**TOP SAIDI:** EnBW has always ensured a highly reliable supply throughout its grid area and for its customers. The corresponding key performance indicator SAIDI, which states the average duration of supply interruptions per connected customer per year, stood at 16 minutes in 2016. We are striving to achieve a value of 15 minutes in the 2017 financial year and subsequent years.

### Expected trends in the employees dimension

#### Key performance indicators

	2017	2016
Employee Commitment Index (ECI) <sup>1</sup>	≥ 60	59
LTIF <sup>1</sup>	≤ 3.7 <sup>2</sup>	3.9

<sup>1</sup> Variations in the group of consolidated companies; see also the definition of key performance indicators on page 28.

<sup>2</sup> Three-year target for 2017, 2018 and 2019.

**TOP Employee Commitment Index:** The Employee Commitment Index (ECI) stabilised in 2016 as desired. The market pressure on the energy sector remains high so that the management and employees of EnBW continue to face major challenges and must implement a cultural change in order to be able to adapt more quickly and efficiently to market changes. Therefore, EnBW has set itself the target for 2017 of maintaining the ECI at a level of 60 points. In subsequent years, we will endeavour to achieve a moderate increase in the ECI.

**TOP LTIF:** Our goal is to continuously improve occupational safety within the company for both our own and third-party employees. Therefore, EnBW has implemented numerous accident prevention measures. In 2017, we are striving to once again reduce the value for this key performance indicator for occupational safety below the figure for the previous year. For this, the focus is being placed on the roll-out of the EHS (Environment, Health and Safety) software and conducting a Group-wide survey on the theme of “Risk assessment – psychological stress”. EnBW intends to lower the LTIF in small steps in the long term.

**Further significant developments:** In view of the difficult conditions, it will be important over the coming years to realise further improvements in efficiency across the entire company. There will be a moderate increase in the number of employees in the Renewable Energies and Grids segments as part of the restructuring of our business portfolio. This will be offset by further measures to optimise processes across the entire company with a focus on the functional units and the area of thermal power plants.

### Expected trends in the environment dimension

#### Key performance indicators

	2017	2016
Installed output of RE in GW and the share of generation capacity accounted for by RE in %	3.3 – 3.4/ 25 – 26	3.1/23.1
CO <sub>2</sub> intensity in g/kWh	-5% – +5%	577

**TOP Installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE:** The installed output from renewable energies is expected to increase in 2017 as a result of the new construction of numerous smaller onshore wind farms and photovoltaic power plants by around 300 MW. These new power plants and the decision to decommission RDK 4 S means that the share of the generation capacity of the Group accounted for by renewable energies will increase appreciably. In subsequent years, we also expect an

increase in the installed output of renewable energies and an increase in the share of the generation capacity accounted for by RE.

**TOP CO<sub>2</sub> intensity:** The relatively low wind yields in 2016 and the planned expansion of the generation capacity from renewable sources in 2017 tend to indicate there will be a positive development in this area, meaning a further fall in our new key performance indicator **E** CO<sub>2</sub> intensity in 2017. It remains to be seen to what extent 2016 was a representative year with regards to CO<sub>2</sub> emissions. Other factors are the availability of the hard coal power plants operated by EnBW and the further development of the **E** Clean Dark Spread in 2017. Due to the high utilisation of fossil fuel-fired power plants during the cold period in the early part of the year and the temporary shutdown of the Philippsburg 2 nuclear power plant at the start of 2017, the possibility of a slight increase in CO<sub>2</sub> intensity in 2017 cannot be excluded. Other uncertainties relating to the forecast are the result of the essentially market-driven deployment of the power plants. The resulting forecast for 2017 is thus between -5% and +5%. In the coming years, we expect a gradual overall reduction in CO<sub>2</sub> intensity even though the value may fluctuate at times.

### Overall assessment of anticipated developments by the management

We expect an increase in **E** adjusted EBITDA for the Group in 2017 compared to 2016. The shift in earnings between the segments laid out in our strategy will continue in 2017. We are well on the way to achieving our 2020 targets. We are adhering to the implementation of our divestiture programme and are able to continue to make sufficient investment funds available to enable us to play an active role in structuring the Energiewende. This also supports our aim to maintain a solid **E** investment-grade rating. With respect to our non-financial key performance indicators, we expect a stable to positive development in 2017 towards our 2020 targets.

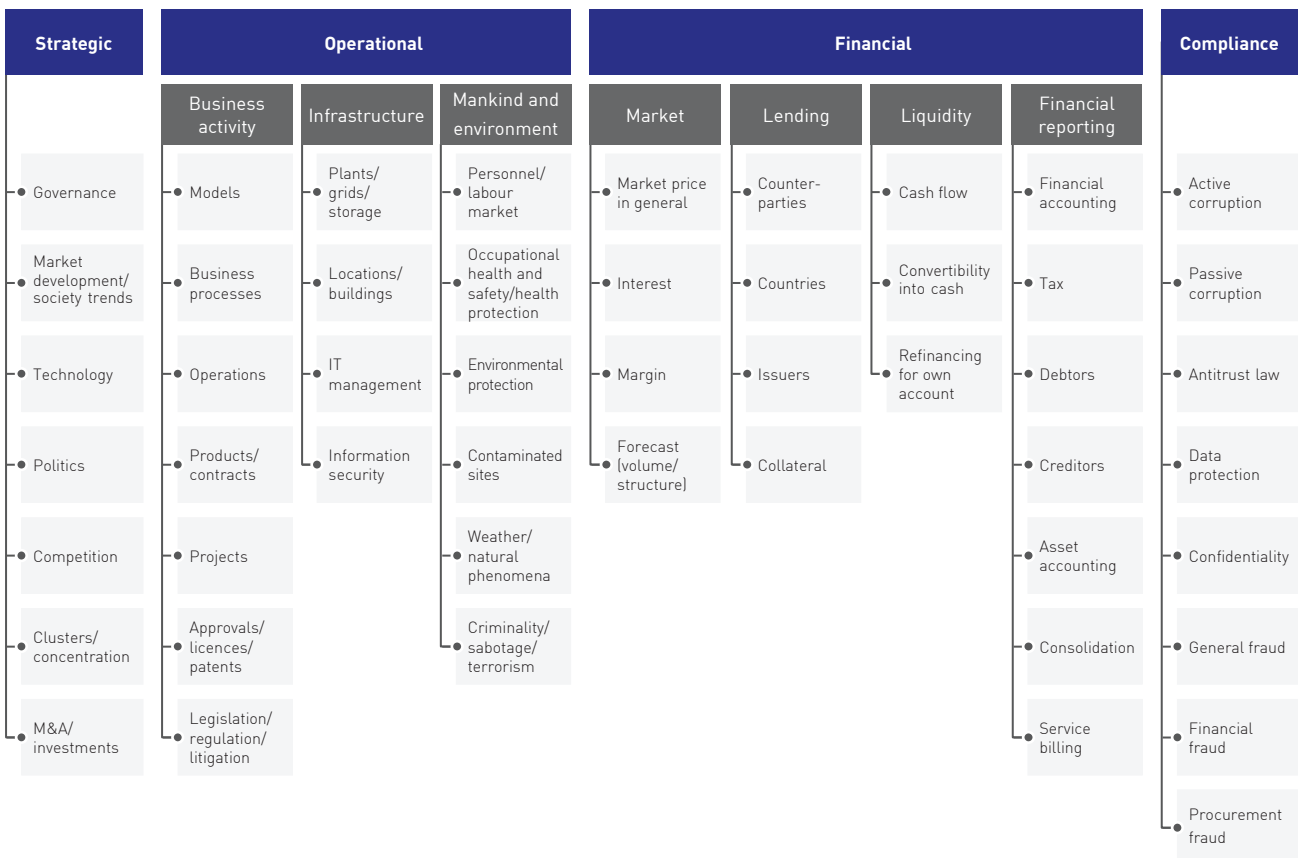
# Report on opportunities and risks

## Principles of the integrated opportunity and risk management system

The integrated opportunity and risk management system (iRM) is based on the internationally established COSO II framework standard for risk management systems that span entire companies. The iRM system aims, through a holistic and integrated approach, to effectively and efficiently identify, evaluate and manage opportunities and risks (including

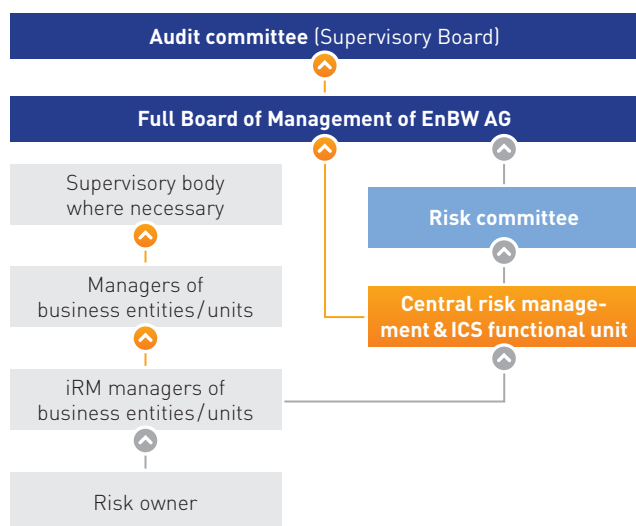
monitoring) and report on the opportunity/risk position, as well as to ensure the appropriateness and functionality of related processes. Risk management involves measures for avoiding, reducing or transferring risk, as well as measures for managing or tolerating risk in the financial statements. EnBW defines an opportunity/risk as an event that might cause a potential over-attainment/non-attainment of strategic, operational, financial and compliance goals in the future. In order to identify and categorise opportunities and risks, the opportunity and risk map that is anchored throughout the Group is utilised.

### Opportunity and risk map



## Structure and processes of the integrated opportunity and risk management system

Structure and processes of the iRM system



➤ Formal reporting 
 ➤ Coordination of Group reporting

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

### iRM relevance filter

Relevance class	Effects on the strategic, operational, financial or compliance goals
0	None
<b>Area/departmental level</b>	
1	Very low
2	Low
<b>Business entity/unit level</b>	
3	Medium
4	High
<b>Group reporting level</b>	
5	Very high
6	Significantly

For the purposes of evaluation, all opportunities and risks are firstly assessed with the help of the iRM relevance filter before and after consideration has been taken of both implemented and envisaged management instruments. The relevance class is determined in each case based on quantitative and

qualitative criteria for each of the four dimensions: strategic, operational, financial and compliance.

In this process, the probability of occurrence is firstly defined based on six levels.

### iRM levels for the probability of occurrence

Description	Level for the probability of occurrence
Very low	0–10%
Low	10–30%
Medium	30–50%
High	50–70%
Very high	70–90%
Almost certain	90–100%

The opportunities and risks allocated to relevance class 5 “Very high” or above are generally included in the Group report on opportunities and risks. Insofar as a financial evaluation is possible, this corresponds to a value of €50 million within the medium-term planning period. Long-term opportunities and risks that are of particular importance are then added. The reports are submitted on a quarterly basis in standardised form. In the case of any significant changes, a special report is immediately issued.

Those opportunities or risks relevant to the Group report on opportunities and risks are generally evaluated in relation to the current planning period using quantitative methods (e.g. scenario techniques and distribution functions) for the purpose of stochastic modelling. Any possible effects on the ■ adjusted EBITDA, the ■ adjusted EBIT and the ■ capital employed (with any associated impact on the ■ ROCE) and the ■ retained cash flow or ■ net investment (with any associated impact on the ■ internal financing capability) are considered. Alongside these financial effects, opportunities and risks can also have an impact on the other key performance indicators (■ p.29 ff.).

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

Alongside the top opportunities/risks, there are a wide variety of other opportunities and risks facing the Group that are allocated to relevant risk categories on the opportunity and risk map (■ p. 80) and evaluated with the aid of the iRM relevance filter. These items could also have an effect on the key performance indicators in the financial, strategy, customers and society, employees and environment goal dimensions. As a result of their relatively minor level of relevance in comparison to the top opportunities/risks, they are not, however, listed in the external report for reasons of clarity.

The process of harmonising the iRM and the annual Compliance Risk Assessment (CRA) was pushed forward in 2016. In particular, synergies were achieved in the joint assessment of risks, as well as in reporting. Significant results from the CRA will be presented in the report on opportunities and risks from this financial year onwards (p. 85).

The iRM is regularly checked by the Group Auditing Department and a report presented to the Supervisory Board.

### Non-financial reporting (CSR Directive)

As part of future non-financial reporting, EnBW expects from the 2017 financial year to report in greater detail on the opportunities and risks relating to non-financial aspects. The processes within the iRM are currently being revised for this purpose.

## Structure and processes of the accounting-related internal control system

### Principles

Alongside the ICS that is anchored within the company's business processes via the iRM, an accounting-related ICS was established at EnBW that is designed to ensure proper and reliable financial reporting. In order to guarantee that this ICS is effective, the appropriateness and functionality of the Group-wide control mechanisms are tested regularly at an individual business entity and Group level. If any existing weaknesses are identified in the control system and considered relevant to the financial statements, they are promptly remedied. This accounting-related ICS methodology is based on the COSO II standard – an internationally accepted framework for internal control systems.

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

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

### Structure

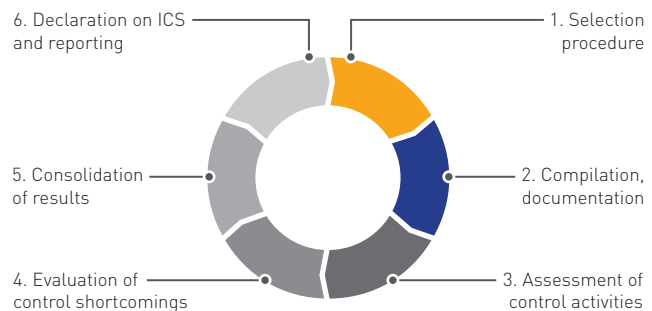
The accounting-related ICS at EnBW is organised at both a centralised and decentralised level. All important business entities, business units and functional units have an ICS officer. These officers monitor the effectiveness of the ICS and evaluate any control weaknesses that may arise. A report on the effectiveness of the ICS is prepared on an annual basis, which is approved by the management of the business entity or unit. The ICS officer at Group level assists the business entities/units with the implementation of standardised procedures and also consolidates collected data.

### Processes

Standardised procedures ensure completeness and consistency in the preparation of the financial statements and financial reporting. The accounting-related ICS defines controls designed to ensure compliance with the accounting policies used by the Group, as well as procedures and deadlines for the individual accounting and consolidation processes. An annual control cycle monitors whether the documentation is up to date and also checks the appropriateness and functionality of the controls. In addition, it identifies and evaluates any control weaknesses that may arise.

A risk-based selection process defines relevant business entities/units, significant items in the financial statements and processes including their associated control measures. This selection process is based on quantitative and qualitative risk indicators.

#### Phases of accounting-related ICS



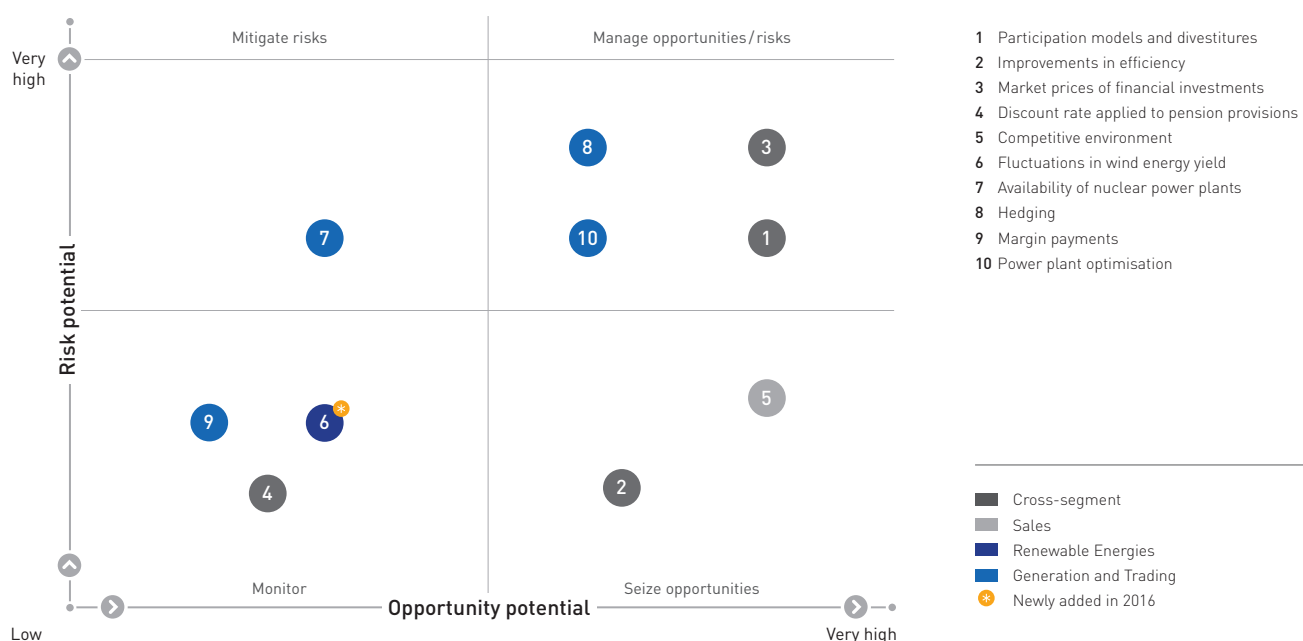
The defined processes and controls are recorded in a central documentation system. The effectiveness of the various control activities is then assessed. This includes analysing whether the control activities are generally appropriate for the purpose of reducing the risk of erroneous financial reporting. In addition, regular monitoring of the implementation of the controls and their documentation is carried out to review the functionality of the defined controls. If any control weaknesses are identified, their effect on the financial statements is evaluated. The results are reported at both a business entity or unit level and at a Group level. Furthermore, the Group Auditing Department performs ICS reviews as part of its risk-oriented audit planning.

## Opportunity and risk position

The following diagram illustrates how the opportunity and risk position is reported to the Board of Management and the audit committee of the Supervisory Board. The arrangement of the top opportunities/risks in the quadrants represents whether EnBW employs control measures to exploit the opportunities or to counteract the risks. On the basis of the individual evaluation of the top opportunities/risks and a

subsequent quantitative aggregation of data, the diagram illustrates how these themes correlate with each other and what effects they could have – based on the relative level of opportunity/risk at a high probability of occurrence – on the **adjusted EBITDA**, **retained cash flow**, **net investment**, **adjusted EBIT** and **capital employed**. The risks are depicted after the risk limitation measures have been implemented.

Top opportunities / risks as of 31/12/2016



The following important opportunities and risks emerged in 2016:

- > **Fluctuations in wind energy yield:** The amount of energy generated by wind power plants is subject to fluctuations in the availability of wind. In order to take these fluctuations into account, wind reports are created. Changes in wind conditions could result in opportunities and risks for EnBW.
- > **Shutdown and early inspection of KKP 2:** During routine checks on Block 2 of the Philippsburg nuclear power plant (KKP 2), damage to ventilation system brackets in the area of the emergency core cooling systems was identified.
- > **Climate protection:** EnBW identifies opportunities and risks in the area of climate protection using a systematic, Group-wide measurement and evaluation system. The risks include, amongst other things, extreme weather conditions that could have an impact on the operative business and thus on the security of supply (electricity grids). However, there are also opportunities such as changing customer requirements and an increasing demand for climate-friendly products such as e-mobility.

Further details about the top opportunities/risks presented in the diagram and their potential effects on the relevant performance indicators are listed in the following section.

### Cross-segment opportunities and risks

#### Strategic opportunities and risks

**1 Participation models and divestitures (in previous year: Divestitures):** Based on past experience, our participation and divestiture portfolio is subject to uncertainties with respect to the realisation of reduced or surplus revenue, as well as to time delays for the completion of these transactions. The majority of the planned divestitures have now been implemented. Opportunities and risks exist for the years 2017 and 2018 that could have an impact on net investment and thus on the key performance indicator **internal financing capability**, insofar as the actual income from the participation models and divestitures does not meet our medium-term planning goals. We currently identify a balanced level of opportunity and risk in this area.

#### Operative opportunities and risks

**2 Improvements in efficiency:** The overall goal for savings through the programme of measures for efficient structures and processes was increased to €650 million by 2020, against the background of continuously lower market prices and the associated drop in earnings. Savings of €317 million had so far been achieved by the end of 2016. Due to the rapid implementation of the measures, this presents an opportunity for 2017 and 2018 in the low double-digit million euro range

with a positive effect on the key performance indicator adjusted EBITDA and thus also on the key performance indicator internal financing capability. For the 2019 financial year, there is both an opportunity and a risk in the low double-digit million euro range that the associated organisational and restructuring projects will either exceed or not be able to fully realise the planned efficiencies for adjusted EBITDA. Once the conditions for implementing the planned improvement in earnings have been established, this risk will be reduced accordingly.

**EU sanctions against Russia:** In the Generation and Trading segment, these sanctions could have a negative impact on existing business relations with Russian companies. In the Grids segment, it is not possible to completely exclude the risk that EnBW will no longer be able to supply gas due to an extended interruption in the delivery of gas from Russia. In the Sales segment, there is an increasing risk of default by German companies that are active in the Russian Federation due to a possible drop in sales and also the possible risk of shortfalls in electricity and gas deliveries as a result of corresponding cutbacks in production. In terms of the financial assets of EnBW, the broad level of diversification means that there is currently a very low probability at most of an increase in the risk of default on isolated bonds from German, Austrian and Russian issuers that form part of the overall portfolio of EnBW.

**Legal risks:** With respect to our contractual relationships with customers, business partners and employees, EnBW is currently engaged in some legal proceedings and other legal disputes. To a lesser extent, we are also conducting legal proceedings relating to topics in the area of corporate law. Adequate accounting provisions have been made for these risks in coordination with the specialist departments concerned and the legal department. As a consequence, there is also an opportunity of positive effects on earnings if the provisions made for these legal risks can be released once again. A risk to the amount of €16.0 million, which is reported under contingent liabilities and other financial obligations, exists for claims legally made against EnBW where it is predicted that the counterparty has little chance of winning the case. In addition, various court cases, official investigations or proceedings and other claims are pending against EnBW. The chances of these actions being successful is, however, considered to have a very low probability and thus they are not reported under contingent liabilities and other financial obligations.



**Personnel risks:** There is a risk that the EnBW will not have a sufficient number of employees at its disposal with the necessary qualifications or skills. When recruiting in the relevant target groups, for example, this risk is primarily due to competition from other companies on the labour market. In addition, this risk is exacerbated by demographic developments and the stricter conditions facing the energy industry. On the basis of ongoing analyses, we receive information on areas in particular need of action. We believe that regular anonymous employee surveys, from which we derive the Employee Commitment Index (ECI) as a key

performance indicator, are an important tool for seizing opportunities early in the areas of employee development and employee loyalty (p. 64 ff.).




#### Health, Safety, Security, Environment – HSSE:

- **Health and occupational safety:** In order to appropriately mitigate risks in the areas of occupational safety and health protection and to protect employees optimally against any adverse consequences, the EnBW Group utilises a comprehensive set of organisational and procedural measures such as workplace-specific risk analyses. EnBW also views these measures as an opportunity to preserve the capacity of its employees to do their work and to maintain the position of EnBW as an attractive employer. Occupational safety is measured in the form of the key performance indicator LTIF within the employees goal dimension (p. 65 ff.).
- **Safety:** Those risks caused by exogenous and endogenous factors are counteracted by EnBW using an emergency and crisis management system that has been implemented throughout the Group and includes comprehensive organisational and procedural measures. Despite this functioning management system, it is not possible to completely prevent crisis and emergency situations occurring (as well as any associated damage). EnBW ensures that the risks posed by crisis and emergency situations are mitigated quickly, effectively and with a coordinated approach through the use of regular crisis management exercises and other measures. All of these measures also have, for example, a positive effect on the key performance indicator supply reliability (SAIDI) in the customers and society goal dimension (p. 63).
- **Environmental protection:** Risks in the area of environmental protection are countered by EnBW using an environmental management system certified according to ISO 14001 (p. 67 ff.). Through its numerous activities for the protection of the environment, nature and species, EnBW also aims to take advantage of the opportunities to have a positive impact on the key performance indicator Reputation Index in the customers and society goal dimension (p. 63 and 67 f.).
- **Climate protection:** EnBW identifies opportunities and risks in the area of climate protection using a systematic, Group-wide measurement and evaluation system – selected opportunities and risks will be regularly presented in future in the report on opportunities and risks. In particular, regulatory guidelines and market changes, as well as changes to physical climate parameters and other climate-induced or climate-related developments flow into the risk evaluation process. The further development of the reporting of climate-related opportunities and risks is based on findings that have so far come from the working group of the Financial Stability Board (FSB), the Task Force on Climate-related Financial Disclosures (TCFD). In addition, the focus is being placed on providing more in-depth detail in areas relating to the business model, strategy and performance indicators (p. 13f. and 22 ff.). The risks include, amongst other things, extreme weather conditions that could have an impact on the operative business and




thus on the security of supply (electricity grids). However, there are also opportunities such as changing customer requirements and an increasing demand for climate-friendly products such as e-mobility. In the environment goal dimension, the aspect of climate protection is illustrated by the key performance indicator  CO<sub>2</sub> intensity ( p. 67f.).

### Financial opportunities and risks

**3 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 ( p. 54). 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 2016 financial year, impairment losses totalled at €133.3 million (previous year: €35.2 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 and 2018 on  net debt in the mid three-digit million euro range. Due to the implementation of the law of reorganising responsibility for nuclear waste management, a significant cash outflow is expected in 2017, which will lead to a reduction in the opportunities and risks.

**4 Discount rate applied to pension provisions:** At the end of the 2016 financial year, the discount rate was 1.9%, which was down 0.4 percentage points on the rate at the end of the previous year (2.3%). This resulted in the present value of the defined pension benefit obligations increasing by €463.3 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 medium level of risk in this area. This could have both a negative or also a positive effect in the low three-digit to low four-digit million euro range on net debt in 2017 and 2018.

**Impairment risks:** For equity investments that are to be stated at market value using share prices, a risk of impairment exists if there is a negative trend in share prices. In contrast, there is a possible opportunity that the value of these investments will increase due to positive developments in share prices.

**Rating:** We identify a general risk that the rating agencies may downgrade the credit rating of EnBW if the economic and political conditions deteriorate further or EnBW cannot fulfil the expectations of the agencies ( p. 56).

### Compliance opportunities and risks

The Compliance Risk Assessment focuses, in particular, on assessing risks and defining corresponding preventative measures in the compliance risk areas of corruption, antitrust law and data protection.

Latent corruption risks, which can be found primarily in sales and local authority/political business activities, are combated by the Group through intensive awareness campaigns, approval processes and system controls. Antitrust violations, particularly within the sales activities of some Group companies, pose the risk of fines and also significant strategic implications and damage to reputation. These risks are counteracted with comprehensive preventative measures by the Legal and Compliance Departments. The incorrect handling and illicit disclosure or use of personal data pose data protection risks for EnBW AG. The risks are increasing due to the transformation of our business activities, as well as a raised level of awareness for this subject due to new legislation. Advisory and awareness services and process controls are in place to guarantee adherence to legal data protection requirements in the Group.



### Sales segment

#### Financial opportunities and risks

**5 Competitive environment:** The continued tense competitive situation in the electricity, gas and energy solutions business could have a negative effect on the customer base, sales volumes and price levels. The willingness of customers to switch suppliers and the pressure on prices remain high. The EnBW 2020 strategy also covers the development and expansion of system solutions and complete solutions that are specifically tailored to the various customer segments. Alongside the traditional supply of electricity and gas, EnBW also sees good long-term opportunities for offering its customers additional innovative energy solutions in the areas of energy technology in the home, such as with the product EnBW solar+, corporate energy efficiency or also e-mobility. The aim is to generate corresponding earnings contributions for EnBW. We currently identify a low level of opportunity and risk in this area. Therefore, this could result in a positive effect in the low double-digit million euro range in 2017 and either a positive or negative effect in 2018 on the key performance indicator adjusted EBITDA.

### Grids segment

#### Strategic opportunities and risks

**High-voltage DC (HVDC) transmission technology projects:** Our transmission system operator (TSO), TransnetBW, plans to set up new  HVDC transmission technology with other TSOs. New dates for the commissioning of the ULTRANET and SuedLink projects have been published by the Federal Network Agency. A regulation stipulating the use of underground additionally also applies to the SuedLink project. In both projects, there is currently a generally high risk of potential delays and additional costs, as well as the risk that the necessity for these transmission lines might no longer be confirmed in a new  Network Development Plan.

### Operative opportunities and risks

**Water concession in Stuttgart:** In the court proceedings dealing with the takeover of the water concession, the City of Stuttgart and EnBW are still striving to reach an amicable settlement. The responsible chamber of the Regional Court had presented a proposal to both sides in January 2015 to be used as the basis for the settlement negotiations. The court proceedings had been suspended so far for the duration of these negotiations. The City of Stuttgart has since resumed the proceedings. Therefore a general risk of losing the concession without receipt of adequate compensation continuous in 2017.

### Financial opportunities and risks

**Year-end balance on the EEG bank account:** As of the reporting date on 31 December 2016, a net surplus in the mid three-digit million euro range existed on the EEG bank account of our subsidiary TransnetBW GmbH. This EEG bank account is a separately managed bank account in accordance with section 5 of the German Compensation Mechanism Ordinance (AusglMechV) and is thus kept separate from other areas of activity. In accordance with AusglMechV, a surplus or deficit on the account balance can have a temporary positive or negative effect on the calculation of the net debt of EnBW, respectively. Due to the EEG cost allocations defined for 2017, we anticipate a positive value for the liquidity reserves for 2017.

## Renewable Energies segment

### Financial opportunities and risks

**6 Fluctuations in wind energy yield:** Wind power plants and the amounts of electricity generated by them are subject to fluctuations in the mean annual wind speed. In order to take these wind fluctuations into account, wind reports were created. In this regard, we currently identify a balanced low level of opportunity and risk in the low double-digit million euro range in 2017 and 2018, which will have an impact on the key performance indicator adjusted EBITDA and the key performance indicator internal financing capability. This top opportunity or top risk is kept under observation because it is only possible to influence the wind fluctuations affecting existing power plants to a very minor extent.

## Generation and Trading segment

The adoption of the law of reorganising responsibility for nuclear waste management means that, following the payment of the corresponding provisions and an additional risk premium, the operators are no longer responsible for the (pre-)financing of the search for and surveying of the final storage sites or for the sites themselves. Following notification of the law by the European Commission and payment of the risk premium by EnBW, the risk relating to final storage will no longer exist. In this context, the risks relating to final storage, intermediate storage and changes to interest rates on nuclear provisions will no longer be reported as a top opportunity/risk.

### Strategic opportunities and risks

**Final storage:** The costs for identifying storage sites must be borne by the companies generating nuclear power such as EnBW. Therefore, the possibility cannot be excluded that the costs for finding final storage sites and constructing the final storage itself could have negative effects after 2018 on net debt and an associated impact on the key performance indicator internal financing capability.

**Intermediate storage:** As a result of the planned transfer of nuclear fuel rods from Obrigheim to Neckarwestheim, there is a risk, on the one hand, of delays to the implementation of the project and, on the other hand, of the possible failure of the project. In addition, there is a risk of a delay in the return of waste to the intermediate storage facilities with possible additional costs as a result of the waste being stored for a longer period of time in Great Britain and France, as well as the risk of further costs for approval and authorisation procedures.


**Changes to interest rates on nuclear provisions:** The discount rate and the inflation rate are key factors influencing the present value of nuclear provisions. A reduction in the discount rate will have a negative effect on the level of net debt, while an increase in the discount rate could have a corresponding positive effect on net debt. Following the adoption of the law of reorganising responsibility for nuclear waste management, the remaining provisions held by EnBW were re-evaluated with shorter maturities. As of the reporting date, the weighted discount rate for the remaining nuclear provisions held by EnBW was 0.5%. Inflation stood at 1.4%. We currently identify a low level of opportunity and risk in this area. There is both an opportunity and also a risk of an effect in the low three-digit million euro range on net debt in 2017 and 2018.

### Operative opportunities and risks

**7 Availability of nuclear power plants (in previous year: Availability of power plants):** Exogenous and endogenous factors have an influence on the availability of power plants. We strive to counter these risks using preventive measures. Depending on their duration, interruptions to the operation of the power plants can significantly impact the operating result. We currently identify a relatively low level of opportunity and risk in this area. In 2017 and 2018, this could result in both a positive (2018) or also negative effect (2017 and 2018) on the key performance indicator adjusted EBITDA in the single to double-digit million euro range and on the key performance indicator internal financing capability.


**Shutdown and early inspection of KKP 2:** During routine checks on Block 2 of the Philippsburg nuclear power plant (KKP 2), damage to ventilation system brackets in the area of the emergency core cooling systems was identified. KKP 2 was thus removed from the grid to investigate the cause of the damaged brackets, repair the affected brackets and inspect all comparable brackets at the site. At the same time, the inspection work originally planned for the summer of 2017 is also completed.


**Operation and dismantling of nuclear facilities:** There are possible opportunities and risks in a wide range of different areas that could have an impact on the key performance indicators in the finance goal dimension. These include the risk of missed deadlines due to delays in receiving approval for transport and storage, as well as risks from delays to dismantling projects due to a change in conditions or planning premises. This is offset by opportunities arising from the potential to accelerate the completion of the work.

**Nuclear fuel rod tax:** After the  nuclear fuel rod tax for the years 2011 to 2014 was announced, EnBW submitted lawsuits for each year to the Freiburg Finance Court on the basis that the tax breached German constitutional and European law. The European Court of Justice (ECJ) decided in its ruling of 4 June 2015 that the nuclear fuel rod tax does not contravene European law. The ruling by the German Federal Constitutional Court is independent of the ruling by the ECJ because it is examining whether the tax is compatible with German constitutional law. The ruling is expected in the first half of 2017. If the German Federal Constitutional Court decides in favour of EnBW and judges the nuclear fuel rod tax to be unconstitutional, it would need to be repaid to EnBW. EnBW had paid €1.44 billion in nuclear fuel rod tax as of 31 December 2016.

**Moratorium lawsuit:** EnBW AG filed a lawsuit at the Regional Court in Bonn against the Federal State of Baden-Württemberg and the Federal Republic of Germany on 23 December 2014 for the payment of damages by liability of public authorities. The background to the lawsuit is the order issued by the Ministry for the Environment of Baden-Württemberg on the request of, and in agreement with, the German Federal Ministry for the Environment for the temporary three-month suspension of operations at GKN I and KKP 1 in the aftermath of the events at Fukushima. It was legally established by the Federal Administrative Court that the identical order issued in that state was unlawful. The lawsuit filed by EnBW was rejected by the Regional Court in Bonn on 6 April 2016. EnBW has appealed against this verdict at the Higher Regional Court (OLG) in Cologne. EnBW submitted the notice of appeal in August 2016. It cannot be excluded that this lawsuit will be withdrawn as part of an agreement between the sector and the German government in connection with the reorganising of responsibilities for the disposal of nuclear waste.





### Financial opportunities and risks

**8 Hedging:** Despite its hedging strategy, when selling generated electricity volumes, EnBW is exposed to the long-term risk of falling electricity prices and the risk of the unfavourable development of fuel prices in relation to electricity prices. The concept underlying the hedging strategy also involves the exploitation of opportunities and the limitation of risks. The hedging instruments utilised in 2016 were forwards, futures and swaps. The EnBW Group has exposure to foreign exchange risks from procurement and hedging of prices for its fuel requirements, as well as from gas and oil trading business. Where  hedging is concerned, we currently identify a low level of risk for 2018. This could result in a negative effect on the key performance indicator adjusted

EBITDA in the single to double-digit million euro range and on the key performance indicator internal financing capability. Further information can be found in the section “Accounting for financial instruments” in the notes to the consolidated financial statements ( [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads)).

**9 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 future and forward 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, there is the potential for higher margin payments. Slightly higher electricity prices and falling CO<sub>2</sub> prices led to additional temporary cash outflows. In this context, we currently identify a medium level of risk and a higher level of opportunity. As a result, this could have corresponding effects in 2017 and 2018 in the mid three-digit million euro range that may have a positive or negative impact on the key performance indicator ROCE.

**Impairment losses and provisions for onerous contracts (in the previous year: Electricity procurement agreements and power plants):** EnBW also made impairment losses on power plants in the 2016 financial year and increased its provisions for onerous contracts for electricity procurement agreements which no longer cover costs. Depending on the development of the markets and the changing general conditions associated with the Energiewende, there is a risk of further negative impacts on earnings. In addition, there is the risk of further impairment losses arising after an examination of the profitability of conventional power plants – which could result in the early decommissioning of individual plants.

**10 Power plant optimisation:** Following the closure of the hedging of generation activities, the Trading business unit will manage the further deployment of the power plants. This is being carried out as part of power plant optimisation on the  forward market, through the sale of  system services and through placements on the spot and  Intraday trading platforms. In particular, falling revenues from system services and low volatility on the forward and  spot markets, as well as the associated increase in leverage, could have a positive or negative effect on the key performance indicator adjusted EBITDA in 2017 and 2018 in the low double-digit million euro range. In addition, regulatory interventions continue to have a strong influence. We currently identify a low level of opportunity and risk that is dependent on the development of market prices.

Compared with the previous year, the following opportunities and risks were either eliminated or will no longer be included in the Group reporting due to their low level of relevance:

> **EWE/VNG claims for damages:** The arbitration proceedings between EWE Aktiengesellschaft (EWE) and EnBW were terminated by mutual agreement. This risk thus no longer exists.

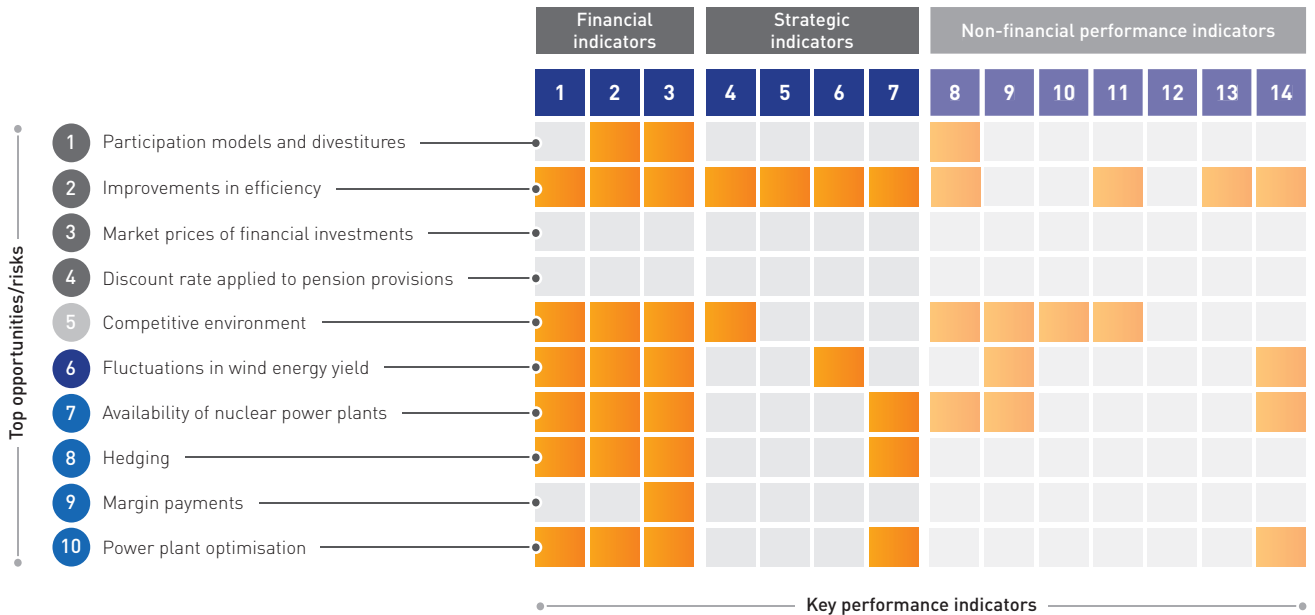
- > **Availability of power plants - KKP 2:** Block 2 of the Philippsburg power plant (KKP 2) has been back online since 1 June 2016 following the completion of its annual inspection. Testing and maintenance work was carried out at the plant, while fuel elements were replaced and a number of technical projects were implemented. The risk of the unscheduled unavailability of KKP 2 thus no longer exists. Remaining risks are presented under the new risk title "Availability of nuclear power plants".
- > **Company pension scheme:** The pending legal proceedings relating to the reorganisation of the company pension scheme at EnBW have now been decided in favour of EnBW. This risk no longer exists because the final judgements became legally binding in February 2017.

- > **Commission to examine the financing of the phase-out of nuclear power:** This risk no longer exists following the adoption of the law of reorganising responsibility for nuclear waste management, which has fixed the size of the risk premium for financing the nuclear disposal and the accounting practices for the remaining nuclear provisions.

**Link to the key performance indicators**

Linking the top opportunities/risks with the key performance indicators illustrates any possible effects they may have on our key performance indicators. The effects on the non-financial key performance indicators are potential in nature. In the past financial year, these links were not monitored individually.

**Linking the top opportunities/risks with the key performance indicators**



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

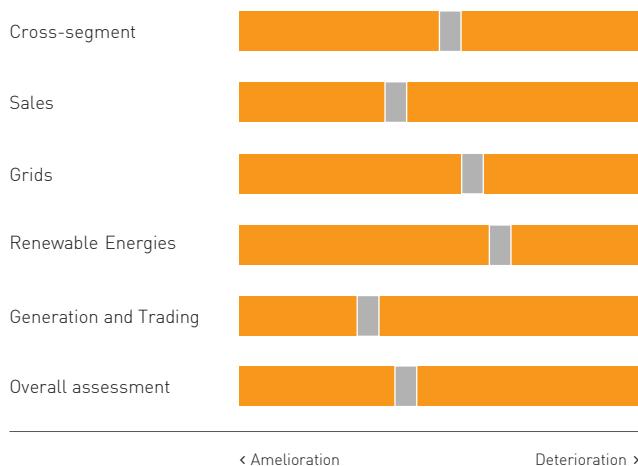
- 1 Adjusted EBITDA
- 2 Internal financing capability
- 3 ROCE
- 4 Share of overall adjusted EBITDA accounted for by "Customer proximity"/Sales
- 5 Share of overall adjusted EBITDA accounted for by Grids

- 6 Share of overall adjusted EBITDA accounted for by Renewable Energies
- 7 Share of overall adjusted EBITDA accounted for by Generation and Trading
- 8 Reputation Index
- 9 EnBW/Yello Customer Satisfaction Index

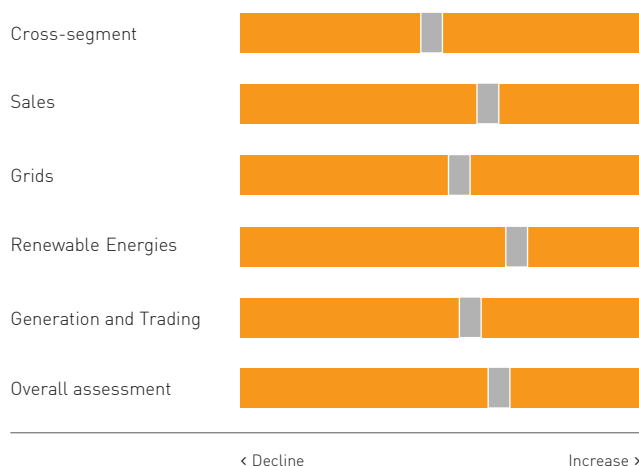
- 10 SAIDI (electricity)
- 11 Employee Commitment Index (ECI)
- 12 LTIF
- 13 Installed output of RE and share of generation capacity accounted for by RE
- 14 CO<sub>2</sub> intensity

## Overall assessment by the Group management

Development of the risk situation in 2016



Development of the opportunity situation in 2016



The risk situation for the entire energy industry also remained tense in 2016. Framework conditions are changing continuously as a consequence of the Energiewende in Germany. As a result, in particular, of the continuing low market prices and the persistently unfavourable expectations regarding medium-term electricity prices, the overall risk situation faced by EnBW will remain tense with regards to 2017. Numerous factors jeopardise the achievement of our economic goals. The political decision to phase out nuclear energy in Germany, as well as the amendment to the German Renewable Energies Act 2017 that regulates the level of feed-in remuneration, reduces planning certainty and harbours great potential for risk in the future. This has resulted in far-reaching consequences for the operating business of the EnBW Group and has had a negative effect on earnings. The persisting competitive and market risks could influence the operating result, financial position and net assets of the EnBW Group. The decision to implement the law of reorganising responsibility for nuclear waste management places a significant strain on the liquidity situation of EnBW.

At the same time, the Energiewende offers a multitude of opportunities to develop new models for future business segments, which we are resolutely pursuing through our EnBW 2020 strategy. EnBW is developing a diverse range of customer-oriented measures such as innovative energy solutions in the areas of energy technology, for example with the product EnBW solar+, corporate energy efficiency and e-mobility. Furthermore, EnBW is resolutely pushing forward the commercial development of environmentally friendly and CO<sub>2</sub>-efficient energy solutions. The implementation of our EnBW 2020 strategy aims to secure the future viability of the company and tap into this potential for growth.

Although some risks were reduced or eliminated during the course of 2016, additional risks for EnBW have either emerged or were exacerbated. No risks currently exist that might jeopardise the EnBW Group as a going concern.

# Remuneration report

The remuneration report summarises the principles relevant for determining the remuneration of the members of the Board of Management and explains the structure and level of both Board of Management and Supervisory Board remuneration.

The remuneration report takes the recommendations of the German Corporate Governance Code and the German Accounting Standard (GAS) 17 (amended in 2010) into consideration in this respect. It also contains disclosures required by German commercial law and the supplementary provisions of the German Act on the Appropriateness of Management Board Remuneration (VorstAG) included in the notes pursuant to section 314 of the German Commercial Code (HGB) and the management report pursuant to section 315 HGB.

## Remuneration of the Board of Management






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

On 18 March 2016, the Supervisory Board of EnBW AG approved the third and final stage of the redesign of the remuneration system for the members of the Board of Management with effect from 1 January 2016. A modern and market-oriented pension system has thus been introduced that optimises business risks and provides members of the Board of Management with greater flexibility with respect to how the pension benefits are paid out. Following the introduction of the new company pension scheme for members of the Board of Management, there has been a shift from the previous defined benefit pension commitments to a defined contribution pension model. The new system was approved by the ordinary Annual General Meeting on 10 May 2016. The remuneration for 2016 consists of the following essential components:

### Fixed remuneration

This comprises fixed basic annual remuneration and other earnings.

### Variable remuneration

- **Performance bonus (Short Term Incentive – STI):** The level of the performance bonus depends on the extent to which the respective targets agreed for the financial year have been achieved. These include financial targets at a Group level (corporate targets), which are measured relative to the two performance indicators  EBITDA and  ROCE, as well as individual targets. The Supervisory Board is entitled to adjust the targets if events arise that are not relevant to the ongoing management of the company. The size of the performance bonus for 100% achievement of the targets, as well as the maximum and minimum values for the overachievement or underachievement of the agreed targets, can be found in the table “Target income of members of the Board of Management”. The performance bonus for the current assessment year is paid immediately. The delayed payment from 2014 (deferral 2) is adjusted to reflect the extent to which the corporate targets were met in 2016. Interest of 3% per annum is accrued on this payment, which is made following ratification of the annual financial statements.
- **Value appreciation bonus (Long Term Incentive – LTI):** The value appreciation bonus consists of a basic LTI, a competition component and a sustainability component. The total value appreciation bonus is the sum of the variable remuneration payments that are calculated from these three components. As with the performance bonus, the Supervisory Board defines target values, lower limits and upper limits in advance. The basic LTI is determined by the accumulated contribution to value derived from the three-year medium-term planning. It is calculated from the difference between the performance indicators  ROCE and  WACC (weighted average cost of capital) multiplied by the average  capital employed. The competition component measures the relative performance of the EnBW Group in the respective three-year performance period against a peer group of competitors on the basis of the value spread (= ROCE - WACC). The goal of the sustainable growth of the company in its strictest sense is also taken into account through the LTI sustainability component. In this component, the impact of the sustainable growth of the company on the areas of customers, employees and environment/society is taken into account. The extent to which the targets for all three components have been achieved is determined after the conclusion of the three-year planning period that acts as the basis for the calculations in each case. The Supervisory Board is entitled to adjust the targets if events arise that are not relevant to the ongoing management of the company and thus outside of the sphere of influence of the Board of Management. The size of the value appreciation bonus for 100% achievement of the targets, as well as the maximum and minimum values

for the overachievement or underachievement of the agreed targets, can also be found in the table "Target income of members of the Board of Management". The amount based on the achievement of the relevant targets is paid out after the conclusion of the three-year measurement period.

With a view to maintaining the previous level of target income, interest of 3% per annum is accrued on the calculated bonus payment for two years and is paid after the conclusion of the three-year calculation period.

#### Remuneration of members of the Board of Management in the 2016 financial year

in €  (previous-year figures in brackets)	Fixed remuneration		Variable remuneration		Total
	Basic remuneration	Other remuneration <sup>1</sup>	Without long-term incentive	With long-term incentive	
Dr. Frank Mastiaux, Chairman	990,000 (990,000)	26,960 (11,872)	878,268 (978,060)	1,241,349 <sup>2</sup> (1,014,032)	3,136,577 (2,993,964)
Dr. Bernhard Beck, LL.M.	515,000 (515,000)	66,036 (47,104)	508,016 (570,640)	647,960 <sup>2</sup> (610,617)	1,737,012 (1,743,361)
Thomas Kusterer	515,000 (515,000)	29,116 (22,122)	448,500 (495,170)	585,164 <sup>2</sup> (549,555)	1,577,780 (1,581,847)
Dr. Hans-Josef Zimmer	515,000 (515,000)	41,642 (39,880)	448,500 (498,320)	585,164 <sup>2</sup> (549,555)	1,590,306 (1,602,755)
<b>Total</b>	<b>2,535,000</b> <b>(2,535,000)</b>	<b>163,754</b> <b>(120,978)</b>	<b>2,283,284</b> <b>(2,542,190)</b>	<b>3,059,637</b> <b>(2,723,759)</b>	<b>8,041,675</b> <b>(7,921,927)</b>

<sup>1</sup> Other remuneration includes monetary benefits, particularly from the provision of company cars amounting to €159,603 (previous year: €120,307).

<sup>2</sup> Current preliminary value appreciation bonus for the performance periods 2015 to 2017 and 2016 to 2018 is €2,009,871 for Dr. Frank Mastiaux (previous year: €2,423,140), €1,215,708 for Dr. Bernhard Beck (previous year: €1,350,673), €1,035,133 for Thomas Kusterer (previous year: €1,186,921) and €1,035,133 for Dr. Hans-Josef Zimmer (previous year: €1,186,921). The exact level of the value appreciation bonus for the performance periods 2015 to 2017 and 2016 to 2018 can only be determined following the end of the 2017 financial year and the 2018 financial year, respectively, and can fluctuate within the LTI spread pursuant to the following table "Target income of members of the Board of Management".

Target income of members of the Board of Management<sup>1</sup>

in €	Dr. Frank Mastiaux Chief Executive Officer				Dr. Bernhard Beck, LL.M. Chief Personnel Officer			
	2015	2016	2016 (min.)	2016 (max.)	2015	2016	2016 (min.)	2016 (max.)
Fixed remuneration	990,000	990,000	990,000	990,000	515,000	515,000	515,000	515,000
Fringe benefits	11,872	26,960	26,960	26,960	47,104	66,036	66,036	66,036
<b>Total</b>	<b>1,001,872</b>	<b>1,016,960</b>	<b>1,016,960</b>	<b>1,016,960</b>	<b>562,104</b>	<b>581,036</b>	<b>581,036</b>	<b>581,036</b>
One-year variable remuneration performance bonus	748,000	748,000	0	1,089,000	455,000	455,000	0	628,000
Multi-year variable remuneration LTI	1,026,000	1,026,000	0	1,494,000	630,000	630,000	0	870,000
<b>Total</b>	<b>2,775,872</b>	<b>2,790,960</b>	<b>1,016,960</b>	<b>3,599,960</b>	<b>1,647,104</b>	<b>1,666,036</b>	<b>581,036</b>	<b>2,079,036</b>
Pension expenses	617,515	-57,648	-57,648	-57,648	150,748	-282,520	-282,520	-282,520
<b>Total remuneration</b>	<b>3,393,387</b>	<b>2,733,312</b>	<b>959,312</b>	<b>3,542,312</b>	<b>1,797,852</b>	<b>1,383,516</b>	<b>298,516</b>	<b>1,796,516</b>

<sup>1</sup> This table illustrates the remuneration in both the reporting year and previous year which arises given 100% achievement of the targets (target income) and the potential minimum and maximum remuneration for the financial year. Remuneration is described for Board of Management members who were appointed at least on a part-time basis in either the reporting year or previous year to the Board of Management at EnBW AG.

Payments to Board of Management members<sup>1</sup>

in €	Dr. Frank Mastiaux Chief Executive Officer		Dr. Bernhard Beck, LL.M. Chief Personnel Officer	
	2016	2015	2016	2015
Fixed remuneration	990,000	990,000	515,000	515,000
Fringe benefits	26,960	11,872	66,036	47,104
<b>Total</b>	<b>1,016,960</b>	<b>1,001,872</b>	<b>581,036</b>	<b>562,104</b>
One-year variable remuneration performance bonus	974,178	756,333	542,906	410,667
Multi-year variable remuneration				
Deferrals from 2012	-	119,639	-	74,775
Deferrals from 2013	520,374	471,878	320,230	290,387
Deferrals from 2014	493,657	-	290,387	-
<b>Total</b>	<b>3,005,169</b>	<b>2,349,722</b>	<b>1,734,559</b>	<b>1,337,933</b>
Pension expenses	-57,648	617,515	-282,520	150,748
<b>Total remuneration</b>	<b>2,947,521</b>	<b>2,967,237</b>	<b>1,452,039</b>	<b>1,488,681</b>

<sup>1</sup> This table illustrates payments in both the reporting year and previous year pursuant to the German Income Tax Act (Einkommensteuergesetz). Earnings are described for members of the Board of Management who were appointed at least on a part-time basis in either the reporting year or previous year to the Board of Management of EnBW AG.



		Thomas Kusterer Chief Financial Officer				Dr. Hans-Josef-Zimmer Chief Technical Officer			
	2015	2016	2016 (min.)	2016 (max.)	2015	2016	2016 (min.)	2016 (max.)	
	515,000	515,000	515,000	515,000	515,000	515,000	515,000	515,000	
	22,122	29,116	29,116	29,116	39,880	41,642	41,642	41,642	
	<b>537,122</b>	<b>544,116</b>	<b>544,116</b>	<b>544,116</b>	<b>554,880</b>	<b>556,642</b>	<b>556,642</b>	<b>556,642</b>	
	390,000	390,000	0	546,000	390,000	390,000	0	546,000	
	535,000	535,000	0	749,000	535,000	535,000	0	749,000	
	<b>1,462,122</b>	<b>1,469,116</b>	<b>544,116</b>	<b>1,839,116</b>	<b>1,479,880</b>	<b>1,481,642</b>	<b>556,642</b>	<b>1,851,642</b>	
	294,190	-533,743	-533,743	-533,743	308,841	-307,973	-307,973	-307,973	
	<b>1,756,312</b>	<b>935,373</b>	<b>10,373</b>	<b>1,305,373</b>	<b>1,788,721</b>	<b>1,173,669</b>	<b>248,669</b>	<b>1,543,669</b>	

		Thomas Kusterer Chief Financial Officer		Dr. Hans-Josef-Zimmer Chief Technical Officer	
	2016	2015	2016	2015	2015
	515,000	515,000	515,000	515,000	515,000
	29,116	22,122	41,642	39,880	39,880
	<b>544,116</b>	<b>537,122</b>	<b>556,642</b>	<b>554,880</b>	<b>554,880</b>
	503,870	363,750	478,870	366,900	366,900
	-	269,189	-	269,189	269,189
	288,207	261,348	288,207	261,348	261,348
	261,348	-	261,348	-	-
	<b>1,597,541</b>	<b>1,431,409</b>	<b>1,585,067</b>	<b>1,452,317</b>	<b>1,452,317</b>
	-533,743	294,190	-307,973	308,841	308,841
	<b>1,063,798</b>	<b>1,725,599</b>	<b>1,277,094</b>	<b>1,761,158</b>	<b>1,761,158</b>

## Compensation agreed with the Board of Management in the event of termination of service

On 18 March 2016, the Supervisory Board of EnBW AG approved the reorganisation of the company pension scheme for the Board of Management as part of the third stage of the redesign of the remuneration system for the members of the Board of Management with effect from 1 January 2016.

The company pension scheme that was valid for members of the Board of Management up until 31 December 2015 is presented in detail in the remuneration report for 2015, which was published in the combined management report of the EnBW Group and EnBW AG for the 2015 financial year.

The reorganisation of the company pension scheme for the Board of Management at the company was completed with the aim of introducing a modern and market-oriented pension system that optimises business risks and provides members of the Board of Management with greater flexibility with respect to how the pension benefits are paid out. Following the introduction of the new system, there has been a shift from the previous defined benefit pension plan to a defined contribution pension model. In the new system, annual pension contributions will be paid that accrue interest at a rate oriented to the capital market. In order to ensure that the business risks associated with the pension scheme – especially the interest rate risks and biometric risks – remain calculable in the future, the interest model only contains a relatively low fixed interest entitlement that forms the basic interest rate plus a non-guaranteed surplus that is based on the actual development of interest rates in the life insurance industry.

The purpose of this restructuring of the remuneration system was not to increase the achievable pension provisions for the members of the Board of Management after the completion of three terms in office.

The most important design characteristics are explained below:

During the term of the contract, EnBW pays fixed annual contributions to the pension scheme to an individual pension account. Pension contributions are paid for a maximum period of three terms of office (or 13 years in office). The fixed annual contributions are €230,000 for ordinary members of the Board of Management and €390,000 for the Chairman of the Board of Management. In the event of invalidity and as a supplementary risk benefit, age-dependent “notional” contributions will be paid on top of the balance already existing on the pension account until the member reaches the age of 60 – although at the most seven contributions will be paid.

As well as the annual contributions, interest is paid that is oriented to the market and consists of a guaranteed basic interest rate and a non-guaranteed surplus. The guaranteed interest is paid on every contribution in advance until the defined retirement age (63 years old). In addition, annual surplus payments can be paid above and beyond the guaranteed interest. These are based on the current average

interest rate for capital investments actually achieved in the past year in the life insurance industry and are not guaranteed.

When the pension is due (age, invalidity, death), payment of the pension assets is generally made in five to ten instalments. Alternatively, a life-long pension payment can be made on the request of the member of the Board of Management – including a 60% entitlement for surviving dependants – or a mixed form of payment. Payment options are also available to the surviving dependants. If the member leaves the Board of Management before the pension is due, the pension account will remain at its current balance plus any surplus payments that are still due to be made.

The members of the Board of Management are entitled to make their own contributions to the pension scheme and supplement the pension provision financed by the employer. For this purpose, a proportion of the annual STI bonus up to a maximum sum of €50,000 p.a. can be converted into a pension entitlement. The rules for the new scheme also apply correspondingly to self-financed contributions.

**Transferring the existing pension entitlements into the new system:** All existing pension entitlements for currently serving members of the Board of Management will be dissolved and transferred to the new system effective as of 31 December 2015/1 January 2016. In accordance with the German Company Pensions Act (BetrAVG), the individually achieved pension entitlements were determined to be vested benefits and were maintained as an unchanged vested pension right. The pension entitlement for serving members of the Board of Management comprises a fixed vested pension entitlement in accordance with the dissolved defined benefit pension plan and an accumulating pension entitlement according to the new defined contribution pension system. The following vested pension entitlements – in accordance with the individual term of service in each case – were determined for the serving members of the Board of Management as of 31 December 2015: Dr. Frank Mastiaux: €80,676 p.a., Dr. Bernhard Beck: €195,846 p.a., Thomas Kusterer: €89,523 p.a., Dr. Hans-Josef Zimmer: €174,636 p.a.

Upon reaching the age of 63 and retiring from the company, or in the event of invalidity, the above-mentioned vested pension entitlement will be paid as a life-long pension with an annual dynamic of 1%. This entitlement includes a widow/widower entitlement of 60% of the member's pension.

From 1 January 2016, the annual pension contributions and the interest on the contributions will generally be paid in accordance with the rules of the new system for new members of the Board of Management appointed in the future. However, a deviation was necessary for the current members of the Board of Management to take account of the transition to the new system, and individual pension contributions and an individual contribution period have been defined. This was done because depending, on the one hand, on the current age of the member and thus the associated length of time they will be subject to the new system and, on the other, the level of vested pension entitlements held by each member, the

existing entitlements require individually tailored contributions in order to recreate the previously agreed entitlements within the new system. The criterion for the uniform application of this method is the achievement of the maximum pension entitlement that would be possible after three terms of office according to each individual contractual agreement.

The following individual pension contributions were determined due to the transition as of 31 December 2015/ 1 January 2016: Dr. Frank Mastiaux: €360,000 p.a., Dr. Bernhard Beck: €170,000 p.a., Thomas Kusterer: €215,000 p.a., Dr. Hans-Josef Zimmer: €120,000 p.a.

Payment of the individual vested pension entitlement from the dissolved pension entitlement will be in the form of a life-long pension for the members of the Board of Management transferred to the new model. In terms of the pension entitlement accumulated under the new system, the payment options for this system are available accordingly. Otherwise, the same rules for the new system described above apply.

**Change of control regulation:** The following change of control regulation currently exists for all members of the Board of Management: If members of the Board of Management relinquish their office and resign due to a change of control, they are entitled to their outstanding annual basic remuneration until the expiry of the planned contractual duration (but limited to a maximum of three annual basic salaries) and to the deferrals already earned as part of the performance bonus. Such entitlements are restricted to one and a half times the severance cap, cannot compensate for more than the residual term of the service contract and are due in the event of premature termination of the service contract.

Where Board of Management employment contracts are concluded or extended, in the event of the early termination of Board of Management activity due to a change of control, it is agreed that settlement or severance payments should not

exceed the severance cap and should not compensate for more than the residual term of the service contract.

No severance benefit obligations exist above and beyond this in the event of premature termination of service on the Board of Management. However, severance benefits may be payable on the basis of a severance agreement made with the individual. For agreements in place as of the reporting date, it was agreed that payments made to a member of the Board of Management on premature termination of his or her contract without serious cause, including fringe benefits, will not exceed the value of two years' remuneration (severance cap) and compensate for no more than the remaining term of the contract. In concluding or extending contracts for the Board of Management, care is taken to ensure that no payments will be made to a member of the Board of Management in the event of the premature termination of the contract due to an important reason for which the member of the Board of Management is responsible.

**Temporary unavailability for work:** In the event of temporary unavailability for work on the part of a member of the Board of Management due to illness or any other reason for which the member of the Board of Management is not responsible, remuneration will be paid for the first six months. The amount of variable remuneration will be calculated from the average of the last three years, and basic remuneration will be paid for a further six months. However, payments in the event of unavailability for work will be made no longer than until the end of the term of the service agreement.

The disclosures for the 2016 financial year concerning post-employment benefits (previous-year figures in brackets) are presented below. This presentation satisfies the requirements of section 285 No. 9a HGB. The disclosures include the vested entitlement as of the reporting date, the annual expenses for pension obligations and the present value of the pension obligations earned as of the reporting date (including pension entitlements financed by the board members themselves by waiving part of their salary).

#### Post-employment benefits

(previous-year figures in brackets)	Vested benefit as of 31/12/2016 Pension p.a. from previous entitlement in €	Capital from new entitlement (contribution model) in €	Annual expenses for pension obligations in € <sup>1</sup>	Present value of pension obligations (defined obligations) in €
Dr. Frank Mastiaux, Chairman	80,676 (32.5% <sup>2</sup> )	408,885 (-)	-57,648 (617,515)	1,895,835 (1,820,911)
Dr. Bernhard Beck, LL.M.	195,846 (60% <sup>3</sup> )	171,059 (-)	-282,520 (150,748)	5,602,207 (5,571,722)
Thomas Kusterer	89,523 <sup>4</sup> (40% <sup>3</sup> )	256,636 (-)	-533,743 (294,190)	2,223,910 (2,393,781)
Dr. Hans-Josef Zimmer	174,636 (50% <sup>3</sup> )	126,773 (-)	-307,973 (308,841)	4,722,748 (4,787,215)

<sup>1</sup> Including an addition to capital for pension benefits totalling €101,001 (previous year: €105,901). This is a pension commitment financed through voluntarily waiving part of the salary. An extraordinary item of €-2,528,767 is also included, which results from the conversion of the pension commitments.

<sup>2</sup> Basis for entitlement in percentage of the pensionable annual basic remuneration, currently: €600,000.

<sup>3</sup> Basis for entitlement in percentage of the pensionable annual basic remuneration, currently: €350,000.

<sup>4</sup> In addition to the vested pension, Thomas Kusterer also has a special capital component of €135,000.

Annual expenses for pension obligations include both service and interest costs. An extraordinary effect (income) is also included in the annual expenses for the 2016 financial year that results from the transfer of the defined benefit pension plan entitlement to the contribution-based capital entitlement and the formation of the vested pension and setting up the accounts. Excluding this effect, the total annual expenses were around the same level as in the previous year. There are defined benefit obligations in accordance with IFRS of €14.4 million for the current members of the Board of Management (previous year: €14.6 million).

Former members of the Board of Management and their surviving dependants received total remuneration of €6.5 million in the 2016 financial year (previous year: €7.1 million). These pension payments are indexed to the percentage change in remuneration according to the collective bargaining agreement.

There are defined benefit obligations to former members of the Board of Management and their surviving dependants in accordance with IFRS of €97.2 million (previous year: €94.4 million).

As in the previous year, no loans or advances to members of the Board of Management existed at the end of the financial year.

## Remuneration of the Supervisory Board

In response to a proposal of the Board of Management and Supervisory Board, the Annual General Meeting on 25 April

2013 revised the regulations for the remuneration of the Supervisory Board. Accordingly, members of the Supervisory Board receive fixed remuneration of €40,000 each payable at the end of the financial year in addition to reimbursement of their expenses for the entire 2016 financial year. The Chairman of the Supervisory Board receives twice the above, while the Deputy Chairman of the Supervisory Board receives one and a half times the aforementioned amount.

Members of the Supervisory Board receive fixed remuneration of €7,500 each per financial year to offset the additional work involved in any activities in one or more Supervisory Board committees. The Chairperson of one or more committees receives twice the amount of the remuneration for the committee work, unless the respective committee has not met in the financial year concerned.

Members of the Supervisory Board who have only belonged to the Supervisory Board or a committee or acted as a Chairperson for part of the financial year are paid remuneration proportionate to the duration of their office or their position in that financial year.

In addition, members of the Supervisory Board receive an attendance fee of €750 for Supervisory Board meetings and committee meetings. Attendance at preliminary meetings is remunerated with €250 per meeting, but only for one preliminary meeting per Supervisory Board meeting.

According to this remuneration system, the members of the Supervisory Board will receive the following total remuneration for the 2016 financial year (including attendance fees and remuneration for offices held at subsidiaries):

## Total remuneration for members of the Supervisory Board of EnBW AG 2016

in € (previous-year figures in brackets)	Fixed remuneration (incl. attendance fees)	Remuneration for offices held at subsidiaries	Total
Lutz Feldmann, Chairman (Chairman since 10/05/2016)	92,378 (33,260)	0 (0)	92,378 (33,260)
Dietrich Herd, Deputy Chairman	85,000 (76,250)	10,400 (9,500)	95,400 (85,750)
Dr. Dietrich Birk (since 05/09/2016)	17,986 (0)	0 (0)	17,986 (0)
Stefanie Bürkle <sup>1</sup> (since 10/05/2016)	36,628 (0)	0 (0)	36,628 (0)
Stefan Paul Hamm <sup>2</sup>	61,250 (46,476)	9,413 (9,301)	70,663 (55,777)
Michaela Krütter <sup>2</sup>	49,250 (5,353)	1,500 (0)	50,750 (5,353)
Silke Krebs <sup>3</sup>	59,500 (50,500)	0 (0)	59,500 (50,500)
Marianne Kugler-Wendt <sup>2</sup>	60,500 (52,250)	7,000 (6,400)	67,500 (58,650)
Thomas Landsbek (since 10/05/2016)	32,292 (0)	0 (0)	32,292 (0)
Dr. Hubert Lienhard	55,750 (49,500)	0 (0)	55,750 (49,500)
Sebastian Maier	55,586 (45,250)	6,615 (6,915)	62,201 (52,165)
Arnold Messner	63,500 (55,250)	8,413 (7,813)	71,913 (63,063)
Dr. Wolf-Rüdiger Michel <sup>1</sup>	59,500 (49,000)	0 (0)	59,500 (49,000)
Gunda Röstel	67,000 (57,000)	7,427 (0)	74,427 (57,000)
Klaus Schörnich	60,500 (51,250)	12,500 (14,375)	73,000 (65,625)
Heinz Seiffert <sup>1</sup>	58,000 (53,000)	0 (0)	58,000 (53,000)
Edith Sitzmann <sup>4</sup> (since 05/09/2016)	18,736 (0)	0 (0)	18,736 (0)
Ulrike Weindel (since 10/05/2016)	38,628 (0)	0 (0)	38,628 (0)
Lothar Wölfle <sup>1</sup>	59,500 (25,020)	0 (0)	59,500 (25,020)
Dr. Bernd-Michael Zinow	68,750 (58,250)	12,747 (12,800)	81,497 (71,050)
Dr. Claus Dieter Hoffmann (Member and Chairman until 10/05/2016)	37,753 (98,000)	0 (0)	37,753 (98,000)
Wolfgang Lang (until 10/05/2016)	21,751 (52,250)	0 (8,862)	21,751 (61,112)
Bodo Moray (until 30/09/2015) <sup>2</sup>	0 (37,658)	0 (5,244)	0 (42,902)
Gerhard Stratthaus (until 29/04/2015)	0 (16,171)	0 (0)	0 (16,171)
Dr. Nils Schmid <sup>3</sup> (until 31/08/2016)	39,167 (52,000)	0 (0)	39,167 (52,000)
Carola Wahl (until 31/07/2016)	27,029 (43,500)	0 (0)	27,029 (43,500)
Dietmar Weber (until 10/05/2016)	22,001 (52,250)	0 (0)	22,001 (52,250)
Kurt Widmaier (until 30/06/2015)	0 (24,815)	0 (0)	0 (24,815)
<b>Total</b>	<b>1,247,937</b> <b>(1,084,253)</b>	<b>76,015</b> <b>(81,210)</b>	<b>1,323,952</b> <b>(1,165,463)</b>

<sup>1</sup> The regulations in the State Civil Service Act (Landesbeamtengesetz) and the Ancillary Activities Ordinance (Landesnebenberufungsverordnung – LNTVO) of the Federal State of Baden-Württemberg for relinquishing remuneration from secondary employment to the administrative district apply. The term of office of Mr Seiffert ended on 30/09/2016.

<sup>2</sup> In accordance with the regulations of the German Federation of Trade Unions (DGB) on the transfer of supervisory board remuneration, the remuneration is transferred to the Hans Böckler foundation and ver.di GewerkschaftsPolitische Bildung gGmbH.

<sup>3</sup> The members of the state government and the state secretaries have agreed to relinquish any remuneration received for membership of supervisory boards, advisory boards and all other comparable boards to which they have been appointed in connection with their office or to which they are assigned as a member of the state government, applying section 5 of the Ancillary Activities Ordinance (LNTVO) analogously, provided that the remuneration received in the calendar year exceeds a gross total of €6,100 (council of ministers resolution dated 24/05/2011). The membership of Mrs Krebs and Dr Schmid in the cabinet of the state government ended on 18/03/2016 and 11/05/2016, respectively.

<sup>4</sup> The members of the state government and the state secretaries are obligated to relinquish any remuneration, including attendance fees, received for membership of supervisory boards, executive boards, advisory boards and all other comparable boards to which they have been appointed in connection with their office or to which they are assigned as a member of the state government, applying section 5 of the Ancillary Activities Ordinance (LNTVO) analogously, provided that the remuneration received in the calendar year exceeds the gross total for level "B6 and higher" (currently €6,100) (council of ministers resolution dated 05/07/2016).

The above disclosures include attendance fees of the members of the Supervisory Board amounting to €240,000 (previous year: €130,500) and attendance fees totalling €20,515 in the remuneration for offices held at subsidiaries (previous year: €21,190). No other remuneration or benefits for services rendered personally, in particular consulting or mediation services, were paid to members of the Supervisory Board, nor did they receive any loans or advances in the reporting year.

The members of the Board of Management and the Supervisory Board are covered by adequate D&O insurance concluded in the interest of EnBW. For this D&O insurance, the deductible for members of the Board of Management and the Supervisory Board is 10% of the claim in each case, but no more than one and a half times the fixed annual remuneration.

## Disclosures pursuant to sections 289 (4) and 315 (4) German Commercial Code (HGB) and explanatory report of the Board of Management

In the following, the Board of Management provides the information prescribed by sections 289 (4) and 315 (4) German Commercial Code (HGB) and explains this in accordance with section 176 (1) sentence 1 German Stock Corporations Act (AktG). The composition of the subscribed capital is described and explained in the notes to the annual and consolidated financial statements in the section "Equity". Direct or indirect shares in capital which exceed 10% of the voting rights are described and explained in the notes to the annual financial statements in the sections "Shareholder composition" and "Disclosures pursuant to section 21 German Securities Trading Act (WpHG)" and the notes to the consolidated financial statements in section "Related parties (individuals)".

Details on the treasury shares are presented in note 18 of the notes to the consolidated financial statements at [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

### Restrictions relating to voting rights or transferability of shares

Agreements were reached on 22 December 2015 between, on the one hand, Zweckverband Oberschwäbische Elektrizitätswerke (Zweckverband OEW) and OEW Energie-Beteiligungs GmbH and, on the other, the Federal State of Baden-Württemberg, NECKARPRI GmbH and NECKARPRI-Beteiligungsgesellschaft mbH, which include clauses relating to restrictions of authorisation over EnBW shares held by these parties and a general mutual obligation of both main shareholders to maintain parity investment relationships in EnBW with respect to each other. Restrictions relating to voting rights no longer exist to the knowledge of the Board of Management since the aforementioned direct and indirect EnBW shareholders annulled a shareholder agreement on 22 December 2015 that had previously existed between them.

### Legal provisions and statutes on the appointment and dismissal of members of the Board of Management and amendments to the Articles of Association

Pursuant to section 84 AktG in conjunction with section 31 German Co-determination Act (MitbestG), responsibility for the appointment and dismissal of members of the Board of Management rests with the Supervisory Board. This competence is stipulated in section 7 (1) sentence 2 of the Articles of Association of EnBW. If, under exceptional circumstances, a necessary member of the Board of Management is missing, section 85 AktG requires that a member of the Board of Management be appointed by the court in urgent cases.

The Annual General Meeting has the right to make changes to the Articles of Association in accordance with section 119 (1) No. 5 AktG. The specific rules of procedure are contained in sections 179 and 181 AktG. For practical reasons, the right to amend the Articles of Association was transferred to the Supervisory Board where such amendments affect the wording only. This option pursuant to section 179 (1) sentence 2 AktG is embodied in section 18 (2) of the Articles of Association.

Pursuant to section 179 (2) AktG, resolutions by the Annual General Meeting to amend the Articles of Association require a majority of at least three quarters of the capital stock represented when passing the resolution, unless the Articles of Association stipulate that any amendment of the purpose of the company requires a higher majority of the capital stock. Pursuant to section 18 (1) of the Articles of Association, resolutions by the Annual General Meeting require a simple majority of the votes cast, unless legal regulations or the Articles of Association stipulate otherwise. If the law requires a larger majority of the votes cast or of the capital stock represented when passing the resolution, the simple majority suffices in those cases where the law leaves the determination of the required majority to the Articles of Association.

### Authority of the Board of Management regarding the possibility to issue or redeem shares

Pursuant to section 5 (2) of the Articles of Association, the Board of Management is authorised, with the approval of the Supervisory Board, to increase the company's share capital until 25 April 2017 by up to €31,907,829.76 through issuing, either once or on several occasions, new ordinary bearer shares against cash capital contributions.


No authorisation of the Annual General Meeting pursuant to section 71 (1) No. 8 AktG for the purchase of treasury shares by the company exists at EnBW. Therefore, the company may only acquire treasury shares on the basis of other reasons justifying such purchases in accordance with section 71 (1) AktG. As of 31 December 2016, the company holds 5,749,677 treasury shares which were purchased on the basis of earlier authorisations in accordance with section 71 (1) No. 8 AktG. The company's treasury shares can be sold on the stock exchange or by public offer to all company shareholders. The use of treasury shares, in particular their sale, in any other way can only occur within the scope of the resolution issued by the Annual General Meeting on 29 April 2004. The treasury shares held by EnBW do not grant the company any rights in accordance with section 71b AktG.

### Material agreements of the company subject to the condition of a change of control as a result of a takeover bid and the resulting effects

The following EnBW agreements are subject to the condition of a change of control following a takeover bid as defined by sections 289 (4) No. 8 and 315 (4) No. 8 HGB:

A syndicated credit line of €1.5 billion, which had not been drawn by 31 December 2016, can be terminated by the lenders and become due for repayment given a change of control at EnBW. This does not apply if the purchaser of the shares is the State of Baden-Württemberg or Zweckverband OEW or another German state-owned public law legal entity.

A promissory note loan of €200 million, two bilateral bank loans together totalling €50 million and a syndicated loan, of which around €194 million was drawn as of 31 December 2016, taken out by the Group company Stadtwerke Düsseldorf AG (SWD) relating to the financing of their CCGT power plant could become due for repayment given a change of control at SWD, including an indirect change of control. This does not apply if, after the change of control, the majority of shares in SWD are held directly or indirectly by German government entities and the City of Düsseldorf holds at least 25.05% of the shares in SWD.

A bond of JPY 20 billion issued on 12 December 2008 under the  Debt Issuance Programme can be terminated by the lenders and become due for repayment given a change of control at EnBW. This does not apply if the purchaser of the shares is EDF (whose legal successor as shareholder is now the State of Baden-Württemberg) or Zweckverband OEW or another German state-owned public law corporation.

Two bilateral long-term bank loans, drawn to the value of €425 million and €454 million as of 31 December 2016, can be terminated by the lender and become due for repayment given a change of control at EnBW, provided the change of control has a negative effect on repayment of the loan in future. This does not apply if the purchaser of the shares is EDF (whose legal successor as shareholder is now the State of Baden-Württemberg) or Zweckverband OEW.

### Compensation agreements

Compensation agreements pursuant to sections 289 (4) No. 9 and 315 (4) No. 9 HGB concluded with members of the Board of Management to cover any case of a change of control are described and explained in the remuneration report.

Nos. 4 and 5 of sections 289 (4) and 315 (4) HGB were not relevant for EnBW in the 2016 financial year.

# Condensed financial statements

of the EnBW Group

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# Income statement

in € million <sup>1</sup>	Notes	2016	2015
Revenue including electricity and energy taxes		20,080.2	21,944.1
Electricity and energy taxes		-711.8	-777.6
<b>Revenue</b>	(1)	<b>19,368.4</b>	<b>21,166.5</b>
Changes in inventories		15.9	-3.0
Other own work capitalised		118.5	93.4
Other operating income	(2)	807.5	833.8
Cost of materials	(3)	-16,681.3	-17,364.7
Personnel expenses	(4)	-1,673.4	-1,641.3
Other operating expenses	(5)	-1,224.9	-1,166.5
<b>EBITDA</b>		<b>730.7</b>	<b>1,918.2</b>
Amortisation and depreciation	(6)	-2,393.6	-1,641.2
<b>Earnings before interest and taxes (EBIT)</b>		<b>-1,662.9</b>	<b>277.0</b>
Investment result	(7)	117.6	21.2
of which net profit/loss from entities accounted for using the equity method		(-10.0)	(26.3)
of which other profit/loss from investments		(127.6)	(-5.1)
Financial result	(8)	-1,176.6	-24.0
of which finance income		(431.9)	(1,078.9)
of which finance costs		(-1,608.5)	(-1,102.9)
<b>Earnings before tax (EBT)</b>		<b>-2,721.9</b>	<b>274.2</b>
Income tax	(9)	1,049.4	-40.0
<b>Group net profit/loss</b>		<b>-1,672.5</b>	<b>234.2</b>
of which profit/loss shares attributable to non-controlling interests		(124.7)	(76.0)
of which profit/loss shares attributable to the shareholders of EnBW AG		(-1,797.2)	(158.2)
<b>EnBW AG shares outstanding (million), weighted average</b>		<b>270.855</b>	<b>270.855</b>
<b>Earnings per share from Group net profit/loss (€)<sup>2</sup></b>	(23)	<b>-6.64</b>	<b>0.58</b>

<sup>1</sup> The figures for the previous year have been restated. Further information is available in the notes under "Restatement of previous-year figures".

We publish the full set of consolidated financial statements at [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

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

# Statement of comprehensive income

in € million <sup>1</sup>	2016	2015
<b>Group net profit/loss</b>	<b>-1,672.5</b>	<b>234.2</b>
Revaluation of pensions and similar obligations	-427.4	200.7
Entities accounted for using the equity method	1.4	-24.2
Income taxes on other comprehensive income	124.1	-32.6
<b>Total of other comprehensive income and expenses without future reclassifications impacting earnings</b>	<b>-301.9</b>	<b>143.9</b>
Currency translation differences	7.0	53.2
Cash flow hedge	247.8	104.9
Available-for-sale financial assets	192.8	-406.4
Entities accounted for using the equity method	-39.8	14.6
Income taxes on other comprehensive income	-105.2	-11.4
<b>Total of other comprehensive income and expenses with future reclassifications impacting earnings</b>	<b>302.6</b>	<b>-245.1</b>
<b>Total other comprehensive income</b>	<b>0.7</b>	<b>-101.2</b>
<b>Total comprehensive income</b>	<b>-1,671.8</b>	<b>133.0</b>
of which profit/loss shares attributable to non-controlling interests	(130.3)	(88.5)
of which profit/loss shares attributable to the shareholders of EnBW AG	(-1,802.1)	(44.5)

<sup>1</sup> The figures for the previous year have been restated. Further information is available in the notes under "Restatement of previous-year figures". We publish the full set of consolidated financial statements at [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

# Balance sheet

in € million <sup>1</sup>	Notes	31/12/2016	31/12/2015	01/01/2015
<b>Assets</b>				
<b>Non-current assets</b>				
Intangible assets	(10)	1,636.5	1,744.9	1,783.0
Property, plant and equipment	(11)	13,481.9	13,508.1	13,681.7
Entities accounted for using the equity method	(12)	1,835.6	826.1	1,941.0
Other financial assets	(13)	6,428.0	8,309.3	8,589.2
Trade receivables	(14)	357.4	760.3	678.6
Other non-current assets	(15)	410.1	345.7	279.1
Deferred taxes	(20)	1,268.9	93.4	430.0
		<b>25,418.4</b>	<b>25,587.8</b>	<b>27,382.6</b>
<b>Current assets</b>				
Inventories		806.8	877.5	1,135.4
Financial assets	(16)	2,389.5	1,353.9	780.1
Trade receivables	(14)	3,129.1	2,787.3	3,193.1
Other current assets	(15)	2,626.9	3,034.7	2,537.2
Cash and cash equivalents	(17)	3,991.6	3,501.1	3,179.2
		<b>12,943.9</b>	<b>11,554.5</b>	<b>10,825.0</b>
<b>Assets held for sale</b>	(22)	173.0	1,015.9	104.5
		<b>13,116.9</b>	<b>12,570.4</b>	<b>10,929.5</b>
		<b>38,535.3</b>	<b>38,158.2</b>	<b>38,312.1</b>
<b>Equity and liabilities</b>				
<b>Equity</b>				
<b>Shares of the shareholders of EnBW AG</b>				
Subscribed capital		708.1	708.1	708.1
Capital reserve		774.2	774.2	774.2
Revenue reserves		1,582.5	3,634.8	3,692.4
Treasury shares		-204.1	-204.1	-204.1
Other comprehensive income		-1,543.0	-1,644.2	-1,530.5
		<b>1,317.7</b>	<b>3,268.8</b>	<b>3,440.1</b>
Non-controlling interests		1,898.5	1,854.4	1,105.5
		<b>3,216.2</b>	<b>5,123.2</b>	<b>4,545.6</b>
<b>Non-current liabilities</b>				
Provisions	(19)	13,011.9	14,478.1	14,302.2
Deferred taxes	(20)	652.8	670.7	648.9
Financial liabilities	(21)	6,720.2	6,810.0	7,187.1
Other liabilities and subsidies	(21)	1,787.1	1,832.9	2,008.5
		<b>22,172.0</b>	<b>23,791.7</b>	<b>24,146.7</b>
<b>Current liabilities</b>				
Provisions	(19)	6,060.2	1,342.8	1,151.6
Financial liabilities	(21)	1,208.7	758.2	1,078.5
Trade payables	(21)	3,193.0	3,523.5	3,829.6
Other liabilities and subsidies	(21)	2,661.2	3,618.0	3,511.6
		<b>13,123.1</b>	<b>9,242.5</b>	<b>9,571.3</b>
<b>Liabilities directly associated with assets classified as held for sale</b>	(22)	24.0	0.8	48.5
		<b>13,147.1</b>	<b>9,243.3</b>	<b>9,619.8</b>
		<b>38,535.3</b>	<b>38,158.2</b>	<b>38,312.1</b>

<sup>1</sup> The figures for the previous year have been restated. Further information is available in the notes under "Changes in accounting policies" and "Restatement of previous-year figures". We publish the full set of consolidated financial statements at [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

# Cash flow statement

in € million <sup>1</sup>	2016	2015
<b>1. Operating activities</b>		
EBITDA	730.7	1,918.2
Changes in provisions	721.9	145.6
Result from disposals	-28.4	-50.3
Other non-cash expenses/income	-49.7	-69.7
Change in assets and liabilities from operating activities	-657.5	-137.7
Inventories	(67.9)	(70.2)
Net balance of trade receivables and payables	(-302.6)	(-60.5)
Net balance of other assets and liabilities	(-422.8)	(-147.4)
Income tax paid/received	-243.4	112.2
<b>Cash flow from operating activities</b>	<b>473.6</b>	<b>1,918.3</b>
<b>2. Investing activities</b>		
Capital expenditure on intangible assets and property, plant and equipment	-1,189.4	-1,416.4
Disposals of intangible assets and property, plant and equipment	115.5	140.2
Cash received from construction cost and investment subsidies	61.1	78.2
Acquisition of subsidiaries, entities accounted for using the equity method and interests in joint operations	-961.3	-21.1
Sale of subsidiaries, entities accounted for using the equity method and interests in joint operations	189.9	25.0
Cash paid for investments in other financial assets	-331.6	-1,996.1
Sale of other financial assets	2,065.2	1,949.6
Cash received/paid for investments in connection with short-term finance planning	39.4	45.8
Interest received	203.0	242.9
Dividends received	142.1	137.7
<b>Cash flow from investing activities</b>	<b>333.9</b>	<b>-814.2</b>
<b>3. Financing activities</b>		
Interest paid for financing activities	-351.3	-375.1
Dividends paid	-226.1	-269.7
Cash received for changes in ownership interest without loss of control	0.0	719.8
Cash paid for changes in ownership interest without loss of control	-8.0	0.0
Increase in financial liabilities	999.2	244.6
Repayment of financial liabilities	-704.8	-1,112.0
Payments from alterations of capital in non-controlling interests	-25.6	-6.1
<b>Cash flow from financing activities</b>	<b>-316.6</b>	<b>-798.5</b>
<b>Net change in cash and cash equivalents</b>	<b>490.9</b>	<b>305.6</b>
Net foreign exchange difference	-0.4	10.3
<b>Change in cash and cash equivalents</b>	<b>490.5</b>	<b>315.9</b>
Cash and cash equivalents at the beginning of the period	3,501.1	3,185.2
<b>Cash and cash equivalents at the end of the period</b>	<b>3,991.6</b>	<b>3,501.1</b>

<sup>1</sup>Further information is available in the notes under (31) "Notes to the cash flow statement". We publish the full set of consolidated financial statements at [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

# Statement of changes in equity

in € million <sup>1,2</sup>	Other comprehensive income <sup>4</sup>										Total
	Subscribed capital and capital reserve <sup>3</sup>	Revenue reserves	Treasury 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 shareholders of EnBW AG	Non-controlling interests <sup>4</sup>	
<b>As of 01/01/2015</b>	<b>1,482.3</b>	<b>3,692.4</b>	<b>-204.1</b>	<b>-1,652.2</b>	<b>-95.6</b>	<b>-334.3</b>	<b>605.3</b>	<b>-53.7</b>	<b>3,440.1</b>	<b>1,105.5</b>	<b>4,545.6</b>
Other comprehensive income				169.5	41.2	77.4	-392.2	-9.6	-113.7	12.5	-101.2
Group net profit/loss		158.2							158.2	76.0	234.2
<b>Total comprehensive income</b>	<b>0.0</b>	<b>158.2</b>	<b>0.0</b>	<b>169.5</b>	<b>41.2</b>	<b>77.4</b>	<b>-392.2</b>	<b>-9.6</b>	<b>44.5</b>	<b>88.5</b>	<b>133.0</b>
Dividends paid		-186.9							-186.9	-65.1	-252.0
Other changes <sup>5,6</sup>		-28.9							-28.9	725.5	696.6
<b>As of 31/12/2015</b>	<b>1,482.3</b>	<b>3,634.8</b>	<b>-204.1</b>	<b>-1,482.7</b>	<b>-54.4</b>	<b>-256.9</b>	<b>213.1</b>	<b>-63.3</b>	<b>3,268.8</b>	<b>1,854.4</b>	<b>5,123.2</b>
Other comprehensive income				-301.9	6.2	159.2	170.0	-38.4	-4.9	5.6	0.7
Group net profit/loss		-1,797.2							-1,797.2	124.7	-1,672.5
<b>Total comprehensive income</b>	<b>0.0</b>	<b>-1,797.2</b>	<b>0.0</b>	<b>-301.9</b>	<b>6.2</b>	<b>159.2</b>	<b>170.0</b>	<b>-38.4</b>	<b>-1,802.1</b>	<b>130.3</b>	<b>-1,671.8</b>
Dividends paid		-149.0							-149.0	-59.1	-208.1
Other changes <sup>5,6</sup>		-106.1						106.1	0.0	-27.1	-27.1
<b>As of 31/12/2016</b>	<b>1,482.3</b>	<b>1,582.5</b>	<b>-204.1</b>	<b>-1,784.6</b>	<b>-48.2</b>	<b>-97.7</b>	<b>383.1</b>	<b>4.4</b>	<b>1,317.7</b>	<b>1,898.5</b>	<b>3,216.2</b>

<sup>1</sup> The figures for the previous year have been restated. Restatement of the revenue reserves of €33.3 million. Restatement of the non-controlling interests of €0.4 million. Further information is available in the notes under "Restatement of previous-year figures".

<sup>2</sup> Further information is available in the notes under (18) "Equity". We publish the full set of consolidated financial statements at [www.enbw.com/report2016-downloads](http://www.enbw.com/report2016-downloads).

<sup>3</sup> Of which subscribed capital €708.1 million (31/12/2015: €708.1 million, 01/01/2015: €708.1 million) and capital reserve €774.2 million (31/12/2015: €774.2 million, 01/01/2015: €774.2 million).

<sup>4</sup> Of which other comprehensive income directly associated with the assets held for sale as of 31/12/2016 to the amount of €0.0 million (31/12/2015: €-45.4 million, 01/01/2015: €0.0 million).

Of which attributable to the shareholders of EnBW AG: €0.0 million (31/12/2015: €-45.4 million, 01/01/2015: €0.0 million). Of which attributable to non-controlling interests: €0.0 million (31/12/2015: €0.0 million, 01/01/2015: €0.0 million).

<sup>5</sup> Of which changes in revenue reserves due to changes in ownership interest of subsidiaries without loss of control of €0.0 million (previous year €-28.2 million). Of which changes in non-controlling interests due to changes in ownership interest of subsidiaries without loss of control of €0.0 million (previous year €738.8 million).

<sup>6</sup> Of which transaction costs that were accounted for as a deduction from equity amounting to €0.0 million (previous year: €1.9 million).

## Information on the result of the audit of the consolidated financial statements and the combined management report of the company and the Group for the 2016 financial year

The condensed financial statements for the 2016 financial year that form part of the Integrated Annual Report do not include the notes to the consolidated financial statements and the declaration of corporate management including the corporate governance report. The full set of consolidated financial statements – including the notes to the consolidated financial statements – and the combined management report for the company and the Group, both for the 2016 financial year, were audited by KPMG AG Wirtschaftsprüfungsgesellschaft as the auditor and Group auditor elected by the Annual General Meeting of EnBW Energie Baden-Württemberg AG on 10 May 2016. Based on its audit, KPMG AG Wirtschaftsprüfungsgesellschaft arrived at the overall conclusion that the audit did not lead to any reservations and issued an unqualified audit opinion. The full set of consolidated financial statements and the combined management report for the company and the Group, both for the 2016 financial year, as well as the unqualified audit opinion issued by the auditor, can be accessed on the website of EnBW Energie Baden-Württemberg AG.

# Corporate bodies

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# The Supervisory Board

## Members

- > **Lutz Feldmann, Bochum**  
Independent Business Consultant,  
Chairman (since 10 May 2016)
- > **Dr. Hubert Lienhard, Heidenheim an der Brenz**  
Chief Executive Officer of Voith GmbH
- > **Lothar Wölfle, Friedrichshafen**  
District Administrator of the Lake  
Constance district
- > **Dietrich Herd, Philippsburg**  
Chairman of the Group works council for  
the EnBW Group and Chairman of the  
central works council "production  
sector" of EnBW Energie Baden-  
Württemberg AG  
Deputy Chairman
- > **Dr. Bernd-Michael Zinow, Pfinztal**  
Head of the functional unit Legal  
Services, Compliance and Regulation  
(General Counsel) at EnBW Energie  
Baden-Württemberg AG
- > **Dr. Dietrich Birk, Göppingen**  
Managing Director of the Verband  
Deutscher Maschinen- und Anlagenbau e.V.  
(VDMA), Regional Association for Baden-  
Württemberg (since 5 September 2016)
- > **Dr. Claus Dieter Hoffmann, Stuttgart**  
Managing Partner of H + H Senior  
Advisors GmbH Chairman  
(until 10 May 2016)
- > **Stefanie Bürkle, Sigmaringen**  
District Administrator of the  
Sigmaringen district (since 10 May 2016)
- > **Arnold Messner, Aichwald**  
Deputy Chairman of the Group works  
council for the EnBW Group and  
Chairman of the central works council  
of Netze BW GmbH
- > **Wolfgang Lang, Karlsruhe**  
Consultant for HR functional units at  
EnBW Energie Baden-Württemberg AG  
(until 10 May 2016)
- > **Stefan Paul Hamm, Gerlingen**  
Head of the Department for Utilities and  
Waste Management, ver.di  
Baden-Württemberg
- > **Dr. Wolf-Rüdiger Michel, Rottweil**  
District Administrator of the Rottweil  
district
- > **Dr. Nils Schmid MdL, Reutlingen**  
Member of the State Parliament of  
Baden-Württemberg  
Deputy Premier Minister and Minister  
for Finance and Economic Affairs of the  
Federal State of Baden-Württemberg  
until 12 May 2016  
(until 31 August 2016)
- > **Michaela Kräutter, Stutensee**  
Union Secretary for Utilities and Waste  
Management, ver.di Central  
Baden/North Black Forest district
- > **Gunda Röstel, Flöha**  
Commercial Director of  
Stadtentwässerung Dresden GmbH and  
Authorised Officer of Gelsenwasser AG
- > **Carola Wahl, Bonn**  
Member of the Executive Board of AXA  
Winterthur and Head of Transformation  
& Market Management  
(until 31 July 2016)
- > **Silke Krebs, Stuttgart**  
Freelance Consultant (strategic and  
organisational consultancy) since  
1 April 2016  
Minister in the State Ministry of Baden-  
Württemberg until 18 March 2016
- > **Klaus Schörnich, Düsseldorf**  
Member of the Group works council  
for the EnBW Group and Chairman of  
the works council of Stadtwerke  
Düsseldorf AG
- > **Dietmar Weber, Esslingen**  
Member of the Group works council for  
the EnBW Group and Chairman of the  
central works council "market sector" of  
EnBW Energie Baden-Württemberg AG  
(until 10 May 2016)
- > **Marianne Kugler-Wendt, Heilbronn**  
Regional Director, ver.di  
Heilbronn-Neckar-Franconia region
- > **Heinz Seiffert, Ehingen**  
District Administrator of the Alb-Donau  
district until 30 September 2016
- > **Edith Sitzmann MdL, Freiburg**  
Minister for Finance for the Federal  
State of Baden-Württemberg and  
Member of the State Parliament of  
Baden-Württemberg  
(since 5 September 2016)
- > **Ulrike Weindel, Karlsruhe**  
Consultant for HR and member of  
the Karlsruhe works council for the  
"functional units sector" of EnBW  
Energie Baden-Württemberg AG  
(since 10 May 2016)

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### Key

- > Active member
- > Inactive member

As of 7 March 2017



## Committees

### Personnel committee

- > Lutz Feldmann (since 10 May 2016)  
Chairman
- > Stefan Paul Hamm  
(since 21 September 2016)
- > Dietrich Herd
- > Silke Krebs (since 21 September 2016)
- > Arnold Messner
- > Lothar Wölfle (since 21 September 2016)
  
- > Dr. Claus Dieter Hoffmann  
(until 10 May 2016)  
Chairman
- > Dr. Nils Schmid (until 31 August 2016)

### Finance and investment committee

- > Lutz Feldmann (since 10 May 2016)  
Chairman
- > Dr. Dietrich Birk  
(since 21 September 2016)
- > Stefan Paul Hamm
- > Dietrich Herd
- > Arnold Messner
- > Edith Sitzmann  
(since 21 September 2016)
- > Lothar Wölfle (since 10 May 2016)
- > Dr. Bernd-Michael Zinow
  
- > Dr. Claus Dieter Hoffmann  
(until 10 May 2016)  
Chairman
- > Silke Krebs (until 21 September 2016)
- > Dr. Hubert Lienhard  
(until 21 September 2016)
- > Heinz Seiffert (until 10 May 2016)

### Audit committee

- > Gunda Röstel  
Chairwoman
- > Marianne Kugler-Wendt
- > Dr. Hubert Lienhard  
(since 21 September 2016)
- > Sebastian Maier (since 10 May 2016)
- > Dr. Wolf-Rüdiger Michel
- > Klaus Schörnich
- > Heinz Seiffert
- > Ulrike Weindel (since 10 May 2016)
  
- > Wolfgang Lang (until 10 May 2016)
- > Dr. Nils Schmid (until 31 August 2016)
- > Dietmar Weber (until 10 May 2016)

### Nomination committee

- > Lutz Feldmann (since 10 May 2016)  
Chairman
- > Dr. Dietrich Birk  
(since 21 September 2016)
- > Silke Krebs
- > Gunda Röstel
- > Heinz Seiffert
- > Lothar Wölfle
  
- > Dr. Claus Dieter Hoffmann  
(until 10 May 2016)  
Chairman

### Ad hoc committee (since 7 June 2010)

- > Dr. Bernd-Michael Zinow  
Chairman
- > Stefanie Bürkle (since 10 May 2016)
- > Dietrich Herd
- > Gunda Röstel
  
- > Dr. Wolf-Rüdiger Michel  
(until 10 May 2016)

### Mediation committee (committee pursuant to section 27 (3) of the German Co- determination Act (MitbestG))

- > Lutz Feldmann (since 10 May 2016)  
Chairman
- > Dietrich Herd
- > Silke Krebs (since 21 September 2016)
- > Thomas Landsbek (since 10 May 2016)
  
- > Dr. Claus Dieter Hoffmann  
(until 10 May 2016)  
Chairman
- > Sebastian Maier (until 10 May 2016)
- > Dr. Nils Schmid (until 31 August 2016)

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#### Key

- > Active member
- > Inactive member

# Offices held by members of the Board of Management

- > **Dr. Frank Mastiaux**  
Chairman
  - EWE Aktiengesellschaft (until 21 April 2016 and since 17 May 2016 member of the Supervisory Board of EWE) (Deputy Chairman of the Supervisory Board and member of the Executive Committee of the Supervisory Board)
- > **Dr. Bernhard Beck**
  - EnBW Kernkraft GmbH (Chairman)
  - Energiedienst AG
  - Stadtwerke Düsseldorf AG (Chairman)
  - BKK VerbundPlus, Körperschaft des öffentlichen Rechts (alternating Chairman)
  - Energiedienst Holding AG
  - Pražská energetika a.s.
- > **Thomas Kusterer**
  - Netze BW GmbH
  - Verbundnetz Gas AG (Chairman) (since 5 September 2016)
  - EVN AG (until 19 January 2017)
- > **Dr. Hans-Josef Zimmer**
  - EnBW Kernkraft GmbH
  - EWE Aktiengesellschaft (until 21 April 2016)
  - Netze BW GmbH (Chairman)
  - terranets bw GmbH (Chairman)
  - TransnetBW GmbH (Chairman)
  - Vorarlberger Illwerke AG

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## Key

- > Active member
- > Inactive member

## Disclosures of office holders pursuant to section 285 No. 10 German Commercial Code (HGB)

- Membership in other statutory supervisory boards
- Membership in comparable domestic and foreign control bodies of business

# Other offices held by members of the Supervisory Board

- > **Lutz Feldmann**
  - Chairman
  - Villa Claudius gGmbH
  - Thyssen'sche Handelsgesellschaft mbH
  
- > **Dietrich Herd**
  - Deputy Chairman
  - EnBW Kernkraft GmbH
  
- > **Dr. Dietrich Birk**
  - SRH Holding (SdbR)
  
- > **Stefanie Bürkle**
  - Hohenzollerische Landesbahn AG
  - SV SparkassenVersicherung Lebensversicherung AG (until 13 July 2017)
  
  - Hohenzollerische Landesbank Kreissparkasse Sigmaringen, Anstalt des öffentlichen Rechts (Chairwoman)
  - Flugplatz Mengen Hohentengen GmbH (Chairwoman of the Board of Directors)
  - SRH Kliniken Landkreis Sigmaringen GmbH (Chairwoman of the Supervisory Board)
  - Sparkassenverband Baden-Württemberg, Anstalt des öffentlichen Rechts
  - Verkehrsverbund Neckar-Alb-Donau GmbH (naldo) (Chairwoman of the Supervisory Board)
  - Wirtschaftsförderungs- und Standortmarketinggesellschaft Landkreis Sigmaringen mbH (Chairwoman of the Supervisory Board)
  - Zweckverband Oberschwäbische Elektrizitätswerke (Deputy Chairwoman since 25 April 2016)
  - Zweckverband Thermische Abfallverwertung Donautal (TAD) (Deputy Chairwoman)
  - Zweckverband Tierische Nebenprodukte Süd-Baden-Württemberg
  
- > **Stefan Paul Hamm**
  - TransnetBW GmbH (until 31 March 2016)
  - Netze BW GmbH
  
- > **Michaela Krütter**
  - NetCom BW GmbH
  
- > **Silke Krebs**
  - Stiftung Kinderland Baden-Württemberg (Chairwoman) (until 18 March 2016)
  - Baden-Württemberg Stiftung gGmbH (until 7 November 2016)
  - Südwestrundfunk, Anstalt des öffentlichen Rechts (deputy member of the Board of Directors) (until 18 October 2016)
  - SWR Media Services GmbH (deputy member of the Supervisory Board) (until 18 October 2016)
  
- > **Marianne Kugler-Wendt**
  - Bausparkasse Schwäbisch-Hall AG
  - EnBW Kernkraft GmbH
  - SLK-Kliniken Heilbronn GmbH
  
  - Heilbronner Versorgungs GmbH
  - Stadtwerke Heilbronn GmbH
  
- > **Thomas Landsbek**
  - Gemeindewerke Bodanrück GmbH & Co. KG
  
- > **Dr. Hubert Lienhard**
  - Heraeus Holding GmbH
  - SGL Carbon SE
  - SMS Holding GmbH
  - Voith Turbo Beteiligungen GmbH (Chairman)
  - Kuka Aktiengesellschaft
  
  - Voith Hydro Holding GmbH & Co. KG (Chairman)
  - Voith Industrial Services Holding GmbH & Co. KG (Chairman) (until 29 January 2016)
  - Voith Turbo GmbH & Co. KG (Chairman)
  
- > **Sebastian Maier**
  - EnBW Ostwürttemberg DonauRies AG
  
  - NetCom BW GmbH
  - Netzgesellschaft Ostwürttemberg GmbH
  
- > **Arnold Messner**
  - Netze BW GmbH
  
- > **Dr. Wolf-Rüdiger Michel**
  - Kreisbaugenossenschaft Rottweil e. G. (Chairman)
  
  - Kreissparkasse Rottweil, Anstalt des öffentlichen Rechts (Chairman)
  - Schwarzwald Tourismus GmbH
  - SMF Schwarzwald Musikfestival GmbH
  - Sparkassen-Beteiligungen Baden-Württemberg GmbH
  - Sparkassenverband Baden-Württemberg, Körperschaft des öffentlichen Rechts
  - Wirtschaftsförderungsgesellschaft Schwarzwald-Baar-Heuberg mbH
  - Zweckverband Bauernmuseum Horb/Sulz
  - Zweckverband Kommunale Informationsverarbeitung Reutlingen-Ulm
  - Zweckverband Oberschwäbische Elektrizitätswerke (Deputy Chairman)
  - Zweckverband Protec
  - Zweckverband Ringzug Schwarzwald-Baar-Heuberg
  
- > **Gunda Röstel**
  - Universitätsklinikum Carl Gustav Carus Dresden an der Technischen Universität Dresden, Anstalt des öffentlichen Rechts (Deputy Chairwoman)
  - Verbundnetz Gas AG (since 30 May 2016)
  - Netze BW GmbH (since 20 April 2016)
  
  - University council of Technische Universität Dresden, Körperschaft des öffentlichen Rechts (Chairwoman)
  - Stadtwerke Burg GmbH

- > **Klaus Schörnich**
  - AWISTA GmbH
  - Stadtwerke Düsseldorf AG
  - Netzgesellschaft Düsseldorf mbH
- > **Heinz Seiffert**
  - Krankenhaus GmbH Alb-Donau-Kreis (Chairman) (until 30 September 2016)
  - LBS Landesbausparkasse Baden-Württemberg, Anstalt des öffentlichen Rechts (until 30 September 2016)
  - ADK GmbH für Gesundheit und Soziales (Chairman) (until 30 September 2016)
  - Donau-Iller-Nahverkehrsverbund GmbH (until 30 September 2016)
  - Fernwärme Ulm GmbH (until 30 September 2016)
  - Kreisbaugesellschaft mbH Alb-Donau (Chairman) (until 30 September 2016)
  - Pflegeheim GmbH Alb-Donau-Kreis (Chairman) (until 30 September 2016)
  - Regionalverband Donau-Iller (until 30 September 2016)
  - Sparkasse Ulm, Anstalt des öffentlichen Rechts (Chairman) (until 30 September 2016)
  - Zweckverband Oberschwäbische Elektrizitätswerke (Chairman until 30 April 2016 and member of the Board of Directors until 30 September 2016)
  - Zweckverband Thermische Abfallverwertung Donaual (Chairman) (until 30 September 2016)
  - Regionale Energieagentur Ulm gGmbH (until 30 September 2016)
- > **Edith Sitzmann**
  - Badische Staatsbrauerei Rothaus AG (mandate suspended from 12 May 2016, resignation under stock corporation law on 10 September 2016)
  - Landesbank Baden-Württemberg, Anstalt des öffentlichen Rechts (since 30 May 2016, active member since special approval granted by the state parliament on 21 July 2016) (Deputy Chairwoman since 4 August 2016)
  - Landeskreditbank Baden-Württemberg, Förderbank, Anstalt des öffentlichen Rechts (Chairwoman of the Board of Directors since 26 July 2016)
  - Kreditanstalt für Wiederaufbau, Anstalt des öffentlichen Rechts (since 1 January 2017)
- Südwestrundfunk, Anstalt des öffentlichen Rechts (until 12 May 2016)
- Baden-Württemberg Stiftung gGmbH (Deputy Chairwoman until 7 November 2016)
- > **Ulrike Weindel**
- > **Lothar Wölfle**
  - Abfallwirtschaftsgesellschaft of the Bodenseekreis and Konstanz districts (Deputy Chairman)
  - Verkehrsverbund Bodensee-Oberschwaben of the Ravensburg and Lake Constance districts (Chairman since 1 January 2016)
  - Bodensee-Oberschwaben-Bahn Verkehrsgesellschaft mbH
  - Sparkasse Bodensee (Deputy Chairman since 1 January 2016)
  - Zweckverband Oberschwäbische Elektrizitätswerke (Deputy Chairman since 1 July 2015)
  - Zweckverband Tierkörperbeseitigung Protec (Deputy Chairman)
  - Wirtschaftsförderungsgesellschaft Bodenseekreis GmbH (Chairman)
  - Regionale Innovations- und Technologiezentrum GmbH (Chairman of the Supervisory Board since 1 November 2016)
- > **Dr. Bernd-Michael Zinow**
  - EnBW Kernkraft GmbH (until 21 April 2016)
  - TransnetBW GmbH
  - Verbundnetz Gas AG (since 30 May 2016)
- > **Dr. Claus Dieter Hoffmann**
  - ING-DiBa AG
  - EJOT Holding GmbH & Co. KG
- > **Wolfgang Lang**
- > **Dr. Nils Schmid**
  - Landesbank Baden-Württemberg, Anstalt des öffentlichen Rechts (Deputy Chairman until 30 May 2016)
  - Landeskreditbank Baden-Württemberg, Förderbank, Anstalt des öffentlichen Rechts (Chairman of the Board of Directors from 1 January 2016 until 12 May 2016)
  - Kreditanstalt für Wiederaufbau, Anstalt des öffentlichen Rechts (until 31 December 2016)
  - Baden-Württemberg International – Gesellschaft für internationale wirtschaftliche und wissenschaftliche Zusammenarbeit mbH (Chairman of the Supervisory Board until 7 June 2016)
  - Baden-Württemberg Stiftung gGmbH
  - e-mobil BW GmbH (Chairman until 15 September 2016)
  - Leichtbau BW GmbH (Deputy Chairman until 15 September 2016)
- > **Carola Wahl**
- > **Dietmar Weber**

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**Key**

- > **Active member**
- > **Inactive member**

**Disclosures of office holders pursuant to section 285 No. 10 German Commercial Code (HGB)**

- Membership in other statutory supervisory boards
- Membership in comparable domestic and foreign control bodies of business

# Service

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# Multi-year overview

## Financial and strategic performance indicators

EnBW Group <sup>1</sup>		2016	2015	2014	2013	2012
<b>Earnings</b>						
Revenue	in € million	19,368	21,167	21,003	20,545	19,324
<b>TOP</b> Adjusted EBITDA	in € million	1,939	2,110	2,167	2,225	2,341
EBITDA	in € million	731	1,918	2,137	2,000	2,307
Adjusted EBIT	in € million	1,025	1,182	1,291	1,340	1,453
EBIT	in € million	-1,663	277	0	1,024	1,289
Group net profit/loss <sup>2</sup>	in € million	-1,797	158	-466	51	484
Earnings per share from Group net profit/loss <sup>2</sup>	in €	-6.64	0.58	-1.72	0.19	1.88
<b>Balance sheet</b>						
Non-current assets	in € million	23,382	24,388	25,995	24,318	24,205
Total assets	in € million	38,535	38,158	38,312	35,758	36,766
Equity	in € million	3,216	5,123	4,546	6,083	6,376
Equity ratio	in %	8.3	13.4	11.9	17.0	17.3
Net financial liabilities	in € million	3,645	3,329	4,403	2,975	3,605
Coverage ratio ALM	in %	61.0	74.2	- <sup>3</sup>	- <sup>3</sup>	- <sup>3</sup>
<b>Cash flow</b>						
Retained cash flow	in € million	950	1,718	- <sup>3</sup>	- <sup>3</sup>	- <sup>3</sup>
Net (cash) investments	in € million	1,317	494	1,427	816	448
<b>TOP</b> Internal financing capability	in %	72.1	347.8	- <sup>3</sup>	- <sup>3</sup>	- <sup>3</sup>
<b>Profitability</b>						
<b>TOP</b> Return on capital employed (ROCE)	in %	7.8	9.5	10.0	9.7	11.1
Weighted average cost of capital before tax	in %	6.9	6.9	7.2	8.5	8.7
Average capital employed	in € million	13,716	13,627	13,424	14,973	15,148
Value added	in € million	123	354	376	180	364
<b>Sales</b>						
Electricity <sup>4</sup>	in billions of kWh	115	115	126	128	136
Gas	in billions of kWh	139	135	117	100	73

## Financial and strategic performance indicators

EnBW Group <sup>1</sup>		2016	2015	2014	2013	2012
<b>Sales</b>						
Electricity sales	in billions of kWh	44	48	48	52	59
Gas sales	in billions of kWh	54	82	72	69	58
Revenue	in € million	7,771	9,061	9,067	9,568	9,278
<b>TOP</b> Adjusted EBITDA	in € million	250	255	231	227	241
<b>Grids</b>						
Electricity sales	in billions of kWh	– <sup>4</sup>	– <sup>4</sup>	– <sup>4</sup>	13	17
Revenue	in € million	6,644	6,351	6,231	5,708	5,340
<b>TOP</b> Adjusted EBITDA	in € million	1,004	747	886	962	773
<b>Renewable Energies</b>						
Electricity sales	in billions of kWh	3	3	4	4	3
Revenue	in € million	511	447	407	372	353
<b>TOP</b> Adjusted EBITDA	in € million	295	287	191	220	239
<b>Generation and Trading</b>						
Electricity sales	in billions of kWh	68	65	75	60	57
Gas sales	in billions of kWh	85	53	45	31	15
Revenue	in € million	4,434	5,300	5,290	4,888	4,346
<b>TOP</b> Adjusted EBITDA	in € million	337	777	900	839	1,125

<sup>1</sup> The figures for the 2015 financial year have been restated.

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

<sup>3</sup> No figures for the comparative periods 2014 to 2012 are available for the new performance indicators.

<sup>4</sup> Since the beginning of 2015, electricity sales from the Grids segment are no longer disclosed because the Independent Transmission Operators (ITO) no longer report their data. The figures for the 2014 financial year have been restated.

## Non-financial performance indicators

EnBW Group		2016	2015	2014	2013	2012
<b>Customers and society goal dimension</b>						
<b>TOP</b> Reputation Index		50.0	48.5	– <sup>1</sup>	– <sup>1</sup>	– <sup>1</sup>
<b>TOP</b> EnBW/Yello Customer Satisfaction Index		132/150	136/152	114/145	111/148	100/152
<b>TOP</b> SAIDI (electricity) in min/year		16	15	15	21	20
<b>Employees goal dimension</b>						
<b>TOP</b> Employee Commitment Index (ECI) <sup>2</sup>		59	60	56	58	65 <sup>3</sup>
<b>TOP</b> LTIF <sup>2</sup>		3.9	3.8	4.3	3.7	7.4 <sup>4</sup>
<b>Environment goal dimension</b>						
<b>TOP</b> Installed output of renewable energies (RE) in GW and the share of the generation capacity accounted for by RE in %		3.1/23.1	3.1/23.6	2.6/19.1	2.6/19.1	2.5/18.9
<b>TOP</b> CO <sub>2</sub> intensity in g/kWh		577	606	– <sup>1</sup>	– <sup>1</sup>	– <sup>1</sup>

<sup>1</sup> No figures for the comparative periods 2014 to 2012 are available for the new performance indicators.

<sup>2</sup> Variations in the group of consolidated companies; see also the definition of key performance indicators on page 28.

<sup>3</sup> Figure from employees survey 2010.

<sup>4</sup> A new definition has been used for LTIF since 2013, the figures are therefore not comparable.

# Glossary

## A

### Adjusted EBITDA

The operative earnings of companies are often measured based on adjusted EBITDA (earnings before interest, taxes, depreciation and amortisation). It describes earnings before the investment and financial results, income taxes and amortisation, adjusted for non-operating effects. The key performance indicator adjusted EBITDA is the central earnings indicator for EnBW.

### Adjusted earnings figures

Adjusted earnings figures are operational earnings figures that are adjusted for non-operating effects. This includes, amongst others, adjusted EBIT.

### Asset liability management model (Alm model)

A model for asset liability and cash flow management. A cash flow-based model is used to determine the effects of the pension and nuclear provisions on the balance sheet, income statement and cash flow statement over the next 30 years. This ensures that the Group can cover its long-term pension and nuclear provisions within an economically viable time period using corresponding financial investments (so-called dedicated financial assets).

### Asset management

A financial asset management system facilitates the active management of investments that are used to cover pension and nuclear provisions. The central focus of this activity is to generate appropriate returns while taking into account the risks incurred.

## B

### Base

Base load product. The constant base level of supply/demand over a period of time.

## C

### Capital employed

Capital employed comprises all assets from the operating business. At EnBW, it primarily comprises property, plant and equipment in the form of power plants or grids. Non-interest-bearing liabilities – such as trade payables – are deducted.

### Cash pooling

Daily pooling of the cash or cash equivalents of one or multiple companies within a Group with the goal of concentrating and transparently depicting them at the level of the parent company in order to optimise the interest result.

### Certified Emission Reduction (CER)

Certified emission reductions from Clean Development Mechanism (CDM) projects. Pursuant to the Kyoto protocol, investors in industrialised countries earn these in developing countries with CDM emission reduction projects. 1 CER corresponds to 1 tCO<sub>2</sub>. CERs can be used by companies to meet the obligation to return allowances under the European emissions trading system (> Emissions trading).

### Clean Dark Spread (CDS)

The difference between the electricity price and the generation costs for a typical coal power station, which is calculated using the coal price, CO<sub>2</sub> allowance price and the degree of efficiency of the power station.

### CO<sub>2</sub> allowances

CO<sub>2</sub> allowances have been traded on the Leipzig electricity exchange since 2005. If a company purchases a CO<sub>2</sub> allowance, it is entitled to emit 1 t CO<sub>2</sub> (> Emissions trading).

### CO<sub>2</sub> intensity

In the energy sector, CO<sub>2</sub> intensity refers to CO<sub>2</sub> emissions connected with electricity generation. It is measured in terms of g/kWh or t/MWh. CO<sub>2</sub> intensity as referred to here in the energy sector should not be confused with the meaning used in the wider economy.

### Combined heat and power (CHP)

The simultaneous conversion of energy into electricity and heat. The waste heat of a power plant can be used as process heat or to heat buildings in the surrounding area. In this way, additional energy is obtained using the same amount of fuel. A power plant that generates both electricity and heat from a single source is called a CHP plant.

### Commercial Paper (CP) programme

The CP programme is a flexible financing instrument and serves to issue unsecured bonds on the money market for the purpose of short-term financing.

### Connected Home

In digitally connected homes, household appliances, sensors and drive elements including all important energy-related components (e.g. photovoltaic systems, heat pumps or battery storage systems) can exchange information with one another digitally and can be connected to the Internet.

### Cost of capital (> WACC)

### Coverage ratio

Coverage of the pension and nuclear provisions of the Group by financial assets in the dedicated financial assets.

## D

### Debt Issuance Programme (DIP)

The DIP, also known as EMTN (Euro Medium Term Notes), is a standardised documentation platform for raising debt through the issuing of medium and long-term bonds on the capital market.

### Derivatives

Financial instruments whose price or rate is derived from its underlying asset.



**Dynamic leverage ratio**

The dynamic leverage ratio is equal to adjusted net debt divided by adjusted EBITDA.

**E****EBIT**

EBIT stands for earnings before interest and taxes.

**EBITDA**

EBITDA stands for earnings before interest, taxes, depreciation and amortisation.

**EEG cost allocations**

Cost allocations under the EEG (Renewable Energies Act) are charged by the transmission system operators (TSO). On the one hand, the cost allocations cover the difference between the income generated by the transmission system operators from selling the electricity from EEG plants and the expenses incurred by the transmission system operators for the fixed feed-in remuneration and market premium payments to direct marketers of EEG plants, while on the other hand, they also cover the costs of implementing the EEG. EEG cost allocations are necessary as the income generated from marketing EEG electricity falls far short of the expenditure for remuneration payments and market premiums due to the falling market prices for electricity. More than half of the electricity price for household customers today consists of taxes, duties and cost allocations. The EEG cost allocation of 6.88 ct/kWh in 2017 (+8.3% in comparison with 2016) accounts for the largest share.

**Emissions trading**

Emissions trading is an EU-wide instrument for achieving the targets for reducing greenhouse gas emissions. It covers around 12,000 installations across Europe in the energy industry, energy-intensive industries and airline operators (ETS sectors). Greenhouse gas emissions from those installations covered by emissions trading are limited in total to a certain amount – the so-called cap – and distributed in the form of tradable allowances (> EU allowance (EUA)) (issued free of charge or via an auction). Every company covered by the system must provide proof of the corresponding number of allowances for their emissions.

**Energy Industry Act (EnWG)**

The EnWG, which came into force in July 2005, introduced a regulatory regime for the supply of electricity and gas. The foundations of the act lie in the definitions of grid operator duties, rules for grid access and grid charges, as well as monitoring by the Federal Network Agency or the state regulatory authorities. The act has been amended several times since it came into force.

**Energy-only-Market (EOM)**

An energy market in which operators are only remunerated for the energy supplied and not explicitly for the generating capacity they provide. According to the plans of the German government, the reformed EOM 2.0 should include, above all, measures for removing regulatory barriers to flexibility and which will make the integration of renewable energies into the system easier. Furthermore, the plans envisage the establishment of a capacity reserve for securing the required capacities nationwide across Germany in periods of shortage.

**Energy saving contracting**

The cross-discipline optimisation of building technology and building operations based on cooperation in partnership. Investments in renovations or efficiency enhancement measures are financed through energy cost-savings.

**Energy supply contracting**

The outsourcing, for a specific period and for a specific area, of tasks relating to energy optimisation or utility energy supplies to a third party.

**EPEX SPOT**

The European Power Exchange (EPEX SPOT SE) is a stock exchange for the short-term wholesale trading of electricity in Germany, France, Austria, Switzerland and Luxembourg.

**ETS Post 2020 Reform**

Reform of the European emissions trading system for the fourth trading period starting in 2021.

**EU allowance (EUA)**

EU emission allowance. An EUA entitles a company to emit 1 t CO<sub>2</sub> (> Emissions trading). Each EU state allocates its supply of EUAs (1 EUA = 1 t CO<sub>2</sub>) to its national companies either free of charge or via auctions.

**F****Forward market**

Market on which the supply and procurement of electricity, fuel and CO<sub>2</sub> allowances are traded for a future period. Usual periods include weeks, months, quarters and years. Settlement can be either physical or financial. The forward market has the primary function of acting as a price hedge.

**Free cash flow**

The cash flow freely available to the company for the distribution of dividends and for the repayment of debt.

**Fuel cell**

Transforms the chemical energy stored in the energy source into electrical current and heat based on the principle of inverse electrolysis. It can be deployed to supply electricity to devices and vehicles for example, and for supplying electricity and heat to buildings, as well as for industrial purposes. Fuel cell plants are an efficient technology for decentralised energy generation.

**Funds from operations (FFO)**

Funds from operations (FFO) is the cash-relevant earnings from operating activities that is available to the company for investments, the distribution of dividends and the repayment of debt.

**G****Geothermal energy**

Energy stored in the form of heat from the interior of the earth. In Germany, temperatures can reach more than 100 °C at depths of several thousand metres, which can be used for the generation of electricity. To heat buildings, geothermal energy can be extracted using probes that only need to reach down to a depth of about 100 metres.

**H****Hedging**

Hedging is a structured approach for securing against financial risks through financial transactions. Hedging involves engaging in countertrade transactions to offset a transaction or an existing position. This is usually carried out in the form of futures contracts.

**High-voltage DC transmission lines (HVDC)**

HVDC are used to transport electrical energy across long distances. The transmission lines use direct current for transportation as the transmission losses are lower.

**Independent Transmission Operator (ITO)**

The Independent Transmission Operators must fulfil the European unbundling regulations for greater liberalisation of the electricity and natural gas markets (3rd EU internal energy market package), that were implemented in the German > Energy Industry Act (EnWG) in 2011. The aim of the unbundling regulations defined in the EnWG is to increase competition on the European energy market. An important prerequisite here is that the transmission grids are made available to all market participants as a neutral platform in a non-discriminatory way.

**Intelligent measurement system**

A combination of a modern measurement system and a data communication module (Smart Meter Gateway). The intelligent measurement system can be safely integrated into a communication network.

**Internal financing capability**

The key performance indicator internal financing capability describes the retained cash flow in relation to the cash-relevant > net investment and is the most significant performance indicator for the Group's ability to finance its activities internally.

**Intraday trading**

Intraday trading of electricity is carried out on both the > EPEX SPOT in Paris and the OTC (Over-the-Counter) market, i.e. via contracts negotiated off-exchange between electricity purchasers and sellers. It describes the continuous purchase and sale of electricity that is delivered on the same day. Therefore, it is also described as short-term wholesale electricity trading.

**Investment-grade rating**

An investment-grade rating exists from a credit rating of at least Baa3 (Moody's) or BBB- (Standard & Poor's).

**N****Net debt**

Net debt comprises net financial liabilities and the net debt relating to pension and dismantling provisions.

**Net financial liabilities**

Net financial liabilities comprise the financial liabilities (including financial leasing) taken on by the company less cash and cash equivalents and financial assets that are available to the company for its operating business. Financial liabilities are adjusted for valuation effects from interest-induced hedging transactions and the equity credit for the hybrid bonds.

**Net debt relating to pension and dismantling provisions**

Net debt relating to pension and dismantling provisions comprises the provisions for pensions and similar obligations and provisions in the nuclear power sector. These provisions are netted against receivables relating to the dismantling of nuclear power plants, cash and cash equivalents and financial assets that are held to cover the pension and dismantling provisions.

**Net (cash) investment**

Cash-relevant net investment describes the overall cash-relevant investment less the overall cash-relevant divestitures in the relevant financial year.

**Network Development Plan Electricity (NDP Electricity)**

This plan describes the measures that need to be deployed over the next 10 and 20 years to expand and restructure the German land-based high-voltage grid to ensure the secure operation of the network. These measures make a significant contribution to the integration of rapidly growing renewable energies and thus also to the Energiewende. The NDP Electricity will be prepared jointly by the four German transmission system operators every two years from 2016, before being submitted to the German Federal Network Agency (BNetzA) as the responsible regulator. The general public has the opportunity to voice its opinion on the related measures at various consultation proceedings.

**Network Development Plan Gas (NDP Gas)**

In the NDP Gas, German gas transmission system operators calculate the transpor-

tation capacities that they will require in the future. The plan is prepared every two years in close cooperation with the German Federal Network Agency (BNetzA) and in consultation with relevant market participants.

**Non-operating result**

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.

**Non-operating figures**

The non-operating figures include 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. This includes, amongst others, non-operating EBIT.

**Nuclear fuel rod tax**

This tax was imposed from 2011 to 2016 at a rate of €145/g of nuclear fuel employed.

**P****Pari passu clause**

A pari passu clause (Latin "pari passu" = on equal footing) is an obligation in financial agreements (for example, in bond agreements or loan agreements). The debtor/issuer obligates themselves during the term of the uncollateralised financial liability (for example, bond or loan) to the principle of equality, meaning future uncollateralised financial liabilities will not be given precedence over the existing financial liability.

**R****Renewable Energies Act (EEG)**

The German law for prioritising renewable energies regulates the preferential input of electricity from renewable sources into the electricity grid. It guarantees producers fixed feed-in remuneration for a 20-year period. It has thereby successfully contributed to the technological development of electricity generation plants from various sources, mainly hydropower, wind power, solar energy, biomass and > geothermal energy. The German government revised the EEG in the first half of 2014 and defined new targets for expansion by 2025 and 2035. It also aims to replace feed-in tariffs with competitive auctions.

**Repowering**

Old power plants for generating energy are replaced by newer and more efficient ones. The term is mainly used in connection with wind turbines.

**Retained cash flow**

The retained cash flow is decisive for the internal financing capability of EnBW. After covering ongoing costs and dividend payments, it is available to the company for investment without the need to raise additional debt.

**ROCE**

ROCE is the return on capital employed in a company. The key performance indicator ROCE describes the relationship between adjusted EBIT including the adjusted investment result and the average capital employed and is thus the central value-oriented performance indicator of EnBW for assessing the return on capital employed in the relevant financial year.

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**S****Smart City**

New technologies in the areas of energy, infrastructure, buildings and mobility are intelligently networked across various systems to enable the highly efficient utilisation of resources such as energy and water, and reduce their consumption. Integrated (urban) planning processes such as integrated energy or mobility concepts are interlinked with the opportunities and demands of new technologies.

**Smart grid**

Smart electricity grid. A communication and control network that monitors and optimises the operation of its inter-connected elements – from electricity generators, storage systems, consumers of electricity and network operating equipment in energy transmission and distribution grids. The aim is to optimise the supply of energy by operating the system efficiently, reliably and cost-effectively.

**Spot market**

Market on which electricity supply and procurement quantities are offered and requested for the following day.

**Spread**

This term describes here the difference in the electricity price and the costs for coal, gas or brown coal and emissions allowances for the generation of electricity.

**Sustainable mobility**

The aim of sustainable mobility is to fulfil the mobility requirements of broad sections of the population in future in an environmentally sustainable way and without restricting other people. This may open up business perspectives for mobility products and services in urban and rural areas, such as service platforms for the networking of different mobility services or for connecting energy storage capacities from new drive technologies with marketing platforms.

**System services**

The complete set of services required to ensure the quality of electricity supplies: provision of operating reserves, maintaining frequency stability, maintaining voltage levels, re-establishing supply, management services.

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**T****TCFD (Task Force on Climate-related Financial Disclosures)**

The Task Force on Climate-related Financial Disclosures (TCFD) examines the opportunities and risks associated with climate change and derives recommendations for transparent and understandable climate-related risk reporting by companies. EnBW is represented on the international task force appointed by the G20 through its Chief Financial Officer Thomas Kusterer ([www.fsb-tcfid.org](http://www.fsb-tcfid.org)).

**Treasury**

Department of the company that deals with liquidity management (disposition, liquidity planning, money markets), currency management (hedging against foreign exchange risks, obtaining foreign currencies) and interest management (hedging against risks due to changes in interest rates, managing the interest rate position).

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**V****Virtual power plant**

A virtual power plant is a business segment where products are marketed through a single platform that increases the value of decentralised energy plants – renewable, storage system, load-based plants – by bundling, marketing and optimising them together.

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**W****WACC**

WACC stands for the Weighted Average Cost of Capital and is used in combination with value-based performance indicators. The cost of capital is determined based on the weighted average cost of equity and debt together.

# Highlights 2016



## Statewide programme for new ideas ACTIVATR launched

In cooperation with the start-up company Pioniergeist GmbH and renowned companies from the automobile and mechanical engineering sector, EnBW launches the statewide programme for new ideas called "ACTIVATR" in April. Interdisciplinary start-up teams consisting of Group employees and young external entrepreneurs will generate ideas for new business models and develop them through to market maturity within a few months. The aim is to open up business fields such as the Internet of Things, Industry 4.0, Future Mobility and Smart City, as well as to further develop the start-up ecosystem and Baden-Württemberg as a business location.

## Official commissioning of the North Black Forest Pipeline

The new 71 kilometre long-distance gas pipeline operated by terranets bw is placed into operation in January. The North Black Forest Pipeline transports natural gas from Au am Rhein in Baden via Ettlingen and Pforzheim to Leonberg in the greater Stuttgart area. It increases the capacity of the Baden-Württemberg transport grid by around 15%. This pipeline project is part of the nationwide Network Development Plan Gas for the expansion of the transmission grid.

## Digital Leader Award for SM!GHT

The multifunctional street lighting SM!GHT – an in-house development from the EnBW Innovation Campus – wins first prize in the "Digitize Society" category at the Digital Leader Awards. The Digital Leader Awards, under the patronage of Sigmar Gabriel, honours projects that push forward the digital revolution. The jury was won over by, amongst other things, the fact that EnBW has founded a start-up within the framework of its Innovation Campus that has succeeded in developing a future-oriented digital product to market maturity in less than two years.



## EWE and EnBW: restructuring of shareholdings

As part of the restructuring of shareholdings with EWE Aktiengesellschaft (EWE), Oldenburg, EnBW acquires 74.21% of VNG-Verbundnetz Gas Aktiengesellschaft (VNG) on 20 April. At the same time, EWE and EWE-Verband each acquire a 10% shareholding in EWE from EnBW. EnBW will retain a 6% shareholding in EWE until at the latest 2019, at which time it will be acquired by EWE-Verband.

## EnBW acquires service provider for wind power plants

EnBW takes over one of the leading service providers for turbine maintenance in Europe with the acquisition of the manufacturer-independent service provider Connected Wind Services A/S

(CWS). As a result, EnBW becomes a significant player in the fast-growing area dealing with the servicing and maintenance of wind power plants while continuing with its rigorous expansion of its Renewable Energies business segment at the same time. In particular, EnBW aims to tap into the potential for new customers in northern Europe and Germany together with CWS.



## EnBW launches a new image campaign

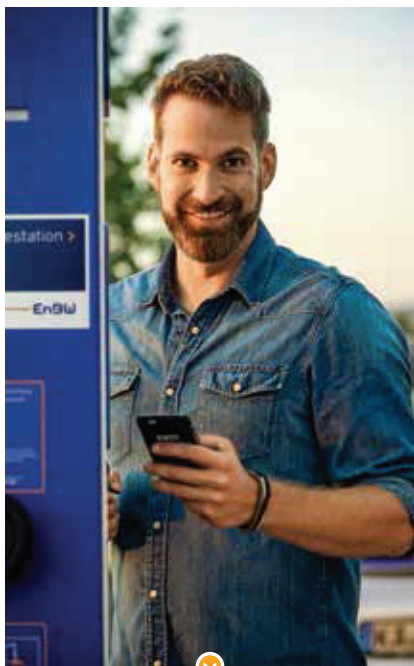
At the heart of the new EnBW communication campaign that started in April, which is running under the motto of "We're making it happen", lie the company's employees. As ambassadors, they campaign throughout Baden-Württemberg to gain the trust of customers and the general public in EnBW and its accomplishments. The EnBW "Making it happen" bus travels across the state from May to September as part of the campaign, so that EnBW employees can provide manpower and materials to support charitable projects directly on-site. Due to the great success of the campaign, it is relaunched in the Advent season with the team on the "Making it happen" bus taking on four further engagements.

## A modern DC transmission network where 100% of the cables are laid underground

The transmission system operators Tennet and TransnetBW are planning to construct a direct current transmission line called SuedLink using only underground cables after the preference for underground cables on direct current transmission lines was stipulated by law at the end of last year. SuedLink is due to be completed in 2025. For the ULTRANET direct current transmission line, Transnet BW also plans to construct a transformer station on the site of the Philippsburg nuclear power plant.

**Green light for the digital product world**

EnBW is offering the first component of its new world of energy solutions with EnBW solar+. Customers receive a solar power plant, a stationary storage system, an intelligent management and measurement system and an app all from one source, as well as service, performance and savings guarantees. All customers are networked in the "Energy Community". The product will be initially offered to private customers in Baden-Württemberg, while preparations for the sale across Germany will be carried out in parallel. Plans currently include expanding the system to allow the charging of electric cars with community electricity. Subsequent stages will see the integration of fuel cells or heat pumps into the system.



**Contract with Tank & Rast: first component of a new e-mobility strategy**

The cooperation agreed with Germany's largest service station operator Autobahn Tank & Rast GmbH is the first important component of the new e-mobility strategy at EnBW. The agreement includes the construction and operation of 68 quick-charging stations at 34 motorway service stations by EnBW. With a total of around 350 charging stations in Baden-Württemberg, EnBW thus offers its customers the largest infrastructure network with the greatest coverage in the state.

**New gas-fired CHP power plant in Stuttgart-Gaisburg**

EnBW modernises its power plant site in Stuttgart-Gaisburg at a cost of around €75 million. The new plants are due to be placed into operation at the end of 2018 or the beginning of 2019. They consist of a gas-fired combined heat and power plant, a district heating storage system, a plant for generating electricity and heating and a district heating station. EnBW is also making a significant contribution to environmental and climate protection in the Stuttgart region with this investment.



**Disposal package negotiated between the German government and nuclear power plant operators**

The law of reorganising responsibility for nuclear waste management redefines the responsibilities of the government and the operators. In future, the government assumes financial and organisational responsibility for the disposal of the nuclear waste. The dismantling of the power plants remains the responsibility of the companies. The necessary funds to cover the costs of storage plus a risk premium of 35% will be transferred by the companies to a state fund. The total transaction by the sector amounts to €23.4 billion, while EnBW is expected to pay €4.7 billion into the fund.

**EnBW further expands its onshore portfolio**

Through the acquisition and construction of seven further wind farms with a total of 46 turbines in various regions of Germany, EnBW further expands the area of renewable energies in 2016 and increases its onshore output to 336 MW. EnBW has approvals for wind farms with a total output of around 200 MW for 2017. 64 turbines distributed across 16 wind farms will be constructed during the course of the year and should be placed into operation before the end of the year. This now means that EnBW joins the leading group of project developers for wind energy in Germany for the first time.



**E-mobility: EnBW cooperating with Hyundai**

EnBW is equipping Hyundai authorised dealerships and service points across Germany with charging stations for electric vehicles. This will create up to 1,000 new charging points by 2017. EnBW is thus expanding its network of digitally linked charging infrastructure for business customers and strengthening its position as a leading provider of infrastructure services.

# Important notes

## Published by

EnBW Energie Baden-Württemberg AG  
Durlacher Allee 93  
76131 Karlsruhe

## Coordination and editor

Corporate Brand Communications,  
Karlsruhe

## Concept and design

IR-ONE, Hamburg  
www.ir-one.de

## Photos in the image section

Avenue Images, Werner Dieterich (p. 2,3 and 5)  
Niko Schmid-Burgk (p. 4, 6, 9 and 10)  
EnBW Energie Baden-Württemberg AG (p. 6, 14 and 15)  
Uli Deck (p. 8)  
Fotolia (p. 12)

## Photos of the Board of Management and Supervisory Board

Matthias Hangst, Karlsruhe  
Niels Schubert, Stuttgart

## Photos for the Highlights

EnBW Energie Baden-Württemberg AG

## Typesetting

In-house using firesys

## Printed by

Elanders GmbH, Waiblingen

ISBA: R.3538.1703

Publication of the Integrated Annual Report 2016:  
28 March 2017

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## Publication in the German Federal Gazette

The complete consolidated financial statements prepared by EnBW Energie Baden-Württemberg AG and audited by KPMG AG Wirtschaftsprüfungsgesellschaft, Mannheim, and the management report, which is combined with the Group management report, will be published in the German Federal Gazette ("Bundesanzeiger") together with the unqualified audit opinion. The necessary documents will be submitted to the German Federal Gazette ("Bundesanzeiger") by 30 April 2017 at the latest.

## No offer or investment recommendation

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

## Forward-looking statements

This report contains forward-looking statements which are based on current assumptions, plans, estimates and forecasts made by the management of EnBW. Forward-looking statements of this kind are therefore only valid at the time they were first published. Forward-looking statements are indicated by the context, but may also be identified by the use of the words "can", "will", "should", "plans", "intends", "expects", "thinks", "estimates", "forecasts", "potential", "continued" and similar expressions.

By nature, forward-looking statements are subject to risks and uncertainties that cannot be controlled or accurately predicted by EnBW. Actual events, future results, the financial position, development or performance of EnBW and the companies of the EnBW Group may therefore diverge considerably from the forward-looking statements made in this report. Therefore, it cannot be guaranteed nor can any liability otherwise be assumed that these forward-looking statements will prove complete, correct or precise, or that expected and forecast results will actually occur in the future.

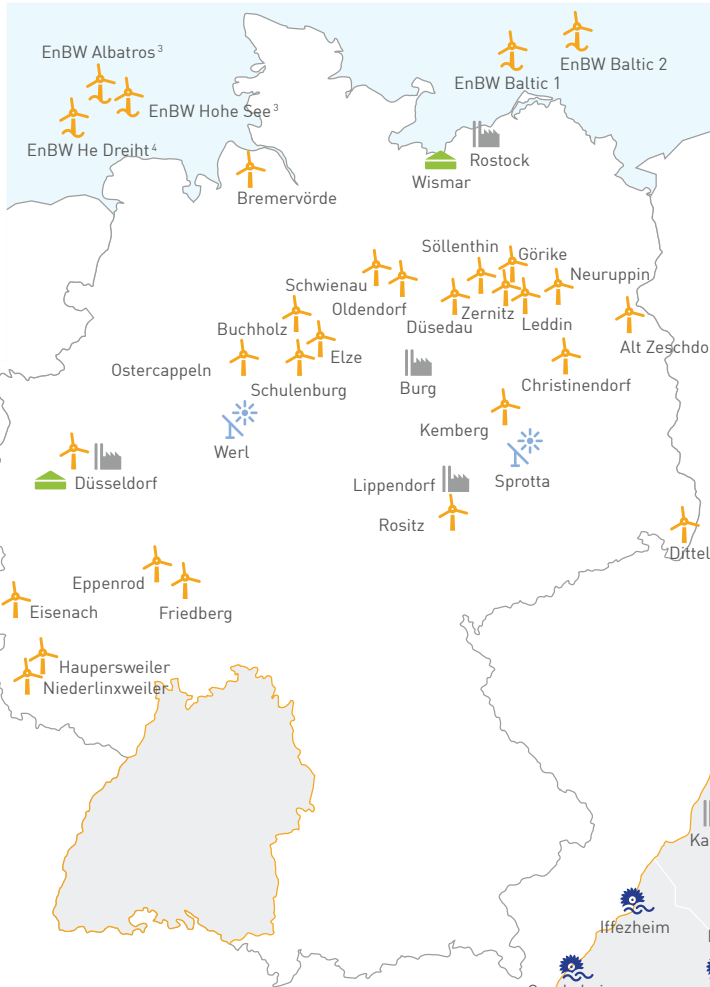
## No obligation to update the information

EnBW assumes no obligation of any kind to update the information contained in this report or to adjust or otherwise update forward-looking statements to future events or developments. This Annual Report can also be downloaded from the Internet in German or English. In cases of doubt, the German version shall be authoritative.



# Important generation locations of the EnBW Group <sup>1</sup>

## Germany










## Baden-Württemberg



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-  Onshore wind farm
-  Offshore wind farm
-  Photovoltaic power plant
-  Hydroelectric power plant
-  Biomass power plant
-  Conventional power plant
-  Nuclear power plant

<sup>1</sup> Long-term procurement agreements and partly owned power plants are included in own electricity production.

<sup>2</sup> Partially or completely in the grid reserve (NetzResV).

<sup>3</sup> At the project planning/planning stage.

<sup>4</sup> At the project development stage.

<sup>5</sup> Currently being dismantled.

EnBW operates numerous other renewable energy power plants. You can find other locations and information at [www.enbw.com/erzeugung](http://www.enbw.com/erzeugung) and in the free EnBW E-Cockpit app.

# Financial calendar

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## **28 March 2017**

Publication of the  
Integrated Annual Report 2016

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## **9 May 2017**

Annual General Meeting 2017

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## **15 May 2017**

Publication of the Quarterly Statement  
January to March 2017

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## **27 July 2017**

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

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## **10 November 2017**

Publication of the Quarterly Statement  
January to September 2017



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 Further information is available on the Internet.

 Further information is available in another section of the report.

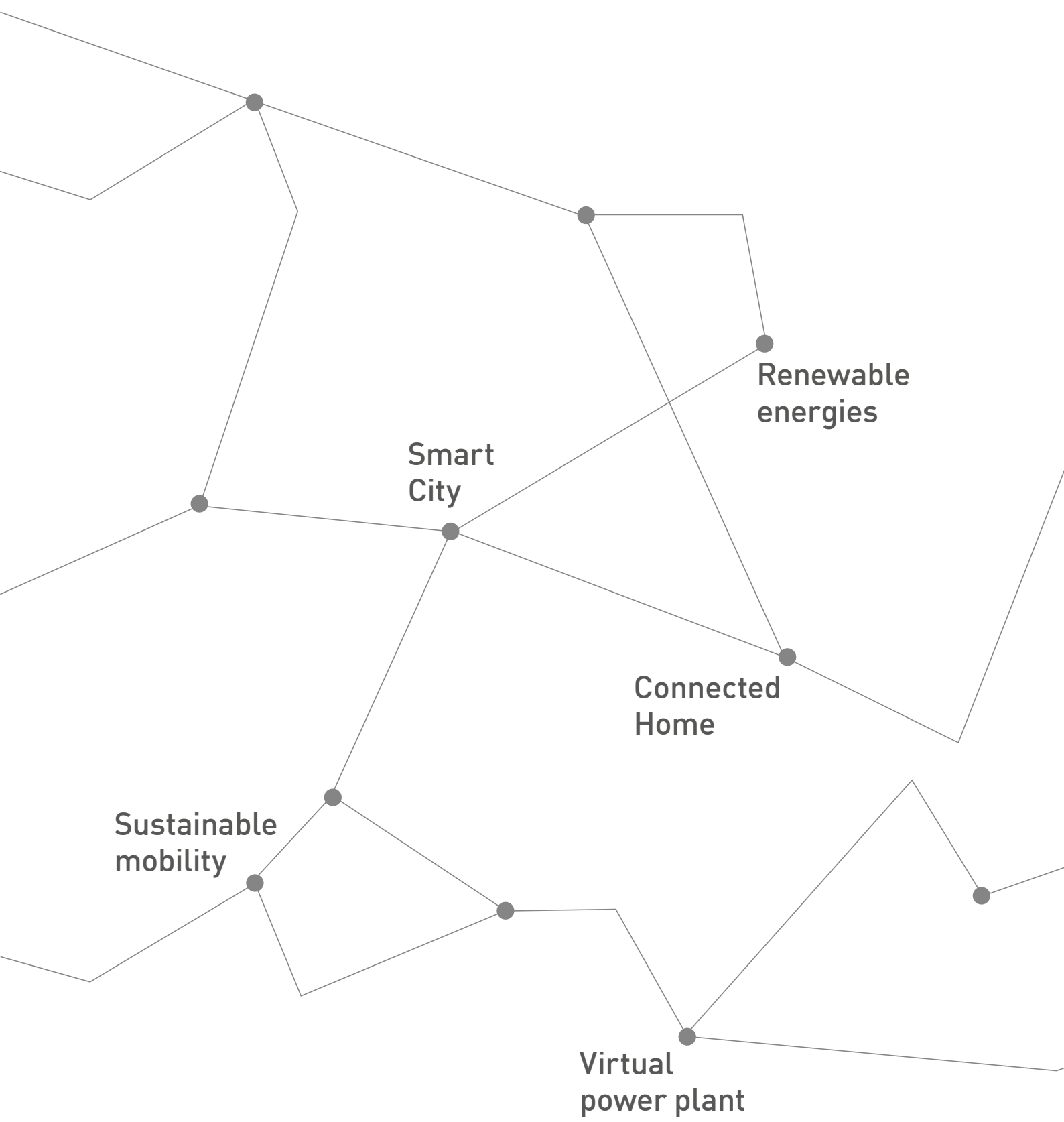
 This term is explained in our glossary on page 116 ff.

The integrated management report of EnBW comprises financial and non-financial goals in the dimensions of finance, strategy, customers and society, employees and the environment.

 Our key performance indicators are labelled with this symbol.

We have also published an online version of the Integrated Annual Report 2016 at:

 [www.enbw.com/report2016](http://www.enbw.com/report2016)



# Financial statements of the EnBW Group 2016

Without management report





# Financial statements

of the EnBW Group

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# Income statement

in € million <sup>1</sup>	Notes	2016	2015
Revenue including electricity and energy taxes		20,080.2	21,944.1
Electricity and energy taxes		-711.8	-777.6
<b>Revenue</b>	(1)	<b>19,368.4</b>	<b>21,166.5</b>
Changes in inventories		15.9	-3.0
Other own work capitalised		118.5	93.4
Other operating income	(2)	807.5	833.8
Cost of materials	(3)	-16,681.3	-17,364.7
Personnel expenses	(4)	-1,673.4	-1,641.3
Other operating expenses	(5)	-1,224.9	-1,166.5
<b>EBITDA</b>		<b>730.7</b>	<b>1,918.2</b>
Amortisation and depreciation	(6)	-2,393.6	-1,641.2
<b>Earnings before interest and taxes (EBIT)</b>		<b>-1,662.9</b>	<b>277.0</b>
Investment result	(7)	117.6	21.2
of which net profit/loss from entities accounted for using the equity method		(-10.0)	(26.3)
of which other profit/loss from investments		(127.6)	(-5.1)
Financial result	(8)	-1,176.6	-24.0
of which finance income		(431.9)	(1,078.9)
of which finance costs		(-1,608.5)	(-1,102.9)
<b>Earnings before tax (EBT)</b>		<b>-2,721.9</b>	<b>274.2</b>
Income tax	(9)	1,049.4	-40.0
<b>Group net profit/loss</b>		<b>-1,672.5</b>	<b>234.2</b>
of which profit/loss shares attributable to non-controlling interests		(124.7)	(76.0)
of which profit/loss shares attributable to the shareholders of EnBW AG		(-1,797.2)	(158.2)
<b>EnBW AG shares outstanding (million), weighted average</b>		<b>270.855</b>	<b>270.855</b>
<b>Earnings per share from Group net profit/loss (€)<sup>2</sup></b>	(23)	<b>-6.64</b>	<b>0.58</b>

<sup>1</sup> The figures for the previous year have been restated. Further information is available in the notes under "Restatement of previous-year figures".

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

# Statement of comprehensive income

in € million <sup>1</sup>	2016	2015
<b>Group net profit/loss</b>	<b>-1,672.5</b>	<b>234.2</b>
Revaluation of pensions and similar obligations	-427.4	200.7
Entities accounted for using the equity method	1.4	-24.2
Income taxes on other comprehensive income	124.1	-32.6
<b>Total of other comprehensive income and expenses without future reclassifications impacting earnings</b>	<b>-301.9</b>	<b>143.9</b>
Currency translation differences	7.0	53.2
Cash flow hedge	247.8	104.9
Available-for-sale financial assets	192.8	-406.4
Entities accounted for using the equity method	-39.8	14.6
Income taxes on other comprehensive income	-105.2	-11.4
<b>Total of other comprehensive income and expenses with future reclassifications impacting earnings</b>	<b>302.6</b>	<b>-245.1</b>
<b>Total other comprehensive income</b>	<b>0.7</b>	<b>-101.2</b>
<b>Total comprehensive income</b>	<b>-1,671.8</b>	<b>133.0</b>
of which profit/loss shares attributable to non-controlling interests	(130.3)	(88.5)
of which profit/loss shares attributable to the shareholders of EnBW AG	(-1,802.1)	(44.5)

<sup>1</sup>The figures for the previous year have been restated. Further information is available in the notes under "Restatement of previous-year figures".

# Balance sheet

in € million <sup>1</sup>	Notes	31/12/2016	31/12/2015	01/01/2015
<b>Assets</b>				
<b>Non-current assets</b>				
Intangible assets	(10)	1,636.5	1,744.9	1,783.0
Property, plant and equipment	(11)	13,481.9	13,508.1	13,681.7
Entities accounted for using the equity method	(12)	1,835.6	826.1	1,941.0
Other financial assets	(13)	6,428.0	8,309.3	8,589.2
Trade receivables	(14)	357.4	760.3	678.6
Other non-current assets	(15)	410.1	345.7	279.1
Deferred taxes	(20)	1,268.9	93.4	430.0
		<b>25,418.4</b>	<b>25,587.8</b>	<b>27,382.6</b>
<b>Current assets</b>				
Inventories		806.8	877.5	1,135.4
Financial assets	(16)	2,389.5	1,353.9	780.1
Trade receivables	(14)	3,129.1	2,787.3	3,193.1
Other current assets	(15)	2,626.9	3,034.7	2,537.2
Cash and cash equivalents	(17)	3,991.6	3,501.1	3,179.2
		<b>12,943.9</b>	<b>11,554.5</b>	<b>10,825.0</b>
<b>Assets held for sale</b>	(22)	173.0	1,015.9	104.5
		<b>13,116.9</b>	<b>12,570.4</b>	<b>10,929.5</b>
		<b>38,535.3</b>	<b>38,158.2</b>	<b>38,312.1</b>
<b>Equity and liabilities</b>				
<b>Equity</b>	(18)			
<b>Shares of the shareholders of EnBW AG</b>				
Subscribed capital		708.1	708.1	708.1
Capital reserve		774.2	774.2	774.2
Revenue reserves		1,582.5	3,634.8	3,692.4
Treasury shares		-204.1	-204.1	-204.1
Other comprehensive income		-1,543.0	-1,644.2	-1,530.5
		<b>1,317.7</b>	<b>3,268.8</b>	<b>3,440.1</b>
Non-controlling interests		1,898.5	1,854.4	1,105.5
		<b>3,216.2</b>	<b>5,123.2</b>	<b>4,545.6</b>
<b>Non-current liabilities</b>				
Provisions	(19)	13,011.9	14,478.1	14,302.2
Deferred taxes	(20)	652.8	670.7	648.9
Financial liabilities	(21)	6,720.2	6,810.0	7,187.1
Other liabilities and subsidies	(21)	1,787.1	1,832.9	2,008.5
		<b>22,172.0</b>	<b>23,791.7</b>	<b>24,146.7</b>
<b>Current liabilities</b>				
Provisions	(19)	6,060.2	1,342.8	1,151.6
Financial liabilities	(21)	1,208.7	758.2	1,078.5
Trade payables	(21)	3,193.0	3,523.5	3,829.6
Other liabilities and subsidies	(21)	2,661.2	3,618.0	3,511.6
		<b>13,123.1</b>	<b>9,242.5</b>	<b>9,571.3</b>
<b>Liabilities directly associated with assets classified as held for sale</b>	(22)	24.0	0.8	48.5
		<b>13,147.1</b>	<b>9,243.3</b>	<b>9,619.8</b>
		<b>38,535.3</b>	<b>38,158.2</b>	<b>38,312.1</b>

<sup>1</sup> The figures for the previous year have been restated. Further information is available in the notes under "Changes in accounting policies" and "Restatement of previous-year figures".



# Cash flow statement

in € million <sup>1</sup>	2016	2015
<b>1. Operating activities</b>		
EBITDA	730.7	1,918.2
Changes in provisions	721.9	145.6
Result from disposals	-28.4	-50.3
Other non-cash expenses/income	-49.7	-69.7
Change in assets and liabilities from operating activities	-657.5	-137.7
Inventories	(67.9)	(70.2)
Net balance of trade receivables and payables	(-302.6)	(-60.5)
Net balance of other assets and liabilities	(-422.8)	(-147.4)
Income tax paid/received	-243.4	112.2
<b>Cash flow from operating activities</b>	<b>473.6</b>	<b>1,918.3</b>
<b>2. Investing activities</b>		
Capital expenditure on intangible assets and property, plant and equipment	-1,189.4	-1,416.4
Disposals of intangible assets and property, plant and equipment	115.5	140.2
Cash received from construction cost and investment subsidies	61.1	78.2
Acquisition of subsidiaries, entities accounted for using the equity method and interests in joint operations	-961.3	-21.1
Sale of subsidiaries, entities accounted for using the equity method and interests in joint operations	189.9	25.0
Cash paid for investments in other financial assets	-331.6	-1,996.1
Sale of other financial assets	2,065.2	1,949.6
Cash received/paid for investments in connection with short-term finance planning	39.4	45.8
Interest received	203.0	242.9
Dividends received	142.1	137.7
<b>Cash flow from investing activities</b>	<b>333.9</b>	<b>-814.2</b>
<b>3. Financing activities</b>		
Interest paid for financing activities	-351.3	-375.1
Dividends paid	-226.1	-269.7
Cash received for changes in ownership interest without loss of control	0.0	719.8
Cash paid for changes in ownership interest without loss of control	-8.0	0.0
Increase in financial liabilities	999.2	244.6
Repayment of financial liabilities	-704.8	-1,112.0
Payments from alterations of capital in non-controlling interests	-25.6	-6.1
<b>Cash flow from financing activities</b>	<b>-316.6</b>	<b>-798.5</b>
<b>Net change in cash and cash equivalents</b>	<b>490.9</b>	<b>305.6</b>
Net foreign exchange difference	-0.4	10.3
<b>Change in cash and cash equivalents</b>	<b>490.5</b>	<b>315.9</b>
Cash and cash equivalents at the beginning of the period	3,501.1	3,185.2
<b>Cash and cash equivalents at the end of the period</b>	<b>3,991.6</b>	<b>3,501.1</b>

<sup>1</sup> Further information is available in the notes under (31) "Notes to the cash flow statement".

# Statement of changes in equity

in € million <sup>1,2</sup>	Other comprehensive income <sup>4</sup>										Total
	Subscribed capital and capital reserve <sup>3</sup>	Revenue reserves	Treasury 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 shareholders of EnBW AG	Non-controlling interests <sup>4</sup>	
<b>As of 01/01/2015</b>	<b>1,482.3</b>	<b>3,692.4</b>	<b>-204.1</b>	<b>-1,652.2</b>	<b>-95.6</b>	<b>-334.3</b>	<b>605.3</b>	<b>-53.7</b>	<b>3,440.1</b>	<b>1,105.5</b>	<b>4,545.6</b>
Other comprehensive income				169.5	41.2	77.4	-392.2	-9.6	-113.7	12.5	-101.2
Group net profit/loss		158.2							158.2	76.0	234.2
<b>Total comprehensive income</b>	<b>0.0</b>	<b>158.2</b>	<b>0.0</b>	<b>169.5</b>	<b>41.2</b>	<b>77.4</b>	<b>-392.2</b>	<b>-9.6</b>	<b>44.5</b>	<b>88.5</b>	<b>133.0</b>
Dividends paid		-186.9							-186.9	-65.1	-252.0
Other changes <sup>5,6</sup>		-28.9							-28.9	725.5	696.6
<b>As of 31/12/2015</b>	<b>1,482.3</b>	<b>3,634.8</b>	<b>-204.1</b>	<b>-1,482.7</b>	<b>-54.4</b>	<b>-256.9</b>	<b>213.1</b>	<b>-63.3</b>	<b>3,268.8</b>	<b>1,854.4</b>	<b>5,123.2</b>
Other comprehensive income				-301.9	6.2	159.2	170.0	-38.4	-4.9	5.6	0.7
Group net profit/loss		-1,797.2							-1,797.2	124.7	-1,672.5
<b>Total comprehensive income</b>	<b>0.0</b>	<b>-1,797.2</b>	<b>0.0</b>	<b>-301.9</b>	<b>6.2</b>	<b>159.2</b>	<b>170.0</b>	<b>-38.4</b>	<b>-1,802.1</b>	<b>130.3</b>	<b>-1,671.8</b>
Dividends paid		-149.0							-149.0	-59.1	-208.1
Other changes <sup>5,6</sup>		-106.1						106.1	0.0	-27.1	-27.1
<b>As of 31/12/2016</b>	<b>1,482.3</b>	<b>1,582.5</b>	<b>-204.1</b>	<b>-1,784.6</b>	<b>-48.2</b>	<b>-97.7</b>	<b>383.1</b>	<b>4.4</b>	<b>1,317.7</b>	<b>1,898.5</b>	<b>3,216.2</b>

<sup>1</sup> The figures for the previous year have been restated. Restatement of the revenue reserves of €33.3 million. Restatement of the non-controlling interests of €0.4 million.

Further information is available in the notes under "Restatement of previous-year figures".

<sup>2</sup> Further information is available in the notes under (18) "Equity".

<sup>3</sup> Of which subscribed capital €708.1 million (31/12/2015: €708.1 million, 01/01/2015: €708.1 million) and capital reserve €774.2 million (31/12/2015: €774.2 million, 01/01/2015: €774.2 million).

<sup>4</sup> Of which other comprehensive income directly associated with the assets held for sale as of 31/12/2016 to the amount of €0.0 million (31/12/2015: € -45.4 million, 01/01/2015: €0.0 million). Of which attributable to the shareholders of EnBW AG: €0.0 million (31/12/2015: € -45.4 million, 01/01/2015: €0.0 million). Of which attributable to non-controlling interests: €0.0 million (31/12/2015: €0.0 million, 01/01/2015: €0.0 million).

<sup>5</sup> Of which changes in revenue reserves due to changes in ownership interest of subsidiaries without loss of control of €0.0 million (previous year: € -28.2 million). Of which changes in non-controlling interests due to changes in ownership interest of subsidiaries without loss of control of €0.0 million (previous year: €738.8 million).

<sup>6</sup> Of which transaction costs that were accounted for as a deduction from equity amounting to €0.0 million (previous year: €1.9 million).

# Notes to the 2016 financial statements of the EnBW Group

## General principles

In accordance with section 315a (1) of the German Commercial Code (HGB), EnBW Energie Baden-Württemberg AG (EnBW), as the highest-level parent company in the EnBW Group, prepares the consolidated financial statements according to the International Financial Reporting Standards (IFRS), the adoption of which is mandatory in the European Union as of the reporting date. The interpretations promulgated by the IFRS Interpretations Committee (IFRS IC) are also taken into account. IFRS and interpretations whose application is not yet mandatory are not adopted. The consolidated financial statements therefore comply with those IFRS and interpretations issued by the International Accounting Standards Board (IASB) which have been endorsed by the EU.

The consolidated financial statements are presented in millions of euro (€ million). The income statement as well as the statement of comprehensive income, the balance sheet, the cash flow statement and the statement of changes in equity of the EnBW Group are presented separately.

In the interest of clarity, items have been combined in the income statement and in the balance sheet, and disclosed separately and explained in the notes.

The income statement has been prepared using the nature of expense method.

Significant events in the reporting period such as the change to the discount rate for pension and nuclear provisions are described and detailed descriptions of the segments are given in the EnBW Group section of the management report. Significant events after the reporting date are presented in the report on opportunities and risks within the management report.

The consolidated financial statements are prepared as of the reporting date of the parent company's financial statements. The parent company's financial year is the calendar year.

The registered office of the company is in Karlsruhe, Germany. The address is EnBW Energie Baden-Württemberg AG, Durlacher Allee 93, 76131 Karlsruhe. It is entered at the District Court of Mannheim under HRB-no. 107956.

EnBW's principal activities are described in the segment reporting.

EnBW's Board of Management prepared and releases the consolidated financial statements for issue on 7 March 2017.

## Consolidation principles

The financial statements of the domestic and foreign companies included in the consolidation were prepared in a standardised manner in accordance with the accounting policies which are applicable at EnBW.

Business combinations are accounted for using the acquisition method. The cost of a business combination is measured based on the fair value of the assets acquired and liabilities assumed or entered into as of the acquisition date. Non-controlling interests are measured at the proportionate fair value of the identified assets and the liabilities assumed. Incidental acquisition costs are expensed as incurred. If the business combination is achieved in stages, the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through profit or loss when the acquirer obtains control. Any excess of the cost of a business combination plus the amount of any non-controlling interest in the acquiree over the acquired identifiable assets, assumed liabilities and contingent liabilities is reported as goodwill if positive or, if negative, is reassessed and recognised as a gain through profit or loss.

A change in the ownership interest in an entity which continues to be fully consolidated is accounted for as an equity transaction. All remaining interests are remeasured at fair value upon loss of control.

Receivables, liabilities and provisions between the consolidated entities are netted. Intercompany income is set off against the corresponding expenses. Intercompany profits and losses are eliminated unless they are of minor importance.

### Consolidated companies

In accordance with the full consolidation method, all subsidiaries under the control of the Group are included. The Group controls an associate if it is exposed to risks or has rights to variable returns as a result of its involvement in the associate, and the Group has the ability to use its power over the associate in a way that affects the amount of the returns from the associate. In the full consolidation process, the assets and liabilities of a subsidiary are included in the consolidated financial statements in their entirety.

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 associate, but the entity does not qualify as a subsidiary. At the time of acquisition they are recognised at cost and subsequently recognised according to the amortised proportionate net assets. The carrying amounts are increased or reduced each year by the proportionate profit or loss, dividends paid or other changes in equity. This means that when shareholdings are being measured, only the company's proportional equity, rather than its assets and liabilities, is shown in the consolidated financial statements. Any goodwill is included in the stated value of the shareholding in question. Any negative differences are recognised in profit or loss in the investment result.

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.

Interests in subsidiaries, joint ventures or associates which, in the Group's opinion, are of minor significance, or are not controlled due to their participation structure and as such no significant influence is exercised over them, are reported in accordance with IAS 39. Indicators for determining the materiality of subsidiaries are the revenue, earnings and equity of these companies.

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	31/12/2016	31/12/2015
Number		
Full consolidation	122	118
Entities accounted for using the equity method	17	17
Joint operations	3	3

### Changes in the consolidated companies

Of the companies included in the consolidated financial statements by way of full consolidation, 12 (previous year: 8) domestic companies and 3 (previous year: 3) foreign companies were consolidated for the first time in the reporting year. 4 (previous year: 2) domestic companies and 3 (previous year: 0) foreign companies were deconsolidated. In addition, 4 domestic companies (previous year: 5) were merged.

## Acquisition and disposal of entities accounted for using the equity method in 2016

### Acquisition of shares in VNG-Verbundnetz Gas Aktiengesellschaft and disposal of shares in EWE Aktiengesellschaft

EnBW Energie Baden-Württemberg AG acquired 74.21% of the shares in VNG-Verbundnetz Gas Aktiengesellschaft (VNG) from EWE Aktiengesellschaft (EWE) on 20 April 2016. In return, EnBW divested itself of a 20% share in EWE. In addition, a cash settlement was paid by EnBW to EWE and the Ems-Weser-Elbe Versorgungs- und Entsorgungsverband (EWE-Verband). VNG will initially be accounted for by EnBW in the consolidated financial statements as a joint venture accounted for using the equity method due to a lack of control as a result of the majority ratios on the Supervisory Board. The remaining 6% shareholding in EWE will be recognised under other financial assets. VNG, with headquarters in Leipzig, is particularly active in the areas of exploration and production, gas transport and gas storage, as well as trading and services. It is allocated in the segment reporting to Other/Consolidation as a joint venture accounted for using the equity method.

## Changes in the shareholdings of fully consolidated companies with loss of control in 2015

### Sale of shares in EnBW Propower GmbH

The EnBW Group sold 100% of the equity in EnBW Propower GmbH, Eisenhüttenstadt to Progroup AG, Landau on 31 December 2015. EnBW Propower GmbH owns a combined heat and power plant for thermal utilisation of substitute fuel in Eisenhüttenstadt. Income of €13.1 million was generated as a result of the sale and has been reported under other operating income. The proceeds of the sale were paid to EnBW in cash at the start of 2016.

## Changes in the shareholdings of already fully consolidated companies in 2015

### Sale of shares in EnBW Baltic 2 S.C.S.

The EnBW Group sold 49.89% of the equity in EnBW Baltic 2 S.C.S., Luxembourg to a subsidiary of the Australian financial investor Macquarie Corporate Holdings Pty Limited (formerly Macquarie Capital Group Limited) on 30 October 2015. As a result of the transaction, our interest in EnBW Baltic 2 S.C.S. fell to 50.11%. EnBW continues to fully consolidate EnBW Baltic 2 S.C.S. in its consolidated financial statements. Sale proceeds of €713.7 million were generated. As of the reporting date of 31 December 2015, this was paid to EnBW in cash in the amount of €721.7 million. The subsequent purchase price adjustment of €8.0 million was repaid at the start of 2016. Incidental costs of €1.9 million were incurred for the transaction. The amount attributable to non-controlling interests was €739.1 million. The difference between the sale proceeds and the amount attributable to non-controlling interests in the amount of €-27.3 million was recognised under revenue reserves in equity.

The impact of the sale of the interest in EnBW Baltic 2 S.C.S. on the EnBW consolidated financial statements is shown below:

in € million	2015
Consideration received after deduction of incidental costs	711.8
Amount attributable to non-controlling interests	739.1
Amount recognised under revenue reserves	-27.3

## Changes in accounting policies

### First-time adoption of amended accounting standards

The IASB and IFRS IC have adopted the following new standards, amendments to existing standards, and interpretations whose application is mandatory as from the 2016 financial year:

- **Collective standard for the amendment of various IFRS (2013) "Improvements to the IFRS Cycle 2010–2012":**  
The amendments are the result of the annual IASB improvement process. The amendments are intended to clarify the wording of the standards and remove any unintended inconsistencies between them. The cycle affects IAS 16, IAS 24, IAS 37, IAS 38, IAS 39, IFRS 2, IFRS 3 and IFRS 8. The amendments are effective for the first time for financial years beginning on or after 1 February 2015. The standard has no material impact on the consolidated financial statements of EnBW.
- **Collective standard for the amendment of various IFRS (2014) "Improvements to the IFRS Cycle 2012-2014":**  
The amendments are the result of the annual IASB improvement process. The amendments are intended to clarify the wording of the standards and remove any unintended inconsistencies between them. The cycle

affects IAS 19, IAS 34, IFRS 5 and IFRS 7. The amendments are effective for the first time for financial years beginning on or after 1 January 2016. The standard has no material impact on the consolidated financial statements of EnBW.

- **Amendments to IAS 1 (2014) “Disclosure Initiative”:** The amendments are intended to clarify the standard to make it simpler for preparers to exercise their judgement in presenting financial reports. For example, the concept of materiality is emphasised more strongly in order to encourage the communication of relevant information and in order to facilitate the presentation of additional line items in the balance sheet and the statement of comprehensive income. The amendments are effective for the first time for financial years beginning on or after 1 January 2016. In order to improve the presentation of the results of operations, net assets and financial position, we have combined items on the balance sheet following due consideration of their materiality and also removed immaterial information from the notes. The item “investment properties” will now be reported under other non-current financial assets, which have increased as a result as of 31 December 2015 by €68.9 million to €8,309.3 million. The item “income tax refund claims” will now be reported within other assets, which increased as a result as of 31 December 2015 by €5.3 million to €345.7 million (non-current assets) and by €469.9 million to €3,034.7 million (current assets). The item “income tax liabilities” will now be reported within other liabilities and subsidies, which increased as a result as of 31 December 2015 by €84.3 million to €1,832.9 million (non-current liabilities) and by €271.8 million to €3,618.0 million (current liabilities).
- **Amendments to IAS 16 and IAS 38 (2014) “Clarification of Acceptable Methods of Depreciation and Amortisation”:** The amendments are intended to clarify which methods of depreciation of property, plant and equipment and amortisation of intangible assets are appropriate. In particular, it was clarified that a revenue-based method is not an appropriate method. The amendments are effective for the first time for financial years beginning on or after 1 January 2016. The standard has no impact on the consolidated financial statements of EnBW.
- **Amendments to IAS 16 and IAS 41 (2014) “Agriculture: Bearer Plants”:** The amendments clarify that so-called bearer plants, which are used only for the production of agricultural produce, fall under the scope of IAS 16 “Property, Plant and Equipment”. The amendments are effective for the first time for financial years beginning on or after 1 January 2016. The standard has no impact on the consolidated financial statements of EnBW.
- **Amendments to IAS 19 (2013) “Defined Benefit Plans: Employee Contributions”:** The amendments are intended to clarify those standards that relate to the allocation of employee contributions or contributions from third parties, which are linked to the service rendered, to periods of service. The amendments are effective for the first time for financial years beginning on or after 1 February 2015. The standard has no impact on the consolidated financial statements of EnBW.
- **Amendments to IAS 27 (2014) “Equity Method in Separate Financial Statements”:** The amendments mean that in future it will also be possible to account for investments in subsidiaries, joint ventures and associates using the equity method in IFRS separate financial statements. The revised standard is effective for the first time for financial years beginning on or after 1 January 2016. The standard has no impact on the consolidated financial statements of EnBW.
- **Amendments to IFRS 10, IFRS 12 and IAS 28 (2014) “Investment Entities: Applying the Consolidation Exception”:** The amendments clarify how the exemption from the consolidation requirement for investment entities that instead account for their subsidiaries at fair value must be applied. The amendments are effective for the first time for financial years beginning on or after 1 January 2016. The standard has no impact on the consolidated financial statements of EnBW.
- **Amendment to IFRS 11 (2014) “Acquisition of an Interest in a Joint Operation”:** The amendments clarify how an acquisition of an interest in a joint operation that is a business is to be accounted for. Acquirers of such an interest have to apply the rules on accounting for business combinations in IFRS 3 “Business Combinations” and other relevant standards. The amendments are effective for the first time for financial years beginning on or after 1 January 2016. The standard has no impact on the consolidated financial statements of EnBW.

## 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 2016 financial year. Their application in the future is subject to their endorsement by the EU into European law.

- **Collective standard for the amendment of various IFRS (2016) “Improvements to the IFRS Cycle 2014-2016”:** The amendments are the result of the annual IASB improvement process. The amendments are intended to clarify the wording of the standards and remove any unintended inconsistencies between them. The cycle affects IFRS 1, IFRS 12 and IAS 28. The amendments are effective for the first time for financial years beginning on or after 1 January 2018. For the amendments to IFRS 12, amendments are effective for the first time for financial years beginning on or after 1 January 2017. The amendments have yet to be endorsed by the EU. The effects on the consolidated financial statements of EnBW are currently being assessed.
- **Amendments to IAS 7 (2016) “Disclosure Initiative”:** The amendments require additional disclosures in the notes to present changes to liabilities from the company's financing activities. The standard must be applied for financial years beginning on or after 1 January 2017. The amendments have yet to be endorsed by the EU. The effects on the consolidated financial statements of EnBW are currently being assessed.
- **Amendments to IAS 12 (2016) “Recognition of deferred tax assets for unrealised losses”:** The amendments are designed to clarify the accounting of deferred tax assets for unrealised losses from available-for-sale financial assets. The standard must be applied for financial years beginning on or after 1 January 2017. The amendments have yet to be endorsed by the EU. The effects on the consolidated financial statements of EnBW are currently being assessed.
- **Amendments to IAS 40 (2016) “Transfer of investment property”:** The amendment relates to the accounting of investment property that is still under construction or development. The amendment clarifies the time from which a property that is under construction or development should be classified as property under the scope of IAS 40 and when the classification no longer applies. The amendments are effective for the first time for financial years beginning on or after 1 January 2018. The amendments have yet to be endorsed by the EU. The effects on the consolidated financial statements of EnBW are currently being assessed.
- **Amendments to IFRS 2 (2016) “Classification and Measurement of Share-based Payment Transactions”:** The amendments are designed to clarify the effects of vesting conditions on the measurement of cash-settled share-based payment transactions, the classification of share-based payment transactions with net settlement features for withheld taxes and the accounting of a change in the conditions. The standard must be applied for financial years beginning on or after 1 January 2018. The amendments have yet to be endorsed by the EU. The amendments will have no effect on the consolidated financial statements of EnBW.
- **Amendments to IFRS 4 (2016) “Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts”:** The amendments apply to the first-time application of IFRS 9 for insurance companies. Two optional approaches for insurance contracts have been introduced: deferral of the first-time application of IFRS 9 or an overlay approach. The standard must be applied for financial years beginning on or after 1 January 2018. The amendments have yet to be endorsed by the EU. The standard will have no effect on the consolidated financial statements of EnBW.
- **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. IFRS 9, which will replace the existing IAS 39 “Financial Instruments: Recognition and Measurement”, includes a new classification model for financial assets. The subsequent measurement of financial assets will, in future, be based on three categories: amortised cost, fair value through profit or loss and fair value through other comprehensive income. The instrument's contractual cash flows and the business model in which the asset is held are key to classification. In addition, the new impairment model devised during phase 2 of the project has been finalised. The rules on hedge accounting for general hedges devised in phase 3 have been published already on 19 November 2013. 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. Following initial assessments 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. The financial assets that were previously classified as “available for sale” should mainly be allocated under the “hold to collect and sell” business model. Furthermore, transfer to the expected loss model will tend to increase the required risk provisions. An improvement is 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 option of not stating any comparative figures for previous years.

- **Amendments to IFRS 10 and IAS 28 (2014) “Sale or Contribution of Assets between an Investor and its Associate or Joint Venture”:** The amendments clarify that in transactions with an associate or joint venture, the extent of the gain or loss recognition depends on whether the assets sold or contributed constitute a business or not (as defined in IFRS 3 “Business Combinations”). The date of first-time adoption of the changes was postponed by the IASB for an indefinite period.
- **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. Essentially, the model is intended to lead to the amount of the consideration the entity expects to receive in exchange for goods and services provided being depicted. The standard replaces the current rules on revenue recognition in IAS 11 and IAS 18 and the associated interpretations. The new items contract assets and contract liabilities will be added to the balance sheet due to IFRS 15. These can occur due to performance bonuses or obligations existing at a contractual level. In addition, the disclosure requirements have been expanded. In this context, the effects of the **amendments to IFRS 15 (2016) “Clarifications to IFRS 15 Revenue from Contracts with Customers”** are also being assessed. The amendments comprise clarifications for identifying performance obligations, principal-agent relationships, licensing and transition relief. Both standards are effective for financial years beginning on or after 1 January 2018. The amendments to IFRS 15 have yet to be endorsed by the EU. In order to examine the impact of IFRS 15 on the consolidated financial statements, a project was started to systematically document and analyse the business transactions at the different value-added stages. The Group-wide implementation project for IFRS 15 has not yet been concluded at EnBW. There may be a need for adjustments to the presentation of multi-component transactions in the Sales segments, which, however, only currently represent minor sale volumes. On the basis of the current state of the analysis, 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.
- **IFRIC 22 “Foreign Currency Transactions and Advance Consideration”:** The interpretation clarifies for the receipt or payment of advance considerations that the exchange rate to be used for this transaction is the one on the date that the asset or liability is recognised for the first time. The interpretation is effective for the first time for financial years beginning on or after 1 January 2018. The amendments have yet to be endorsed by the EU. The effects on the consolidated financial statements of EnBW are currently being assessed.



## Restatement of previous-year figures

In the 2015 financial statements, subsidiaries of EnBW AG wrongly disclosed actual income tax liabilities. The reason for this was the implementation of the amended judgement of the Federal Fiscal Court on the handling of personnel provisions on the tax balance sheet. The error was corrected by restating each of the affected items in the consolidated financial statements of the comparative period including the information on earnings per share. There were no effects on the opening balance sheet for the comparative periods. The following tables summarise the effects on the comparative period in these consolidated financial statements:

### Restatement of the income statement

in € million	2015
Income tax	33.7
<b>Group net profit</b>	<b>33.7</b>
of which profit/loss shares attributable to non-controlling interests	(0.4)
of which profit/loss shares attributable to the shareholders of EnBW AG	(33.3)
<b>Earnings per share from Group net profit (€)<sup>1</sup></b>	<b>0.12</b>

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

### Restatement of the statement of comprehensive income

in € million	2015
<b>Group net profit</b>	<b>33.7</b>
<b>Total other comprehensive income</b>	<b>0.0</b>
<b>Total comprehensive income</b>	<b>33.7</b>
of which profit/loss shares attributable to non-controlling interests	(0.4)
of which profit/loss shares attributable to the shareholders of EnBW AG	(33.3)

### Restatement of the balance sheet

in € million	31/12/2015
<b>Equity and liabilities</b>	
<b>Equity</b>	
<b>Shares of the shareholders of EnBW AG</b>	
Revenue reserves	33.3
	<b>33.3</b>
Non-controlling interests	0.4
	<b>33.7</b>
<b>Current liabilities</b>	
Other liabilities and subsidies	-33.7
	<b>-33.7</b>
	<b>0.0</b>

## Significant accounting policies

### Intangible assets

Intangible assets acquired for a consideration are carried at amortised cost and, except for goodwill, are amortised using the straight-line method over their useful life. The amortisation period of purchased software ranges from 3 to 5 years; the amortisation period of franchises for power plants is between 15 and 65 years. Customer relationships are amortised over their expected useful life of between 6 and 30 years, water rights and the underlying franchises are amortised over 20 years.

Internally generated intangible assets are recognised at cost if it is probable that a future economic benefit will flow to the company from the use of the asset and the cost of the asset can be reliably determined. If the recognition criteria are not satisfied, costs are expensed immediately through profit or loss in the year in which they were incurred. At the EnBW Group, these assets relate to software programmes that are amortised on a straight-line basis over a useful life of five years.

The useful lives and amortisation methods are reviewed regularly.

In accordance with the provisions of the IFRS, goodwill from business combinations is not amortised, but tested for impairment at least once a year and whenever there is any indication that the recoverable amount may be lower than the carrying amount.

### Property, plant and equipment

Items of property, plant and equipment are measured at cost. Items that are subject to wear and tear are depreciated using the straight-line method over the expected useful life of their individual components. Depreciation is recorded pro rata temporis in the year of addition.

Maintenance and repair costs are recorded as expenses. Renewal or maintenance expenses which lead to future economic benefits of an asset are capitalised.

Construction cost subsidies and investment grants or subsidies are not deducted from the cost of the asset concerned, but recognised on the liabilities side of the balance sheet.

The nuclear power plants also contain the present value, net of depreciation, of the estimated cost of decommissioning and dismantling the contaminated facilities.

Depreciation on our major items of property, plant and equipment is computed using the following uniform Group-wide useful lives:

Useful life	
in years	
Buildings	25 – 100
Power plants	10 – 50
Electricity distribution plants	25 – 45
Gas distribution plants	10 – 55
Water distribution plants	15 – 40
District heat distribution plants	15 – 40
Telecommunications distribution facilities	4 – 20
Other equipment, factory and office equipment	4 – 14

The useful lives and depreciation methods are reviewed regularly.

Property, plant and equipment are derecognised upon disposal or when no further economic benefits are expected from their continued use or sale. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the income statement in the period the asset is derecognised.

### **Borrowing costs**

If a qualifying asset necessarily takes a substantial period of time (more than twelve months) to get ready for its intended use, the borrowing costs incurred until it is ready for its intended use that are directly attributable to its acquisition or production are capitalised as part of the respective asset. Where there are specific debt financing arrangements, the respective borrowing costs incurred are used. Where the debt financing arrangements are not specific, borrowing costs are capitalised using a uniform rate within the Group of 3.5% (previous year: 3.5%). Borrowing costs totalling €5.8 million were capitalised in the financial year (previous year: €21.9 million).

### **Leases**

A lease is an agreement whereby the lessor conveys to the lessee, in return for a payment or series of payments, the right to use an asset for an agreed period of time. This also applies for agreements that do not explicitly describe the conveyance of such a right. Leases are classified either as finance leases or as operating leases.

Leases where the EnBW Group as lessee retains substantially all the risks and rewards of ownership of the leased asset are classified as finance leases. The leased asset is recognised at the lower of fair value and the present value of the minimum lease payments. A liability of the same amount is recognised.

The recognised leased asset is depreciated over the shorter of its useful life and the lease term. The liability is repaid and carried forward in subsequent periods using the effective interest method. All other leases where the EnBW Group is the lessee are classified as operating leases. Lease payments and instalments from operating leases are recognised directly as an expense in the income statement.

Leases where the EnBW Group as lessor transfers substantially all the risks and rewards of ownership of the leased asset to the lessee are recognised as finance leases at the lessor. A receivable is recognised for the amount of the net investment in the lease. The payments made by the lessee are recognised as repayments on the principal or interest income using the effective interest method. All other leases where the EnBW Group is the lessor are classified as operating leases. The leased asset remains in the consolidated balance sheet and is depreciated. The payments made by the lessee are recognised as income on a straight-line basis over the term of the lease.

### **Impairment**

The carrying amounts of intangible assets, property, plant and equipment, and investment properties are tested for impairment at each reporting date. If there is any indication that the asset may be impaired, the recoverable amount of the asset concerned is determined in impairment testing. The recoverable amount is the higher of the fair value less costs to sell and the value in use.

The fair value is determined on the basis of a business valuation model and reflects the best estimate of the amount at which a third party would acquire the asset. The value in use corresponds to the present value of the future cash flows expected to be derived from an asset or cash-generating unit. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

If it is not possible to determine the recoverable amount for an individual asset, the recoverable amount is determined for the cash-generating unit to which the asset can be allocated.

Goodwill arising from business combinations is allocated to the cash-generating units or groups of cash-generating units that are expected to achieve synergies from the business combination.

The recoverable amount of these cash-generating units or groups of cash-generating units is tested for impairment at least once a year. An additional test is performed whenever there is any indication that the carrying amount may not be recoverable. For more information, please refer to note (10) "Intangible assets".

If the recoverable amount of an asset falls short of its carrying amount, an impairment loss is recognised in profit or loss immediately. In the event of impairment losses on cash-generating units to which goodwill has been allocated, the goodwill is reduced first. If the impairment loss exceeds the carrying amount of the goodwill, the difference is allocated proportionally to the remaining non-current assets of the cash-generating unit.

If the reason for a previously recognised impairment loss no longer exists at a later date, the impairment loss is reversed. The increased carrying amount of the asset attributable to a reversal may not exceed the carrying amount that would have been determined had no impairment loss been recognised in previous years (amortised cost).

An impairment loss recognised for goodwill may not be reversed in a subsequent period. Accordingly, impairment losses on goodwill are not reversed.

#### **Financial assets**

Investments in non-consolidated affiliated entities, in associates not accounted for using the equity method and in other investments, as well as some of the securities, are allocated to the "available for sale" measurement category. This measurement category includes all financial assets that are not "held for trading", "held to maturity" or "loans and receivables". They are measured at fair value if it can be determined reliably; unrealised gains and losses are recognised directly in equity. If the fair value cannot be determined reliably because there is no active market, these financial assets are measured at amortised cost. Most of these assets are other investments, which are not traded on an active market.

If there is any permanent or significant impairment as of the reporting date, the adjustments to the negative market value are recognised in profit or loss. The unrealised gains or losses previously recognised directly in equity are recognised in profit or loss upon sale. Impairment losses are reflected in an allowance account.

Securities that were classified as "held to maturity" in the previous year are measured at amortised cost. These are securities listed on the stock exchange. The measurement category "held to maturity" is no longer used.

Loans are accounted for at amortised cost. Loans subject to market interest rates are recognised at nominal value, and low-interest or interest-free loans at present value. Some bad debt allowances are recognised via an allowance account. The decision whether the bad debt allowance reduces the carrying amount directly, or does so indirectly via an allowance account, depends on the probability of the anticipated default.

The securities recognised as current financial assets and allocated to the "held for trading" category are measured at fair value through profit or loss. The fair value equals the quoted price or repurchase price as of the reporting date. Changes in fair value are recognised immediately in profit or loss.

### **Inventories**

Inventories are recorded at cost. As a rule, they are measured at average prices. Pursuant to IAS 2, costs of conversion contain the direct costs and an appropriate portion of the necessary materials and production overheads including depreciation. Costs of conversion are determined on the basis of normal capacity utilisation. Borrowing costs are not capitalised as a component of costs of conversion. Appropriate allowance is made for risks relating to slow-moving goods. Where necessary, the lower net realisable value compared to the carrying amount is recognised. Reversals of impairment losses on inventories are deducted from the cost of materials.

The nuclear fuel rods disclosed in the inventories are measured at amortised cost. Write-downs are determined in accordance with consumption.

Inventories acquired for trading purposes are recognised at fair value less costs to sell.

### **Emission allowances**

Emission allowances acquired for production purposes are recognised at cost as inventories. Emission allowances acquired for trading purposes are recognised as other assets at fair value through profit or loss, and any fluctuation in fair value is recognised directly in profit or loss.

The obligation to return CO<sub>2</sub> allowances is accounted for under other provisions. The carrying amount of the provision is determined based on the carrying amount of the existing emission allowances. If further emission allowances are needed, they are accounted for at their fair value as of the reporting date.

### **Trade receivables and other assets**

Trade receivables and other assets are accounted for at cost less any bad debt allowances required based on the actual bad debt risk. Trade receivables usually have short terms to maturity. Consequently, their carrying amounts as of the reporting date approximate their fair value. Receivables that bear off-market interest with remaining terms to maturity of more than one year are reported in the balance sheet at present value.

For other current assets, it is assumed that the fair value approximates the carrying amount. For other non-current assets, the market value is determined by discounting the expected future cash flows. Some bad debt allowances are recognised by means of an allowance account. The decision whether the bad debt allowance reduces the carrying amount directly, or does so indirectly via an allowance account, depends on the probability of the anticipated default.

### **Treasury shares**

Own equity instruments which are repurchased (treasury shares) are deducted from equity. No gain or loss is recognised in the income statement on the purchase, sale, issue or cancellation of the Group's own equity instruments.

### **Provisions for pensions and similar obligations**

For defined benefit plans, provisions for pensions and similar obligations are determined using the projected unit credit method in accordance with IAS 19. This method considers current and future pension benefits known at the reporting date as well as future anticipated salary and pension increases. Actuarial gains and losses are recorded in their entirety in the financial year in which they arise. They are reported outside of the income statement in the statement of comprehensive income as part of the cumulative changes not impacting income and recorded directly in equity. There will be no recognition in profit and loss in subsequent periods. Plan assets of funds established to cover the pension obligations are deducted from the provision. The service cost is disclosed in personnel expenses, while the net interest portion of additions to the provision and the return on plan assets are recorded in the financial result. Payments for defined contribution plans are expensed as incurred and presented under personnel expenses.

### Provisions relating to nuclear power

Provisions relating to nuclear power include obligations for the decommissioning and disposal of nuclear power plants, as well as the disposal of fuel rods and operating waste. The current legal situation must be taken into account in this process. In 2016, this included the legislative package of reorganising responsibility for nuclear waste management. The evaluation of the provisions is carried out mainly on the basis of estimates, which for decommissioning and disposal costs are primarily derived from sector-specific appraisals. The provisions are recognised at the discounted settlement amount at the time they originated.

### Other provisions

Other provisions take account of all legal or constructive obligations towards third parties resulting from past events that are identifiable at the reporting date, to the extent that it is probable that they will lead to an outflow of resources in future and their amount can be reliably estimated. The provisions are recognised at their settlement amount. They are measured at the estimated future amount or the amount most likely to be incurred.

The non-current provisions are stated at the future amount needed to settle the obligation discounted to the reporting date. This does not apply to provisions for pensions and similar obligations. They are subject to special rules in accordance with IAS 19.

### Deferred taxes

Deferred taxes are recorded in accordance with the temporary concept (IAS 12) on all timing differences between the tax accounts and the IFRS balance sheet of the individual entities. Deferred taxes from consolidation entries are recognised separately. Deferred tax assets are recognised on deductible temporary difference and unused tax losses if it is reasonably certain that they will be recovered.

Deferred taxes are calculated on the basis of the tax rates that apply or that are expected to apply in the individual countries at the time of utilisation. As in the previous year, a tax rate of 29.0% is applied for German Group companies. Tax assets and tax liabilities are netted with each other by consolidated tax group or entity if the conditions to do so have been satisfied.

### Financial liabilities

Financial liabilities are recorded at fair value upon initial recognition. After initial recognition, they are measured at amortised cost. Liabilities from finance leases are measured at the lower of fair value and present value of the minimum lease payments at the date when the leased asset is recognised.

The fair value of bonds listed on the capital market is the nominal value multiplied by the quoted price as of the reporting date. For current financial liabilities, it is assumed that the fair value corresponds to the carrying amount. For non-current financial liabilities, the market value is determined by discounting the expected future cash outflows. If these financial liabilities are subject to floating interest rates, the carrying amount corresponds to the fair value.

### Trade payables and other liabilities

Trade payables and other liabilities are recognised at the amount repayable. Trade payables primarily have short terms to maturity. Consequently, their carrying amounts as of the reporting date approximate their fair value. For other current liabilities, it is assumed that the fair value corresponds to the carrying amount. For other non-current liabilities, the market value is determined by discounting the expected future cash outflows. The construction cost subsidies carried as liabilities are released to revenue in accordance with the use of the subsidised item of property, plant and equipment. As a rule, the period of release for construction cost subsidies is between 38 and 45 years. Investment cost subsidies and grants are released over the depreciation period of the subsidised assets. The release is offset openly against the amortisations.

### **Assets held for sale and liabilities directly associated with assets classified as held for sale**

Assets held for sale are individual non-current assets and groups of assets which can be sold in their present condition, whose sale is highly probable and which satisfy all the criteria defined in IFRS 5. The item “liabilities directly associated with assets classified as held for sale” includes liabilities that are part of a group of assets held for sale.

Assets that meet the criteria to be classified as assets held for sale for the first time are measured at the lower of carrying amount and fair value less costs to sell, and depreciation on such assets ceases.

Gains or losses from measuring individual assets and groups of assets held for sale are disclosed as profit or loss from continuing operations until they are finally sold.

### **Derivatives**

Derivatives are measured at fair value in accordance with IAS 39. Both the counterparty’s credit default risk and that of the company itself are taken into account in the calculation of fair value. Default risk with respect to an individual counterparty is calculated on the basis of the net risk position. In the case of derivatives for which net recording is not permitted, the credit default risk calculated on the basis of the net position is recorded in proportion to the fair value before the value adjustment. In accordance with the “net approach”, this involves allocating the value adjustment solely to the derivatives’ asset or liability surplus that arises. The derivatives are recognised under other assets and other liabilities and subsidies.

Derivatives are measured using quoted prices in active markets such as stock market prices. Where such prices are not available, the fair values are determined by reference to generally accepted valuation techniques. Quoted prices in active markets are used as inputs wherever possible. If they are not available either, entity-specific planning assumptions are considered in the valuation.

If they are contracts that were entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item, in accordance with the entity’s expected purchase, sale or usage requirements (own use), they are not recognised as derivatives under IAS 39, but as executory contracts in accordance with IAS 37.

Derivatives are classified as “held for trading” unless hedge accounting is used. Changes in fair value are recognised in profit or loss.

For derivatives used in a hedge, the accounting treatment of changes in fair value depends on the nature of the hedge.

In the case of changes in the fair value of cash flow hedges which are used to offset future cash flow risks arising from existing hedged items or highly probable forecast transactions, the unrealised gains and losses are initially recognised directly in equity (other comprehensive income) in the amount of the hedged item covered. Amounts are reclassified to the income statement when the hedged item impacts profit or loss.

In the case of a fair value hedge used to hedge the fair value of reported assets or liabilities, the gains or losses from the measurement of derivatives and the associated hedged items are recognised in profit or loss.

Foreign currency risks from investments with a foreign functional currency are secured by hedges of a net investment in a foreign operation. Unrealised exchange differences are initially recognised in equity and reclassified to profit or loss when the foreign operation is sold.

### Contingent liabilities

Contingent liabilities are possible obligations to third parties or present obligations where the probability of an outflow of resources is remote or the amount cannot be determined reliably. Contingent liabilities are not recognised.

### Financial guarantees

Financial guarantees are contracts where EnBW is required to make specified payments to reimburse the holder for a loss incurred because a debtor fails to meet its payment obligations under the financial guarantee. Financial guarantees are measured at fair value upon initial recognition. After initial recognition, the financial guarantees are measured at the higher of amortised cost and the best estimate of the present obligation as of the reporting date.

### Revenue recognition

Revenue is generally recognised when the risk has been transferred to the customer. Substantially all the risks and rewards are transferred to the customer upon the transfer of title or ownership. Revenue is measured at the fair value of the consideration received or receivable for goods or services. Revenue is recognised net of any sales deductions such as price discounts and rebates and VAT, as well as after elimination of intercompany sales. Most of the revenue is generated from the sale of electricity and gas, the distribution of electricity and gas, as well as waste disposal, energy-related services and water supply.

Interest income is recognised using the effective interest method. Dividend income is recognised when the right to receive payment is established.

### Exercise of judgement and estimates when applying accounting policies

The preparation of the consolidated financial statements requires judgements and estimates to be made in applying the accounting policies that affect the reported amounts of assets and liabilities, revenue and expenses, and the disclosure of contingent liabilities.

The following judgements in particular have to be made in the process of applying the accounting policies:

- › Judgement is required with respect to certain commodity futures contracts to determine whether they are derivatives as defined by IAS 39 or executory contracts in accordance with the provisions of IAS 37.
- › Financial assets are allocated to the IAS 39 measurement categories: “held for trading”, “available for sale”, “held to maturity” and “loans and receivables”.

These estimates are based on assumptions and forecasts which, by their very nature, are uncertain and may be subject to change. The key future-oriented assumptions and other sources of uncertainty as of the reporting date, concerning estimates which have given rise to a considerable risk that material adjustments of carrying amounts of assets and liabilities may be required in the next financial year, are explained below:

**Goodwill:** Goodwill is tested for impairment at least once a year. The impairment test involves estimates that concern above all future cash inflows. To determine the recoverable amount, an appropriate discount rate must be chosen. Future changes in the overall economic, industry or company situation may reduce cash inflows or the discount rate, and thus potentially lead to an impairment of goodwill.

**Property, plant and equipment:** Property, plant and equipment are tested for impairment when circumstances or events indicate that there could be an impairment or increase in value. For our power plants in particular, in addition to technical progress and damage, expectations that have changed for the worse regarding short, medium and long-term electricity prices may lead to impairment losses or reversals of impairment losses. A suitable interest rate is to be used when performing the impairment tests. If this interest rate changes, for example due to a change in the macroeconomic or industry situation, recognition of impairment losses or reversals of impairment losses may also be necessary.



**Impairment of available-for-sale financial assets:** Changes in the value of financial assets in the “available for sale” measurement category are recognised directly in equity. Permanent impairment is recognised in the profit or loss for the period. A significant (20% or more) or prolonged (over the last nine months) decline in the fair value of an investment in an equity instrument below its amortised cost is objective evidence of permanent impairment.

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

**Trade receivables and other assets:** To take account of the credit risk, allowances for doubtful accounts are set up. The amount of the allowance includes estimates and judgements concerning individual receivables, based on the age structure of the receivables, the customers’ credit rating, past experience relating to the derecognition of receivables and changes in payment terms.

**Pension provisions:** When calculating pension provisions, differences compared to the actual obligations incurred over time may arise from the selection of underlying assumptions, such as the imputed interest rate or trends, use of demographic probabilities based on the 2005G Heubeck mortality tables and accepted approximation methods for future pension increases from the statutory pension insurance fund.

**Nuclear provisions:** The provisions for decommissioning and dismantling in relation to nuclear power are based mainly on external appraisals that are updated annually. These appraisals are based on cost estimates of the settlement value for each obligation. The uncertainty inherent in the estimates is primarily due to changes in the scope of the obligation, departures from the assumed cost development and changes in payment dates. Changes in the discount rate could also lead to an adjustment of the nuclear provisions.

**Provisions for onerous contracts:** Provisions for onerous contracts are generally set up for onerous procurement and sales agreements. Future changes in market prices on the procurement or sales side or in the discount rates may lead to an adjustment of the provisions for onerous contracts.

**Acquisition accounting:** For acquisition accounting purposes, all identifiable assets, liabilities and contingent liabilities acquired in a share purchase are recognised at fair value as of the date of acquisition for first-time consolidation purposes. Estimates are used to calculate the fair value of these assets and liabilities as of the date of acquisition. Land and buildings as well as other equipment, factory and office equipment are generally measured by independent appraisers. Marketable securities are recognised at market price. If the purchase price agreement includes contingent consideration, accounting for those purchase price components also requires estimates.

The measurement of intangible assets is based on the nature of the intangible asset as well as the complexity of determining fair value. Fair value is therefore determined on the basis of an independent external valuation appraisal.

**Income tax:** Estimates are also needed to capitalise tax refund claims, to set up tax liabilities and to assess the temporary differences arising from differences in the accounting treatment of certain items in the financial statements between the consolidated balance sheet in accordance with IFRS and the tax accounts. Capitalisation of tax refund claims and the setting up of tax liabilities are fundamentally only recognised if the relevant payments are likely. Deferred tax assets are, in principle, only recognised when the future tax advantages will probably be realised. Deferred tax assets or liabilities are recognised on temporary differences. Deferred tax assets are recognised for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

**Entities accounted for using the equity method:** IFRS financial statements were not available to us for all entities. Therefore, these entities were accounted for using the equity method based on an estimate of the HGB-IFRS differences. An impairment test is performed on investments accounted for applying the equity method, which also requires the use of estimates.

Potential effects due to changes in estimates in other areas are explained in the respective sections. For more information, please refer to note (19) "Provisions".

## Currency translation

In the separate financial statements of the entities, business transactions in foreign currency are translated at the rate of the transaction date. Non-monetary items are measured at the rate prevailing when they were first recorded. Monetary items are translated at the closing rate as of the reporting date. Exchange differences from monetary items that are allocable to the operating activities are recognised in other operating income or other operating expenses with effect on profit or loss. Translation differences from financing activities are disclosed in the interest result.

The reporting currency of EnBW, which is also the functional currency, is the euro (€). The financial statements of the Group entities are translated to euros. Currency translation is performed in accordance with IAS 21 "The Effects of Changes in Foreign Exchange Rates" using the modified closing rate method. Under this method, the assets and liabilities of entities that do not report in euros are translated at the mean rate prevailing on the reporting date, while expenses and income are translated at the average annual rate. The companies concerned are foreign entities. Differences from the currency translation of assets and liabilities compared to the translation of the previous year, as well as exchange differences between the income statement and the balance sheet, are recognised directly in equity under other comprehensive income. The same procedure is applied by analogy for foreign entities accounted for using the equity method.

Currency translation was based on the following exchange rates, amongst others:

€1	Closing rate		Average rate	
	31/12/2016	31/12/2015	2016	2015
Swiss franc	1.07	1.08	1.09	1.07
Pound sterling	0.86	0.73	0.82	0.73
US dollar	1.05	1.09	1.11	1.11
Czech koruna	27.02	27.02	27.03	27.29
Japanese yen	123.40	131.07	120.33	134.32

## Notes to the income statement and the balance sheet

### (1) Revenue

Revenue is recorded when goods or services have been delivered and the risk has been transferred to the customer. The electricity and energy tax paid by the entities is deducted from revenue in the income statement.

For the sale of electricity and gas to customer groups (especially private customers) for which the units supplied are measured and billed during the reporting period, revenue between billing and the end of the reporting period is based on a projection using past consumption values while taking into account the impact of current temperatures and calendar-related effects.

Most of the revenue is generated from the sale of electricity and gas to wholesale markets and consumers. In addition, this item includes revenue from the distribution of electricity and gas, deliveries of heat, water and services, as well as own-account trading and disposal.

In the interest of a more accurate presentation of the business development, income and expenses from energy trading businesses are disclosed net. The net disclosure means that revenue from energy trading businesses is reported net of the related cost of materials. For the 2016 financial year, the net energy trading revenue amounted to €8,089.6 million (previous year: €9,950.1 million).

The segment reporting contains a breakdown of revenue by business segment, geographical segment and product.

### (2) Other operating income

in € million	2016	2015
Income from derivatives	280.5	125.7
Income from the reversal of provisions	154.9	172.4
Income from disposals	41.6	65.7
Rent and lease income	25.7	28.3
Income from the release and reduction of specific bad debt allowances	8.4	11.0
Income from reversals of impairment losses	5.9	59.5
Sundry	290.5	371.2
<b>Total</b>	<b>807.5</b>	<b>833.8</b>

Capital gains on disposals mainly comprise income from the disposal of property, plant and equipment through the sale of land.

The reversals of impairment losses for the current financial year amount to €5.9 million (previous year: €59.5 million) and mainly relate to reversals of impairment losses on property at their fair value. In the previous year, there were reversals of impairment losses in connection with EnBW Propower GmbH and also on the gas distribution grids.

In the reporting year, income from currency exchange rate gains amounted to €20.5 million (previous year: €54.3 million).

Sundry other operating income includes income from the reversal of accruals and income from insurance claims.

### (3) Cost of materials

in € million	2016	2015
Cost of materials and supplies and of purchased merchandise	13,910.7	14,984.0
Cost of purchased services	2,770.6	2,380.7
<b>Total</b>	<b>16,681.3</b>	<b>17,364.7</b>

Cost of materials and supplies and of purchased merchandise comprises in particular electricity and gas procurement costs including increases in provisions for onerous contracts for electricity procurement agreements. In addition, it includes the necessary increase – other than due to the passage of time – in provisions for the decommissioning of nuclear power plants, unless these are required to be recognised as part of the cost of the asset. Expenses relating to nuclear power also include costs for the disposal of irradiated fuel rods and radioactive waste, as well as the consumption of nuclear fuel rods and nuclear fuels. These also include expenses for the nuclear fuel rod tax which must be paid for new fuel rods used. Fuel costs for conventional power plants, as well as costs for the procurement of CO<sub>2</sub> allowances, are also recorded under that position.

Cost of purchased services mainly contains expenses for network use, services purchased for the operation and maintenance of the plants as well as franchise fees. In addition, other expenses directly attributable to services rendered are shown under this heading.

#### (4) Personnel expenses

in € million	2016	2015
Wages and salaries	1,262.5	1,240.2
Social security, pension and other benefit costs	410.9	401.1
of which for post-employment benefits	(192.7)	(186.7)
<b>Total</b>	<b>1,673.4</b>	<b>1,641.3</b>
<b>Employees</b>		
annual average	2016	2015
Sales	3,267	3,294
Grids	8,273	7,909
Renewable Energies	873	727
Generation and Trading	5,112	5,205
Other	2,780	3,015
<b>Employees</b>	<b>20,305</b>	<b>20,150</b>
Apprentices and trainees including DH students in the Group	811	836

The total number includes employees of joint operations at 7 employees (previous year: 5) based on the proportion attributable to EnBW.

#### (5) Other operating expenses

in € million	2016	2015
Expenses from derivatives	330.8	254.4
Administrative and selling costs and other overheads	292.1	308.1
Other personnel expenses	126.4	59.4
Audit, legal and consulting fees	73.9	86.9
Advertising expenses	66.1	64.7
Expense from specific bad debt allowances	64.8	51.1
Rent and lease expenses	53.0	56.2
Insurance	51.9	42.3
Other taxes	19.1	21.8
Dues and levies	13.8	13.4
Costs from disposals	13.2	13.6
Sundry	119.8	194.6
<b>Total</b>	<b>1,224.9</b>	<b>1,166.5</b>

Sundry other operating expenses contain non-operating expenses of €15.0 million (previous year: €104.5 million). In the previous year, these mainly related to a planned acquisition of a company and expenses from currency exchange rate losses amounting to €20.8 million (previous year: €16.1 million). In addition, this item comprises commissions and research and development expenses.

## (6) Amortisation and depreciation

in € million	2016	2015
Amortisation of intangible assets	171.1	127.0
Depreciation of property, plant and equipment	2,221.7	1,512.9
Depreciation of investment properties	2.4	3.2
Release of investment cost subsidies	-1.6	-1.9
<b>Total</b>	<b>2,393.6</b>	<b>1,641.2</b>

In the reporting year, impairment losses of goodwill of €20.5 million (previous year: €2.7 million) were recognised.

The impairment losses of other intangible assets, property, plant and equipment and investment property amounted to €1,458.7 million (previous year: €710.8 million). In the current financial year, the impairments mainly comprised impairment losses of power plants and are primarily allocated to the Generation and Trading segment in the segment reporting. The recoverable amount was calculated on the basis of the fair value less selling costs and corresponds to Level 3 of the IFRS 13 fair value hierarchy. Using a business valuation model, the fair value was derived from the cash flow planning, based on the medium-term planning approved by the Board of Management and valid as of the date of the impairment test as well as long-term market expectations beyond the detailed planning horizon. The plans were based on past experience and on estimates concerning the future market development. The discount rate used in the valuation is 5.4% (previous year: 5.9%). In particular, the impairment losses were due to two main factors: On the one hand, the increase in nuclear provisions due to the legislative package of reorganising responsibility for nuclear waste management on the liabilities side led to an increase in the tested carrying amount of our power plants on the assets side of the balance sheet, while on the other hand, the evaluation of the service life of our conventional power plants was adjusted as part of discussions about future decarbonisation. The fair value calculated for the power plants of around €2.4 billion is therefore significantly below the carrying amount. The impairment losses in the previous year also relate mainly to power plants. With regard to the impact on possible future changes to key estimation parameters, please refer to the “Exercise of judgement and estimates when applying accounting policies” section.

## (7) Investment result

in € million	2016	2015
Share of profit/loss of entities accounted for using the equity method	-5.4	46.1
Write-downs of entities accounted for using the equity method	-4.6	-257.2
Write-ups of entities accounted for using the equity method	0.0	237.4
<b>Net profit/loss from entities accounted for using the equity method</b>	<b>-10.0</b>	<b>26.3</b>
Investment income	92.9	73.5
Write-downs of investments	-4.1	-84.9
Result from the sale of equity investments	38.8	6.3
<b>Other profit/loss from investments<sup>1</sup></b>	<b>127.6</b>	<b>-5.1</b>
<b>Investment result (+income/-expense)</b>	<b>117.6</b>	<b>21.2</b>

<sup>1</sup> Of which €53.6 million (previous year: €52.3 million) was income from investments held as financial assets.

As part of the restructuring of shareholdings agreed between EnBW, EWE Aktiengesellschaft (EWE) and Ems-Weser-Elbe Versorgungs- und Entsorgungsverband (EWE-Verband) in the previous period, the carrying amount of the investment in EWE was written down to the recoverable amount (€1,265.0 million). The write-ups and write-downs of entities accounted for using the equity method in the previous year included the interest-induced reversal of the impairment for the carrying amount of the investment in EWE from the first half of the year and the impairment recognised for EWE from the second half of the year. €194.2 million of the write-downs of entities accounted for using the equity method and €76.9 million of the write-downs of investments in the previous year were accounted for by the 20% shareholding in EWE that was reclassified as assets held for sale in the third quarter of 2015.

The result from the sale of equity investments in the 2016 financial year mainly relates to the sale of the EWE shares.

The write-downs on investments mainly relate to shareholdings held as financial investments, while in the previous year it included other impairment losses of €8.0 million which were largely accounted for by other investments.

## (8) Financial result

in € million	2016	2015
Interest and similar income	290.7	310.6
Other finance income	141.2	768.3
<b>Finance income</b>	<b>431.9</b>	<b>1,078.9</b>
Borrowing costs	-308.1	-304.2
Other interest and similar expenses	-578.2	-193.9
Interest portion of increases in liabilities	-523.6	-526.0
Personnel provisions	(-129.5)	(-128.1)
Provisions relating to nuclear power	(-378.6)	(-387.0)
Other non-current provisions	(-6.7)	(-3.9)
Other liabilities	(-8.8)	(-7.0)
Other finance costs	-198.6	-78.8
<b>Finance costs</b>	<b>-1,608.5</b>	<b>-1,102.9</b>
<b>Financial result (+ income/- costs)</b>	<b>-1,176.6</b>	<b>-24.0</b>

Interest and similar income contains interest income from interest-bearing securities and loans, dividends, other shares in the profits and interest income on tax arrears. In the 2016 financial year, interest income of €22.8 million (previous year: €22.6 million) was offset against these economically related interest expenses. Other finance income primarily contains realised market price gains on the sale of securities amounting to €128.4 million (previous year: €724.0 million).

Borrowing costs are composed as follows:

in € million	2016	2015
Expenses incurred for bank interest and bonds	287.7	277.1
Interest component incurred for the costs of finance lease agreements	1.7	4.8
Other borrowing costs	18.7	22.3
<b>Borrowing costs</b>	<b>308.1</b>	<b>304.2</b>

Other interest and similar expenses mainly contains interest expenses as a result of reducing the discount rate for the remaining nuclear provisions held by EnBW from 4.7% to 0.5% (previous year: reduction from 4.8% to 4.7%). This was due to the reassessment of the remaining nuclear provisions as a result of the law of reorganising responsibility for nuclear waste management. The interest portion of increases in liabilities relates mainly to the annual increase of the non-current provisions due to the passage of time.

In the reporting period, other finance costs mainly comprises expenses from write-downs on our financial investments of €133.3 million (previous year: €35.2 million), which were mainly allocated to the “available for sale” measurement category, as well as market price losses on sales of securities amounting to €53.9 million (previous year: €29.4 million). Impairment losses on loans of €3.1 million (previous year: €0.1 million) were recognised in the reporting period.

The total interest income and expenses for financial assets and financial liabilities presented in the financial result breaks down as follows:

<b>Total interest income and expenses</b>		
<b>in € million</b>	<b>2016</b>	<b>2015</b>
Total interest income	240.3	222.0
Total interest expenses	-350.5	-298.9

The total interest income and expenses arose from financial instruments that are not measured at fair value through profit or loss. The main items here are interest received from loans and bank balances as well as interest and dividends received from financial assets classified as “available for sale”. The interest expenses were incurred in particular on bonds, bank liabilities and finance lease liabilities.

As in the previous year, total interest income does not include material interest income from impaired financial assets.

## (9) Income tax

<b>in € million<sup>1</sup></b>	<b>2016</b>	<b>2015</b>
<b>Actual income tax</b>		
Domestic corporate income tax	48.8	-261.2
Domestic trade tax	37.4	-29.2
Foreign income taxes	44.9	42.0
<b>Total (-income/+expense)</b>	<b>131.1</b>	<b>-248.4</b>
<b>Deferred taxes</b>		
Germany	-1,175.4	284.1
Abroad	-5.1	4.3
<b>Total (-income/+expense)</b>	<b>-1,180.5</b>	<b>288.4</b>
<b>Income tax (-income/+expense)</b>	<b>-1,049.4</b>	<b>40.0</b>

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

The actual income taxes amounting to €131.1 million (previous year restated: €-248.4 million) concern income taxes from the current financial year amounting to €135.9 million (previous year: €98.4 million) and income taxes for past periods amounting to €4.8 million (previous year restated: €346.8 million).

Deferred tax income amounting to €1,180.5 million (previous year: expense of €288.4 million) consists of deferred tax income from the current year amounting to €1,087.3 million (previous year: expense of €1.5 million) and deferred tax income for past periods of €93.2 million (previous year: expense of €286.9 million). The balance of the deferred taxes contains income totalling €1.4 million (previous year: €0.8 million) from the change in tax rates.

The corporate income tax rate came to 15.0% plus a solidarity surcharge amounting to 5.5% of the corporate income tax. The trade tax rate was 13.2%. This represents a tax rate on income of 29.0%. For the foreign entities, the tax rate applicable in their country of residence of 19.0% to 25.2% is used to calculate income taxes. Deferred tax assets and liabilities are measured at the tax rates expected to apply when the asset is realised or the liability is settled.

Deferred tax relates to the following:

in € million	2016	2015
Origination or reversal of temporary differences	-1,109.0	190.3
Origination of unused tax losses	-1.8	-4.7
Utilisation of unused tax losses	2.9	1.2
Correction in previous year for unused tax losses	-74.8	0.0
Write-down of unused tax losses	2.2	101.6
<b>Deferred taxes (-income/+expense)</b>	<b>-1,180.5</b>	<b>288.4</b>

The reconciliation from the expected income tax expense to the current income tax expense is presented below:

in € million <sup>1</sup>	2016	in %	2015	in %
<b>Earnings before tax</b>	<b>-2,721.9</b>		<b>274.2</b>	
Effective tax rate		29.0		29.0
<b>Expected income tax (-income/+expense)</b>	<b>-789.4</b>		<b>79.5</b>	
Tax effects				
Differences in foreign tax rates and tax rate differences	-18.1	0.7	-20.2	-7.3
Tax-free income	-41.2	1.5	-194.6	-71.0
Non-deductible expenses	73.0	-2.7	43.3	15.8
Amortisation of goodwill	5.9	-0.2	0.8	0.3
Add-backs and reductions for trade tax purposes	12.2	-0.4	13.8	5.0
Accounting for joint ventures and associates using the equity method	4.9	-0.2	-6.2	-2.3
Adjustment/valuation/non-recognition of losses carried forward and temporary differences	-183.2	6.7	191.6	69.9
Zero-rated disposals of investments	-12.0	0.4	-5.9	-2.2
Taxes relating to other periods	-98.0	3.6	-59.9	-21.8
Other	-3.5	0.2	-2.2	-0.8
<b>Current income tax (-income/+expense)</b>	<b>-1,049.4</b>		<b>40.0</b>	
<b>Effective tax rate</b>		<b>38.6</b>		<b>14.6</b>

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



**(10) Intangible assets**

in € million	Franchises, industrial rights and similar rights and assets	Internally generated intangible assets	Goodwill	Other	Total
<b>Cost</b>					
As of 01/01/2016	2,239.7	93.4	785.0	10.3	3,128.4
Increase/decrease due to changes in the consolidated companies	4.8	0.0	32.4	0.0	37.2
Additions	47.2	4.7	0.0	5.0	56.9
Reclassifications	3.3	1.5	0.0	-4.6	0.2
Reclassification to assets held for sale	-30.0	0.0	0.0	0.0	-30.0
Currency adjustments	2.6	0.0	0.0	0.0	2.6
Disposals	-458.3	0.0	0.0	-2.9	-461.2
As of 31/12/2016	1,809.3	99.6	817.4	7.8	2,734.1
<b>Accumulated amortisation</b>					
As of 01/01/2016	1,270.4	85.6	27.5	0.0	1,383.5
Decrease due to changes in the consolidated companies	-0.1	0.0	0.0	0.0	-0.1
Additions	73.6	5.2	0.0	0.0	78.8
Reclassification to assets held for sale	-0.1	0.0	0.0	0.0	-0.1
Currency adjustments	0.9	0.0	0.0	0.0	0.9
Disposals	-457.7	0.0	0.0	0.0	-457.7
Impairment	71.8	0.0	20.5	0.0	92.3
As of 31/12/2016	958.8	90.8	48.0	0.0	1,097.6
<b>Carrying amounts</b>					
As of 31/12/2016	850.5	8.8	769.4	7.8	1,636.5
<b>Cost</b>					
As of 01/01/2015	2,177.2	88.5	775.9	20.0	3,061.6
Increase/decrease due to changes in the consolidated companies	2.3	0.0	2.6	0.0	4.9
Additions	53.7	2.9	0.0	6.9	63.5
Reclassifications	5.0	2.0	0.0	-4.7	2.3
Reclassification to assets held for sale	-12.7	0.0	0.0	0.0	-12.7
Currency adjustments	34.1	0.0	6.5	0.0	40.6
Disposals	-19.9	0.0	0.0	-11.9	-31.8
As of 31/12/2015	2,239.7	93.4	785.0	10.3	3,128.4
<b>Accumulated amortisation</b>					
As of 01/01/2015	1,170.9	82.9	24.8	0.0	1,278.6
Additions	93.7	2.7	0.0	0.0	96.4
Reclassifications	0.9	0.0	0.0	0.0	0.9
Reclassification to assets held for sale	-12.6	0.0	0.0	0.0	-12.6
Currency adjustments	9.5	0.0	0.0	0.0	9.5
Disposals	-19.9	0.0	0.0	0.0	-19.9
Impairment	27.9	0.0	2.7	0.0	30.6
As of 31/12/2015	1,270.4	85.6	27.5	0.0	1,383.5
<b>Carrying amounts</b>					
As of 31/12/2015	969.3	7.8	757.5	10.3	1,744.9

The carrying amount of the intangible assets also includes franchises to operate power plants amounting to €568.4 million (previous year: €650.1 million) and customer relationships amounting to €130.7 million (previous year: €148.5 million). The remaining terms of power plant franchises are between 15 and 65 years. For customer relationships, the remaining terms are between 6 and 30 years.

In 2016, a total of €37.3 million (previous year: €29.9 million) was spent on research and development. This sum contains public subsidies totalling €3.8 million (previous year: €3.6 million). The criteria for their recognition required under IFRS were not satisfied.

Goodwill was allocated to the cash-generating units or groups of cash-generating units for impairment test purposes. The recoverable amount of the cash-generating units is basically calculated on the basis of the fair value less selling costs and corresponds to Level 3 of the IFRS 13 valuation hierarchy. Using a business valuation model, the fair value is derived from the cash flow planning, based on the mid-term planning approved by the Board of Management for a period of three years and valid as of the date of the impairment test. The planning is based on past experience and on estimates concerning the future market development. In justified exceptional cases it is based on a longer detailed planning period, provided that this is necessitated by commercial or regulatory requirements.

Key assumptions underlying the determination of fair value less costs to sell include projections of future electricity and gas prices, materials prices, company-specific investing activities, the regulatory framework as well as growth and discount rates.

The interest rates used for discounting the cash flows are calculated on the basis of market data and are between 3.4% and 6.8% after tax, or between 4.8% and 8.4% before tax (previous year: 3.4% to 6.8% after tax, and 4.8% to 8.4% before tax).

Constant growth rates of 0.0% and 1.5% (previous year: 0.0% and 1.5%) are used to extrapolate the cash flows beyond the detailed planning period in order to take into account the expected price and volume-related growth.

In 2016, an impairment loss on goodwill of €20.5 million (previous year: €2.7 million) was recognised. The amount relates to one of our cash-generating units gas distribution/gas sales, whose recoverable amount was €413.7 million below the carrying amount including the goodwill. The impairment loss was mainly due to the deterioration in the earnings forecast for sales and is reported under the Sales segment.

In all other cash-generating units, the recoverable amounts were above the relevant carrying amounts so that, based on the current assessment of the economic situation, only a significant change in the main measurement parameters would lead to an impairment loss.

As of 31 December 2016, goodwill totalled €769.4 million (previous year: €757.5 million). Of this figure, 84.6% (previous year: 85.7%) is attributable to the cash-generating units or groups of cash-generating units presented in the table below:

**Cash-generating units/Group of cash-generating units**

	Discount rates after tax (%)		Goodwill in € million	
	2016	2015	2016	2015
PRE subgroup	4.6–6.8	4.6–6.8	250.1	248.0
Electricity sales and distribution	3.4–5.6	3.4–5.6	131.7	131.7
Stadtwerke Düsseldorf AG subgroup	3.4–5.9	3.4–5.9	127.4	127.4
Energiedienst Holding AG subgroup	3.4–5.6	3.4–5.6	142.0	142.0

The goodwill allocated to the other cash-generating units or groups of cash-generating units accounted for less than 15.4% (previous year: 14.3%) of total goodwill in each case. Its aggregate total amounted to €118.2 million (previous year: €108.4 million).

### (11) Property, plant and equipment

in € million	Land and buildings	Power plants	Distribution plants	Other equipment	Fixed assets under construction	Total
<b>Cost</b>						
As of 01/01/2016	3,894.6	17,161.0	13,955.5	1,564.3	1,044.2	37,619.6
Increase/decrease due to changes in the consolidated companies	2.1	22.3	1.3	1.5	0.8	28.0
Additions	59.3	1,291.4	459.6	61.3	442.8	2,314.4
Reclassifications	85.3	477.5	174.0	21.0	-768.8	-11.0
Reclassification to assets held for sale	-0.1	-3.4	-67.5	-0.2	-55.8	-127.0
Currency adjustments	0.1	2.6	0.2	0.1	0.1	3.1
Disposals	-20.6	-63.9	-91.6	-33.6	-6.6	-216.3
As of 31/12/2016	4,020.7	18,887.5	14,431.5	1,614.4	656.7	39,610.8
<b>Accumulated amortisation</b>						
As of 01/01/2016	1,993.7	12,499.3	8,450.1	1,165.0	3.4	24,111.5
Decrease due to changes in the consolidated companies	0.0	-0.2	0.0	-0.2	0.0	-0.4
Additions	63.8	381.1	309.8	81.2	0.0	835.9
Reclassifications	-3.7	22.6	-22.5	0.8	0.0	-2.8
Reclassification to assets held for sale	0.2	-1.2	-46.9	0.0	0.0	-47.9
Currency adjustments	0.0	1.8	0.1	0.1	0.0	2.0
Disposals	-15.0	-36.9	-66.8	-32.7	-2.1	-153.5
Impairment	171.3	1,199.1	2.4	12.4	0.6	1,385.8
Reversal of impairment losses	-0.7	-0.4	0.0	-0.6	0.0	-1.7
As of 31/12/2016	2,209.6	14,065.2	8,626.2	1,226.0	1.9	26,128.9
<b>Carrying amounts</b>						
As of 31/12/2016	1,811.1	4,822.3	5,805.3	388.4	654.8	13,481.9

in € million	Land and buildings	Power plants	Distribution plants	Other equipment	Fixed assets under construction	Total
<b>Cost</b>						
As of 01/01/2015	3,948.2	15,562.8	13,706.2	1,563.7	1,888.6	36,669.5
Increase/decrease due to changes in the consolidated companies	0.7	66.7	0.0	-0.1	2.8	70.1
Additions	22.4	410.7	395.5	57.5	571.0	1,457.1
Reclassifications	11.1	1,340.2	54.3	-2.5	-1,417.5	-14.4
Reclassification to assets held for sale	-79.9	-214.1	-17.6	-1.3	0.0	-312.9
Currency adjustments	3.9	27.9	35.2	0.9	1.1	69.0
Disposals	-11.8	-33.2	-218.1	-53.9	-1.8	-318.8
As of 31/12/2015	3,894.6	17,161.0	13,955.5	1,564.3	1,044.2	37,619.6
<b>Accumulated amortisation</b>						
As of 01/01/2015	1,856.4	11,707.5	8,287.9	1,132.6	3.4	22,987.8
Decrease due to changes in the consolidated companies	0.0	0.0	0.0	-0.3	0.0	-0.3
Additions	66.0	390.4	296.9	78.1	0.0	831.4
Reclassifications	0.0	-3.1	1.6	-2.5	0.0	-4.0
Reclassification to assets held for sale	-42.5	-70.5	-12.3	-1.1	0.0	-126.4
Currency adjustments	1.7	18.0	14.8	0.5	0.0	35.0
Disposals	-2.0	-16.8	-163.5	-51.8	0.0	-234.1
Impairment	114.1	508.8	49.1	9.5	0.0	681.5
Reversal of impairment losses	0.0	-35.0	-24.4	0.0	0.0	-59.4
As of 31/12/2015	1,993.7	12,499.3	8,450.1	1,165.0	3.4	24,111.5
<b>Carrying amounts</b>						
As of 31/12/2015	1,900.9	4,661.7	5,505.4	399.3	1,040.8	13,508.1

Items of property, plant and equipment amounting to €83.5 million (previous year: €94.7 million) serve as collateral for liabilities to banks.

The land and buildings also include, amongst other things, similar rights and buildings on leasehold land. Other plant and equipment includes waste disposal plants, other technical plants as well as factory and office equipment.

The carrying amounts of the property, plant and equipment include €16.7 million (previous year: €16.1 million) accounted for by finance lease agreements. These relate mainly to two natural gas caverns whose contractual term covers most of their useful life.

The Group's capital expenditures on intangible assets and property, plant and equipment totalling €1,189.4 million (previous year: €1,416.4 million) can be seen below in the statement of changes in non-current assets:

in € million	2016	2015
Additions to intangible assets and property, plant and equipment according to the statement of changes in non-current assets	2,371.3	1,520.6
Less additions to assets recognised under finance leases	-1.6	-0.5
Less additions to the provision recognised for the decommissioning and dismantling of property, plant and equipment	-1,211.0	-103.8
Plus additions to intangible assets and property, plant and equipment of assets held for sale	30.7	0.1
<b>Capital expenditure on intangible assets and property, plant and equipment</b>	<b>1,189.4</b>	<b>1,416.4</b>

## (12) Entities accounted for using the equity method

Both joint ventures and associates are accounted for using the equity method.

VNG-Verbundnetz Gas Aktiengesellschaft (VNG), with headquarters in Leipzig, is a joint venture of material significance to the EnBW consolidated financial statements due to the carrying amount of the investment. EnBW has a 74.21% shareholding in this company.

The following tables show a summary of the financial information for VNG:

Earnings data <sup>1</sup>	2016
in € million	
Revenue	7,213.9
Scheduled amortisation and depreciation	-135.7
Interest and similar income	4.8
Interest and similar expenses	-21.8
Income taxes	39.4
Net loss for the year from continuing operations	-8.2
Other income	7.5
Total comprehensive income	-0.7
Dividends received	0.0

<sup>1</sup> Preliminary figures for the current reporting year.

**Balance sheet data<sup>1</sup>**

in € million	31/12/2016
Non-current assets	3,014.8
Current assets	1,241.7
of which cash and cash equivalents	(51.8)
Non-current liabilities	1,414.7
of which financial liabilities	(330.5)
Current liabilities	1,195.3
of which financial liabilities	(147.4)
Net assets	1,646.5
Adjustment to EnBW's interest	-358.0
Carrying amount of entities accounted for using the equity method	1,288.5

<sup>1</sup> Preliminary figures for the current reporting year.

EWE Aktiengesellschaft (EWE), an energy supply company with registered offices in Oldenburg, was an associate of material significance to the EnBW consolidated financial statements due to the carrying amount of the investment. 20% of the shares in our 26% shareholding in EWE that were reclassified as assets held for sale in the previous year were sold on 20 April 2016.

The following tables show a summary of the financial information for EWE:

**Earnings data<sup>1</sup>**

in € million	2015
Revenue	7,819.3
Net loss for the year from continuing operations	-7.1
Other income	56.3
Total comprehensive income	49.2
Dividends received	22.9

<sup>1</sup> Figures for the previous year restated at their final values.

**Balance sheet data<sup>1</sup>**

in € million	31/12/2015
Non-current assets	6,659.6
Current assets	1,833.1
Assets held for sale	1,251.6
Non-current liabilities	5,337.8
Current liabilities	2,682.2
Net assets	1,724.3
Adjustment to EnBW's interest	-1,432.4
Carrying amount of entities accounted for using the equity method	291.9

<sup>1</sup> Figures for the previous year restated at their final values.

The following table shows a summary of the financial information for the remaining entities accounted for using the equity method:

**Financial data for the remaining entities accounted for using the equity method  
(EnBW's interest)**

in € million	2016		2015	
	Remaining associates	Joint ventures	Remaining associates	Joint ventures
Carrying amount of entities accounted for using the equity method	319.1	228.0	328.6	205.6
Net profit/loss for the year from continuing operations	22.5	-12.1	31.8	-20.2
Other income	-4.6	4.9	3.0	16.9
Total comprehensive income	18.0	-7.1	34.8	-3.3

Elektrizitätswerk Rheinau AG and Fernwärme Ulm GmbH have a different reporting date and are consolidated with the figures from their financial statements for the year ended 30 September 2016.

### (13) Other financial assets

in € million	Shares in affiliated entities	Other investments <sup>1,2</sup>	Non-current securities <sup>3</sup>	Investment properties	Loans	Total
<b>Cost</b>						
As of 01/01/2016	107.5	1,292.9	7,037.6	143.5	56.2	8,637.7
Decrease due to changes in the consolidated companies	-2.7	-0.6	0.0	0.0	0.0	-3.3
Additions	11.5	254.7	2,407.9	0.2	8.5	2,682.8
Reclassifications	-1.1	2.0	-999.3	8.7	-2.3	-992.0
Reclassification to assets held for sale	-1.7	0.0	0.0	-44.3	0.0	-46.0
Currency adjustments	0.0	0.4	0.0	0.0	0.1	0.5
Disposals	-2.8	-76.8	-3,416.1	-5.6	-4.3	-3,505.6
As of 31/12/2016	110.7	1,472.6	5,030.1	102.5	58.2	6,774.1
<b>Accumulated amortisation</b>						
As of 01/01/2016	32.4	103.8	116.2	74.6	1.4	328.4
Decrease due to changes in the consolidated companies	0.0	-0.6	0.0	0.0	0.0	-0.6
Additions	0.0	0.0	0.0	1.3	0.0	1.3
Impairment	0.0	4.1	133.3	1.1	3.1	141.6
Reclassifications	0.0	0.0	0.0	3.7	0.0	3.7
Reclassification to assets held for sale	0.0	0.0	0.0	-17.5	0.0	-17.5
Currency adjustments	0.0	0.1	0.0	0.0	0.0	0.1
Disposals	0.0	0.0	-102.7	-4.0	0.0	-106.7
Reversal of impairment losses	0.0	0.0	0.0	-4.2	0.0	-4.2
As of 31/12/2016	32.4	107.4	146.8	55.0	4.5	346.1
<b>Carrying amounts</b>						
As of 31/12/2016	78.3	1,365.2	4,883.3	47.5	53.7	6,428.0

<sup>1</sup> €30.5 million of the additions to acquisition costs and €13.6 million of the derecognition of acquisition costs originate from the market valuation.

<sup>2</sup> The carrying amounts include €1,236.2 million accounted for by investments held as financial assets.

<sup>3</sup> €281.6 million of the additions to acquisition costs and €221.0 million of the derecognition of acquisition costs originate from the market valuation.

in € million	Shares in affiliated entities	Other investments <sup>1,2</sup>	Non-current securities <sup>3</sup>	Investment properties	Loans	Total
<b>Cost</b>						
As of 01/01/2015	95.3	1,091.6	7,591.9	163.2	57.7	8,999.7
Decrease due to changes in the consolidated companies	-0.2	0.0	0.0	0.0	0.0	-0.2
Additions	22.4	348.1	6,104.8	0.0	5.7	6,481.0
Reclassifications	-0.7	-11.9	-481.9	0.7	-1.5	-495.3
Reclassification to assets held for sale	-6.4	0.0	0.0	-13.3	0.0	-19.7
Currency adjustments	0.0	4.7	0.0	0.0	2.3	7.0
Disposals	-2.9	-139.6	-6,177.2	-7.1	-8.0	-6,334.8
As of 31/12/2015	107.5	1,292.9	7,037.6	143.5	56.2	8,637.7
<b>Accumulated amortisation</b>						
As of 01/01/2015	32.4	167.1	119.3	87.4	4.3	410.5
Additions	0.0	0.0	0.0	1.8	0.0	1.8
Impairment	0.0	8.0	35.2	1.4	0.1	44.7
Reclassifications	0.0	-12.5	0.0	0.3	0.2	-12.0
Reclassification to assets held for sale	0.0	0.0	0.0	-10.9	0.0	-10.9
Currency adjustments	0.0	1.0	0.0	0.0	0.5	1.5
Disposals	0.0	-59.8	-38.3	-5.3	-3.7	-107.1
Reversal of impairment losses	0.0	0.0	0.0	-0.1	0.0	-0.1
As of 31/12/2015	32.4	103.8	116.2	74.6	1.4	328.4
<b>Carrying amounts</b>						
As of 31/12/2015	75.1	1,189.1	6,921.4	68.9	54.8	8,309.3

<sup>1</sup> €104.4 million of the additions to acquisition costs and €4.0 million of the derecognition of acquisition costs originate from the market valuation.

<sup>2</sup> The carrying amounts include €1,058.8 million accounted for by investments held as financial assets.

<sup>3</sup> €453.7 million of the additions to acquisition costs and €299.8 million of the derecognition of acquisition costs originate from the market valuation.

The investments in affiliated entities disclosed in the financial assets are entities that are not included in the consolidated financial statements due to immateriality.

The non-current securities are mainly fixed-interest securities as well as listed shares. To a large extent, the non-current securities are held in special funds. For consolidation purposes, the individual securities in the special funds are shown separately in the consolidated balance sheet by type of investment. The non-current securities, loans and investments, which are held as financial investments, are available to the operative business in the amount of €42.5 million (previous year: €0.0 million) and to cover the pension and nuclear provisions in the amount of €6,130.7 million (previous year: €8,035.0 million).

The receivables from irredeemable operating leases of the EnBW Group amounting to €134.1 million (previous year: €139.9 million) originate primarily from the renting out of commercial and residential property. As in the previous year, no contingent rent was recognised in the reporting period.



The minimum lease payments receivable are as follows:

in € million	2016	2015
Due within 1 year	42.5	35.7
Due in 1 to 5 years	26.2	22.4
Due in more than 5 years	65.4	81.8
<b>Total</b>	<b>134.1</b>	<b>139.9</b>

The loans consist of loans to affiliated entities amounting to €2.5 million (previous year: €3.6 million), loans to entities in which participating interests are held amounting to €37.7 million (previous year: €37.2 million) and other loans amounting to €13.5 million (previous year: €14.0 million).

Impairment losses of financial assets are recorded on a separate allowance account and presented in the statement of changes in non-current assets.

#### (14) Trade receivables

in € million	31/12/2016			31/12/2015		
	Current	Non-current	Total	Current	Non-current	Total
Trade receivables	3,129.1	357.4	3,486.5	2,787.3	760.3	3,547.6
of which receivables from affiliated entities	(25.5)	(0.0)	(25.5)	(14.8)	(0.0)	(14.8)
of which receivables from other investees and investors	(45.2)	(0.0)	(45.2)	(35.1)	(0.0)	(35.1)
of which receivables from entities accounted for using the equity method	(26.5)	(0.0)	(26.5)	(26.7)	(0.0)	(26.7)

Non-current trade receivables principally include receivables relating to electricity supplies, whose term to maturity does not match the customary business cycle.

The movements in the provision for impairment of trade receivables break down as follows:

in € million <sup>1</sup>	2016	2015
As of 01/01	83.4	79.3
Utilisation	-25.8	-33.0
Net additions	48.2	37.1
<b>As of 31/12</b>	<b>105.8</b>	<b>83.4</b>

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

The credit risks inherent in trade receivables are presented below:

in € million	31/12/2016	31/12/2015
Not past due and not impaired	3,434.3	3,466.1
Past due, but not impaired		
Due within 3 months	6.8	29.2
Due in between 3 and 6 months	5.1	2.1
Due in between 6 months and 1 year	5.3	3.2
Due in more than 1 year	10.8	19.6
Impaired	24.2	27.4
<b>Total</b>	<b>3,486.5</b>	<b>3,547.6</b>

There was no indication as of the reporting date that any impairment losses needed to be recognised on the trade receivables recorded as not impaired.

### (15) Other assets

in € million	31/12/2016			31/12/2015		
	Current	Non-current	Total	Current	Non-current	Total
Income tax refund claims	420.9	1.4	422.3	469.9	5.3	475.2
Other tax refund claims	81.7	0.0	81.7	54.8	0.0	54.8
Interest from tax refunds	98.5	0.0	98.5	76.5	0.0	76.5
Derivatives	1,456.1	242.4	1,698.5	1,787.5	209.3	1,996.8
of which without hedges	(1,377.5)	(129.2)	(1,506.7)	(1,687.7)	(103.0)	(1,790.7)
of which cash flow hedge	(78.6)	[4.7]	[83.3]	(99.8)	[0.0]	(99.8)
of which fair value hedge	[0.0]	(108.5)	(108.5)	[0.0]	(106.3)	(106.3)
Finance lease receivables	5.2	26.4	31.6	5.4	30.0	35.4
Payments on account	57.2	49.6	106.8	81.6	49.2	130.8
Active prepaid expenses	17.9	34.9	52.8	29.0	26.3	55.3
Sundry assets	489.4	55.4	544.8	530.0	25.6	555.6
<b>Total</b>	<b>2,626.9</b>	<b>410.1</b>	<b>3,037.0</b>	<b>3,034.7</b>	<b>345.7</b>	<b>3,380.4</b>

Current and non-current income tax refund claims mainly include deductible tax on investment income from previous years and the current year, as well as income tax receivables from concluded audits.

The finance lease receivables arose from supply contracts for various forms of energy such as electricity, heat, cooling and compressed air, under which the economic ownership of the leased technical equipment and machinery is allocable to the lessee. The leases contain escalation clauses, as well as renewal and purchase price options.

The agreements are based on the following parameters and terms to maturity:

in € million	31/12/2016	31/12/2015
Total lease instalments	41.3	45.4
Interest portion of outstanding lease instalments	9.7	10.0
<b>Present value of outstanding lease instalments</b>	<b>31.6</b>	<b>35.4</b>

The outstanding lease instalments are due as follows:

in € million	31/12/2016		31/12/2015	
	Nominal value	Present value	Nominal value	Present value
Due within 1 year	7.2	5.6	7.0	5.8
Due in 1 to 5 years	18.5	13.4	22.6	19.2
Due in more than 5 years	15.6	12.6	15.8	10.4
<b>Total</b>	<b>41.3</b>	<b>31.6</b>	<b>45.4</b>	<b>35.4</b>

As in the previous year, no impairment losses or reversals of impairment losses had to be recognised on outstanding finance lease receivables.

Payments on account contain prepayments for electricity procurement agreements amounting to €50.3 million (previous year: €49.6 million).

Other assets contain collateral for over-the-counter trading businesses and in the 2016 financial year also for exchange-based trading businesses amounting to €287.2 million (previous year: €122.9 million), as well as variation margins of €38.3 million (previous year: €38.6 million). A market interest rate is applied to the collateral provided for exchange-based trading businesses. This collateral will be used by the stock exchanges in the event that the obligations resulting from stock market transactions are not met.

Bad debt allowances on other assets measured at amortised cost developed as follows:

in € million <sup>1</sup>	2016	2015
As of 01/01	32.8	38.1
Utilisation	-0.8	-7.1
Net additions	1.1	1.8
<b>As of 31/12</b>	<b>33.1</b>	<b>32.8</b>

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

The credit risks of financial instruments disclosed under other assets break down as follows:

in € million	31/12/2016	31/12/2015
Not past due and not impaired	2,238.8	2,578.1
Past due, but not impaired		
Due within 3 months	0.2	0.0
Due in between 3 and 6 months	0.1	0.0
Due in between 6 months and 1 year	0.0	0.0
Due in more than 1 year	0.2	0.1
Impaired	0.8	1.2
<b>Total</b>	<b>2,240.1</b>	<b>2,579.4</b>

There was no indication as of the reporting date that any impairment losses needed to be recognised on the other assets recorded as not impaired.

## (16) Financial assets

Current financial assets mainly consist of fixed-interest securities, while other current financial assets essentially include loans in the reporting year. The current financial assets are available to the operative business in the amount of €329.5 million (previous year: €670.3 million) and to cover the pension and dismantling provisions in the amount of €2,060.0 million (previous year: €683.6 million).

in € million	31/12/2016	31/12/2015
Profit participation rights, funds and shares	2,295.6	1,335.8
Other current financial assets	93.9	18.1
<b>Total</b>	<b>2,389.5</b>	<b>1,353.9</b>

In the previous year, current financial assets totalling €153.7 million were provided as collateral. The collateral was mainly provided for stock exchange transactions.

## (17) Cash and cash equivalents

Cash and cash equivalents relate primarily to bank balances, largely in the form of time and call deposits. Cash was not subject to any significant restrictions on disposal.

Cash and cash equivalents are available to the operative business in the amount of €2,264.3 million (previous year: €2,429.5 million) and to cover the pension and dismantling provisions in the amount of €1,727.3 million (previous year: €1,071.6 million).

## (18) Equity

The development of equity and total comprehensive income is presented separately in the statement of changes in equity. The components of total comprehensive income are presented in the statement of comprehensive income.

### Subscribed capital

The share capital of EnBW AG amounts to €708,108,042.24 as of 31 December 2016 (previous year: €708,108,042.24) and is divided into 276,604,704 (previous year: 276,604,704) no-par-value bearer shares, all of which have been fully paid-in. The no-par-value shares each represent an imputed share of €2.56 per share (previous year: €2.56 per share) of the subscribed capital.

### Capital reserve

The capital reserve contains the amounts received from the issue of shares of EnBW AG which exceed the imputed value of the shares.

### Revenue reserves

The revenue reserves primarily contain the pro rata revenue reserves of the parent company and the other companies included in the consolidation after the date of acquisition accounting.

### Retained earnings/loss of EnBW AG

Taking account of the profit carried forward amounting to €168.4 million (previous year: €662.6 million), the retained loss amounts to €63.5 million (previous year: retained earnings of €317.4 million). Due to the retained loss of EnBW AG, no dividends will be distributed in the current financial year (previous year: €0.55 per share). As of 31 December 2016, a total of 270,855,027 shares (previous year: 270,855,027 shares) were entitled to dividends. The amount distributed by EnBW AG in the previous year was €149.0 million.

The retained loss (previous year: retained earnings) of EnBW AG are disclosed under revenue reserves.

### Treasury shares

As of 31 December 2016, EnBW AG holds 5,749,677 (previous year: 5,749,677) treasury shares. The acquisition cost of the treasury shares amounting to €204.1 million (previous year: €204.1 million) was deducted from the carrying amount of the equity. The amount of share capital attributable to them is €14,719,173.12 (previous year: €14,719,173.12 million). This corresponds to 2.1% (previous year: 2.1%) of the subscribed capital. The treasury shares were acquired on 28 and 29 December 1998 based on the authorisation issued on 25 August 1998 by the Annual General Meeting pursuant to section 71 (1) No. 8 AktG. The acquisition was carried out with a view to planned cooperations with domestic and foreign energy suppliers, as well as industrial customers, that were to be underpinned by mutual capital participations.

The company has no rights or dividend entitlements from directly held treasury shares; they are not entitled to dividends. In accordance with the rulings of IFRS, the treasury shares are not recognised as securities, but are offset in one sum against equity in the balance sheet.

### Other comprehensive income

Other comprehensive income comprises changes in the market value of available-for-sale financial assets, changes in the market value of cash flow hedges, amounts recognised directly in equity for accounting for entities using the equity method, currency translation differences from the translation of financial statements of foreign entities, and the revaluation of pensions and similar obligations.

For details on the changes recognised directly in equity on available-for-sale financial assets and of cash flow hedges, please refer to note (24) "Accounting for financial instruments".

Presentation of the components of other comprehensive income:

2016 in € million	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 shareholders of EnBW AG	Non-controlling interests	Total
Unrealised changes in market value in the current period	-425.4	5.0	195.7	134.0	0.4	-90.3	6.3	-84.0
Reclassification adjustments included in the income statement	0.0	0.8	-11.2	58.8	-38.8	9.6	0.7	10.3
Reclassification to cost of hedged items	0.0	0.0	55.5	0.0	0.0	55.5	0.0	55.5
<b>Other comprehensive income before tax</b>	<b>-425.4</b>	<b>5.8</b>	<b>240.0</b>	<b>192.8</b>	<b>-38.4</b>	<b>-25.2</b>	<b>7.0</b>	<b>-18.2</b>
Income tax	123.5	0.4	-80.8	-22.8	0.0	20.3	-1.4	18.9
<b>Other comprehensive income</b>	<b>-301.9</b>	<b>6.2</b>	<b>159.2</b>	<b>170.0</b>	<b>-38.4</b>	<b>-4.9</b>	<b>5.6</b>	<b>0.7</b>

2015 in € million	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 shareholders of EnBW AG	Non-controlling interests	Total
Unrealised changes in market value in the current period	202.5	37.8	-120.2	252.9	-9.6	363.4	11.7	375.1
Reclassification adjustments included in the income statement	0.0	0.0	65.8	-659.4	0.0	-593.6	-0.2	-593.8
Reclassification to cost of hedged items	0.0	0.0	161.5	0.0	0.0	161.5	0.0	161.5
<b>Other comprehensive income before tax</b>	<b>202.5</b>	<b>37.8</b>	<b>107.1</b>	<b>-406.5</b>	<b>-9.6</b>	<b>-68.7</b>	<b>11.5</b>	<b>-57.2</b>
Income tax	-33.0	3.4	-29.7	14.3	0.0	-45.0	1.0	-44.0
<b>Other comprehensive income</b>	<b>169.5</b>	<b>41.2</b>	<b>77.4</b>	<b>-392.2</b>	<b>-9.6</b>	<b>-113.7</b>	<b>12.5</b>	<b>-101.2</b>

Presentation of the tax effects relating to unrealised gains and losses in equity:

in € million	2016			2015		
	Before tax	Tax expenses/income	After tax	Before tax	Tax expenses/income	After tax
Revaluation of pensions and similar obligations	-427.4	124.5	-302.9	200.7	-32.6	168.1
Currency translation differences	5.9	0.3	6.2	53.2	3.4	56.6
Cash flow hedge	202.9	-76.6	126.3	-122.2	16.6	-105.6
Available-for-sale financial assets	134.2	-43.1	91.1	253.0	-17.5	235.5
Entities accounted for using the equity method	0.4	0.0	0.4	-9.6	0.0	-9.6
<b>Other comprehensive income</b>	<b>-84.0</b>	<b>5.1</b>	<b>-78.9</b>	<b>375.1</b>	<b>-30.1</b>	<b>345.0</b>

Presentation of the tax effects of reclassification adjustments included in the income statement and the cost of hedged items:

in € million	2016			2015		
	Before tax	Tax expenses/ income	After tax	Before tax	Tax expenses/ income	After tax
Currency translation differences	1.1	0.1	1.2	0.0	0.0	0.0
Cash flow hedge	44.9	-6.6	38.3	227.1	-45.7	181.4
Available-for-sale financial assets	58.6	20.3	78.9	-659.4	31.8	-627.6
Entities accounted for using the equity method	-38.8	0.0	-38.8	0.0	0.0	0.0
<b>Other comprehensive income</b>	<b>65.8</b>	<b>13.8</b>	<b>79.6</b>	<b>-432.3</b>	<b>-13.9</b>	<b>-446.2</b>

### Non-controlling interests

Non-controlling interests are shares in Group companies held by third parties. They relate, in particular, to the Energiedienst group, Stadtwerke Düsseldorf AG and Pražská energetika a.s., with their relevant subsidiaries and EnBW Group Baltic 2 S.C.S.

#### Financial information for subsidiaries where there is a significant influence without a controlling interest

in € million	2016				2015			
	Energie- dienst Holding AG	Stadt- werke Düssel- dorf AG	Pražská energe- tika a.s.	EnBW Baltic 2 S.C.S.	Energie- dienst Holding AG	Stadt- werke Düssel- dorf AG	Pražská energe- tika a.s.	EnBW Baltic 2 S.C.S.
Capital share in %	33.33	45.05	30.16	49.89	33.33	45.05	30.16	49.89
Annual net profit from non-controlling interests	6.7	49.1	24.5	38.4	11.2	16.6	22.4	17.8
Dividends paid	10.6	21.6	19.2	2.4	16.1	22.8	18.9	0.0
Carrying amount of non-controlling interests	395.4	363.1	237.2	772.7	397.9	331.9	230.6	756.9
<b>Balance sheet data</b>								
Non-current assets	1,535.9	1,420.5	1,057.5	1,517.4	1,519.5	1,423.9	1,055.3	1,602.6
Current assets	378.2	554.4	96.5	259.2	376.4	503.5	94.4	210.0
Non-current liabilities	540.1	812.2	247.2	130.1	540.8	809.0	244.7	119.4
Current liabilities	177.3	399.7	116.2	23.2	153.4	382.1	136.2	101.5
<b>Earnings data</b>								
Adjusted EBITDA	92.8	213.5	167.7	174.3	107.5	153.7	159.0	124.9

## (19) Provisions

The provisions disclosed separately according to maturity in the balance sheet are combined for the purposes of disclosures in the notes to the financial statements.

in € million	31/12/2016			31/12/2015		
	Current	Non-current	Total	Current	Non-current	Total
Provisions for pensions and similar obligations	146.7	5,970.0	6,116.7	144.1	5,480.9	5,625.0
Provisions relating to nuclear power	5,277.2	5,694.8	10,972.0	478.5	7,852.4	8,330.9
Provisions for non-contractual nuclear obligations	(323.1)	(2,683.0)	(3,006.1)	(288.2)	(4,749.2)	(5,037.4)
Provisions for contractual nuclear obligations	(4,954.1)	(3,011.8)	(7,965.9)	(190.3)	(3,103.2)	(3,293.5)
Other provisions	636.3	1,347.1	1,983.4	720.2	1,144.8	1,865.0
Other electricity provisions	(186.8)	(148.9)	(335.7)	(225.6)	(112.7)	(338.3)
Personnel provisions	(122.5)	(135.2)	(257.7)	(76.7)	(116.6)	(193.3)
Provisions for onerous contracts	(141.2)	(798.3)	(939.5)	(155.4)	(740.0)	(895.4)
Sundry provisions	(185.8)	(264.7)	(450.5)	(262.5)	(175.5)	(438.0)
<b>Total</b>	<b>6,060.2</b>	<b>13,011.9</b>	<b>19,072.1</b>	<b>1,342.8</b>	<b>14,478.1</b>	<b>15,820.9</b>

### Provisions for pensions and similar obligations

The provisions for pensions and similar obligations are recorded on the basis of the existing commitments for future and current post-employment benefits to current and former employees with a pension entitlement, as well as their surviving dependants. A substantial majority of the employees of the EnBW Group are entitled to pension payments from defined benefit pension plans. There are different post-employment provision schemes, which reflect how long the respective employees have served the company. In the case of employees who have already retired, the schemes in question are mainly final salary-based systems, in which the pension paid is calculated on the basis of the length of service, the rate of increase and the last pensionable income. As of 1 January 2005, this system was decoupled from the adjustments to the statutory pension insurance system as part of a reorganisation. The amount of provisions for pensions and similar obligations as of 31 December 2016 was €5,586.7 million (previous year: €5,243.2 million). The bulk of the active employees are covered by ongoing salary-based schemes and/or a pension component system in the form of an average salary plan in which the pension paid consists of annual pension components. The related provisions amounted to €496.6 million (previous year: €381.8 million). For employees who joined the company from 1998 onwards, the pension commitment is based solely on a pension component system. In addition, the employees are granted energy-price reductions during the period in which they receive their pensions.

The pensioners and those with prospective pension entitlements are distributed as follows amongst the different post-employment provision schemes:

Number of employees	31/12/2016		31/12/2015	
	Staff with prospective pension entitlements	Pensioners	Staff with prospective pension entitlements	Pensioners
Closed systems dependent on final salary	8,507	13,450	8,835	13,535
Pension component systems	8,308	296	7,714	273

The commitments are measured above all on the basis of the length of service and remuneration of the employees. In addition, the company pension scheme includes defined benefit obligations under a multi-employer plan using the same measurement basis. The contributions payable to the supplemental pension



plans are made as a certain percentage of the respective employee's remuneration that is subject to the supplemental pension plan.

The amount of provisions earmarked for the defined benefit obligations corresponds to the present value of the expected future obligations. The provisions are calculated using actuarial methods. Plan assets were created in accordance with IAS 19.8 and will be used exclusively to cover pension obligations. They are deducted from the pension obligations. These exist in the form of contractual trust arrangements (CTA) in the EnBW Group. A CTA is a legally structured trustee arrangement for the capital cover of direct pension commitments with separated and spun-off assets.

The objective of asset management in this area is to cover the non-current provisions for pensions and similar obligations, as well as the Group's nuclear provisions, within an economically sensible period by means of appropriate financial investments. The investment goals indicated can be achieved with a minimum of risk. As of 31 December 2016, the dedicated financial assets for pension and nuclear provisions totalled approximately €10.0 billion (previous year: €9.8 billion) and were allocated to a total of nine (previous year: nine) asset classes. In addition to the direct investments, the financial investments were bundled within two (previous year: four) master funds.

The following premises are taken into account when investments are made:

- › Risk-optimised performance in line with the market is targeted.
- › The risk was minimised by, for example, the implementation of an intervention line concept, the establishment of issuer limits and minimum ratings for bonds, adherence to a broad diversification of asset classes and further appropriate measures.
- › The impact on the balance sheet and the income statement are to be minimised.
- › Reducing costs and simplifying administration are also major priorities.

The anticipated development of the cash flow of the post-employment provision scheme is as follows:

in € million	2016	2017– 2021 <sup>1</sup>	2022– 2026 <sup>1</sup>	2027– 2031 <sup>1</sup>	2032– 2036 <sup>1</sup>	2037– 2041 <sup>1</sup>	2042– 2046 <sup>1</sup>	2047– 2051 <sup>1</sup>
Closed systems dependent on final salary	151.9	160.4	191.6	226.3	243.4	235.7	212.8	177.5
Pension component systems	0.5	1.6	3.8	8.9	18.2	28.6	39.3	51.9
<b>Total</b>	<b>152.4</b>	<b>162.0</b>	<b>195.4</b>	<b>235.2</b>	<b>261.6</b>	<b>264.3</b>	<b>252.1</b>	<b>229.4</b>

<sup>1</sup> Average values for five years.

Changes in the underlying parameters for calculating the provisions for pensions and similar obligations would have the following impact on their amounts:

in € million	31/12/2016		31/12/2015	
	Pension component systems	Closed post-retirement systems dependent on final salary	Pension component systems	Closed post-retirement systems dependent on final salary
Discount rate +/-0.5%	-80.9 / 97.1	-501.4 / 571.4	-61.5 / 57.0	-466.7 / 525.7
Salary trend +/-0.5%	14.8 / -13.8	130.5 / -114.7	11.2 / -10.7	107.2 / -94.5
Pension trend +/-0.5%	4.6 / -4.3	408.6 / -371.7	6.4 / -6.1	381.1 / -350.6
Life expectancy +/-1 year	16.6 / -16.6	234.6 / -230.1	16.6 / -17.1	339.6 / -344.1

The parameters for the sensitivity analysis were chosen from the point of view of materiality. Their impact on the defined benefit obligation (DBO) was determined separately in each case to prevent interactions. The parameter variation is based on past experience and the long-term planning premises applied within the Group.

The material parameters (average values) for calculating the defined-benefit pension commitments at the Group's domestic companies are shown below:

in %	31/12/2016	31/12/2015
Actuarial interest rate	1.90	2.30
Future expected wage and salary increases	2.70	2.60
Future expected pension increase	1.90	1.85
Employee turnover	2.00	2.00

The calculations are based on the 2005 G mortality tables devised by Prof. Dr. Klaus Heubeck.

The expenses for pensions and similar obligations is comprised as follows:

in € million	2016	2015
Current service cost	110.8	118.1
Past service cost	-2.5	-0.1
Interest income from plan assets	-22.8	-22.6
Interest costs	150.0	148.6
<b>Recording in the income statement</b>	<b>235.5</b>	<b>244.0</b>
Income from plan assets excluding interest income	-53.1	-22.9
Actuarial gains (-)/losses (+) from changes in demographic assumptions	-1.6	0.0
Actuarial gains (-)/losses (+) from changes in financial assumptions	463.3	-173.1
Actuarial gains (-)/losses (+) from experience-based restatements	18.8	-4.7
<b>Recording in the statement of comprehensive income</b>	<b>427.4</b>	<b>-200.7</b>
<b>Total</b>	<b>662.9</b>	<b>43.3</b>

The development of the pension provisions, categorised by the present value of the defined benefit commitment and the market value of the plan assets, is as follows:

in € million	31/12/2016	31/12/2015
Defined benefit obligation at the beginning of the financial year	6,738.8	6,888.4
Current service cost	110.8	118.1
Interest costs	150.0	148.6
Benefits paid	-264.8	-251.4
Actuarial gains (-)/losses (+)	480.5	-177.8
Actuarial gains (-)/losses (+) from changes in demographic assumptions	(-1.6)	(0.0)
Actuarial gains (-)/losses (+) from changes in financial assumptions	(463.3)	(-173.1)
Actuarial gains (-)/losses (+) from experience-based restatements	(18.8)	(-4.7)
Past service cost	-2.5	-0.1
Changes in the consolidated companies and currency adjustments	-1.5	11.5
Reclassifications	10.5	1.5
<b>Present value of the defined benefit obligation at the end of the financial year</b>	<b>7,221.8</b>	<b>6,738.8</b>
Fair market value of plan assets at the beginning of the financial year	1,113.8	1,102.4
Interest income	22.8	22.6
Appropriations to the plan assets <sup>1</sup>	60.2	66.8
Benefits paid	-112.4	-110.3
Income from plan assets excluding interest income	53.1	22.9
Currency adjustments and reclassifications	1.0	9.4
<b>Fair market value of plan assets at the end of the financial year</b>	<b>1,138.5</b>	<b>1,113.8</b>
Surplus cover from benefit entitlements	33.4	0.0
<b>Provisions for pensions and similar obligations</b>	<b>6,116.7</b>	<b>5,625.0</b>

<sup>1</sup> Applies almost exclusively to the employer's contributions.

Payments into the plan assets in the amount of €8.6 million (previous year: €4.9 million) are planned in the subsequent period.

The present value of the defined benefit obligation breaks down as follows by asset-funded and non-asset-funded status:

in € million	31/12/2016	31/12/2015
Funded benefits	1,219.5	1,189.4
Full funding	(1,191.6)	(1,161.8)
Partial funding	(27.9)	(27.6)
Pension entitlements without asset funding	6,002.3	5,549.4

The present value of the benefit obligations, the fair market value of plan assets and the plan surplus or deficit have developed as follows:

in € million	31/12/2016	31/12/2015
Present value of benefit obligations	7,221.8	6,738.8
Fair market value of plan assets	1,138.5	1,113.8
Plan surplus or deficit	6,083.3	5,625.0

The plan assets consist of the following asset classes:

in %	31/12/2016	31/12/2015
Shares	86.1	86.3
Pension funds	0.9	0.9
Fixed-interest securities	7.7	8.5
Land and buildings	1.9	1.8
Other assets	2.5	1.7
Current financial assets	0.9	0.8
	<b>100.0</b>	<b>100.0</b>

The investment objective for the external plan assets is to cover benefit obligations with a similar term. The plan assets are invested almost entirely within the EU and mainly in energy supply companies. Their performance is subject to country-specific and energy-industry risks. They do not include any shares of EnBW Group companies or any owner-occupied property. The investment strategy takes into consideration the maturity structure and volume of benefit obligations.

The plan assets mainly have market price listings on active markets. The shares contain €285.7 million (previous year: €296.7 million) whose fair value was determined with the help of the discounted cash flow method in the absence of an active market.

#### Multi-employer plans

Multi-employer plans, which are defined benefit plans, are accounted for as defined contribution plans because the information required to allocate the obligations and plan assets to the respective participating employer and the corresponding expenses is not provided by the supplemental pension plans. The expenses from defined benefit obligations via multi-employer plans amounted to €14.8 million (previous year: €16.6 million). Appropriations of a similar magnitude are anticipated for the subsequent year. Potential future increases in contributions from obligations that are not fully funded will not have a significant effect on the EnBW Group.

The employer's contributions to statutory pension insurance in 2016 amounted to €93.0 million (previous year: €90.3 million).

#### Provisions relating to nuclear power

The provisions relating to nuclear power have been recorded for the disposal of irradiated fuel rods and radioactive waste, as well as for the decommissioning and dismantling of contaminated facilities.

in € million	31/12/2016	31/12/2015
<b>Remaining with EnBW</b>		
Decommissioning and dismantling	4,754.6	4,057.0
Containers, transportation, waste, other	1,459.5	1,111.8
	<b>6,214.1</b>	<b>5,168.8</b>
<b>Passing to disposal fund<sup>1</sup></b>		
Containers, transportation, waste, other	1,274.3	776.1
Intermediate storage	1,000.7	662.9
Konrad mine final storage facility	727.7	615.3
Final storage facility for highly radioactive waste	1,755.2	1,107.8
	<b>4,757.9</b>	<b>3,162.1</b>
<b>Total</b>	<b>10,972.0</b>	<b>8,330.9</b>

<sup>1</sup> The amount to be paid to the disposal fund is still to be reduced by the expenditure in the first half of 2017.

The determination of the remaining nuclear provisions held by EnBW is based on appraisals and contractual agreements, as well as external and internal cost estimates.

The provisions for decommissioning and dismantling include the expected costs for remaining or post-operation, dismantling and the removal and disposal of nuclear power plants.

In accordance with the law of reorganising responsibility for nuclear waste management, the non-current provisions, especially for intermediate and final storage costs, will be transferred to a disposal fund. The remaining nuclear power provisions for the disposal obligations have a significantly shorter utilisation period.

The remaining provisions relating to nuclear power are discounted at a risk-free interest rate of on average 0.5% (previous year: 4.7%). A corresponding rate of increase of costs of around 1.4% (previous year: 3.5%) is applied. This results in a spread of around -0.9% (previous year: 1.2%), which generally corresponds to the real interest rate. The change in the discount rate and the rate of increase of costs led overall to an increase in the remaining nuclear power provisions of €1,081.5 million.

A reduction or increase of 0.1 percentage points in the real interest rate would increase the present value of the remaining provisions held by EnBW by €41.3 million (previous year: €147.0 million) or reduce them by €55.5 million (previous year: €141.8 million), respectively.

The nominal amount (without taking into account the effects of the discount rate and rate of increase of costs) of the remaining provisions held by EnBW is €5,742.9 million.

When measuring the provisions being transferred to the disposal fund, the amendments to the German Atomic Power Act from 6 August 2011 and the law of reorganising responsibility for nuclear waste management agreed by the Bundestag and the Bundesrat on 15 and 16 December 2016 were taken into account.

The law of reorganising responsibility for nuclear waste management reflects the recommendation made by the "Commission to examine the financing of the phase-out of nuclear power" (KFK) appointed by the German Federal Ministry for Economic Affairs and Energy in 2015. The state aid investigation by the EU Commission and the signature of the German Federal President are still outstanding. Afterwards, the responsibility for intermediate and final storage will be transferred into the hands of the government. The financial burden will be borne by the companies through payment of the required cash funds into a fund under public law. The operators of the nuclear power plants will thus be responsible in future for the complete financing and management of decommissioning, dismantling and specialist packaging of the radioactive waste. The government, which was already responsible for the implementation of the final storage, will now also be responsible for its financing as well as the implementation and financing of intermediate storage. The financial funds for the intermediate and final storage will be made available to the government by the operators and paid into a fund for the financing of the disposal of nuclear waste.

According to the law, the basic amount including interest for the first half of 2017 should be paid on 1 July 2017.

EnBW will pay both the basic amount and also the additional risk premium into the fund on 1 July 2017. The immediate payment of the risk premium releases EnBW from the payment of any subsequent contributions.

The provisions for the decommissioning and dismantling of contaminated plants, as well as for fuel rods, are recognised at the discounted settlement amount at the time of commissioning. This is disclosed accordingly under the power plants and depreciated. It amounts to €978.7 million (previous year: €513.1 million). Changes in estimates due to changes in assumptions concerning the future development of costs were generally recognised without effect on profit or loss by adjusting the appropriate balance sheet items by €1,174.2 million (previous year: €33.7 million). Changes in estimates relating to decommissioned power plants were recognised as profit or loss.

Decommissioning and dismantling costs are calculated on the basis of the scenario that assumes that the plants will be removed immediately. The provisions are partially offset by receivables amounting to €779.4 million (previous year: €759.2 million) which relate to dismantling obligations for nuclear power plants assumed by a contractual partner in connection with electricity supplies.

## Other provisions

Other electricity provisions primarily relate to obligations from CO<sub>2</sub> emission allowances, the dismantling obligations for wind and hydroelectric power plants and the Renewable Energies Act (EEG).

Personnel provisions primarily concern obligations from phased retirement arrangements, long-service awards and restructuring measures.

The provisions for onerous contracts concern future obligations from onerous procurement and sales agreements. The obligations mainly relate to the procurement of electricity.

Other provisions are discounted using an interest rate of 0.00% to 1.00% on average (previous year: 0.00% to 1.50%). The majority of other non-current provisions have a term of between one and five years.

The provisions developed as follows in the reporting year:

Provisions in € million	As of 01/01/2016	Increases	Reversals	Increase due to passage of time	Changes recognised in equity	Changes in the consolidated companies, currency adjustments and reclassifications	Utilisation	As of 31/12/2016
Provisions for pensions and similar obligations	5,625.0	108.3	0.0	127.2	438.7	-30.1	152.4	6,116.7
Provisions relating to nuclear power <sup>1</sup>	8,330.9	1,577.5	69.7	378.6	1,174.2	-3.1	416.4	10,972.0
Other provisions	1,865.0	754.0	148.8	9.0	36.8	-6.7	525.9	1,983.4
Other electricity provisions	(338.3)	(182.4)	(22.2)	(1.1)	(35.0)	(1.5)	(200.4)	(335.7)
Personnel provisions	(193.3)	(160.3)	(10.6)	(2.3)	(0.0)	(-16.9)	(70.7)	(257.7)
Provisions for onerous contracts	(895.4)	(216.6)	(31.9)	(1.0)	(0.0)	(-1.4)	(140.2)	(939.5)
Sundry provisions	(438.0)	(194.7)	(84.1)	(4.6)	(1.8)	(10.1)	(114.6)	(450.5)
<b>Total</b>	<b>15,820.9</b>	<b>2,439.8</b>	<b>218.5</b>	<b>514.8</b>	<b>1,649.7</b>	<b>-39.9</b>	<b>1,094.7</b>	<b>19,072.1</b>

<sup>1</sup> Utilisation breaks down into decommissioning and dismantling totalling €259.7 million, disposal of spent fuel rods totalling €140.3 million and waste totalling €16.4 million.

**(20) Deferred taxes**

The deferred taxes on measurement differences compared to the tax accounts break down as follows:

in € million	31/12/2016		31/12/2015	
	Deferred tax assets <sup>1</sup>	Deferred tax liabilities <sup>1</sup>	Deferred tax assets <sup>1</sup>	Deferred tax liabilities <sup>1</sup>
Intangible assets	21.2	60.7	26.7	67.7
Property, plant and equipment	448.0	1,744.6	194.9	1,618.9
Financial assets	133.8	328.0	51.0	110.9
Other assets	8.6	33.1	25.4	23.3
Derivative financial instruments	0.0	53.3	0.0	60.3
<b>Non-current assets</b>	<b>611.6</b>	<b>2,219.7</b>	<b>298.0</b>	<b>1,881.1</b>
Inventories	49.9	9.0	36.5	22.8
Financial assets	0.0	56.8	0.7	17.7
Other assets	65.5	506.3	26.2	617.2
<b>Current assets</b>	<b>115.4</b>	<b>572.1</b>	<b>63.4</b>	<b>657.7</b>
Provisions	1,659.8	81.3	1,297.5	660.0
Liabilities and subsidies	230.2	89.6	262.9	86.5
<b>Non-current liabilities</b>	<b>1,890.0</b>	<b>170.9</b>	<b>1,560.4</b>	<b>746.5</b>
Provisions	368.5	6.0	275.4	31.8
Liabilities and subsidies	543.5	47.6	788.2	277.5
<b>Current liabilities</b>	<b>912.0</b>	<b>53.6</b>	<b>1,063.6</b>	<b>309.3</b>
Unused tax losses	103.4	0.0	31.9	0.0
<b>Deferred taxes before netting</b>	<b>3,632.4</b>	<b>3,016.3</b>	<b>3,017.3</b>	<b>3,594.6</b>
Netting	-2,363.5	-2,363.5	-2,923.9	-2,923.9
<b>Deferred taxes after netting</b>	<b>1,268.9</b>	<b>652.8</b>	<b>93.4</b>	<b>670.7</b>

<sup>1</sup> Deferred tax assets and liabilities prior to netting.

In the 2016 financial year, €2,363.5 million (previous year: €2,923.9 million) in deferred tax assets was netted against deferred tax liabilities. Deferred taxes are netted with each other per consolidated tax group or entity if the conditions to do so have been satisfied.

In the measurement differences compared to the tax accounts, a negative balance from deferred taxes resulting from consolidation of €54.0 million (previous year: €57.1 million) is taken into account.

In addition, deferred tax assets on measurement differences compared to the tax accounts contain €4.3 million (previous year: €7.1 million) in non-current financial assets, €734.1 million (previous year: €609.8 million) in non-current provisions and €43.7 million (previous year: €115.4 million) in current liabilities and subsidies that were offset against equity.

The deferred tax liabilities on measurement differences compared to the tax accounts contain €71.4 million (previous year: €51.2 million) in non-current financial assets and €15.4 million (previous year: €4.7 million) in current financial assets that were offset against equity.

In order to evaluate the deferred tax assets from deductible temporary differences in assets and unused tax losses, a tax planning forecast is derived based on the company's multi-year plans and corporate strategy. In this process, it was possible to prove with sufficient certainty that there would be adequate taxable income available in the planning horizon used as the basis for the tax planning forecast for the full capitalisation of deferred tax assets both from deductible temporary differences in assets and also unused tax losses. The estimates were based, above all, on the strategic goals of the company, which envisage an increase in the share of earnings accounted for by the regulated grid business and a resulting improvement in the risk-return profile.

Unused tax losses are composed as follows:

in € million	31/12/2016		31/12/2015	
	Corporate income tax	Trade tax	Corporate income tax	Trade tax
Unlimited ability to carry forward the previously unused tax losses for which no deferred tax assets have been recognised in the balance sheet	118.7	171.3	89.3	143.8
Deferred taxes on the non-valued unused tax losses that would theoretically have to be formed	18.8	22.6	14.1	19.0
Unlimited ability to carry forward the existing unused tax losses for which deferred tax assets were formed <sup>1</sup>	432.7	269.7	114.3	105.0

<sup>1</sup> Almost exclusively concern German companies.

According to the Tax Privilege Reduction Act, from 2004 onwards only 60% of current taxable income exceeding €1 million can be offset against unused tax losses. Unused tax losses reduced the actual tax burden by €28.2 million (previous year: €1.2 million).

The deferred taxes on unused tax losses break down as follows:

in € million	31/12/2016	31/12/2015
Corporate income tax (or comparable foreign tax)	68.1	18.1
Trade tax	35.3	13.8
<b>Total</b>	<b>103.4</b>	<b>31.9</b>

Presentation of the development of deferred taxes on unused tax losses:

in € million	31/12/2016	31/12/2015
Opening balance	31.9	130.0
Utilisation of tax losses	-2.9	-1.2
Correction in previous year for unused tax losses (addition)	74.8	0.0
Origination of tax losses (addition)	1.8	4.7
Write-downs	-2.2	-101.6
<b>Closing balance</b>	<b>103.4</b>	<b>31.9</b>

As of 31 December 2016, the previous adjustments of and non-recognition of deferred tax assets on unused tax losses and deductible temporary differences of €183.2 million were reversed or withdrawn.

In the previous period, the deferred tax assets were adjusted and not recognised on unused tax losses to the amount of €191.6 million due to the limited planning horizon and the resulting insufficient probability of their use.

In the reporting period, there were no deferred taxes on interest amounts carried forward as in the previous year.

No deferred tax liabilities were recognised on temporary differences of €8.5 million (previous year: €7.9 million) in connection with shares in subsidiaries because it is not likely that these temporary differences will reverse in the foreseeable future.

Deferred tax assets totalling €695.3 million (previous year: €676.4 million) were offset directly against equity under other comprehensive income as of 31 December 2016.



## (21) Liabilities and subsidies

### Financial liabilities

Financial liabilities break down as of 31 December 2016 compared to the previous year as follows:

in € million <sup>1</sup>	31/12/2016			31/12/2015		
	Current	Non-current	Total	Current	Non-current	Total
Hybrid bonds	999.9	1,989.9	2,989.8	0.0	1,987.9	1,987.9
Bonds	0.0	3,018.3	3,018.3	499.4	3,004.9	3,504.3
Liabilities to banks	121.4	1,334.1	1,455.5	137.8	1,450.7	1,588.5
Other financial liabilities	87.4	377.9	465.3	121.0	366.5	487.5
<b>Financial liabilities</b>	<b>1,208.7</b>	<b>6,720.2</b>	<b>7,928.9</b>	<b>758.2</b>	<b>6,810.0</b>	<b>7,568.2</b>

<sup>1</sup> Please refer to note (24) "Accounting for financial instruments" for more details on the credit and liquidity risk, fair values and undiscounted cash flows by year.

Of the non-current financial liabilities, €2,568.5 million (previous year: €2,582.9 million) have a term of between one year and five years, and €4,151.7 million (previous year: €4,227.1 million) have a term of more than five years.

### Overview of the hybrid bonds

Issuer	Issue volume	Carrying amounts	Coupon	Maturity
EnBW AG <sup>1</sup>	€1,000 million	€999.9 million	7.375%	02/04/2072
EnBW AG <sup>2</sup>	€1,000 million	€990.9 million	3.625%	02/04/2076
EnBW AG <sup>3</sup>	€725 million	€716.3 million	3.375%	05/04/2077
EnBW AG <sup>3</sup>	US-\$ 300 million	€282.7 million	3.003% <sup>4</sup>	05/04/2077
		<b>€2,989.8 million</b>		

<sup>1</sup> Repayment option for EnBW every five years after the first interest payment date; the earliest possible date is 2 April 2017.

<sup>2</sup> Repayment option for EnBW every five years after the first interest payment date; the earliest possible date is 2 April 2021.

<sup>3</sup> Repayment option for EnBW every five years after the first interest payment date; the earliest possible date is 5 April 2022.

<sup>4</sup> After the swap into euros.

In September 2016, EnBW issued two further hybrid bonds: a euro hybrid bond with a volume of €725 million and a US dollar bond with a volume of US\$300 million. Both bonds have terms of 60.5 years. The bonds were placed with investors in Europe and Asia. The issue date was 5 October 2016 and the final repayment date is 5 April 2077. The first interest payment date will be 5 April 2017. EnBW has both the right to call and repay the bonds in the three-month period before 5 April 2022 and then at every interest payment date. The euro bond was initially given a coupon of 3.375%, while the US dollar bond was given an initial coupon of 5.125% (3.003% after the swap into euros).

All outstanding hybrid bonds include early repayment rights for EnBW and are subordinate to all other financial liabilities, although they have equal ranking with each other. EnBW has the option of suspending interest payments. However, these interest payments must be subsequently paid if EnBW pays dividends or services another hybrid bond. Based on their terms and conditions, all EnBW bonds qualify for 50% of the amount being recognised as equity in accordance with the methods used by the rating agencies Moody's and Standard & Poor's.

### An overview of our bonds

Issuer	Issue volume	Carrying amounts	Coupon	Maturity
Public bonds				
EnBW International Finance B.V.	CHF 100 million	€94.9 million <sup>1</sup>	1.250%	12/07/2018
EnBW International Finance B.V.	€750 million	€748.9 million	6.875%	20/11/2018
EnBW International Finance B.V.	CHF 100 million	€92.8 million	2.250%	12/07/2023
EnBW International Finance B.V.	€500 million	€585.2 million <sup>1</sup>	4.875%	16/01/2025
EnBW International Finance B.V.	€500 million	€498.3 million	2.500%	04/06/2026
EnBW International Finance B.V.	€600 million	€589.2 million	6.125%	07/07/2039
Private placements				
EnBW International Finance B.V.	€100 million	€98.3 million	2.875%	13/06/2034
EnBW International Finance B.V.	JPY 20 billion	€162.1 million	5.460% <sup>2</sup>	16/12/2038
EnBW International Finance B.V.	€100 million	€99.1 million	3.080%	16/06/2039
EnBW International Finance B.V.	€50 million	€49.5 million	2.900%	01/08/2044
		<b>€3,018.3 million</b>		

<sup>1</sup> Adjusted for valuation effects from interest-induced hedging transactions.

<sup>2</sup> After the swap into euro.

On 19 October 2016, a €500 million bond with a coupon of 4.250% issued in October 2006 became due for repayment and was repaid from the existing liquidity position.

### Commercial paper programme

As of the reporting date, no funds had been drawn under the commercial paper programme in place at EnBW International Finance B.V. for short-term financing purposes, as in the previous year.

### Liabilities to banks

Liabilities to banks decreased in the 2016 financial year due to scheduled repayments made by EnBW and its subsidiaries. The majority of the outstanding liabilities to banks are bilateral loan agreements.

In the previous year, existing funding at a subsidiary was refinanced through two new bilateral amortising loans of €25 million each and through new syndicated financing currently valued at €194 million. In addition, a new bank loan of €115 million was taken out in the previous year by a further subsidiary. This was partly used to refinance bank loans due. In the 2016 financial year, the existing syndicated credit line for €1.5 billion (previous year: €1.5 billion) was extended for the last time by a further year until July 2021. In the previous year, the credit line had already been extended by a further year until July 2020. The credit line remained unused as of 31 December 2016.

In addition, a further €348 million (previous year: €472 million) in bilateral free credit lines was available within the Group. These credit lines are not subject to any restrictions as regards their utilisation.

The liabilities to banks are not collateralised with real estate liens as in the previous year. Liabilities to banks to the amount of €128.5 million are collateralised with other types of security (previous year: €137.7 million).

### Other financial liabilities

The item "other financial liabilities" primarily includes long-term promissory notes that a subsidiary placed with institutional investors in 2015. In addition, it also includes long-term finance leases.

The minimum payments from finance leases included in other financial liabilities have the following maturities:

in € million	31/12/2016		31/12/2015	
	Nominal value	Present value	Nominal value	Present value
Due within 1 year	3.1	1.4	2.3	0.6
Due in 1 to 5 years	10.9	4.3	10.3	3.6
Due in more than 5 years	49.2	27.2	51.3	27.8
<b>Total</b>	<b>63.2</b>	<b>32.9</b>	<b>63.9</b>	<b>32.0</b>

### Other liabilities and subsidies

Other liabilities and subsidies disclosed separately according to maturity in the balance sheet are combined in the notes to the financial statements.

in € million <sup>1</sup>	31/12/2016	31/12/2015
Non-current liabilities	508.5	499.9
Current liabilities	5,788.8	7,074.7
<b>Liabilities</b>	<b>6,297.3</b>	<b>7,574.6</b>
Non-current subsidies	1,278.6	1,333.0
Current subsidies	65.4	66.8
<b>Subsidies</b>	<b>1,344.0</b>	<b>1,399.8</b>
Non-current liabilities and subsidies	1,787.1	1,832.9
Current liabilities and subsidies	5,854.2	7,141.5
<b>Liabilities and subsidies</b>	<b>7,641.3</b>	<b>8,974.4</b>

<sup>1</sup> The figures for the previous year have been restated: Liabilities and subsidies amounted to €9,349.7 million as of 1 January 2015. It does not include any retroactive restatements as of 1 January 2015 (as of 31 December 2015: € -33.7 million).

Other liabilities as of 31 December 2016 break down as follows compared to the previous year:

in € million <sup>1,2</sup>	31/12/2016			31/12/2015		
	Current	Non-current	Total	Current	Non-current	Total
Payments received on account	106.6	33.0	139.6	99.9	36.0	135.9
Trade payables	3,193.0	0.4	3,193.4	3,523.5	0.3	3,523.8
of which liabilities to affiliated entities	(7.7)	(0.0)	(7.7)	(9.7)	(0.0)	(9.7)
of which liabilities to other investees and investors	(57.4)	(0.0)	(57.4)	(50.6)	(0.0)	(50.6)
of which liabilities to entities accounted for using the equity method	(43.9)	(0.0)	(43.9)	(41.7)	(0.0)	(41.7)
Other deferred income	25.0	214.5	239.5	23.0	168.0	191.0
Liabilities from derivatives	1,482.8	76.6	1,559.4	1,958.7	98.1	2,056.8
of which without hedges	(1,458.3)	(61.6)	(1,519.9)	(1,812.9)	(39.7)	(1,852.6)
of which cash flow hedge	(24.5)	(15.0)	(39.5)	(145.8)	(58.4)	(204.2)
Income tax liabilities	111.9	78.2	190.1	271.8	84.3	356.1
Miscellaneous liabilities	869.5	105.8	975.3	1,197.8	113.2	1,311.0
of which interest from back taxes	(3.0)	(0.0)	(3.0)	(0.2)	(0.0)	(0.2)
of which from other taxes	(117.5)	(0.0)	(117.5)	(116.6)	(0.0)	(116.6)
of which relating to social security	(15.2)	(5.9)	(21.1)	(21.9)	(5.9)	(27.8)
<b>Other liabilities</b>	<b>5,788.8</b>	<b>508.5</b>	<b>6,297.3</b>	<b>7,074.7</b>	<b>499.9</b>	<b>7,574.6</b>

<sup>1</sup> The figures for the previous year have been restated. Other liabilities amounted to €7,988.0 million as of 1 January 2015. It does not include any retroactive restatements as of 1 January 2015 (as of 31 December 2015: €-33.7 million).

<sup>2</sup> Please refer to note [24] "Accounting for financial instruments" for more details on the credit and liquidity risk, fair values and undiscounted cash flows by year.

Of the other non-current liabilities, €392.5 million (previous year: €354.2 million) has a remaining term of between one year and five years, and €116.0 million (previous year: €145.7 million) has a remaining term of more than five years.

Liabilities relating to trade payables include obligations for outstanding invoices amounting to €1,065.4 million (previous year: €1,382.8 million).

Other liabilities mainly concern collateral for over-the-counter trading businesses (margin calls received) amounting to €224.5 million (previous year: €368.4 million), as well as exchange-based trading businesses (variation margins) of €35.7 million (previous year: €91.2 million), interest obligations from bonds amounting to €151.4 million (previous year: €144.1 million) and non-controlling interests in fully consolidated partnerships recorded as liabilities to the amount of €78.9 million (previous year: €76.7 million).

Subsidies include investment grants, as well as construction cost subsidies and investment cost subsidies.

in € million	31/12/2016	31/12/2015
Investment grants	0.0	0.3
Investment cost subsidies	10.8	12.3
Other subsidies from public authorities	11.8	17.2
Construction cost subsidies	1,321.4	1,370.0
<b>Total</b>	<b>1,344.0</b>	<b>1,399.8</b>

The investment grants were awarded in accordance with section 4a German Investment Grant Act (InvZulG).

The construction cost subsidies which have not yet been recognised in profit or loss were largely granted for investments in the electricity and gas sectors; the title to the subsidised assets is retained by the EnBW Group companies. The subsidies are released over the estimated useful life of the subsidised assets.

## (22) Assets held for sale and liabilities directly associated with assets classified as held for sale

### Assets held for sale

in € million	31/12/2016	31/12/2015
Intangible assets	29.9	0.0
Property, plant and equipment	109.2	33.8
Other financial assets	33.4	982.1
Other assets	0.5	0.0
<b>Total</b>	<b>173.0</b>	<b>1,015.9</b>

### Liabilities directly associated with assets classified as held for sale

in € million	31/12/2016	31/12/2015
Other liabilities and subsidies	24.0	0.8
<b>Total</b>	<b>24.0</b>	<b>0.8</b>

In the reporting year, intangible assets and property, plant and equipment held for sale mainly comprise the EnBW Hohe See GmbH & Co. KG offshore wind farm, the sale of shares in which at the beginning of 2017 led to a loss of economic control. In addition, property, plant and equipment held for sale includes distribution facilities connected to concession losses. This is allocated in the segment reporting to Renewable Energies and Grids. Other financial assets held for sale in the reporting year refer particularly to a piece of land and building held for sale as part of our divestiture strategy. This is allocated in the segment reporting under Other/Consolidation.

Other liabilities and subsidies in connection with the assets held for sale in the reporting year refer mainly to current trade payables and construction cost subsidies.

In the previous year, other financial assets held for sale mainly referred to a 20% shareholding in EWE, which was part of our overall 26% shareholding in EWE. As a result of the planned restructuring of shareholdings agreed between EnBW AG, EWE and EWE-Verband, this were reclassified as assets held for sale. EWE subsequently acquired 10% of its own shares from EnBW in 2016, while EWE-Verband acquired a further 10% of the EWE shares. This is allocated in the segment reporting to Other/Consolidation.

Property, plant and equipment held for sale in the previous year referred mainly to a piece of land and building held for sale as part of our divestiture strategy. This is allocated in the segment reporting under Other/Consolidation.

## Other disclosures

### (23) Earnings per share

Earnings per share is determined by dividing the profit or loss attributable to the shareholders of EnBW AG by the average number of shares outstanding. This indicator may be diluted by potential shares on account of share options or convertible bonds. As EnBW does not have any potential shares, the basic earnings per share is identical to the diluted earnings per share.

Earnings per share <sup>1</sup>		2016	2015
Earnings from continuing operations	in € million	-1,672.5	234.2
of which profit/loss shares attributable to the shareholders of EnBW AG	in € million	(-1,797.2)	(158.2)
Group net profit/loss	in € million	-1,672.5	234.2
of which profit/loss shares attributable to the shareholders of EnBW AG	in € million	(-1,797.2)	(158.2)
Number of shares outstanding (weighted average)	Thousands	270,855	270,855
Earnings per share from continuing operations <sup>2</sup>	in €	-6.64	0.58
Earnings per share from Group net profit/loss (€) <sup>2</sup>	in €	-6.64	0.58
Dividend per share for the EnBW AG 2015 financial year	in €	-	0.55

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

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

### (24) Accounting for financial instruments

Financial instruments include primary financial instruments and derivatives. On the assets side, primary financial instruments mainly consist of financial assets, trade receivables, other assets, and cash and cash equivalents. On the liabilities side, they consist of financial liabilities, trade payables and other liabilities.

#### Fair value and carrying amounts of financial instruments by measurement category

The table below shows the fair values and carrying amounts of the financial assets and financial liabilities contained in the individual balance sheet items: If it is not indicated separately, the fair value is measured recurrently.

31/12/2016	Hierarchy of input data						
in € million	Fair value	Level 1	Level 2	Level 3	Measured at amortised cost	Not in IFRS 7's field of application	Carrying amount
Financial assets	8,770.0	5,193.6	1,985.3	599.2	991.9	47.5	8,817.5
Held for trading	(59.4)	(59.4)					(59.4)
Available for sale	(8,563.0)	(5,134.2)	(1,985.3)	(599.2)	(844.3)		(8,563.0)
Held to maturity	(0.0)				(0.0)		(0.0)
Loans and receivables	(147.6)				(147.6)		(147.6)
Trade receivables	3,486.5				3,486.5		3,486.5
Loans and receivables	(3,486.5)				(3,486.5)		(3,486.5)
Other assets	2,240.1	2.4	1,696.1		541.6	796.9	3,037.0
Held for trading <sup>1</sup>	(1,506.7)	(0.2)	(1,506.5)				(1,506.7)
Loans and receivables	(510.0)				(510.0)		(510.0)
Derivatives in hedge accounting	(191.8)	(2.2)	(189.6)				(191.8)
Carrying amount in accordance with IAS 17	(31.6)				(31.6)		(31.6)
Cash and cash equivalents	3,991.6				3,991.6		3,991.6
Loans and receivables	(3,991.6)				(3,991.6)		(3,991.6)
Assets held for sale <sup>2</sup>	6.6				6.6	166.4	173.0
<b>Total assets</b>	<b>18,494.8</b>	<b>5,196.0</b>	<b>3,681.4</b>	<b>599.2</b>	<b>9,018.2</b>	<b>1,010.8</b>	<b>19,505.6</b>
Financial liabilities	8,708.0				7,928.9		7,928.9
Measured at amortised cost <sup>3</sup>	(8,675.1)				(7,896.0)		(7,896.0)
Carrying amount in accordance with IAS 17	(32.9)				(32.9)		(32.9)
Trade payables	516.5				516.5	2,676.5	3,193.0
Measured at amortised cost	(516.5)				(516.5)		(516.5)
Other liabilities and subsidies	2,150.6	0.2	1,559.2		591.2	2,297.7	4,448.3
Held for trading	(1,519.9)	(0.1)	(1,519.8)				(1,519.9)
Measured at amortised cost	(591.2)				(591.2)		(591.2)
Derivatives in hedge accounting	(39.5)	(0.1)	(39.4)				(39.5)
Liabilities directly associated with assets classified as held for sale	15.3				15.3	8.7	24.0
<b>Total liabilities</b>	<b>11,390.4</b>	<b>0.2</b>	<b>1,559.2</b>	<b>0.0</b>	<b>9,051.9</b>	<b>4,982.9</b>	<b>15,594.2</b>

<sup>1</sup> Of which €8.1 million designated at fair value through profit or loss.

<sup>2</sup> This refers to a non-recurring measurement of the fair value due to the application of IFRS 5.

<sup>3</sup> Of the financial liabilities measured at amortised cost, an amount of €483.1 million is part of fair value hedges.

31/12/2015 <sup>1</sup>	Hierarchy of input data				Measured at amortised cost	Not in IFRS 7's field of application	Carrying amount
in € million	Fair value	Level 1	Level 2	Level 3			
Financial assets	9,654.6	4,563.8	2,580.3	506.4	1,943.8	68.9	9,663.2
Held for trading	[223.0]	[223.0]					[223.0]
Available for sale	[8,186.8]	[4,340.8]	[2,580.3]	[506.4]	[759.3]		[8,186.8]
Held to maturity	[1,171.9]				[1,111.6]		[1,111.6]
Loans and receivables	[72.9]				[72.9]		[72.9]
Trade receivables	3,547.6				3,547.6		3,547.6
Loans and receivables	[3,547.6]				[3,547.6]		[3,547.6]
Other assets	2,579.4	22.4	1,974.4		582.6	801.0	3,380.4
Held for trading <sup>2</sup>	[1,790.7]	[18.1]	[1,772.6]				[1,790.7]
Loans and receivables	[547.2]				[547.2]		[547.2]
Derivatives in hedge accounting	[206.1]	[4.3]	[201.8]				[206.1]
Carrying amount in accordance with IAS 17	[35.4]				[35.4]		[35.4]
Cash and cash equivalents	3,501.1				3,501.1		3,501.1
Loans and receivables	[3,501.1]				[3,501.1]		[3,501.1]
Assets held for sale <sup>3</sup>	6.4				6.4	1,009.5	1,015.9
<b>Total assets</b>	<b>19,289.1</b>	<b>4,586.2</b>	<b>4,554.7</b>	<b>506.4</b>	<b>9,581.5</b>	<b>1,879.4</b>	<b>21,108.2</b>
Financial liabilities	8,194.6				7,568.2		7,568.2
Measured at amortised cost <sup>4</sup>	[8,162.6]				[7,536.2]		[7,536.2]
Carrying amount in accordance with IAS 17	[32.0]				[32.0]		[32.0]
Trade payables	437.3				437.3	3,086.2	3,523.5
Measured at amortised cost	[437.3]				[437.3]		[437.3]
Other liabilities and subsidies	2,931.9	23.6	2,033.2		875.1	2,519.0	5,450.9
Held for trading	[1,852.6]	[18.2]	[1,834.4]				[1,852.6]
Measured at amortised cost	[875.1]				[875.1]		[875.1]
Derivatives in hedge accounting	[204.2]	[5.4]	[198.8]				[204.2]
Liabilities directly associated with assets classified as held for sale						0.8	0.8
<b>Total liabilities</b>	<b>11,563.8</b>	<b>23.6</b>	<b>2,033.2</b>	<b>0.0</b>	<b>8,880.6</b>	<b>5,606.0</b>	<b>16,543.4</b>

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

<sup>2</sup> Of which €19.7 million designated at fair value through profit or loss.

<sup>3</sup> This refers to a non-recurring measurement of the fair value due to the application of IFRS 5.

<sup>4</sup> Of the financial liabilities measured at amortised cost, an amount of €481.6 million is part of fair value hedges.



Calculation of the fair values is explained in the section entitled accounting policies. The individual levels of the input hierarchy are as follows:

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

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

The fair value of the assets in the measurement category “held for trading” amounts to €1,566.1 million (previous year: €2,013.7 million), of which €59.6 million is allocated to the first hierarchical level (previous year: €241.1 million) and €1,506.5 million to the second hierarchical level (previous year: €1,772.6 million). This includes financial instruments of €8.1 million (previous year: €19.7 million) that were designated to this category. The assets of the “available for sale” measurement category have a fair value totalling €8,569.6 million (previous year restated: €8,193.2 million), of which €5,134.2 million is allocated to the first hierarchical level (previous year: €4,340.8 million), €1,985.3 million to the second hierarchical level (previous year: €2,580.3 million), €599.2 million to the third hierarchical level (previous year restated: €506.4 million) and €850.9 million to “measured at amortised cost” (previous year: €765.7 million). As of 31 December 2016, there were no securities classified as “held to maturity” investments. In the previous year, securities classified as “held to maturity” investments had a fair value totalling €1,171.9 million that were allocated to the hierarchical level 1. Assets classified as “loans and receivables” are measured at amortised cost and amount to €8,135.7 million (previous year: €7,668.8 million). Equity instruments measured at cost have a carrying amount of €850.9 million as of the reporting date (previous year restated: €765.7 million). In the previous year, the assets held for sale included €973.1 million assigned to hierarchical level 3. The fair value was calculated on the basis of the fair value less selling costs and was determined from the market transaction carried out for VNG-Verbundnetz Gas Aktiengesellschaft (VNG) less a valuation adjustment and has been derived from the value of the shares in VNG to be acquired by EnBW.

In the 2016 financial year, €970.0 million (previous year: €0.0 million) was reclassified from the category “held to maturity” to the category “available for sale” and evaluated at fair value as of 31 December 2016 in the amount of €1,027.5 million due to the termination of the holding intent. The securities are allocated to hierarchical level 1.

The financial instruments designated to the “held for trading” measurement category when reported for the first time comprise securities containing embedded derivatives which cannot be separated. The maximum credit risk amounts to €8.1 million (previous year: €19.7 million). The evaluation is carried out at market rates.

In the previous year, equity instruments of the “available for sale” category previously measured at amortised cost were measured at fair value for the first time because the measurement factors that previously precluded the fair value to be reliably determined no longer exist. In order to determine the fair value, a level 3 measurement method is used because no prices listed in active markets are available. The measurement is made on the basis of the net asset value. The difference between the carrying amount and the fair value was recognised directly in other comprehensive income. The equity instruments allocated to Level 3 are investments in private equity companies.

The fair values of investments in private equity companies are provided by the respective investment companies. The fair value depends on the changes in market value of the respective asset. The most up-to-date fair value available is taken as the basis in each case.

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 01/01/2016	Changes in consolidated companies, currency adjustments, other	Changes recognised in equity	Additions	Disposals	As of 31/12/2016
Financial assets	506.4	-10.6	27.5	104.0	-28.1	599.2

In the financial year, gains from Level 3 financial instruments were recognised in the investment result in the amount of €16.4 million (previous year: €18.8 million), of which, €16.4 million (previous year: €18.8 million) is accounted for by financial instruments still held on the reporting date.

Financial liabilities as of 31 December 2016 include bonds with a fair value of €6,768.6 million (previous year: €6,101.0 million) and liabilities to banks with a fair value of €1,474.2 million (previous year: €1,606.1 million). The fair value of the bonds and of the liabilities to banks must be allocated to hierarchical level 1 and 2, respectively.

#### Disclosures – offsetting financial assets and financial liabilities

The derivative financial instruments are part of standard market netting agreements. Master netting agreements exist with our business partners that were created with banks, in particular, on the basis of ISDA agreements (International Swaps and Derivatives Association). Transactions concluded as part of commodity transactions are generally subject to EFET agreements (European Federation of Energy Traders). The netting agreements are included in the calculations of fair value.

The following table contains the financial instruments netted in the balance sheet and those which, irrespective of that, are subject to a legally enforceable netting agreement. These financial instruments are contained in the non-netted amounts. In addition, the non-netted amounts also contain collateral to be furnished in advance for on-exchange transactions.

31/12/2016	Non-netted amounts					
in € million	Gross amounts	Netting	Net amounts accounted for	Master netting agreement	Financial collateral received/paid	Net amount
Other assets	1,845.2	-95.0	1,750.2	-1,254.6	-223.9	271.7
Held for trading	(1,719.6)	(-40.9)	(1,678.7)	(-1,241.7)	(-223.9)	(213.1)
Derivatives in hedge accounting	(125.6)	(-54.1)	(71.5)	(-12.9)	(0.0)	(58.6)
Other liabilities and subsidiaries	1,676.5	-136.3	1,540.2	-1,254.6	-258.3	27.3
Held for trading	(1,543.5)	(-20.1)	(1,523.4)	(-1,241.7)	(-254.4)	(27.3)
Derivatives in hedge accounting	(133.0)	(-116.2)	(16.8)	(-12.9)	(-3.9)	(0.0)

31/12/2015 <sup>1</sup>	Non-netted amounts					
in € million	Gross amounts	Netting	Net amounts accounted for	Master netting agreement	Financial collateral received/paid	Net amount
Other assets	1,969.0	-22.0	1,947.0	-1,545.0	-330.0	72.0
Held for trading	(1,869.0)	(-18.0)	(1,851.0)	(-1,521.0)	(-330.0)	(0.0)
Derivatives in hedge accounting	(100.0)	(-4.0)	(96.0)	(-24.0)	(0.0)	(72.0)
Other liabilities and subsidies	2,261.0	-296.0	1,965.0	-1,545.0	-304.0	116.0
Held for trading	(1,904.0)	(-57.0)	(1,847.0)	(-1,521.0)	(-210.0)	(116.0)
Derivatives in hedge accounting	(357.0)	(-239.0)	(118.0)	(-24.0)	(-94.0)	(0.0)

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

The following net gains/losses were presented in the income statement:

#### Net gains or losses by measurement category

in € million <sup>1</sup>	2016	2015
Financial assets and liabilities held for trading	-50.2	-99.4
Available-for-sale financial assets	-25.4	497.1
Loans and receivables	-64.6	-12.1
Financial liabilities measured at amortised cost	0.0	-0.2

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

The presentation of net gains and losses does not include derivatives that are used as hedging instruments. Stand-alone derivatives are included in the “financial assets and liabilities held for trading” measurement category. Please refer to note (8) “Financial result” for information on the total interest income and expenses arising from assets held for sale, loans and receivables, held to maturity financial investments and financial liabilities measured at amortised cost.

The net loss posted in the “financial assets and liabilities held for trading” measurement category includes gains from marking to market and gains on sale, as well as interest and currency effects.

As in the previous year, the net gain recorded in the “available-for-sale financial assets” measurement category includes realised losses on disposal as well as impairment losses.

As in the previous year, the net loss recorded in the “loans and receivables” measurement category arises from the impairment losses, which are higher than the positive currency effects and write-ups.

In the previous year, the net loss on financial liabilities measured at amortised cost was attributable primarily to credit fees.

Earnings from changes in the market value of available-for-sale financial assets were recognised directly in equity in the amount of €134.2 million in the 2016 financial year (previous year: €253.0 million). Of the changes in market values posted with no impact on income, €58.6 million was transferred with a negative earnings impact (previous year: €659.4 million with a positive earnings impact) to the income statement.

The valuation allowances on financial assets in the “available for sale” and “loans and receivables” measurement categories amount to €137.4 million (previous year: €43.2 million) and €3.1 million (previous year: €0.1 million), respectively. In the 2016 financial year, impairment losses were carried out on trade receivables amounting to €47.1 million (previous year: €27.0 million) and on other assets measured at amortised cost totalling €1.7 million (previous year: €1.9 million). As of 31 December 2016, bad debt allowances on financial assets, trade receivables and other assets totalled €143.4 million (previous year restated: €117.6 million).

### Derivative financial instruments and hedging

**Derivatives:** Both physical and financial options and forward transactions are entered into to hedge risks in the commodity area, while forward transactions are used almost exclusively in the foreign exchange area. In the area of financing, swap transactions were concluded to minimise risks.

All derivatives held for trading are accounted for as assets or liabilities. They are measured at fair value.

Changes in the fair value of derivatives which are neither intended for own use nor qualify as cash flow hedges are recorded in the income statement.

Hedge accounting in accordance with IAS 39 is applied in the finance area mainly for currency hedges for investments with a foreign functional currency and for interest rate hedges for non-current liabilities. In the commodity area, fluctuations of future cash flows from forecast procurement and sales transactions are hedged.

**Cash flow hedges** have been entered into particularly in the commodity area to cover price risks from future sales and procurement transactions, to limit the currency risk from liabilities denominated in foreign currency and to limit the risk of interest rate fluctuation of floating-rate liabilities.

The change in the fair value of the hedges used, particularly forward contracts and futures, is, insofar as they are effective, recorded directly in other comprehensive income (measurement of financial instruments at market value) until termination of the hedge. The ineffective portion of the gain or loss on the hedging instrument is immediately recognised in profit or loss.

#### Date of the reclassification of the result that was directly recognised in equity to the 2016 income statement

in € million	Fair value	2017	2018 – 2021	>2021
Currency-related cash flow hedges	39.8	38.8	16.6	-15.6
Commodity cash flow hedges	-55.0	20.4	-75.4	0.0
Interest-related cash flow hedges	0.7	0.0	0.0	0.7
Other derivative cash flow hedges	-3.8	-6.4	2.6	0.0

#### Date of the reclassification of the result that was directly recognised in equity to the 2015 income statement

in € million	Fair value	2016	2017 – 2020	>2020
Currency-related cash flow hedges	44.7	66.9	27.3	-49.5
Commodity cash flow hedges	-346.7	-226.6	-120.1	0.0
Interest-related cash flow hedges	-0.2	0.0	0.0	-0.2
Other derivative cash flow hedges	-36.1	-36.1	0.0	0.0

As of 31 December 2016, unrealised gains from derivatives amounted to €111.2 million (previous year: €359.0 million). The effective portion of the cash flow hedges amounting to €-203.4 million (previous year: €122.4 million) was recognised directly in equity in the reporting period. From the ineffective portion of the cash flow hedges in 2016, there arose income of €4.6 million (previous year: €4.3 million) and income from reclassifications from the other comprehensive income in the amount of €11.2 million (previous year: expense in the amount of €65.8 million) to the income statement. The reclassification will be made to revenue (increase of €66.4 million, previous year: €18.1 million), cost of materials (increase of €74.4 million, previous year: €87.8 million) and the financial result (increase of €25.7 million, previous year: €14.2 million). Moreover, the amounts reclassified also included expenses as a result of the de-designation of cash flow hedges amounting to €6.5 million (previous year: €10.3 million). An amount of €55.5 million (previous year: €161.5 million) was reclassified from other comprehensive income to inventories. This led to an increase in acquisition costs.

As of 31 December 2016, existing hedged transactions are covered by cash flow hedges for foreign currencies with terms of up to around 60 years (previous year: up to 23 years). In the commodity area, the terms of planned underlying transactions are generally up to four years (previous year: up to four years).

For optimisation purposes, hedging relationships are redesignated and de-designated as is customary in the industry.

**Fair value hedges** are entered into above all to hedge fixed-interest liabilities against market price risks. Interest rate swaps are used as hedging instruments. With a fair value hedge, both the hedged transaction and the hedging instrument for an exposure are measured at fair value through profit or loss. The change of €0.8 million in the fair value of hedging instruments was recognised in the income statement with a positive impact on earnings in the reporting period (previous year: €21.8 million with a negative impact on earnings). For hedged liabilities, the fluctuation in market values arising from the hedged risk was also recognised in profit or loss. In the reporting year, the fluctuations in market values totalling €0.8 million that resulted from the underlying transactions were measured through profit or loss with a negative impact on earnings (previous year: €21.1 million with a positive impact on earnings).

**Hedges of net investments in foreign operations:** Primary foreign currency bonds are used to hedge against foreign exchange risks from investments with a foreign functional currency. As of 31 December 2016, €46.5 million (previous year: €45.4 million) arising from the hedges' exchange rate changes was reported within equity as unrealised losses under "Currency translation". Hedges of net investments in foreign operations are 100% effective.

Contracts that have been concluded to meet the company's expected usage requirements are not recorded in the balance sheet pursuant to the provisions of IAS 39.

Regular way purchases or sales (spot purchases/sales) of primary financial instruments are generally recognised as of the settlement date at fair value taking into account the transaction costs. Derivative financial assets are recognised as of the trading date. Derivative and primary financial instruments are recognised in the balance sheet when EnBW becomes party to the contract.

Purchases and sales of fuels are made in euros or US dollars.

Counterparty risks are assessed taking into account the period for which the current replacement and selling risk has been calculated. Moreover, these risks are analysed with reference to the current rating by the rating agencies Moody's and Standard & Poor's. An internal rating procedure is used for trading partners that do not have such an external rating.

The counterparty risk is based on replacement and selling risks resulting from the market value of the item in question with the individual trading partner as of the reporting date. Netting options agreed in master agreements concluded with the trading partner are also taken into account when determining the counterparty risk.

If there is a netting agreement, positive and negative market values are netted for each trading partner. Otherwise, only positive market values are taken into consideration.

## Counterparty risk Moody's, S&amp;P and/or internal rating

in € million <sup>1</sup>	31/12/2016		31/12/2015	
	< 1 year	1–5 years	< 1 year	1–5 years
up to A1	27.3	7.2	33.5	9.0
up to A3	50.1	13.3	94.1	68.1
Baa1	19.2	21.7	47.8	13.9
up to Baa3	11.3	13.7	34.4	14.3
below Baa3	18.1	3.2	8.0	0.1
<b>Total</b>	<b>126.0</b>	<b>59.1</b>	<b>217.8</b>	<b>105.4</b>

<sup>1</sup> Without taking into account securities in the previous year.

Derivatives used for hedging purposes can be reconciled to other comprehensive income (cash flow hedge) as follows:

in € million <sup>1</sup>	31/12/2016	31/12/2015	Variance
Derivatives used in cash flow hedges with a positive fair value	136.9	99.8	37.1
Derivatives used in cash flow hedges with a negative fair value	155.2	438.1	-282.9
	<b>-18.3</b>	<b>-338.3</b>	<b>320.0</b>
Deferred tax on changes recognised directly in equity in derivatives used in cash flow hedges	13.9	97.5	-83.6
Hedge ineffectiveness	-1.1	3.5	-4.6
Cascading effects	-54.8	-13.1	-41.7
Effects realised from hedged transactions <sup>2</sup>	-36.1	-11.1	-25.0
Non-controlling interests	-1.3	4.6	-5.9
<b>Cash flow hedge (recognised in equity)</b>	<b>-97.7</b>	<b>-256.9</b>	<b>159.2</b>

<sup>1</sup> Before offsetting financial assets and financial liabilities according to IAS 32.

<sup>2</sup> Of which € -19.7 million (previous year: € -20.3 million) will be reclassified in the income statement in the period 2017 to 2018 (previous year: 2016 to 2018).

The cascading effects concern the changes in market value of the futures that are part of hedges accumulated until the time of cascading.

In cascading, annual and quarterly futures are settled by other futures instead of in cash.

### Risk management system

As an energy supply company, EnBW is exposed to financial price risks in the currency, interest and commodity areas in the course of its operating activities, investments and financing transactions. In addition, there are credit and liquidity risks. It is company policy to eliminate or limit these risks by systematic risk management.

Exchange rate fluctuations between the euro and other currencies, fluctuation in interest rates on international money and capital markets, as well as fluctuating prices on the markets for electricity, coal, gas and emission allowances are the main price risks for EnBW. The hedging policy used to limit these risks is set forth by the Board of Management and is documented in intercompany guidelines. It also provides for the use of derivatives.

The derivatives used to hedge against financial risks are subject to the assessment criteria defined in the risk management guidelines. These include value-at-risk ratios and position limit and loss limits. The segregation of duties between trading and back-office processing and control is a further key element of our risk management.

The corresponding financial transactions are only concluded with counterparties with excellent credit ratings. Using suitable hedging instruments, it is possible to make use of market opportunities while hedging the risk position.

The risks arising from financial instruments as well as the methods used to assess and manage them have not been changed significantly since the previous year.

For further details on EnBW's risk management system, we refer to our explanations given in the risk report contained in the management report.

**Credit risk:** EnBW is exposed to credit risks that result from the counterparties not fulfilling contractual agreements. EnBW manages its credit risks by generally demanding a high credit rating of its counterparties and limiting the credit risk with counterparties. The credit ratings of counterparties are continually monitored by EnBW's system for managing credit ratings. Commodity and energy transactions are generally made under master agreements such as EFET, ISDA or IETA.

These master agreements are generally only entered into following careful scrutiny of the counterparty's creditworthiness. Exceptions to this business policy can be made only if it is in the justified interest of the company, e.g. in order to penetrate new markets. In terms of the customer structure, the receivables from individual counterparties are not large enough to give rise to a significant concentration of risks.

Financial investments are only made with the investment limits and counterparties defined in the treasury guidelines. Compliance with these guidelines is constantly monitored by the internal control system (ICS).

The maximum credit risk from financial assets (including derivatives with positive market value) is equivalent to the carrying amounts recognised in the balance sheet. As of the reporting date of 31 December 2016, the maximum credit risk amounts to €18,494.8 million (previous year restated: €19,228.8 million).

**Liquidity risk:** Liquidity risks arise for EnBW from the obligation to repay liabilities fully and punctually. The objective of EnBW's cash and liquidity management is to secure the company's solvency at all times.

Cash management determines any cash requirements and surpluses on a central basis. By offsetting cash requirements and excess cash, the number of banking transactions is reduced to a minimum. The offsetting is carried out by cash pooling. Cash management has implemented standardised processes and systems to manage bank accounts and internal clearing accounts and perform automated payment transactions.

For liquidity management purposes, a finance plan based on cash flows is prepared centrally. As they arise, finance needs are covered by suitable liquidity management instruments. In addition to ensuring that liquidity is available on a daily basis, EnBW maintains further liquidity reserves of €1.8 billion (previous year: €2.0 billion) which are available at short notice. The amount of liquidity reserves is based on strategic liquidity planning, taking into account defined worst-case parameters. The liquidity reserve is made up of contractually agreed, syndicated and free credit lines with various terms to maturity. In view of the liquidity available and existing credit lines, EnBW does not consider there to be any concentration of risk.

For further details on financial liabilities refer to note (21) "Liabilities and subsidies".

The tables below show future undiscounted cash flows from financial liabilities and derivative financial instruments that affect the future liquidity situation of the EnBW Group.

The analysis includes all contractual obligations as of the reporting date 31 December 2016 that are disclosed in the balance sheet.

Interest and redemption payments are taken into consideration for debt instruments issued and liabilities to banks.

The interest payments on fixed-interest financial instruments are based on the contractually agreed interest rates. For financial instruments subject to floating interest, the interest rates last fixed prior to 31 December 2016 were used.

Foreign currency financial instruments are translated at the respective spot price as of 31 December 2016.

Where derivatives are concerned, positive or negative market values are generally included, provided they give rise to a net outflow of resources. Undiscounted cash flows are based on the following terms and conditions:

- › Swap transactions are only included in the liquidity analysis provided they give rise to a net outflow of resources.
- › Forward exchange transactions are taken into account provided they give rise to an outflow of resources.
- › In the case of forward transactions, all calls are taken into account. The future cash flows are equivalent to the quantities measured at the contractually agreed price.
- › Futures transactions are not included in the liquidity analysis because they are settled by daily variation margins.

#### Undiscounted cash flows as of 31/12/2016

in € million	Total	2017	2018	2019	2020	Cash flows > 2020
Non-derivative financial liabilities						
Debt instruments issued	8,064.6	1,277.9	1,072.7	176.5	176.1	5,361.4
Liabilities to banks	1,508.6	132.0	120.1	103.8	158.4	994.3
Finance lease liabilities	63.2	3.1	4.4	3.4	3.1	49.2
Other financial liabilities	467.6	65.0	15.9	61.8	11.8	313.1
Trade payables	516.5	516.5				
Other financial obligations	596.4	494.6	11.0	1.3	9.5	80.0
Derivative financial assets <sup>1</sup>	5,347.5	4,069.2	937.2	336.7	4.4	
Derivative financial liabilities <sup>1</sup>	1,820.4	1,370.4	399.4	35.5	3.5	11.6
Financial guarantees	250.8	250.8				
<b>Total</b>	<b>18,635.6</b>	<b>8,179.5</b>	<b>2,560.7</b>	<b>719.0</b>	<b>366.8</b>	<b>6,809.6</b>

<sup>1</sup> Before netting according to IAS 32.



## Undiscounted cash flows as of 31/12/2015

in € million	Total	2016	2017	2018	2019	Cash flows > 2019
Non-derivative financial liabilities						
Debt instruments issued	7,568.4	773.1	1,251.7	1,020.3	125.3	4,398.0
Liabilities to banks	1,672.5	151.5	154.1	130.9	281.3	954.7
Finance lease liabilities	63.9	2.3	2.8	3.2	2.3	53.3
Other financial liabilities	506.2	123.7	12.9	15.8	52.2	301.6
Trade payables	437.3	437.3				
Other financial obligations	875.1	779.3	7.2	1.3	7.9	79.4
Derivative financial assets <sup>1</sup>	221.8	155.0	43.2	22.6	1.0	
Derivative financial liabilities <sup>1</sup>	8,488.5	6,093.7	1,727.3	604.5	23.6	39.4
Financial guarantees	247.6	247.6				
<b>Total</b>	<b>20,081.3</b>	<b>8,763.5</b>	<b>3,199.2</b>	<b>1,798.6</b>	<b>493.6</b>	<b>5,826.4</b>

<sup>1</sup> Before netting according to IAS 32.

The general recovery of market prices on the commodity markets resulted in the reclassification of liabilities as assets. The continued fall in the volume of forward purchases in the electricity and gas segments, however, led to a further decrease in assets and liabilities overall. Because only the derivatives that cause a cash outflow are presented and the netting agreements concluded with numerous trading partners as part of our risk management activities are also left out here, EnBW Group's actual liquidity risk from derivatives is not directly revealed.

#### Market price risks

Market price risks can arise from foreign exchange and interest rate risks as well as from commodity and other price risks for shares, share-based investment funds and interest-bearing securities. The price risks are reduced through the implementation of a comprehensive hedging concept and the associated conclusion of risk positions.

The main foreign currency risks of EnBW result from procurement and hedging of prices for its fuel requirements, gas and oil trading business and liabilities denominated in foreign currency. Other currency risks resulting from investments in shares, share-based investment funds and fixed-interest securities are taken into account under other price risks due to their minor significance for the dedicated financial assets. The currency risk is hedged with the help of appropriate standardised financial instruments – in the reporting period, forward exchange contracts in particular – on the basis of continuously monitored exchange rate forecasts. Foreign exchange risks are hedged centrally. EnBW principally has exposure to currency risks from US dollars and Swiss francs.

The net assets tied up at foreign Group entities outside the eurozone, and their related translation risks, are hedged against exchange rate fluctuation only in exceptional cases.

The effects of changes in exchange rates on the net profit/loss for the year and on equity are analysed below. The analysis was made assuming that all other parameters, such as interest rates, remain unchanged. The analysis includes financial instruments of €1,424.8 million (previous year: €939.2 million) whose exchange rate exposure might affect equity or the net profit/loss for the year.

These are mainly hedging instruments from cash flow hedges and from hedges of net investments in foreign operations, stand-alone derivatives and receivables and liabilities denominated in foreign currency.

A 10% appreciation (depreciation) of the euro (previous year: 10%) against all currencies as of the reporting date 31 December 2016 would worsen (improve) the net profit/loss for the year by €19.0 million. In the previous year, an appreciation (depreciation) of the euro would have worsened (improved) the net profit/loss for the year by €13.2 million. The hypothetical change in net profit/loss results from currency sensitivity between the euro and the US dollar (worsens by €25.5 million; previous year: €19.7 million) and between the euro and the Swiss franc (improves by €6.5 million; previous year: €6.5 million).

In the event of an appreciation (depreciation) of 10% (previous year: 10%), the equity would increase (decrease) by €65.8 million (previous year: increase by €52.5 million) as of the reporting date of 31 December 2016. The hypothetical change in equity results from currency sensitivity between the euro and the US dollar (increase of €53.7 million; previous year: increase of €40.5 million) and between the euro and the Swiss franc (increase of €12.1 million; previous year: €12.0 million).

EnBW uses a multitude of interest-sensitive financial instruments in order to meet the requirements of operational and strategic liquidity management. Interest rate risks only stem from floating-rate instruments.

Interest-induced changes in the market value of interest-bearing securities in the “available for sale” measurement category are presented under other price risks for shares, share-based investment funds and interest-bearing securities.

On the assets side, there is interest exposure from bank balances and on the liabilities side from floating-rate liabilities to banks. In addition, there are interest rate risks from derivatives in the form of swap transactions. EnBW mainly has interest rate risks in the euro area. The analysis includes financial assets of €1,935.0 million (previous year: €1,884.0 million) and financial liabilities of €1,736.0 million (previous year: €1,723.0 million), whose interest rate exposure might affect equity or the net profit/loss for the year.

The effects of changes in interest rates on the net profit/loss for the year and on equity on the reporting date are analysed below. The situation on the reporting date for the period is decisive for the quantitative information; the effects for one year on the current reporting period are presented. The analysis was made assuming that all other parameters, such as exchange rates, remain unchanged. The analysis includes only financial instruments whose interest rate exposure might affect equity or the net profit/loss for the year. For analysis purposes, the average change in yield over the last ten years was used.

An increase of 65 basis points (previous year: 65 basis points) in the interest rate in the eurozone as of the reporting date of 31 December 2016 in relation to the nominal volume would increase the net profit/loss for the year by a total of €1.3 million (previous year: increase of €1.1 million). A decrease of 65 basis points as of the reporting date of 31 December 2016 in relation to the nominal volume would decrease the net profit/loss by a total of €1.8 million. The hypothetical change in net profit/loss consists of potential effects from worsening interest rate derivatives amounting to €2.3 million (previous year: €3.1 million), an increase of €11.3 million (previous year: €11.7 million) in cash at banks with a floating interest rate and a decrease of €7.7 million (previous year: €7.5 million) in primary financial liabilities with a floating interest rate.

In the context of our energy trading activities, EnBW enters into energy trading contracts for the purpose of price risk management, optimisation of power stations, load equalisation and optimisation of margins. Trading for own account is only permitted within narrow, clearly defined boundaries.

The price risks mostly arise from the procurement and sale of electricity, the procurement of coal, gas and oil as fuels, and the procurement of emission allowances. Furthermore, EnBW is exposed to price risks from speculative items entered into in own-account trading. The price risks are hedged using appropriate financial instruments on the basis of continuously monitored forecasts of market prices. The hedging instruments used in the reporting period were forwards, futures, swaps and options.

The sensitivity of the measurement of derivatives to the price of electricity, coal, oil, gas and emission allowances is analysed below. The analysis was made assuming that all other parameters remain unchanged. It includes only derivatives whose changes in market value affect equity or the net profit/loss for the year. These are derivatives that are accounted for as stand-alone derivatives as well as derivatives used as hedging instruments in cash flow hedges. For all commodities, typical volatilities were determined and rounded on the basis of the front year.

These volatilities give the percentage rate by which the market price is shifted on the evaluation date. For all commodities, the resulting changes in market prices are multiplied by the sensitivities and aggregated for each commodity.

The analysis does not include any derivatives that are intended for the purpose of receipt or delivery of a non-financial item in accordance with the entity's expected purchase, sale or usage requirements (own use), and are not required to be accounted for in accordance with IAS 39. Our generation and distribution positions are not included in the analysis either.

The sensitivities presented below therefore do not represent the actual economic risks that the EnBW Group is exposed to and serve solely to satisfy the disclosure requirements of IFRS 7.

An increase (decrease) of 25% in the market price of electricity (previous year: 10%) as of the reporting date of 31 December 2016 would worsen (improve) the net profit/loss for the year by €55.7 million (previous year: €21.0 million). In the event of an increase (reduction) of 25% in the market price (previous year: 10%) as of the reporting date of 31 December 2016, the equity would decrease (increase) by €185.3 million (previous year: €5.3 million).

An increase (decrease) of 30% in the market price of coal (previous year: 20%) as of the reporting date of 31 December 2016 would improve (worsen) the net profit/loss for the year by €2.2 million (previous year: €6.1 million). In the event of an increase (reduction) of 30% in the market price (previous year: 20%) as of the reporting date of 31 December 2016, the equity would increase (decrease) by €160.3 million (previous year: €69.0 million).

An increase (decrease) of 35% in the market price of oil (previous year: 35%) as of the reporting date of 31 December 2016 would improve (worsen) the net profit/loss for the year by €7.6 million (previous year: €16.2 million). In the event of an increase (reduction) of 35% in the market price (previous year: 35%) as of the reporting date of 31 December 2016, the equity would increase (decrease) by €5.6 million (previous year: €22.3 million).

An increase (decrease) of 25% in the market price of gas (previous year: 15%) as of the reporting date of 31 December 2016 would worsen (improve) the net profit/loss for the year by €18.0 million (previous year: €5.5 million). In the event of an increase (reduction) of 25% in the market price (previous year: 15%) as of the reporting date of 31 December 2016, the equity would increase (decrease) by €19.0 million (previous year: €0.0 million).

An increase (decrease) of 55% in the market price of emission allowances (previous year: 30%) as of the reporting date of 31 December 2016 would improve (worsen) the net profit/loss for the year by €51.7 million (previous year: €95.9 million). In the event of an increase (reduction) of 55% in the market price (previous year: 30%) as of the reporting date of 31 December 2016, the equity would increase (decrease) by €8.4 million (previous year: €5.2 million).

EnBW has investments in shares and share-based investment funds and fixed-interest securities that pose price risks for the company, which include, amongst other things, currency risk. When selecting securities, the company always attaches particular importance to high marketability and a good credit rating. As of the reporting date 31 December 2016, shares, share-based investment funds and fixed-interest securities totalling €7,178.8 million (previous year: €7,144.1 million) were exposed to the market risk.

The effects of price risks from shares and share-based investment funds as well as interest-bearing securities on the net profit/loss for the year and on equity are analysed below. The analysis was made assuming that all other parameters, such as interest, remain unchanged. The analysis includes financial instruments whose price risks might affect equity or the net profit/loss for the year. The analysis of the market price risk of shares and share-based investment funds was carried out based on historical volatility. A standard deviation was assumed as a realistic scenario. The market risk of fixed-interest securities was analysed by modified duration. Taking into account the changes in interest rates assumed (see interest rate risk) in relation to the fair value of fixed-interest securities, earnings are determined in absolute figures. The premises on which the sensitivity analysis is based are 15% for shares and share-based investment funds (previous year: 16%) and 2% for interest-bearing securities (previous year: 2%).

In the risk scenario in question, the net profit/loss for the year would increase (decrease) by €1.2 million (previous year: €4.5 million). The hypothetical change in profit/loss for the year is due to fixed-interest securities. In the risk scenario in question, the equity for the year would increase (decrease) by €455.8 million (previous year: €493.2 million). Of the hypothetical change in equity, €361.7 million (previous year: €405.5 million) is accounted for by shares and share-based investment funds and €94.2 million (previous year: €87.7 million) by fixed-interest securities.

## (25) Contingent liabilities and other financial commitments

The disclosures on contingent liabilities and other financial commitments relate to the nominal values.

### Contingent liabilities

After the amended German Atomic Power Act (AtG) and the amended Directive on the Coverage Provisions in the Nuclear Power Industry (AtDeckV) came into force on 27 April 2002, German nuclear power plant operators are required to provide evidence of coverage provision up to a maximum amount of €2.5 billion per case of damage for risks related to nuclear power. Of this provision, €255.6 million is covered by uniform third-party liability insurance. Nuklear Haftpflicht GbR now only provides solidarity coverage in respect of claims relating to officially prescribed evacuation measures ranging from €0.5 million to €15 million. In proportion to their shares in the nuclear power plants, Group companies have undertaken to provide the operating companies responsible for the nuclear power plants with sufficient liquidity to enable them to meet their obligations arising from their membership of Nuklear Haftpflicht GbR at any time.

In order to fulfil the subsequent coverage provision amounting to €2,244.4 million per case of damage, EnBW and the other parent companies of the German nuclear power station operators reached a solidarity agreement on 11 July, 27 July, 21 August and 28 August 2001, which was extended with agreements on 25 March, 18 April, 28 April and 1 June 2011, to provide a liable nuclear power station operator with sufficient funding – after exhausting its own possibilities and those of its parent companies – to meet its payment obligations in the event of a claim for damages. According to the agreement, EnBW has to bear a 24.9% share of the liability coverage as of 31 December 2016, and the same share of 24.9% as of 1 January 2017, plus 5% for costs to settle any claims for damages. Sufficient provisions have been made to ensure this liquidity and are taken into account in the liquidity plan.

EnBW, Kernkraftwerk Obrigheim GmbH (KWO) and EnBW Kernkraft GmbH (EnKK) are members of the European Mutual Association for Nuclear Insurance (EMANI). Comprehensive property insurance has been taken out with EMANI for all nuclear power plants operated by EnBW. In the event that the guarantee fund held by EMANI is exhausted or if EMANI no longer holds the legally stipulated liquidity, EMANI can demand the payment of an amount up to six times the annual net premium from the members in accordance with its statutes. The annual net premium for all nuclear power plant blocks operated by EnBW is currently €1.4 million.

In addition, there are other contingent liabilities at the EnBW Group amounting to €55.2 million (previous year: €888.5 million). These include €16.0 million (previous year: €884.4 million) for pending litigation where no provisions were made because the counterparty is unlikely to win the case. The fall mainly results from the elimination of the arbitration proceedings between EWE and EnBW. More detailed explanations on important legal risks, for which contingent liabilities are reported, can be found in the risk report. In addition, various court cases, investigations by authorities or proceedings and other claims are pending against EnBW. The chances of these being successful are, however, remote and they are therefore not reported under contingent liabilities.

### Other financial commitments

The EnBW Group has long-term purchase commitments for natural gas, coal and other fossil fuels, as well as for electricity. In addition, there are commitments from long-term agreements for the purchase, conversion, enrichment, production and disposal of uranium. The total volume of these commitments amounts to €18.2 billion (previous year: €19.0 million), of which €4.1 billion (previous year: €3.9 billion) is due within one year.

This reduction was primarily the result of shorter terms to maturity, as well as amended assumptions about long-term supply agreements in the electricity and brown coal sectors.

In addition, there are provisions for long-term procurement agreements amounting to €891.4 million (previous year: €773.5 million).

Sundry other financial commitments break down as follows:

in € million	31/12/2016	Of which due in			31/12/2015
		< 1 year	1 – 5 years	> 5 years	
Financial commitments from rent and lease agreements	469.0	88.5	234.4	146.1	448.0
Purchase commitments	932.5	615.8	190.0	126.7	643.4
Capital commitments for intangible assets and property, plant and equipment	478.5	267.6	209.8	1.1	501.9
Financial commitments from corporate acquisitions <sup>1</sup>	553.3	220.1	289.0	44.2	660.5
Other financial commitments	461.9	211.6	76.7	173.6	515.0
<b>Total</b>	<b>2,895.2</b>	<b>1,403.6</b>	<b>999.9</b>	<b>491.7</b>	<b>2,768.8</b>

<sup>1</sup> Financial commitments from corporate acquisitions < 1 year include investments held as financial assets amounting to €210.4 million (previous year: €198.9 million).

## (26) Significant restrictions

As a result of regulatory and legal requirements, the ability of the Group to transfer assets within the Group is limited to some extent.

In accordance with the Energy Industry Act (EnWG), independent transmission operators must possess the financial, technical, material and human resources required to operate the transmission grid. For this purpose, the independent transmission operators must be the owner, either directly or through shareholdings, of all of the assets required to operate the transmission grid.

As of 31 December 2016, the EnBW Group held a total of €1,026.9 million (previous year: €916.5 million) in assets restricted due to these legal regulations.

## (27) Audit fees

The fees of the Group auditor KPMG AG Wirtschaftsprüfungsgesellschaft, which are recorded as an expense, break down as follows:

in € million	2016	2015
Statutory audit	2.5	2.3
Other attestation services	1.0	0.6
Tax advisory services	0.4	0.1
Other services	1.3	1.1
<b>Total</b>	<b>5.2</b>	<b>4.1</b>

## (28) Exemptions pursuant to section 264 (3) or section 264b HGB

The following German subsidiaries made use of some or all of the exemption provisions of section 264 (3) of the German Commercial Code (HGB) or section 264b HGB in the 2016 financial year:

### Exemptions pursuant to section 264 (3) HGB

- › EnBW Biogas GmbH, Stuttgart
- › EnBW Offshore 1 GmbH, Stuttgart
- › EnBW Offshore 2 GmbH, Stuttgart
- › EnBW Offshore 3 GmbH, Stuttgart (formerly EnBW Omega Sechshundsechzigste Verwaltungsgesellschaft mbH, Karlsruhe)
- › EnBW Perspektiven GmbH, Karlsruhe
- › EnBW REG Beteiligungsgesellschaft mbH, Stuttgart

- › EnBW Rückbauservice GmbH, Stuttgart
- › EnBW Speicher GmbH, Stuttgart
- › EnBW Wind Onshore Instandhaltungs GmbH, Karlsruhe (formerly EnBW Omega Siebenundachtzigste Verwaltungsgesellschaft mbH, Karlsruhe)
- › EnBW Windpartner GmbH, Stuttgart (formerly EnBW Omega Neunundsechzigste Verwaltungsgesellschaft mbH, Stuttgart)
- › MSE Mobile Schlammentwässerungs GmbH, Karlsbad-Ittersbach
- › Netze BW Wasser GmbH, Stuttgart
- › NWS Finanzierung GmbH, Karlsruhe
- › NWS REG Beteiligungsgesellschaft mbH, Stuttgart
- › RBS wave GmbH, Stuttgart
- › TPLUS GmbH, Karlsruhe
- › u-plus Umweltservice GmbH, Karlsruhe (formerly U-plus Umweltservice AG, Karlsruhe)
- › Watt Synergia GmbH, Frankfurt am Main

#### Exemptions pursuant to section 264b HGB

- › EnBW City GmbH & Co. KG, Obrigheim
- › NWS Grundstücksmanagement GmbH & Co. KG, Obrigheim

#### (29) Declaration of compliance with the German Corporate Governance Code

The Board of Management and Supervisory Board of EnBW Energie Baden-Württemberg AG issued the declaration of compliance with the German Corporate Governance Code required by section 161 German Stock Corporations Act (AktG) on 9 December 2016 and made it permanently available to shareholders on the Internet at [www.enbw.com/declarationofcompliance](http://www.enbw.com/declarationofcompliance).

#### (30) Share deals and shareholdings of key management personnel

The company did not receive any notices in the 2016 financial year about transactions involving EnBW shares or related financial instruments concerning persons in managerial positions or those persons closely related to them in accordance with section 15a German Securities Trading Act (Wertpapierhandelsgesetz – WpHG). The EnBW shares held by all members of the Board of Management and the Supervisory Board total less than 1% of all shares issued by the company.

#### (31) Notes to the cash flow statement

The cash flow statement is split up into cash flows from operating, investing and financing activities. The balance of the cash flow statement represents the change in cash and cash equivalents during the 2016 financial year amounting to €490.9 million (previous year: €305.6 million).

Cash and cash equivalents relate almost exclusively to bank balances, largely in the form of time and call deposits. In the 2016 financial year, cash flow from operating activities amounted to €473.6 million (previous year: €1,918.3 million).

Other non-cash expenses and income break down as follows:

in € million	2016	2015
Income from the reversal of construction cost subsidies	-64.7	-67.5
Income and expenses from changes in specific bad debt allowances	59.2	44.0
Reversal of impairment losses on property, plant and equipment and intangible assets	-5.9	-59.5
Write-ups/write-downs on inventories	-31.8	32.7
Other	-6.5	-19.4
<b>Total</b>	<b>-49.7</b>	<b>-69.7</b>

In the 2016 financial year, €77.1 million (previous year: €82.8 million) was distributed to third-party shareholders of Group companies.

The purchase prices paid in cash for the acquisition of subsidiaries and entities accounted for using the equity method, as well as for shares in joint operations, totalled €963.4 million (previous year: €21.1 million). In the reporting year, €2.1 million (previous year: none) in cash and cash equivalents were acquired in the course of share purchases. The cash payments in the reporting period mainly related to the acquisition of 74.21% of the

shares in VNG. The consideration transferred included a non-cash proportion (exchange of shares) to the amount of 10% of the shares in EWE (€419.8 million). A cash settlement was also paid for the acquisition. In addition, cash payments include the acquisition of Connected Wind Services A/S (CWS) and the four onshore wind farms SCE Wind Bremervörde GmbH & Co. KG, SCE Wind Ostercappeln GmbH & Co. KG, SCE Wind Rositz GmbH & Co. KG and SCE Wind Zernitz GmbH & Co. KG, as well as capital increases at entities accounted for using the equity method. Property, plant and equipment of €3.5 million, other assets of €14.5 million, provisions of €0.5 million, financial liabilities of €9.9 million and other liabilities of €6.1 million were acquired with the purchase of CWS. Property, plant and equipment of €23.2 million, other assets of €1.6 million, provisions of €1.5 million, financial liabilities of €0.2 million and other liabilities of €1.8 million were acquired with the purchase of the four onshore wind farms. The cash payments in the previous year primarily concerned capital increases at entities accounted for using the equity method.

The sale prices from the disposal of subsidiaries and entities accounted for using the equity method as well as for shares in joint operations totalled €191.3 million (previous year: €31.5 million). There was an outflow of cash and cash equivalents of €1.4 million (previous year: €6.5 million) in the reporting year as a result of the sale of shares. In the reporting period, the cash receipts largely resulted from the receipt of the purchase price for EnBW Propower GmbH at the beginning of 2016. The sale itself was already completed at the end of 2015. As a result of the disposal of Thermogas Gas- und Gerätevertriebs-GmbH, property, plant and equipment of €2.5 million and other assets of €4.7 million and other liabilities and subsidies of €1.7 million were derecognised. The disposal of Energiedienstleistungen Rhein-Neckar GmbH resulted in the derecognition of property, plant and equipment of €0.5 million, other assets of €3.9 million, provisions of €2.7 million and other liabilities and subsidies of €1.5 million. In the comparative period, the cash receipts largely resulted from a partial sale of shares in entities accounted for using the equity method. In addition, the sale of Kraftwerk Bexbach Verwaltungsgesellschaft mbH was included. The disposal resulted in the derecognition of property, plant and equipment of €31.7 million and other assets of €6.9 million, as well as provisions of €23.4 million and other liabilities and subsidies of €1.5 million. On the sale of the EnBW Propower GmbH, property, plant and equipment of €162.3 million, other assets of €10.2 million and other liabilities and subsidies of €0.7 million were derecognised.

Cash-relevant net investment in the management report can be reconciled as follows:

in € million	2016	2015
Cash flow from investing activities	333.9	-814.2
- Interest and dividends received	-345.1	-380.6
- Cash received/paid for investments in connection with short-term finance planning	-39.4	-45.8
- Net investments held as financial assets	162.9	161.4
- Net investment in other assets	-1,396.5	-134.9
- Acquired/relinquished cash	-0.7	6.5
+ Payments for alterations of capital in non-controlling interests	-25.6	-6.1
+ Cash received/cash paid for changes in ownership interest without loss of control	-8.0	719.8
+ Cash received from participation models	1.6	0.0
<b>Cash payments for net investments</b>	<b>-1,316.9</b>	<b>-493.9</b>

The contribution to the dedicated financial assets of €50.7 million (previous year: €-74.2 million) is reported separately for representing the retained cash flow in the liquidity analysis.

For further explanations on the cash flow statement, please refer to the explanations given in the management report about the financial position of the EnBW Group.

### **(32) Additional disclosures on capital management**

Capital management at EnBW covers the management of liabilities, as well as of financial assets. Financial assets include non-current securities and loans, as well as current financial assets and cash and cash equivalents. On the liabilities side, capital management covers financial liabilities, as well as provisions for pensions and dismantling provisions.

By limiting cash-relevant net investment to the level of the retained cash flow, measured by the internal financing capability, EnBW controls the level of net financial liabilities irrespective of the interest rate-related volatility of the pension and nuclear provisions. EnBW ensures the timely coverage of the pension and dismantling provisions using an asset liability management model. EnBW uses this cash flow-based model to determine the anticipated effects over the next 30 years, based on appraisals of the pension provisions, as well as appraisals of the nuclear provisions. This model forms the basis for the management of the financial assets. It allows simulations of various alternative return and provision scenarios.

The effect the utilisation of the pension and dismantling provisions may have on the operating business is limited using an ongoing contribution from the financial assets of €300 million per year (plus an inflation supplement). If the provisions are fully covered by the financial assets, no further funds will be taken from operating cash flow as part of the model.

EnBW uses a rolling planning horizon of three months for the short-term management of liquidity. EnBW also uses tools which allow forecasts to be made about liquidity requirements beyond the medium-term period.

EnBW has a well-balanced maturity profile for its financial liabilities. The financial policy focuses on ensuring the solvency of the company, limiting financial risks and optimising capital costs. As of 31 December 2016, the creditworthiness of EnBW was rated by the rating agencies Moody's, Standard & Poor's and Fitch with A3 negative, A- negative and A- stable, respectively.



**(33) Segment reporting**

01/01 – 31/12/2016 in € million	Sales	Grids	Renewable Energies	Generation and Trading	Other / Consolidation	Total
<b>Revenue</b>						
External revenue	7,771.1	6,643.7	510.6	4,433.9	9.1	19,368.4
Internal revenue	431.4	2,639.0	272.4	2,341.8	-5,684.6	0.0
Total revenue	8,202.5	9,282.7	783.0	6,775.7	-5,675.5	19,368.4
<b>Earnings indicators</b>						
Adjusted EBITDA	249.7	1,004.1	295.3	337.2	52.6	1,938.9
EBITDA	177.1	897.2	293.8	-739.3	101.9	730.7
Adjusted EBIT	193.2	636.9	142.1	26.8	25.5	1,024.5
EBIT	76.4	527.1	128.8	-2,467.5	72.3	-1,662.9
Income from reversals of impairment losses	0.2	2.9	0.0	1.4	1.4	5.9
Scheduled amortisation and depreciation	-56.5	-367.2	-153.2	-310.4	-27.1	-914.4
Impairment losses	-44.2	-2.9	-11.8	-1,417.8	-2.5	-1,479.2
Net profit/loss from entities accounted for using the equity method	0.0	12.9	-16.5	4.6	-11.0	-10.0
Significant non-cash items	22.0	16.8	8.6	11.2	-12.5	46.1
<b>Assets and liabilities</b>						
Capital employed	525.6	5,310.8	3,066.2	2,074.7	3,817.0	14,794.3
of which carrying amount of entities accounted for using the equity method	(0.0)	(282.7)	(207.7)	(56.7)	(1,288.5)	(1,835.6)
Capital expenditures on intangible assets and property, plant and equipment	51.9	795.6	208.1	111.1	22.7	1,189.4

01/01 – 31/12/2015 in € million <sup>1</sup>	Sales	Grids	Renewable Energies	Generation and Trading	Other / Consolidation	Total
<b>Revenue</b>						
External revenue	9,061.2	6,350.6	447.0	5,300.4	7.3	21,166.5
Internal revenue	319.1	2,592.0	318.3	2,705.4	-5,934.8	0.0
Total revenue	9,380.3	8,942.6	765.3	8,005.8	-5,927.5	21,166.5
<b>Earnings indicators</b>						
Adjusted EBITDA	255.3	747.4	287.4	777.3	42.2	2,109.6
EBITDA	329.5	818.9	274.3	579.9	-84.4	1,918.2
Adjusted EBIT	199.2	402.4	176.5	392.7	11.1	1,181.9
EBIT	266.7	469.7	150.3	-481.7	-128.0	277.0
Income from reversals of impairment losses	35.0	24.5	0.0	0.0	0.0	59.5
Scheduled amortisation and depreciation	-56.1	-345.0	-110.9	-384.6	-31.1	-927.7
Impairment losses	-6.7	-4.2	-13.1	-677.0	-12.5	-713.5
Net profit/loss from entities accounted for using the equity method	0.0	22.2	-16.2	5.7	14.6	26.3
Significant non-cash items	-34.2	57.2	4.4	-18.8	-12.3	-3.7
<b>Assets and liabilities</b>						
Capital employed	578.7	4,938.6	2,960.3	2,055.9	2,401.9	12,935.4
of which carrying amount of entities accounted for using the equity method	(0.0)	(304.4)	(193.2)	(56.3)	(272.2)	(826.1)
Capital expenditures on intangible assets and property, plant and equipment	67.9	710.8	439.4	170.5	27.8	1,416.4

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

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 extraordinary items, 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	2016	2015
Adjusted EBITDA	1,938.9	2,109.6
Non-operating EBITDA	-1,208.2	-191.4
of which income/expenses relating to nuclear power	(-860.6)	(43.8)
of which income from the release of other provisions	(18.9)	(82.7)
of which result from disposals	(28.4)	(52.1)
of which addition to the provisions for onerous contracts relating to electricity procurement agreements	(-198.1)	(-295.0)
of which income from reversals of impairment losses	(5.9)	(59.5)
of which restructuring	(-110.4)	(-20.8)
of which other non-operating result	(-92.3)	(-113.7)
<b>EBITDA</b>	<b>730.7</b>	<b>1,918.2</b>
Amortisation and depreciation	-2,393.6	-1,641.2
<b>Earnings before interest and taxes (EBIT)</b>	<b>-1,662.9</b>	<b>277.0</b>
Investment result	117.6	21.2
Financial result	-1,176.6	-24.0
<b>Earnings before tax (EBT)</b>	<b>-2,721.9</b>	<b>274.2</b>

The components of non-operating EBITDA can be found on the income statement, in particular, in the items cost of materials totalling €-1,235.1 million (previous year: €-395.4 million), other operating income totalling €169.7 million (previous years: €294.9 million), other operating expenses totalling €-97.6 million (previous years: €-133.8 million) and personnel expenses totalling €-43.3 million (previous years: €-18.7 million).

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 an 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 and the area dealing with the dismantling of nuclear power plants. Our shareholding in VNG and up to 20 April 2016 our shareholding in EWE 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.

The significant non-cash items principally comprise expenses from allocations to provisions, income from the reversal of construction cost subsidies and deferred liabilities.

Capital employed, which we record as segment assets, comprises all assets from the operating business. Non-interest-bearing liabilities – such as trade payables – are deducted.

Capital employed is calculated as follows:

in € million <sup>1</sup>	31/12/2016	31/12/2015
Intangible assets	1,636.5	1,744.9
Property, plant and equipment	13,481.9	13,508.1
Investment properties	47.5	68.9
Investments <sup>2</sup>	2,042.9	1,031.5
Inventories	806.8	877.5
Current trade receivables <sup>3</sup>	2,680.7	2,772.5
Other assets <sup>4</sup>	3,037.5	4,255.0
of which income tax refund claims	(422.3)	(475.2)
of which assets held for sale	(173.0)	(1,015.9)
of which other tax refund claims	(81.7)	(54.8)
of which derivatives	(1,698.5)	(1,996.8)
of which payments on account made	(106.8)	(130.8)
of which prepaid expenses	(52.8)	(55.3)
of which sundry assets	(643.3)	(632.1)
of which non-current trade receivables	(357.4)	(760.3)
of which assets attributable to net debt	(-498.3)	(-866.2)
Other provisions	-1,983.4	-1,865.0
Trade payables and other liabilities <sup>5</sup>	-6,228.2	-7,480.9
of which payments received on account	(-139.6)	(-135.9)
of which trade payables	(-3,185.7)	(-3,514.1)
of which other deferred income	(-239.5)	(-191.0)
of which derivatives	(-1,559.4)	(-2,056.8)
of which income tax liabilities	(-190.1)	(-356.1)
of which other liabilities	(-896.4)	(-1,234.3)
of which liabilities directly associated with the assets classified as held for sale	(-24.0)	(-0.8)
of which liabilities attributable to net debt	(6.5)	(8.1)
Subsidies	-1,344.0	-1,399.8
Deferred taxes <sup>6</sup>	616.1	-577.3
<b>Capital employed</b>	<b>14,794.3</b>	<b>12,935.4</b>
<b>Average capital employed<sup>7</sup></b>	<b>13,715.6</b>	<b>13,627.2</b>

<sup>1</sup> The figures for the previous year have been restated: The capital employed amounted to €13,602.9 million as at 1 January 2015. It does not include retroactive restatements of the income tax liabilities as of 1 January 2015 (as of 31 December 2015: €33.7 million) and concerns the Grids segment and Other/Consolidation.

<sup>2</sup> Including entities accounted for using the equity method, shares in affiliated entities and other investments allocable to operating activities.

<sup>3</sup> Excluding affiliated entities, excluding receivables associated with nuclear provisions.

<sup>4</sup> Excluding receivables associated with nuclear provisions, excluding net profit from CTA, excluding valuation effects from interest-induced hedging transactions.

<sup>5</sup> Excluding affiliated entities, excluding non-controlling interests in fully consolidated partnerships recognised as liabilities.

<sup>6</sup> Deferred tax assets and liabilities netted.

<sup>7</sup> Average calculation based on the relevant quarterly value for the reporting year and the year-end value for the previous year.

External revenue by region is determined based on the place supplied. The EnBW Group does not generate 10% or more of its external revenue with any one external customer.

#### External revenue by region

in € million	2016	2015
Germany	18,189.4	19,386.0
European currency zone excluding Germany	186.7	390.8
Rest of Europe	992.0	1,389.4
Rest of world	0.3	0.3
	<b>19,368.4</b>	<b>21,166.5</b>

#### External revenue by product

in € million	2016	2015
Electricity	15,025.5	16,162.4
Gas	3,293.5	3,860.5
Energy and environmental services	1,049.4	1,143.6
	<b>19,368.4</b>	<b>21,166.5</b>

#### Intangible assets and property, plant and equipment by region

in € million	31/12/2016	31/12/2015
Germany	13,472.0	13,632.0
European currency zone excluding Germany	25.6	0.0
Rest of Europe	1,620.8	1,621.0
	<b>15,118.4</b>	<b>15,253.0</b>

### (34) Related parties (entities)

Related parties include, above all, the Federal State of Baden-Württemberg and Zweckverband Oberschwäbische Elektrizitätswerke as indirect major shareholders of EnBW AG. As of 31 December 2016, the Federal State of Baden-Württemberg and its wholly owned subsidiary NECKARPRI GmbH indirectly held 46.75% (unchanged) of the shares in EnBW AG, and NECKARPRI-Beteiligungsgesellschaft mbH held the same amount directly. NECKAPRI-Beteiligungsgesellschaft mbH is a wholly owned subsidiary of NECKARPRI GmbH. Zweckverband Oberschwäbische Elektrizitätswerke indirectly held 46.75% (unchanged) of the shares in EnBW AG, and its wholly owned subsidiary OEW Energie-Beteiligungs GmbH (OEW GmbH) held the same amount directly. This means that related parties include, in particular, the federal state, NECKARPRI GmbH, OEW, OEW GmbH and entities controlled or jointly controlled by them, or over which they have a significant influence.

The transactions concluded with the federal state and entities controlled or jointly controlled by it, or over which it has significant influence, essentially relate to supplying public entities such as universities, government authorities, zoos and clinics with electricity, gas and district heating. The revenue from these transactions was immaterial in the reporting period; most of the receivables had been settled as of 31 December 2016. All business transactions with the federal state were based on customary market terms and conditions. There are no contingent liabilities or financial commitments to the federal state.

There are no business relations with OEW and NECKARPRI-Beteiligungsgesellschaft mbH apart from dividends paid.

Business relations with related parties, which, amongst others, result from supply and procurement agreements in the electricity and gas sectors and took place at customary market terms and conditions, are as follows:

in € million	2016			2015		
	Joint ventures accounted for using the equity method	Associated companies accounted for using the equity method	Joint operations recognised on a proportional basis	Joint ventures accounted for using the equity method	Associated companies accounted for using the equity method	Joint operations recognised on a proportional basis
Income	113.2	233.8	1.5	44.2	309.1	1.1
Expenses	-91.9	-314.9	-7.9	-23.1	-435.5	-5.0
Assets	3.7	53.9	3.3	3.9	51.0	1.5
Liabilities	5.6	436.4	3.6	4.4	469.3	1.4
Other obligations	262.3	143.3	151.5	257.2	91.7	143.1

In business relations with joint ventures accounted for using the equity method, the receivables are due within one year, the liabilities mainly have longer terms. Other obligations to these entities largely concern guarantees, sureties and future purchase price obligations of €24.1 million (previous year: €24.1 million). In addition, there are obligations from lease agreements with Stuttgart Netze GmbH.

The business relations with associated companies accounted for using the equity method, including with municipal entities (particularly municipal utilities) mainly exist in the course of ordinary business activity. The receivables and liabilities for the reporting period are almost exclusively due within one year. There are also provisions for long-term procurement agreements that are regularly adjusted to current market assessments. In addition to ordinary business activity, an obligation was newly recognised in the 2015 financial year in connection with a planned acquisition of a company. Due to the payment of the cash settlement in April 2016, this obligation no longer exists as of 31 December 2016. Other obligations to these entities result primarily from long-term purchase obligations in the electricity sector.

In business relations with joint operations whose assets, liabilities, income and expenses are recognised on a proportional basis, the receivables and liabilities are due within one year. Other obligations to these entities solely concern the gas sector.

Related parties also include the EnBW Trust e.V., which manages the plan assets for securing pension obligations.

### **(35) Related parties (individuals)**

The EnBW Group has not entered into any significant transactions with individuals that are related parties.

The basic principles of the remuneration system and amount of remuneration for the Board of Management, the Supervisory Board and former members of the Board of Management are presented in the remuneration report, which is part of the combined management report.

Total remuneration paid to the Board of Management for the 2016 financial year amounted to €8.0 million (previous year: €7.9 million). Short-term benefits amount to €5.0 million (previous year: €5.2 million) and long-term benefits to €3.0 million (previous year: €2.7 million). As of the 1 January 2016, the defined benefit pension commitments for the serving members of the Board of Management were transferred to the new defined contribution system. The resulting pension commitments are €1.0 million. For this group of people, there was income of €1.2 million (including one-off income of €2.5 million due to the transfer of the pension commitments) resulting from the defined benefit pension commitments in the 2016 financial year (previous year: expenses of €1.4 million), which includes service and interest costs. There are defined benefit obligations in accordance with IFRS of €14.4 million for the current members of the Board of Management (previous year: €14.6 million).

Former members of the Board of Management and their surviving dependants received €6.5 million (previous year: €7.1 million), of which to former members of boards of management, and their surviving dependants, from formerly independent companies €1.1 million (previous year: €1.2 million). There are defined benefit obligations to former members of the Board of Management and their surviving dependants in accordance with IFRS of €97.2 million (previous year: €94.4 million), of which to former members of boards of management, and their surviving dependants, from formerly independent companies €26.2 million (previous year: €24.4 million).

As in the previous year, no loans or advances to members of the Board of Management existed at the end of the financial year.

The remuneration system of the Supervisory Board is also presented in the remuneration report, which is part of the combined management report.

The members of the Supervisory Board will receive total remuneration of €1.3 million for the 2016 financial year (previous year: €1.2 million). In addition to fixed components, the remuneration includes attendance fees and board remuneration from subsidiaries.

As in the previous year, there were no loans or advances to members of the Supervisory Board in the 2016 financial year.

**(36) Additional disclosures****List of shareholdings pursuant to section 313 (2) HGB as of 31 December 2016**

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
<b>Sales segment</b>					
<b>Fully consolidated companies</b>					
1	ED GrünSelect GmbH, Rheinfelden	6	100.00	495	1
2	EnBW Mainfrankenpark GmbH, Dettelbach	3	100.00	3,759	-
3	EnBW Vertriebsbeteiligungen GmbH, Stuttgart		100.00	13,713	-30
4	energieNRW GmbH, Düsseldorf	5	100.00	1,109	433
5	ESD Energie Service Deutschland GmbH, Offenburg (formerly ESD Energie Service Deutschland AG, Offenburg)		100.00	255	865
6	eYello CZ k.s., Prague/Czech Republic	5, 18	100.00	253	0
7	Gasversorgung Süddeutschland GmbH, Stuttgart	3	100.00	65,000	-
8	Gasversorgung Unterland GmbH, Heilbronn		100.00	8,225	30
9	NaturEnergie Aktiengesellschaft für Wasser- und Sonnenstrom, Grenzach-Whylen	5	100.00	9,630	2,092
10	NaturEnergie+ Deutschland GmbH, Mühlacker		100.00	6,006	-286
11	Sales & Solutions GmbH, Frankfurt am Main	3	100.00	75,618	-
12	Watt Synergia GmbH, Frankfurt am Main	3	100.00	250	-
13	Yello Strom GmbH, Cologne	3	100.00	1,100	-
14	ZEAG Immobilien GmbH & Co. KG, Heilbronn		100.00	4,153	1,055
15	TRITEC AG, Aarberg/Switzerland	6	60.00	-2,871	-1,940
16	Energie- und Medienversorgung Sandhofer Straße GmbH & Co. KG, Mannheim	9	49.91	3,500	1,753
17	Pražská energetika a.s., Prague/Czech Republic	15	41.40	390,431	81,334
<b>Non-consolidated affiliated entities</b>					
18	EZG Operations GmbH, Wismar	5	100.00	142	10
19	NatürlichEnergie Swiss NES GmbH, Laufenburg/Switzerland	5	100.00	14	-5
20	ZEAG Immobilien Verwaltungsgesellschaft mbH, Heilbronn	5	100.00	29	2
21	KEA-Beteiligungs-GbR "Energie", Karlsruhe	8, 18	60.66	-	-
22	grünES GmbH, Esslingen am Neckar	5	51.00	112	6
23	Stromvertrieb Backnang Verwaltungs GmbH, Backnang	5	51.00	25	0
24	Energie- und Medienversorgung Sandhofer Straße Verwaltungs GmbH, Mannheim	5	50.00	47	2
<b>Investments<sup>16</sup></b>					
25	AutenSys GmbH, Karlsruhe	13	65.00	-	-
26	Stromvertrieb Backnang GmbH & Co. KG, Backnang	5	51.00	200	-443
27	AQUANTO GmbH, Unterföhring	5	50.00	221	-2,376
28	my-e-car GmbH, Lörrach	5	50.00	34	14
29	NatürlichEnergie EMH GmbH, Monzelfeld	5	50.00	805	-22
30	Regionah Energie GmbH, Munderkingen	13	50.00	-	-
31	Einhorn Energie GmbH & Co. KG, Giengen an der Brenz	5	49.90	655	368
32	Einhorn Energie Verwaltungsgesellschaft mbH, Giengen an der Brenz	5	49.90	30	1
33	Stadtwerke Freiberg a.N. Vertriebs-GmbH, Freiberg am Neckar	5	49.90	26	-157
34	Gasversorgung Pforzheim Land GmbH, Pforzheim	5	49.00	15,371	1,721
35	Gemeinschaft für Energieeffizienz GmbH, Düsseldorf	13	26.40	-	-
36	espot GmbH, Stuttgart	5	25.10	520	60



		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
37	EDSR Energiedienste Staldenried AG, Staldenried/Switzerland	5	20.00	204	10
<b>Grids segment</b>					
<b>Fully consolidated companies</b>					
38	ED Netze GmbH, Rheinfelden	3,6	100.00	30,165	-
39	EnBW Kommunale Beteiligungen GmbH, Stuttgart	3	100.00	977,128	-
40	EnBW REG Beteiligungsgesellschaft mbH, Stuttgart	3	100.00	405,649	-
41	EVGA Grundstücks- und Gebäudemanagement GmbH & Co. KG, Obrigheim		100.00	91,621	26,773
42	KORMAK nemovitosti s.r.o., Prague/Czech Republic	5	100.00	417	55
43	KORMAK Praha a.s., Prague/Czech Republic	5	100.00	1,202	527
44	Netze BW GmbH, Stuttgart	3	100.00	1,130,861	-
45	Netze BW Wasser GmbH, Stuttgart	3	100.00	32,894	-
46	Netze-Gesellschaft Südwest mbH, Karlsruhe	3	100.00	71,139	-
47	Netzgesellschaft Düsseldorf mbH, Düsseldorf	3,5	100.00	1,000	-
48	Netzgesellschaft Ostwürttemberg DonauRies GmbH, Ellwangen Jagst	3	100.00	135	-
49	NHF Netzgesellschaft Heilbronn-Franken mbH, Heilbronn	3	100.00	4,000	-
50	NWS Grundstücksmanagement GmbH & Co. KG, Obrigheim		100.00	320,833	54,481
51	NWS REG Beteiligungsgesellschaft mbH, Stuttgart	3	100.00	79,963	-
52	PREdistribuce a.s., Prague/Czech Republic	5	100.00	713,955	38,557
53	PREmereni a.s., Prague/Czech Republic	5	100.00	18,957	3,241
54	RBS wave GmbH, Stuttgart	3	100.00	503	-
55	terranets bw GmbH, Stuttgart	3	100.00	90,000	-
56	TransnetBW GmbH, Stuttgart	3	100.00	728,141	-
57	EnBW Ostwürttemberg DonauRies AG, Ellwangen	3	99.73	115,439	-
58	ZEAG Energie AG, Heilbronn		98.65	190,334	21,117
59	Erdgas Südwest GmbH, Karlsruhe		79.00	63,415	21,962
60	NetCom BW GmbH, Ellwangen		74.90	36,621	10,558
61	Stuttgart Netze Betrieb GmbH, Stuttgart	3	74.90	4,926	-
62	Stadtwerke Düsseldorf AG, Düsseldorf	5	54.95	435,811	26,405
63	Stromnetzgesellschaft Heilbronn GmbH & Co. KG, Heilbronn	9	49.90	38,017	2,825
64	Neckar Netze GmbH & Co. KG, Esslingen am Neckar	9	49.00	25,670	5,564
<b>Non-consolidated affiliated entities</b>					
65	Elektrizitätswerk Aach GmbH, Aach	5	100.00	1,866	-28
66	Energieversorgung Gaildorf OHG der EnBW Kommunale Beteiligungen GmbH und der NWS REG Beteiligungsgesellschaft mbH, Gaildorf	5	100.00	3,267	1,640
67	Energieversorgung Raum Friedrichshafen GmbH & Co. KG, Stuttgart	5	100.00	940	51
68	Energieversorgung Raum Friedrichshafen Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	27	1
69	HEV Hohenloher Energie Versorgung GmbH, Ilshofen-Obersteinach	3,5	100.00	10,219	-
70	Konverter Ultramet GmbH & Co. KG, Stuttgart	5	100.00	1	0
71	Konverter Ultramet Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	25	0
72	Neckar Netze Verwaltungsgesellschaft mbH, Esslingen am Neckar	5	100.00	108	4
73	Netze Pforzheim-Region Verwaltungs GmbH, Pforzheim	5	100.00	25	1
74	Rieger GmbH & Co. KG, Lichtenstein, Kreis Reutlingen	5	74.28	269	664

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
75	Rieger Beteiligungs-GmbH, Lichtenstein, Kreis Reutlingen	5	74.24	45	2
76	Elektrizitätswerk Weißenhorn AG, Weißenhorn	5	63.24	3,724	732
77	Netze Pforzheim-Region GmbH & Co. KG, Pforzheim	5	60.00	13,107	-14
78	Gasnetzgesellschaft Laupheim GmbH & Co. KG, Laupheim	5	50.10	3,590	190
79	Gasnetzgesellschaft Laupheim Verwaltungs GmbH, Laupheim	5	50.10	22	0
80	Netzgesellschaft Elz-Neckar GmbH & Co. KG, Obrigheim	5	50.10	1,176	19
81	Netzgesellschaft Elz-Neckar Verwaltungs GmbH, Obrigheim	5	50.10	29	1
82	Stromnetzgesellschaft Albershausen GmbH & Co. KG, Albershausen	5,6	50.10	836	49
83	Stromnetzgesellschaft Albershausen Verwaltungs GmbH, Albershausen	5	50.10	27	1
84	Stromnetzgesellschaft Heilbronn Verwaltungs-GmbH, Heilbronn	5	50.10	24	1
85	Stromnetzgesellschaft Laupheim GmbH & Co. KG, Laupheim	5	50.10	2,299	163
86	Stromnetzgesellschaft Laupheim Verwaltungs GmbH, Laupheim	5	50.10	22	0
<b>Entities accounted for using the equity method</b>					
87	Stadtwerke Esslingen am Neckar GmbH & Co. KG, Esslingen am Neckar	5	49.98	55,466	3,076
88	Pražská energetika Holding a.s., Prague/Czech Republic	5,10	49.00	225,233	36,088
89	Zweckverband Landeswasserversorgung, Stuttgart	5	27.20	121,158	1,247
90	Heilbronner Versorgungs GmbH, Heilbronn	4,5	25.10	38,850	-
91	Stuttgart Netze GmbH, Stuttgart	4,5,10	25.10	184,648	-
92	FairEnergie GmbH, Reutlingen	4,5	24.90	108,466	-
93	Stadtwerke Hilden GmbH, Hilden	5	24.90	20,390	5,239
94	Zweckverband Bodensee-Wasserversorgung, Stuttgart	5	22.13	149,919	500
95	Stadtwerke Karlsruhe GmbH, Karlsruhe	4,5	20.00	165,710	-
<b>Investments<sup>16</sup></b>					
96	Netzgesellschaft Sontheim GmbH & Co. KG, Sontheim an der Brenz	5	74.90	1,523	280
97	Netzgesellschaft Sontheim Verwaltungsgesellschaft mbH, Sontheim an der Brenz	5	74.90	25	0
98	Netzgesellschaft Steinheim GmbH & Co. KG, Steinheim am Albuch	5	74.90	240	87
99	Netzgesellschaft Steinheim Verwaltungsgesellschaft mbH, Steinheim am Albuch	5	74.90	25	0
100	Stromnetz Herrenberg Verwaltungsgesellschaft mbH, Herrenberg	5	74.90	29	1
101	Stromnetzgesellschaft Herrenberg mbH & Co. KG, Herrenberg	5	74.90	4,186	321
102	Stadtwerke Sinsheim Versorgungs GmbH & Co. KG, Sinsheim	5	60.00	12,403	1,293
103	Stadtwerke Sinsheim Verwaltungs GmbH, Sinsheim	5	60.00	27	1
104	Stromnetz Langenau GmbH & Co. KG, Langenau	5	50.10	2,644	139
105	Stromnetz Langenau Verwaltungs-GmbH, Langenau	5	50.10	30	1
106	CESOC AG, Laufenburg/Switzerland	5	50.00	216	0
107	e.wa riss GmbH & Co. KG, Biberach	5	50.00	21,822	7,237
108	e.wa riss Verwaltungsgesellschaft mbH, Biberach	5	50.00	66	0
109	Fränkische Wasser Service GmbH, Crailsheim	5	50.00	36	2
110	HDRRegioNet GmbH, Düsseldorf	5	50.00	96	59
111	Niederrheinisch-Bergisches Gemeinschaftswasserwerk GmbH, Düsseldorf	5	50.00	2,903	275

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
112	Ostalbwasser Ost GmbH, Ellwangen	5	50.00	33	1
113	Ostalbwasser Service GmbH, Aalen	5	50.00	88	12
114	Ostalbwasser West GmbH, Schwäbisch Gmünd	5	50.00	52	5
115	regioaqua Gesellschaft für Wasser und Abwasser mbH, Rheinfelden	5	50.00	93	15
116	Stadtwerke Schramberg GmbH & Co. KG, Schramberg	5	50.00	13,399	2,335
117	Stadtwerke Schramberg Verwaltungsgesellschaft mbH, Schramberg	5	50.00	33	2
118	Stromnetzgesellschaft Hechingen GmbH & Co. KG, Hechingen	5	50.00	1,676	259
119	Stromnetzgesellschaft Hechingen Verwaltungs GmbH, Hechingen	5	50.00	25	0
120	Wasserübernahme Neuss-Wahlscheid GmbH, Neuss	5	50.00	370	16
121	Stadtwerke Emmendingen GmbH, Emmendingen	5	49.90	18,366	1,419
122	Stromnetz Blaubeuren GmbH, Blaubeuren	5	49.90	993	84
123	Stadtwerke Esslingen-Verwaltungsgesellschaft mbH, Esslingen am Neckar	5	49.80	40	1
124	Energie Sachsenheim GmbH & Co. KG, Sachsenheim	5	49.00	4,840	336
125	Energie Sachsenheim Verwaltungs-GmbH, Sachsenheim	5	49.00	28	2
126	Energieversorgung Strohgäu GmbH & Co. KG, Gerlingen	5	49.00	8,373	277
127	Energieversorgung Strohgäu Verwaltungs GmbH, Gerlingen	5	49.00	23	0
128	Gemeindewerke Bodanrück GmbH & Co. KG, Allensbach	5	49.00	4,517	238
129	Gemeindewerke Bodanrück Verwaltungs-GmbH, Allensbach	5	49.00	25	1
130	LEO Energie GmbH & Co. KG, Leonberg	5	49.00	8,658	753
131	Netzgesellschaft Marbach GmbH & Co. KG, Marbach am Neckar	5	49.00	1,777	91
132	Stadtwerke Backnang GmbH, Backnang	4,5	49.00	8,725	-
133	Stadtwerke Bad Wildbad GmbH & Co. KG, Bad Wildbad	5	49.00	6,825	889
134	Stadtwerke Bad Wildbad Verwaltungs-GmbH, Bad Wildbad	5	49.00	38	7
135	Stadtwerke Eppingen GmbH & Co. KG, Eppingen	5	48.96	7,958	242
136	Energie Calw GmbH, Calw	4,5	48.82	12,238	-
137	Stadtwerke Münsingen GmbH, Münsingen	5	45.00	6,169	732
138	Stadtwerke Böblingen GmbH & Co. KG, Böblingen	5	41.10	29,492	1,435
139	Stadtwerke Böblingen Verwaltungs GmbH, Böblingen	5	41.10	6	-6
140	Energieversorgung Südbaar GmbH & Co. KG, Blumberg (formerly Energieversorgung Südbaar GmbH, Blumberg)	5	40.00	3,227	262
141	SUEnergie GmbH & Co. KG, Süßen	5	40.00	2,302	170
142	SUEnergie Verwaltungs GmbH, Süßen	5	40.00	29	1
143	Stadtwerke Weinheim GmbH, Weinheim	5	39.32	29,173	3,924
144	Energieversorgung Rottenburg am Neckar GmbH, Rottenburg am Neckar	4,5	38.00	7,160	-
145	EVG Grächen AG, Grächen/Switzerland	5	35.00	4,798	99
146	EVN Energieversorgung Nikolai AG, St. Niklaus/Switzerland	5,7	35.00	1,124	71
147	EVR Energieversorgung Raron AG, Raron/Switzerland	5,7	35.00	820	83
148	EVWR Energiedienste Visp – Westlich Raron AG, Visp/Switzerland	5	35.00	2,075	878
149	Valgrid SA, Sion/Switzerland	5	35.00	19,640	940
150	VED Visp Energie Dienste AG, Visp/Switzerland	5,7	35.00	2,901	245
151	Taubernetze GmbH & Co. KG, Tauberbischofsheim	5	33.00	4	-1
152	Taubernetze Verwaltungs-GmbH, Tauberbischofsheim	5	33.00	23	0

	Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)	
153	ErmstalEnergie Dettingen an der Erms GmbH & Co. KG, Dettingen an der Erms	5	32.60	3,155	187
154	Versorgungsbetriebe Dettingen an der Erms Verwaltungs-GmbH, Dettingen an der Erms	5	32.60	27	1
155	eneREGIO GmbH, Muggensturm	5	32.00	8,833	487
156	Regionalnetze Linzgau GmbH, Pfullendorf	4,5	31.64	6,462	-
157	Elektrizitätswerk Mittelbaden AG & Co. KG, Lahr	5	31.00	60,699	12,503
158	Elektrizitätswerk Mittelbaden Verwaltungsaktiengesellschaft, Lahr	5	31.00	117	7
159	Stadtwerke Bad Herrenalb GmbH, Bad Herrenalb	5	30.00	11,128	-472
160	Energie- und Wasserversorgung Bruchsal GmbH, Bruchsal	4,5	27.41	23,002	-
161	Stadtwerke Bad Säckingen GmbH, Bad Säckingen	3,5	26.30	8,673	-
162	Albwerk GmbH & Co. KG, Geislingen an der Steige	5	25.10	18,994	5,355
163	Albwerk Verwaltungsgesellschaft mbH, Geislingen an der Steige	5	25.10	70	2
164	Energie Kirchheim unter Teck GmbH & Co. KG, Kirchheim unter Teck	5	25.10	9,268	628
165	Energie Kirchheim unter Teck Verwaltungs-GmbH, Kirchheim unter Teck	5	25.10	25	1
166	Energieversorgung Immenstaad GmbH & Co. KG, Immenstaad am Bodensee	5	25.10	893	54
167	Gasnetzgesellschaft Schorndorf GmbH & Co. KG, Schorndorf	5	25.10	3,614	260
168	Gasnetzgesellschaft Winnenden mbH, Winnenden	4,5	25.10	2,275	-
169	Gasnetzverwaltungsgesellschaft Schorndorf GmbH, Schorndorf	5	25.10	27	3
170	Gemeindewerke Brühl GmbH & Co. KG, Brühl	5	25.10	1,282	58
171	Gemeindewerke Brühl Verwaltungs-GmbH, Brühl	5	25.10	28	1
172	Gemeindewerke Plüderhausen GmbH, Plüderhausen	4,5	25.10	1,598	-
173	Infrastrukturgesellschaft Plochingen GmbH & Co. KG, Plochingen	5	25.10	2,855	185
174	Netzgesellschaft Besigheim GmbH & Co. KG, Besigheim	5	25.10	4,857	375
175	Netzgesellschaft Besigheim Verwaltungs GmbH, Besigheim	5	25.10	28	1
176	Netzgesellschaft Leinfelden-Echterdingen GmbH, Leinfelden-Echterdingen	5	25.10	4,384	107
177	Netzgesellschaft Salach GmbH & Co. KG, Salach	5	25.10	1,304	48
178	Netzgesellschaft Salach Verwaltungs GmbH, Salach	5	25.10	27	1
179	Netzgesellschaft Schwetzingen GmbH & Co. KG, Schwetzingen	5	25.10	1,920	119
180	Netzgesellschaft Schwetzingen Verwaltungs GmbH, Schwetzingen	5	25.10	25	0
181	Netzgesellschaft Vaihingen GmbH & Co. KG, Vaihingen an der Enz	5	25.10	7,641	680
182	Netzgesellschaft Vaihingen Verwaltungs-GmbH, Vaihingen an der Enz	5	25.10	27	1
183	Stadtwerke Ellwangen GmbH, Ellwangen	4,5	25.10	7,802	-
184	Stadtwerke Giengen GmbH, Giengen	5	25.10	12,063	841
185	Stadtwerke Schwäbisch Gmünd GmbH, Schwäbisch Gmünd	4,5	25.10	28,251	-
186	Stadtwerke Stockach GmbH, Stockach	5	25.10	9,348	937
187	Stadtwerke Weinstadt Energieversorgung GmbH, Weinstadt	4,5	25.10	6,153	-
188	Stadtwerke Wiesloch – Strom – GmbH & Co. KG, Wiesloch	5	25.10	25	165
189	Stromgesellschaft March GmbH & Co. KG, March	5	25.10	765	3
190	Stromnetzgesellschaft Ebersbach GmbH & Co. KG, Ebersbach an der Fils	5	25.10	3,487	241

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
191	Stromnetzgesellschaft Ebersbach Verwaltungs GmbH, Ebersbach an der Fils	5	25.10	28	1
192	Stromnetzgesellschaft Östlicher Schurwald GmbH & Co. KG, Rechberghausen	5	25.10	2,869	44
193	Stromnetzgesellschaft Östlicher Schurwald Verwaltungs GmbH, Rechberghausen	5	25.10	27	1
194	Technische Werke Schussental GmbH & Co. KG, Ravensburg	5	25.10	37,211	3,196
195	Technische Werke Schussental Verwaltungsgesellschaft mbH, Ravensburg	5	25.10	23	-3
196	Stadtwerke Nürtingen GmbH, Nürtingen	5	25.00	20,967	3,199
197	Stromversorgung Sulz am Neckar GmbH, Sulz am Neckar	5	24.90	3,773	361
198	Netzeigentumsgesellschaft Rheinstetten GmbH & Co. KG, Rheinstetten	5	24.50	4,398	186
199	Stadtwerke Wehr GmbH & Co. KG, Wehr	5	24.50	2,007	111
200	Stadtwerke Wehr Verwaltungs-GmbH, Wehr	5	24.50	21	0
201	Energieversorgung Oberes Wiesental GmbH, Todtnau	5	24.00	3,789	57
202	Netzgesellschaft Edingen-Neckarhausen GmbH & Co. KG, Edingen-Neckarhausen	5	24.00	847	61
203	ENRW Energieversorgung Rottweil GmbH & Co. KG, Rottweil	5	20.00	23,809	1,679
204	ENRW Verwaltungs-GmbH, Rottweil	5	20.00	15	0
205	Stadtwerke Sindelfingen GmbH, Sindelfingen	5	20.00	33,355	2,833
<b>Renewable Energies segment</b>					
<b>Fully consolidated companies</b>					
206	Aletsch AG, Mörel/Switzerland	6	100.00	22,741	0
207	Connected Wind Services A/S, Balle/Denmark	5	100.00	17,985	-759
208	EnAlpin AG, Visp/Switzerland	6	100.00	180,494	2,856
209	EnBW Albatros GmbH, Stuttgart (formerly EnBW Albatros GmbH, Aurich)		100.00	2,010	-2,826
210	EnBW Biogas GmbH, Stuttgart	3	100.00	52	-
211	EnBW He Dreiht GmbH, Varel	3	100.00	1,016	-
212	EnBW Hohe See GmbH & Co. KG, Stuttgart		100.00	950	-75
213	EnBW NAG-Beteiligungsgesellschaft mbH, Stuttgart		100.00	24	0
214	EnBW Offshore 1 GmbH, Stuttgart	3	100.00	28,737	-
215	EnBW Offshore 2 GmbH, Stuttgart	3	100.00	690,453	-
216	EnBW Offshore 3 GmbH, Stuttgart (formerly EnBW Omega Sechsendsechzigste Verwaltungsgesellschaft mbH, Karlsruhe)	3	100.00	30,951	-
217	EnBW Offshore Service GmbH, Klausdorf-Barhöft	3	100.00	25	-
218	EnBW Solar GmbH, Stuttgart	3	100.00	25	-
219	EnBW Wind Onshore 1 GmbH, Stuttgart	3	100.00	25	-
220	EnBW Wind Onshore 2 GmbH, Stuttgart	3	100.00	25	-
221	EnBW Wind Onshore Instandhaltungs GmbH, Karlsruhe (formerly EnBW Omega Siebenundachtzigste Verwaltungsgesellschaft mbH, Karlsruhe)	3	100.00	25	-
222	EnBW Windkraftprojekte GmbH, Stuttgart		100.00	1,929	-1,199
223	EnBW Windpark Eisenach II GmbH, Stuttgart		100.00	31,108	-1,312
224	EnBW Windpartner GmbH, Stuttgart (formerly EnBW Omega Neunundsechzigste Verwaltungsgesellschaft mbH, Stuttgart)	3	100.00	27,525	-
225	Energiedienst AG, Rheinfelden	6	100.00	193,454	27,722
226	Grünwerke GmbH, Düsseldorf	3,5	100.00	34,070	-
227	SCE Wind Bremervörde GmbH & Co. KG, Stuttgart		100.00	1,796	-124

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
228	SCE Wind Ostercappeln GmbH & Co. KG, Stuttgart		100.00	4,246	-508
229	SCE Wind Rositz GmbH & Co. KG, Stuttgart		100.00	2,085	-316
230	SCE Wind Zernitz GmbH & Co. KG, Stuttgart		100.00	1,977	-188
231	Windpark Niederlinxweiler GmbH & Co. KG, Leinfelden-Echterdingen		100.00	138	73
232	Windpark Rot am See GmbH, Stuttgart (formerly Windkraft Rot am See GmbH, Stuttgart)		100.00	118	93
233	Bürgerenergie Widdern GmbH & Co. KG, Widdern		99.99	5,826	74
234	EE BürgerEnergie Forchtenberg GmbH & Co. KG, Forchtenberg		99.99	1,462	10
235	EE BürgerEnergie Jagsthausen GmbH & Co. KG, Jagsthausen		99.99	4,325	-28
236	EE BürgerEnergie Möckmühl GmbH & Co. KG, Möckmühl		99.99	1,452	48
237	EnBW Holding A.S., Gümüssuyu-Istanbul/Turkey		99.99	202,938	-4,863
238	EE BürgerEnergie Boxberg GmbH & Co. KG, Boxberg		99.00	44	-7
239	EE Bürgerenergie Braunsbach GmbH & Co. KG, Braunsbach		99.00	27	-9
240	EE Bürgerenergie Ilshofen GmbH & Co. KG, Ilshofen		98.75	1,595	5
241	Neckar Aktiengesellschaft, Stuttgart		82.20	10,179	0
242	EE Bürgerenergie Hardthausen GmbH & Co. KG, Hardthausen am Kocher		80.80	7,850	127
243	Geothermie-Gesellschaft Bruchsal GmbH, Bruchsal		74.90	3,194	1,293
244	JatroSolutions GmbH, Stuttgart		70.49	1,328	-1,539
245	Energiedienst Holding AG, Laufenburg/Switzerland	6, 11	66.67	940,161	46,198
246	Rheinkraftwerk Neuhausen AG, Neuhausen/Switzerland	6	56.00	1,141	48
247	EnBW Baltic 1 GmbH & Co. KG, Stuttgart		50.32	43,814	3,168
248	EnBW Baltic 2 S.C.S., Luxembourg/Luxembourg		50.09	1,543,178	74,046
249	EnBW Onshore Portfolio GmbH, Stuttgart		50.02	129,057	1,740
250	Kraftwerk Lötschen AG, Steg/Switzerland	6, 12	50.00	26,864	0
<b>Joint operations</b>					
251	Rheinkraftwerk Iffezheim GmbH, Iffezheim	10	50.00	54,617	1,803
252	Rhonewerke AG, Ernen/Switzerland	5, 10	30.00	26,580	0
<b>Non-consolidated affiliated entities</b>					
253	Windpark Rot am See Infrastruktur GmbH, Stuttgart	13	100.00	-	-
254	CarbonBW (Thailand) Ltd., Bangkok/Thailand	5	100.00	7,080	11
255	Connected Wind Services Danmark A/S, Balle/Denmark	5	100.00	3,373	-29
256	Connected Wind Services Deutschland GmbH, Rantrum	5	100.00	2,161	-128
257	Connected Wind Services Refurbishment A/S, Balle/Denmark	13	100.00	-	-
258	CWS-BD UG, Hamburg	5	100.00	0	-1
259	P-CWS 2012 A/S, Copenhagen/Denmark	5, 17	100.00	15,274	-779
260	Svenska Connected Wind Services AB, Falkenberg/Sweden	5	100.00	455	233
261	EnBW Baltic 1 Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	22	0
262	EnBW Baltic 2 Management S.a r.l., Luxembourg/Luxembourg	5	100.00	13	1
263	EnBW Baltic 2 Windpark Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	28	1
264	EnBW Baltic Windpark Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	30	1
265	EnBW Hohe See Management GmbH, Hamburg (formerly EnBW Omega Sechundsiebzigste Verwaltungsgesellschaft mbH, Karlsruhe)	13	100.00	-	-
266	EnBW Wind Onshore Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	25	2
267	EnBW Windkraft Beteiligungsgesellschaft mbH, Karlsruhe	3, 5	100.00	190	-

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
268	Grünwerke Verwaltungs GmbH, Düsseldorf	5	100.00	31	5
269	Kemberg Windpark Management GmbH & Co. Betriebsgesellschaft KG, Düsseldorf	5	100.00	1,575	35
270	Kriegers Flak ApS, Copenhagen/Denmark	5	100.00	7	0
271	Langenburg Infrastruktur GmbH, Stuttgart	13	100.00	-	-
272	Windpark "Auf der Weißen Trisch" GmbH, Zweibrücken	5	100.00	25	-3
273	Windpark Borg GmbH & Co. KG, Nalbach	5	100.00	0	-4
274	Windpark IBK GmbH & Co. KG, Nalbach	5	100.00	0	-4
275	Windpark Webenheim GmbH & Co. KG, Stuttgart	5	100.00	0	-5
276	ZEAG Erneuerbare Energien GmbH, Heilbronn	5	100.00	41	16
277	JATROSELECT-Paraguay Sociedad de Responsabilidad Limitada, Volendam/Paraguay	5	99.98	513	-248
278	BürgerEnergie Königheim GmbH & Co. KG, Königheim	5	99.00	25	-18
279	EE Bürgerenergie Bühlerzell GmbH & Co. KG, Bühlerzell	5	99.00	90	-3
280	EE Bürgerenergie Frankenhardt GmbH & Co. KG, Frankenhardt	5	99.00	88	-3
281	EE Bürgerenergie Hardheim GmbH & Co. KG, Hardheim	5	99.00	97	-3
282	EE Bürgerenergie Höpfingen GmbH & Co. KG, Höpfingen	5	99.00	97	-3
283	EE BürgerEnergie Krautheim GmbH & Co. KG, Krautheim	5	99.00	48	-20
284	EE BürgerEnergie Neudenuau GmbH & Co. KG, Neudenuau	5	99.00	84	-5
285	EE Bürgerenergie Sulzbach-Laufen GmbH & Co. KG, Sulzbach-Laufen	5	99.00	89	-3
286	Holzskraft Plus GmbH, Düsseldorf	5	90.00	174	-7
287	NatürlichSonne Trogen GmbH & Co. KG, Monzelfeld	5	90.00	271	-3
288	JatroGreen S.A.R.L., Antananarivo/Madagascar	5	70.00	-609	-146
289	Erneuerbare Energien Neckarwestheim GmbH & Co. KG, Neckarwestheim	13	64.00	-	-
290	Alb-Windkraft Verwaltungs GmbH, Geislingen an der Steige	5	51.00	74	8
291	Solarpark Leutkirch GmbH & Co. KG, Leutkirch im Allgäu	5	51.00	10,778	619
292	Solarpark Leutkirch Verwaltungsgesellschaft mbH, Leutkirch im Allgäu	5	51.00	24	1
<b>Entities accounted for using the equity method</b>					
293	Borusan EnBW Enerji yatırımları ve Üretim Anonim Şirketi, Istanbul/Turkey	5, 10	50.00	296,194	-23,743
294	Elektrizitätswerk Rheinau AG, Rheinau/Switzerland	5, 7	50.00	21,647	791
295	Bayerische-Schwäbische Wasserkraftwerke Beteiligungsgesellschaft mbH, Gundremmingen	5	37.80	63,699	9,327
296	KW Ackersand I AG, Stalden/Switzerland	5	25.00	1,989	59
<b>Investments<sup>16</sup></b>					
297	Netzanschlussgesellschaft Windparks Ostercappel/Bohmte mbH, Kirchdorf	5	66.67	77	90
298	biogasNRW GmbH i.L., Düsseldorf		50.00	-	-
299	Centrale Electrique Rhénane de Gamsheim SA, Gamsheim/France	5	50.00	10,132	0
300	Havelland-Fläming Wind GmbH, Berlin	5	50.00	262	-1
301	Kraftwerk Reckingen AG, Reckingen	5	50.00	3,204	72
302	Rheinkraftwerk Säckingen AG, Bad Säckingen	5	50.00	7,204	300
303	SwissAlpin SolarTech AG, Visp/Switzerland	5	50.00	54	-11
304	Wasserkraftwerk Hausen GbR, Hausen im Wiesental	5, 18	50.00	674	-82
305	Windpark Schurwald GmbH, Esslingen am Neckar	5	50.00	23	-2

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
306	WKM Wasserkraftwerke Maulburg GmbH, Maulburg	5	50.00	447	13
307	KW Jungbach AG, St. Niklaus/Switzerland	5	49.00	3,834	240
308	Obere Donau Kraftwerke AG, Munich	5	40.00	3,180	0
309	TWKW Trinkwasserkraftwerke Niedergesteln AG, Niedergesteln/Switzerland	5	40.00	1,705	155
310	Kraftwerk Ryburg-Schwörstadt AG, Rheinfelden/Switzerland	5,7	38.00	35,911	1,713
311	GEIE Exploitation Miniere de la Chaleur, Kutzenhausen/France	5,18	33.33	-	-1,039
312	Windpark Prütze II GmbH & Co. KG, Düsseldorf	5	33.33	2,052	26
313	KWT Kraftwerke Törbel-Moosalp AG, Törbel/Switzerland	5	30.00	926	39
314	Baltic Windpark Beteiligungen GmbH & Co. KG, Stuttgart	5	29.17	29,521	2,546
315	EE Bürgerenergie Heilbronn GmbH & Co. KG, Heilbronn	5	26.00	1,000	58
316	Windpark Lindorf GmbH, Rheine	5	26.00	5,985	92
317	Alb-Windkraft GmbH & Co. KG, Geislingen an der Steige	5	25.50	397	246
318	Biosphärenwindpark Schwäbische Alb GmbH, Münsingen	5	25.00	25	0
319	ANOG Anergienetz Obergoms AG, Obergoms/Switzerland	5	24.50	202	18
320	KWOG Kraftwerke Obergoms AG, Obergoms/Switzerland	5	24.50	4,019	316
321	Erneuerbare Energien Zollern Alb GmbH, Balingen	5	20.00	82	-8
322	Kooperation Erneuerbare Energien im Landkreis Rottweil GmbH, Schramberg	5	20.00	77	-22
323	Wasserkraftwerk Pfinztal GmbH & Co. KG, Pfinztal	5	20.00	267	-2
<b>Generation and Trading segment</b>					
<b>Fully consolidated companies</b>					
324	AWISTA Logistik GmbH, Düsseldorf	3,5	100.00	3,025	-
325	EnBW Biomasse GmbH, Karlsruhe		100.00	1,175	222
326	EnBW Etzel Speicher GmbH, Karlsruhe	3	100.00	725	-
327	EnBW Grundstücksverwaltung Rheinhafen GmbH, Karlsruhe		100.00	2,248	376
328	EnBW Kraftwerk Lippendorf Beteiligungsgesellschaft mbH, Stuttgart	3	100.00	297,640	-
329	EnBW Rückbauservice GmbH, Stuttgart	3	100.00	25	-
330	EnBW Speicher GmbH, Stuttgart	3	100.00	100	-
331	Gemeinschaftsheizkraftwerk Fortuna GmbH, Düsseldorf		100.00	25	40
332	Gesellschaft für nukleares Reststoffrecycling mbH, Neckarwestheim		100.00	1,750	-339
333	Heizkraftwerk Stuttgart GmbH, Stuttgart		100.00	5,129	-12
334	Kernkraftwerk Obrigheim GmbH, Obrigheim	3	100.00	51,130	-
335	MSE Mobile Schlammwässerungs GmbH, Karlsbad-Ittersbach	3	100.00	1,171	-
336	TAE Thermische Abfallentsorgung Ansbach GmbH, Ansbach		100.00	57,178	0
337	TPLUS GmbH, Karlsruhe	3	100.00	18,162	-
338	TWS Kernkraft GmbH, Gemmrigheim	3	100.00	149,297	-
339	u-plus Umweltservice GmbH, Karlsruhe (formerly u-plus Umweltservice AG, Karlsruhe)	3	100.00	99,040	-
340	EnBW Kernkraft GmbH, Obrigheim	3	99.80	10,000	-
341	AWISTA Gesellschaft für Abfallwirtschaft und Stadtreinigung mbH, Düsseldorf	5	51.00	48,868	18,340
342	KNG Kraftwerks- und Netzgesellschaft mbH, Rostock		50.40	507	8



	Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)	
<b>Joint operations</b>					
343	Friedeburger Speicherbetriebsgesellschaft mbH "Crystal", Friedeburg	10	50.00	59,118	332
<b>Non-consolidated affiliated entities</b>					
344	Südwestdeutsche Nuklear-Entsorgungsgesellschaft mbH, Stuttgart	5	86.49	9,292	1,904
345	Zentraldeponie Hubbelrath GmbH, Düsseldorf	5	76.00	18,772	57
346	Nahwärme Düsseldorf GmbH, Düsseldorf	5	66.00	2,631	236
<b>Entities accounted for using the equity method</b>					
347	Fernwärme Ulm GmbH, Ulm	5, 7, 10	50.00	32,429	2,441
348	Schluchseewerk Aktiengesellschaft, Laufenburg/Baden	5	50.00	59,339	2,809
349	Grosskraftwerk Mannheim AG, Mannheim	5	32.00	114,142	6,647
<b>Investments<sup>16</sup></b>					
350	Fernwärme Rhein-Neckar GmbH, Mannheim	5	50.00	2,811	1,022
351	KDM Kompostierungs- und Vermarktungsgesellschaft für Stadt Düsseldorf/Kreis Mettmann mbH, Ratingen	5	50.00	3,545	346
352	Powerment GmbH, Ettlingen	5	50.00	10,984	2,560
353	RheinWerke GmbH, Düsseldorf	5	50.00	1,160	-43
354	MOWA Mobile Waschanlagen GmbH, Neunkirchen-Seelscheid	5	49.00	252	197
355	REMONDIS Rhein-Wupper GmbH & Co. KG, Düsseldorf	5	49.00	11,574	5,097
356	REMONDIS Rhein-Wupper Verwaltungs GmbH, Düsseldorf	5	49.00	37	1
357	Fernwärme Zürich AG, Zurich/Switzerland	5	40.00	3,031	764
358	HWM Holzwärme Müllheim GmbH, Müllheim	5	33.33	497	91
359	Heizkraftwerk Pforzheim GmbH, Pforzheim	5	30.00	6,693	867
360	Contiplan AG, Vaduz/Liechtenstein	5	25.10	2	-1
361	Rheticus AG, Vaduz/Liechtenstein	5	25.10	16	-4
362	Beteiligungsgesellschaft der EVU an der Kerntechnischen Hilfsdienst GmbH – GbR, Karlsruhe	5, 18	21.59	0	0
<b>Other</b>					
<b>Fully consolidated companies</b>					
363	ED Immobilien GmbH & Co. KG, Rheinfelden	6	100.00	0	151
364	ED Immobilien Verwaltungsgesellschaft mbH, Rheinfelden	6	100.00	31	0
365	EnBW City GmbH & Co. KG, Obrigheim		100.00	8,885	3,920
366	EnBW Immobilienbeteiligungen GmbH, Karlsruhe (formerly EnBW Immobilienbeteiligungen GmbH, Stuttgart)		100.00	462,756	4,829
367	EnBW International Finance B.V., Amsterdam/Netherlands		100.00	1,166,718	35,004
368	EnBW Perspektiven GmbH, Karlsruhe	3	100.00	1,500	-
369	Energiedienst Support GmbH, Rheinfelden	6	100.00	389	9
370	Facilma Grundbesitzmanagement und -service GmbH & Co. Besitz KG, Obrigheim		100.00	199,595	4,683
371	Neckarwerke Stuttgart GmbH, Stuttgart		100.00	1,833,528	81,153
372	NWS Finanzierung GmbH, Karlsruhe	3	100.00	2,475,184	-
373	SBZ Beteiligungen GmbH, Karlsruhe		100.00	25	0
374	symbiotic services GmbH, Karlsruhe	3	100.00	25	-
375	MURVA Grundstücks-Verwaltungsgesellschaft mbH & Co. KG, Grünwald	5	95.00	-10,558	283
376	EnBW Versicherungsvermittlung GmbH, Stuttgart		51.00	3,532	3,481

		Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
<b>Non-consolidated affiliated entities</b>					
377	EnBW CZ spol. s.r.o., Prague/Czech Republic	5	100.00	1,406	40
378	EnBW New Ventures GmbH, Karlsruhe	3,5	100.00	2,525	-
379	EnBW Omega Achtundachtzigste Verwaltungsgesellschaft mbH, Karlsruhe	13	100.00	-	-
380	EnBW Omega Achtundsechzigste Verwaltungsgesellschaft mbH, Karlsruhe	3,5	100.00	25	-
381	EnBW Omega Achtundsiebzigste Verwaltungsgesellschaft mbH, Karlsruhe	13	100.00	-	-
382	EnBW Omega Achtzigste Verwaltungsgesellschaft mbH, Karlsruhe	13	100.00	-	-
383	EnBW Omega Dreiundachtzigste Verwaltungsgesellschaft mbH, Stuttgart	13	100.00	-	-
384	EnBW Omega Dreiundsiebzigste Verwaltungsgesellschaft mbH, Karlsruhe	5	100.00	24	-1
385	EnBW Omega Einundachtzigste Verwaltungsgesellschaft mbH, Stuttgart	13	100.00	-	-
386	EnBW Omega Einundsiebzigste Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	24	-1
387	EnBW Omega Fünfundachtzigste Verwaltungsgesellschaft mbH, Stuttgart	13	100.00	-	-
388	EnBW Omega Fünfundfünfzigste Verwaltungsgesellschaft mbH, Stuttgart	3,5	100.00	25	-
389	EnBW Omega Fünfundsechzigste Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	24	-1
390	EnBW Omega Neunundachtzigste Verwaltungsgesellschaft mbH, Karlsruhe	13	100.00	-	-
391	EnBW Omega Neunundsiebzigste Verwaltungsgesellschaft mbH, Karlsruhe	13	100.00	-	-
392	EnBW Omega Neunzigste Verwaltungsgesellschaft mbH, Karlsruhe	13	100.00	-	-
393	EnBW Omega Sechsendachtzigste Verwaltungsgesellschaft mbH, Karlsruhe	13	100.00	-	-
394	EnBW Omega Siebenundsiebzigste Verwaltungsgesellschaft mbH, Karlsruhe	13	100.00	-	-
395	EnBW Omega Siebzigste Verwaltungsgesellschaft mbH, Stuttgart	3,5	100.00	25	-
396	EnBW Omega Vierundachtzigste Verwaltungsgesellschaft mbH, Stuttgart	13	100.00	-	-
397	EnBW Omega Vierundfünfzigste Verwaltungsgesellschaft mbH, Stuttgart	3,5	100.00	25	-
398	EnBW Omega Zweiundachtzigste Verwaltungsgesellschaft mbH, Stuttgart	13	100.00	-	-
399	EnBW Omega Zweiundfünfzigste Verwaltungsgesellschaft mbH, Karlsruhe	3,5	100.00	25	-
400	EnBW Omega Zweiundsiebzigste Verwaltungsgesellschaft mbH, Karlsruhe	5	100.00	24	-1
401	EnBW Real Estate GmbH, Obrigheim	5	100.00	85	8
402	EnBW Senergi Immobilien GmbH, Karlsruhe	5	100.00	75	0
403	HQ Capital (Deutschland) GmbH, Bad Homburg v. d. Höhe	5	100.00	5,025	-41
404	Interconnector GmbH, Karlsruhe (formerly EnBW Omega Siebenundsechzigste Verwaltungsgesellschaft mbH, Karlsruhe)	3,5	100.00	25	-
405	KMS Verwaltungsgesellschaft mbH, Stuttgart	5	100.00	42	2
406	SSG Verwaltungsgesellschaft mbH i.L., Kornwestheim		100.00	-	-

	Footnote	Capital share <sup>1</sup> (in %)	Equity <sup>2</sup> (in T€)	Earnings <sup>2</sup> (in T€)
407 WTT CampusONE GmbH, Ludwigsburg (formerly EnBW Omega Fünfundsiebzigste Verwaltungsgesellschaft mbH, Stuttgart)	5	100.00	24	-1
<b>Entities accounted for using the equity method</b>				
408 Verbundnetz Gas Aktiengesellschaft, Leipzig	5	74.21	698,786	-101,907
<b>Investments<sup>16</sup></b>				
409 Wp Global Germany Private Equity L.P., Wilmington, Delaware/USA	5, 18	100.00	120,293	11,987
410 Impulse L.P., Edinburgh/UK	5, 18	99.87	117,300	8,142
411 Continuum Capital Limited Partnership, Edinburgh/UK	5, 18	98.00	84,843	0
412 Sirius EcoTech Fonds Düsseldorf GmbH & Co. KG., Düsseldorf	5	78.15	5,705	-448
413 regiodata GmbH, Lörrach	5	35.00	718	174
414 RWE - EnBW Magyarország Kft., Budapest/Hungary	5	30.00	363	12
415 E & G Bridge Equity Fonds GmbH & Co. KG, Munich	5, 7	29.97	25,077	1,413
416 EFR Europäische Funk-Rundsteuerung GmbH, Munich	5	25.10	3,362	2,573
417 KIC InnoEnergy Germany GmbH, Karlsruhe	5	25.00	25	90
418 MVV Energie AG, Mannheim	7, 14	22.48	1,314,326	85,232
<b>Investments in large corporations &gt; 5%</b>				
419 EWE Aktiengesellschaft, Oldenburg	5	6.00	2,206,700	126,800

<sup>1</sup> Shares of the respective parent company calculated in accordance with section 313 (2) HGB (as of 31 December 2016).

<sup>2</sup> In the case of separate entities, the figures stem from financial statements prepared pursuant to local principles and do not show the contributions of each entity to the consolidated financial statements. For financial statements in foreign currencies, the equity is translated at the mean rate on the reporting date, while earnings are translated at average annual rates.

<sup>3</sup> Profit and loss transfer agreement and/or domination agreement.

<sup>4</sup> Profit and loss transfer agreement with third parties.

<sup>5</sup> Previous year's figures.

<sup>6</sup> Preliminary figures.

<sup>7</sup> Divergent financial year.

<sup>8</sup> Exemption clause section 313 (3) sentence 4 HGB.

<sup>9</sup> Control due to contractual agreement.

<sup>10</sup> Joint control pursuant to IFRS 11.

<sup>11</sup> Before taking treasury shares of the company into account.

<sup>12</sup> Majority of the voting rights.

<sup>13</sup> New company, annual financial statements not yet available.

<sup>14</sup> There is no significant influence due to lack of representation in the Supervisory Board.

<sup>15</sup> Other shareholdings included due to contractual control arrangements.

<sup>16</sup> Includes investments that are not accounted for using the equity method because of their minor importance. They are recognised instead at their acquisition costs.

<sup>17</sup> Commercial merger or accretion in 2016, entered into the commercial register in 2017.

<sup>18</sup> Companies whose shareholders with unlimited liability are a company that is included in the consolidated financial statements.

### (37) Disclosures concerning franchises

Franchise agreements in the areas of electricity, gas, district heating and water are in place between the individual entities in the EnBW Group and the municipalities. The majority of the franchise agreements have a term of 20 years. There are obligations governed by law to connect to the supply networks. Under the franchise agreements, the EnBW Group is obliged to provide and maintain the facilities required to satisfy the general supply needs. In addition, it is required to pay a franchise fee to the municipalities. Upon expiry of a franchise agreement, the facilities must be returned or transferred to the municipalities or the successor network operator, respectively, in return for reasonable compensation, unless the franchise agreement is extended.

### (38) Subsequent events

EnBW Energie Baden-Württemberg AG has sold 49.89% of the shares acquired from its subsidiary EnBW Offshore 3 GmbH in the offshore wind farm EnBW Hohe See GmbH & Co. KG at the beginning of 2017 to a company owned by the Canadian energy group Enbridge Inc., Calgary. Due to a loss of economic control, EnBW Hohe See GmbH & Co. KG will be accounted for in the consolidated financial statements in future as a joint venture using the equity method. EnBW will monitor the construction of the North Sea wind farm with a capacity of around 500 MW and provide services for its operation and maintenance.

As of 1 March 2017, EnBW acquired the natural gas-fired combined heat and power plant from the chemical company Dow at the Walsrode industrial park and will supply electricity and steam to Dow and other industrial customers as the owner and operator of the plant. In addition, EnBW plans to modernise and expand its energy generation and will invest an amount in the mid double-digit million euro range at the site in Bomlitz for this purpose.

EnBW exercised the call option on its hybrid bond issued in 2011 and increased in 2012 as of the first call date on 2 April 2017. This bond was the first hybrid bond issued by EnBW and has a total volume of €1 billion and a coupon of 7.375%. This security will be repaid at 100% of its nominal value. In the past year, EnBW has issued two hybrid bonds – US\$300 million and €725 million – which replace the now called bond in the capital structure.

Karlsruhe, 7 March 2017  
EnBW Energie Baden-Württemberg AG



Dr. Mastiaux



Dr. Beck



Kusterer



Dr. Zimmer

# Audit opinion

We have audited the consolidated financial statements prepared by EnBW Energie Baden-Württemberg AG, Karlsruhe, comprising the income statement, the statement of comprehensive income, the balance sheet, the cash flow statement, the statement of changes in equity as well as the notes to the financial statements, together with the combined management report of the company and the Group, for the financial year from 1 January to 31 December 2016. The preparation of the consolidated financial statements and the combined management report in accordance with IFRS as adopted by the EU, and the additional requirements of German commercial law pursuant to section 315a (1) HGB [“Handelsgesetzbuch”: German Commercial Code] is the responsibility of the company’s Board of Management. Our responsibility is to express an opinion on the consolidated financial statements and on the combined management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with section 317 HGB and German generally accepted standards for the audit 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 audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the combined management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the combined management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by the Board of Management, as well as evaluating the overall presentation of the consolidated financial statements and the combined management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements comply with IFRS, as adopted by the EU, the additional requirements of German commercial law pursuant to section 315a (1) HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The combined management report is consistent with the consolidated financial statements, corresponds to the statutory regulations and as a whole provides an appropriate view of the Group’s position and appropriately presents the opportunities and risks of future development.

Frankfurt am Main, 7 March 2017  
KPMG AG  
Wirtschaftsprüfungsgesellschaft

Janz  
German Public Auditor

Stratmann  
German Public Auditor

# Declaration of the legal representatives

We assure to the best of our knowledge that, in accordance with the applicable accounting principles, the 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 Group management report, which has been combined with the management report of the company, 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, 7 March 2017  
EnBW Energie Baden-Württemberg AG



Dr. Mastiaux



Dr. Beck



Kusterer



Dr. Zimmer

# Important notes

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