The value added generated by the EnBW Group increased in the 2017 financial year compared to the previous year to €151.5 million. The adjusted EBIT including the adjusted investment result increased slightly, while the average capital employed also rose slightly. Due to the consistently low interest rate, the risk-adjusted weighted average cost of capital fell on average by 0.6 percentage points compared to the previous year. The ROCE of 7.3% was slightly higher than our forecast for the 2017 financial year (Forecast 2017: 6.3% to 7.2%).

Sales: Value added in the Sales segment increased in 2017 by €56.4 million. This was mainly due to the increase in adjusted EBIT including the adjusted investment result. The average capital employed increased, which was due, amongst other things, to the consolidation of VNG's activities in the gas sector from the second quarter of 2017.

Grids: Value added in the Grids segment stood at the same level as in 2016. Both the adjusted EBIT including the adjusted investment result and also the capital employed rose slightly. This was primarily due to the consolidation of the gas grids operated by VNG from the second quarter of 2017.

Renewable energies: Value added in the Renewable Energies segment improved in comparison to the previous year to €-36.0 million. The adjusted EBIT including the adjusted investment result increased as expected to €164.9 million. In addition, value added was positively influenced by the adjustments to the capital costs in the Renewable Energies segment. In contrast, investments in the expansion of onshore and offshore wind power led to an increase in the capital base in the reporting year.

Generation and Trading: The Generation and Trading segment achieved value added of €-206.3 million. In contrast to the increase in adjusted EBITDA, the adjusted EBIT including the adjusted investment result for the Generation and Trading segment fell to €-27.0 million. This was due, above all, to higher impairment losses on the power plants. At the same time, the average capital employed increased by €150.7 million, which was due primarily to the consolidation of VNG from the second quarter of 2017.

Customers and society goal dimension

Reputation

A strong reputation is an important factor for the sustainable success of a company. The good social reputation of a company reflects the trust placed by the general public and relevant stakeholders in the competent and responsible actions of a company.

Especially for companies in the energy industry, which is undergoing a period of fundamental change, this social acceptance is vitally important. A good reputation signals the willingness of society and its different stakeholder groups to cooperate with and invest in the company.

EnBW aims to continuously improve its reputation. The Supervisory Board and the Board of Management dealt with this theme in depth in 2017 and agreed to the further development of reputation management. The focal point of this concept is the stakeholder team, consisting of representatives from all important areas of the company, that was established in 2017. The stakeholder team directly or indirectly communicates and maintains dialogue with relevant stakeholder groups. It gathers the opinions of stakeholders and passes them onto the company, identifies reputational opportunities and risks, develops measures to protect and improve the reputation of the company, advises the Board of Management and management and gives recommendations for action. Reputation is thus becoming an important aspect for all meaningful decisions made by the company. Protecting and improving the reputation of EnBW are tasks and responsibilities of the entire management team.

TOP Reputation Index

Reputation is measured using the key performance indicator Reputation Index.

Key performance indicator

	2017	2016	Change in %	Forecast 2017
Reputation Index	52.1	50.0	4.2	51.4

The Reputation Index increased noticeably in the reporting year to 52.1 index points and thus stands at a medium level – below that of public utilities but significantly better than the values for larger comparable companies. The image campaign “We’re making it happen”, focusing on the themes of wind power and electromobility, which started in 2016 and was continued in 2017, contributed to an improvement in the reputation of EnBW. The forecast for 2017 was thus achieved.

Opportunities and risks related to reputation exist, for example, in the area of responsible coal procurement, a topic which the Board of Management addressed once again in 2017 (p. 47 f.). In this context, the reputation management department commissioned a representative survey in Germany, analysed and evaluated the results and used this information to develop four scenarios in cooperation with the relevant specialist departments that were then presented to the Board of Management for a decision. The Board of Management approved the recommendations made by the stakeholder team. This systematic management of reputation supports the implementation of the company's strategy and the operating business of EnBW.

More details on reputational risks can be found in the “Report on opportunities and risks” on p. 95.

Customer proximity

The customers of EnBW increasingly desire digital interaction both in the area of energy sales and also the grids business. The type and intensity of these interactions are also changing. Local authorities are increasingly viewing digital infrastructure as a decisive location factor. This area offers EnBW great opportunities for acquiring new customers using tailored digital services and solutions and for generating additional revenue.

TOP Customer Satisfaction Index

Customer loyalty is based on high customer satisfaction. Customer satisfaction is measured in accordance with the requirements of the EnBW Group standard for market research and surveys. The Group standard regulates the general procedure for the preparation, implementation and follow-up work for market research studies. It is binding for EnBW AG and all Group companies that are controlled by EnBW AG. The Customer Satisfaction Index for the two core brands EnBW and Yello are compiled from customer surveys carried out by an external provider.

Key performance indicator

	2017	2016	Change in %	Forecast 2017
EnBW/Yello Customer Satisfaction Index[1]	143/161	132/150	8.3/7.3	128–138/ 145–155

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

The satisfaction of the customers of EnBW reached a very good level again in 2017 at 143 points, which was above the forecasted range for 2017 (128–138). A very good level starts at a value of 136 points for the Customer Satisfaction Index.

It was possible to further increase the satisfaction of Yello customers again in comparison to the previous year. It stood at 161 points in 2017, which was once again at a very high level and above the forecasted range for 2017.

In 2017, EnBW expanded its portfolio of energy industry services and energy solutions considerably and carried out numerous sales activities and communication measures. In the process, EnBW strongly oriented the range of services to the individual expectations and needs of customers by closely integrating customers into product development at an early stage – for example in customer workshops and discussions with customers. In addition, the opportunities for customers to engage in dialogue with the company include apps, dialogue boxes or feedback buttons. This enables customers to quickly and easily inform us of their experiences and expectations in relation to our products and services. We use this information to constantly improve our customer orientation and expand the digital literacy of EnBW in a targeted manner.

The establishment of the Net Promoter Score (NPS), which is designed for directly collecting and utilising customer opinions, is also delivering some initial insights (p. 95).

On our path towards becoming one of the leading developers of **broadband infrastructure** in Baden-Württemberg, we were able to grow considerably in 2017. EnBW supports local authorities and municipal associations with tasks ranging from broadband planning and the installation of infrastructure through to operation and the end customer business. Cost efficiency, fast implementation and customer satisfaction hold the highest priorities in this area.

Modern inner city residential districts also need to be conceived for efficiency and networking in future. Therefore, we are utilising our expertise in the area of **district development** and advising local authorities on urban planning and urban infrastructures – holistically across the product areas of energy, grids, e-mobility, communication/digital networking, safety and smart services.

Electromobility is not only a key theme in urban districts, which is why we are offering an easy charging solution for the home with the **EnBW mobility+ charging box**. The **EnBW mobility+ app** shows users where the nearest charging station is located when they are out and about. In addition, anyone who is still undecided can use the app to find out whether to make the switch to electromobility – and if yes – what electric car would be the right choice for them. The **EnBW mobility+ charging card** can be used to charge vehicles at the same tariff within our roaming network at more than 8,000 charging points in Germany, Austria and Switzerland. The expansion of EnBW's own charging network is progressing at full speed. We now operate quick-charging stations at more than 120 locations in total. In addition, EnBW has intensified its contact with possible cooperation partners in order to be able to offer e-mobility customers more than 1,000 **quick-charging stations** by 2020.

E-mobility will also play a role in the future through our complete photovoltaic solution **EnBW solar+**. EnBW solar+ enables customers to generate their own solar energy, store it and sell it to the energy community. In future, our customers will also be able to integrate heating solutions into EnBW solar+ and charge their electric cars at home using self-generated electricity.

Bundle offers are used to provide customers with more added value – EnBW Entertain gives customers, for example, free membership to Amazon Prime. As the first energy industry partner for Amazon in Germany, we are breaking new ground in the sector with this offer and thus creating a unique selling point for ourselves. EnBW Secure combines an electricity or gas tariff with household insurance cover that will quickly provide support in the event of accidents or problems at home. We will continue to expand our bundle portfolio in a targeted manner.

The very successful performance of **Yello** demonstrates that **bundle offers** not only promote market penetration but also

strengthen customer loyalty. Therefore, Yello expanded its bundle range in 2017: customers can now select exclusive hardware products such as the Samsung AddWash™ washing machine or the Playstation 4 Pro in a plus tariff with an electricity or gas contract. In addition, bundle products are now also available in the Yello Shop – with a large and regularly updated range of hardware products available.

Furthermore, a cooperation with the Bild newspaper (Bild Electricity and Gas powered by Yello) was started in 2017. Bild readers are able to select from three different Yello tariffs. Alongside the cooperation with Bild, the interface between sales and customers has been digitally expanded through the Yello app kWhapp, which enables users to directly conclude their electricity contract via the app. In addition, the app also provides an overview of electricity and gas costs. Yello also expanded its product range to include Yello Solar in 2017. This is a complete photovoltaic product that enables customers to lease a solar power plant. The e-mobility offer in cooperation with Sixt Neuwagen was also very successful. It enabled customers to lease and test a BMW i3 in a Yello design at a very low price to see how electromobility would work for them in everyday life. The stock of BMW i3 cars for the offer was sold out within one day.

Due to its product range, which has grown constantly over the years, and changing market requirements, it was a logical step to turn Yello Strom into the **Yello brand** at the beginning of 2017. The company has had a new logo and corporate design since then, as well as the new tagline "More than you think.", because the range of products and services now extends far beyond electricity. The repositioning of the brand has been accompanied by an image campaign.

The **EnBW campaign** "We're making it happen" was successfully continued in 2017. The key themes of wind power and electromobility were presented in the spring and autumn via various different communication channels. Our aim is to rejuvenate the EnBW brand and show that EnBW has changed in a positive way. That's why, in addition to previous measures, we also produced an unconventional advertising video for the first time. Animated, talking birds play the lead roles and present the subject of electricity sourced from renewable energies in a totally new way for EnBW. The commercial received very positive feedback on the social media channels operated by EnBW and was rated one of the top 5 YouTube advertising videos in December 2017 (youtu.be/RSEEgQQTi0A).

The business models of the future are digital and will emerge from customers. We want to play an active role in shaping this digital future and the networking of energy industry services for our market. But to achieve this we need to develop the ability to impress customers, remain commercially viable and achieve operational excellence all at the same time. In order to take on these challenges, we have created the necessary foundations in the form of the new sales and operation platform **EnPower**. EnPower enables us to achieve operational excellence in terms of digitalisation, automation and streamlining existing processes, as well as ensuring optimal interaction externally between customers and the brands of EnBW. EnPower was launched for the first time for the sustainability brand NaturEnergiePlus in the middle of 2017. We have thus taken an important step on the path to a 100% online brand to meet the needs of consumers. Yello and EnBW will also utilise this platform in the future.

Customer orientation also plays a central role in the area of contracting. In 2017, EnBW concluded an important contract with the international chemical company Dow: an **energy supply contract** that guarantees the long-term supply of energy in the form of electricity and steam from the Bomlitz combined heat and power plant. In this context, the plants were modernised and expanded to include two highly efficient combined heat and power blocks and three additional steam boilers.

The Law on Digitalizing the Energiewende will present energy supply companies with great challenges. EnBW has developed this theme into a new field of business and, following the successful certification of the smart meter gateway operation, has produced a holistic solution for the roll-out and operation of **smart meters**. Smartpack100 – the first lean entry-level package for gateway administration and the receipt of meter readings – was developed and has been in great demand.

We also refer you to the details provided in the "Report on opportunities and risks" (p. 95).

Supply reliability

Guaranteeing a reliable supply of electricity to our customers is a key goal of EnBW. It means that the generation and consumption of electricity must be continuously synchronised and sufficient generation capacities must be made available at peak times. Ultimately, electricity grids must be able to fulfil their transport role and feature control mechanisms to guarantee grid stability at all times. SAIDI is used as an indicator for supply reliability; it states the average duration of supply interruptions per connected customer in minutes per year.

TOP SAIDI

SAIDI is one of the key performance indicators in the area of grids and is optimised by the distribution grid operators of EnBW using various processes that are sometimes integrated with one another: the desired grid topology in the long term is thus already oriented towards optimising SAIDI at the planning stage. As part of an IT-supported asset simulation, various technical variants and their associated investment budgets are then analysed. Once the chosen variant has been implemented, the available investment budget for optimising SAIDI is distributed to the various different projects on an annual basis. The specific measures are selected based on performance indicators for plant reliability.

Key performance indicator

	2017	2016	Change in %	Forecast 2017
SAIDI (electricity) in min./year	19	16	18.8	15

A similarly good level for SAIDI was achieved in the EnBW Group in 2017 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 acceptable range.

Employees goal dimension

The key tasks of HR are providing the company with employees, including the promotion of young talent, encouraging loyalty to the company amongst employees and maintaining and fostering their motivation, satisfaction and employability. Leadership, corporate culture, HR development and health management are key aspects in this area. Other important elements of a successful HR policy are ensuring the best possible employment conditions, such as in the negotiation of collective bargaining agreements, as well as adapting the organisational structure to the business environment.

Therefore, we believe that the value drivers for our HR policy can be found in the following areas of focus:

- Leadership
- Safeguarding and promoting expertise
- Employment conditions and structures
- Health management

Employee commitment

TOP Employee Commitment Index (ECI)

The key performance indicator ECI is an important indicator for EnBW as it reflects the degree to which employees identify with the company. The annual measurement of this indicator enables us to respond specifically to any negative trends at an early stage.

Key performance indicator

	2017	2016	Change in %	Forecast 2017
Employee Commitment Index (ECI)[1]	60	59	1.7	≥ 60

1 Variations in the group of consolidated companies; see also the definition of key performance indicators on p. 30.

The third short survey for monitoring the ECI – MAB-Blitzlicht (Employee Flashlight) – was carried out between 18 September and 6 October 2017. Following last year's full employee survey, the MAB-Blitzlicht survey was carried out as in 2014 and 2015 by using just twelve questions and taking a random representative sample. As in the full surveys, it collected information on the level of commitment of the employees to the Group and to their respective company. The ECI from MAB-Blitzlicht in 2017 revealed a positive trend and improved slightly from 59 (2016) to 60 points. The target set for 2017 was thus achieved. In an external comparison, the ECI stabilised at an average level.

The positive development of the ECI can be attributed to employees being able to better assess the current competitiveness of the company and having greater trust in the future viability of the company. Following the last survey, the Board of Management set itself the goal of reducing the uncertainty and scepticism of the workforce with respect to these two factors. This was achieved through the resolute implementation of the 2020 strategy, in which we have made successful progress, and the presentation of the post 2020 strategy in dialogue with managers and employees across all departments and companies. In particular, the significant improvement in the assessment of the competitiveness and future viability of the company by top and upper management demonstrated that the strategy presented and followed by the Board of Management of the Group has been met with acceptance and support. The aim is now to transfer this increasingly positive assessment to the remaining management team and employees, and integrate them even more strongly into the process.

Areas of focus in HR

The main measures and activities carried out by the key Group companies in these areas of focus are reported below.

Leadership: "Drive – Work together – Deliver" has been the motto followed by top management since 2016 in the area of leadership. EnBW anchors these leadership principles within the company using targeted measures to bring them to life. This includes programmes for leadership development and receiving feedback from managers, as well as special theme-based measures such as dialogue on the strategic outlook to 2025, the concept of "digital leadership experience" and the "reflection for managers" workshop.

At Pražská energetika (PRE), the active participation in specialist conferences and discussion forums form an

important measure for developing leadership skills and the knowledge potential of managers at all levels. In 2017, 39 management personnel at the PRE Group participated in 20 events. The international energy forum "New Business Models in the Energy Sector" and the nationwide conference Energetika 2017 were, for example, important platforms for discussing current themes in the energy industry.

At Stadtwerke Düsseldorf, the concept "Start-up assistance for new managers" was established in the reporting year. It comprises a workshop to clarify expectations, a training course on communication, networking events, start-up coaching and a mentoring programme.

VNG-Verbundnetz Gas completed the "Leadership compass" project in 2017, in which the principles for respectful management were developed with the management personnel. It was followed by a 180 degree feedback process for all management personnel at VNG which included a self-assessment by the managers and also an assessment by their superiors and employees. A meeting to discuss the results was then held with the managers and the employees with the participation of an external consultant.

The digital energy industry is characterised by a high level of complexity. In order to be able to react and lead appropriately in this environment, new skills are required. The key companies are thus focussing their leadership development activities on the development of these skills. Special importance is being given here to the improvement of cross-departmental cooperation and the formation of effective leadership coalitions, which are also supported by the increased use of agreements on team targets. In addition, the new tasks, responsibilities and value contributions of leaders and also the significance of digital, data-driven business models is being communicated in a digital leadership programme. The programme uses modern learning formats that enable participants to directly experience contemporary leadership at work. The aim is to realise the digital transformation of the Group more quickly and effectively.

Safeguarding and promoting expertise: An important goal for EnBW is to be an attractive employer so that it can secure the expertise it requires and then retain this expertise within the company. In particular, the concepts and measures developed for this purpose focus on the themes of diversity, the promotion of young talent and the attractiveness of the employer.

EnBW promotes **diversity** amongst its employees. Under the motto "Diversity generates added value", EnBW relies on a diverse workforce in terms of numerous different criteria such as gender, age or disability, but also education and life situations. We hope to use this diverse range of people to better respond to the needs of the market, accelerate the speed of innovation, be an attractive employer and thus shape a successful future. The aim is to utilise the opportunities offered by diversity in all areas of the company so as to generate added value for employees and also for EnBW.

Diversity at EnBW

in %	2017	2016	Change
Proportion of women in the overall workforce	26.2	25.4	0.8
Proportion of women in management positions	15.2	12.5	2.7
Proportion of women in management positions at EnBW AG			
First level below the Board of Management[1]	4.3	4.5	-0.2
Second level below the Board of Management[1]	14.0	13.0	1.0
Total proportion of part-time employees[2]	9.4	8.9	0.5
of which women[2]	82.6	85.1	-2.5
of which men[2]	17.4	14.9	2.5

1 The values refer to EnBW AG.
2 Excluding those in semi-retirement.

The increase in the proportion of women in management positions by 2.7 percentage points is due to the full consolidation of VNG.

With respect to gender, EnBW AG has binding targets for the proportion of women in management positions at the first two levels below the Board of Management. In the period from 1 January 2017 until 31 December 2020, the goal is to increase the proportion of women at the first level (top management) and second level (upper management) of management to at least 20%. These target values were not yet achieved in the first year of the evaluation period for the achievement of the targets (status: 31 December 2017). After increasing the ratios in the previous evaluation period (1 January 2016 until 31 December 2016), it was not possible to make any noticeable improvement in 2017 despite a great deal of effort.

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. A fundamental goal of EnBW is not only to appoint women to the two management levels below the Board of Management but also to other levels of the hierarchy. The internal EnBW women's network is a well used platform for female employees to exchange information and ideas. As part of the mentoring programme, dialogue is promoted between management and female employees with potential. Following a successful pilot programme, the "CareerCompass" service will offer advice to female employees throughout the Group who are interested in their first management position.

In the external recruitment of young female leadership talent, EnBW relies on, amongst other measures, the Femtec network and participates in trade fairs and discussion forums tailored specifically for women. As a result, half of those enrolled on the Group trainee programme were young female talent. In addition, EnBW has signed up to the "Diversity Charter"

(Charta der Vielfalt) and actively participates in the "Initiative Chefsache" network, which focuses on the theme of promoting equal opportunities across companies. A particularly noteworthy development here was the creation of a "Flex Report" that highlights the possibility of more flexible forms of working for managers and proposes specific courses of action. In the individual business units, sector-specific events and campaigns are carried out to attract female managers.

Promotion of young talent

in %	2017	2016	Change
Promotion of trainees including DH students	4.3	4.3	0.0
Proportion of working students/interns	4.2	4.2	0.0

Another part of the HR policy is **promoting young talent**. The EnBW Group employed 955 trainees and students from the Cooperative State University (DH) as of 31 December 2017. There are plans to appoint 293 new trainees and DH students in 2018.

VNG started discussions with the Berufsakademie Sachsen, Staatliche Studienakademie Leipzig (University of Cooperative Education) in 2017 about replacing the apprenticeship to become an industrial merchant with a dual degree. In particular, the new course should take into account the requirements of the digital world. The aim is for VNG and the university to develop a module on digitalisation together by 2019 that accounts for around 30% of the teaching content.

An online platform has been created on the Internet with access for almost 60% of the Group employees – the **EnBW project exchange** – that enables them to apply to take part in temporary and interdepartmental cooperation in projects. This project exchange collects together all project activities from short secondments that only last a few weeks and assignments that only take up part of the employee's working hours through to full-time activities lasting many months. The project announcements and the application process have been purposely kept simple. The specific form of activities are individually agreed between the employee, their departmental manager and those responsible for the project. After the conclusion of the project, the employee resumes their full activities in their original team.

In 2017, EnBW AG was honoured by the business magazine Focus as one of the 1,000 **top employers** in Germany. In the industry rankings, EnBW achieved 21st place – ahead of RWE (37th place), E.ON (49th place) and Vattenfall (50th place). Furthermore, EnBW AG was also certified by the Top Employers Institute as a Top Employer Germany 2017 based on a comprehensive catalogue of criteria and an external audit. VNG Norge was ranked in seventh place in the Great Place to Work list in 2017 in the category for companies with 50 to 199 employees. The ratings are based on the assessments of more than 28,000 employees from 191 Norwegian organisations.

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

EnBW achieved its ambitious earnings target for 2017. The Board of Management believes that this was possible thanks to the whole EnBW team. In agreement with shareholders and employee representatives, it was thus agreed that the existing agreement to suspend **profit sharing plans** for employees in 2017 would be lifted and the profit sharing bonuses would be paid in 2017.

The **collective remuneration negotiations** between the union ver.di and the Employers Association for Electricity Power Plants in Baden-Württemberg came to the following result on 19 February 2018: remuneration will increase by 3.0% as of 1 February 2018. In addition, a special bonus of 9% of the holiday pay will be made. Monthly remuneration for apprentices will rise by €70.00. The collective agreement becomes valid after the agreed deadline for the declaration expires, with retroactive effect as of 1 January 2018 and can be terminated at the earliest as of 28 February 2019.

The HR department at PRE plays an active role in the integration of acquired companies. Following the acquisition of the company KORMAK in 2016, all HR activities and processes at this new Group company were initially handled by an external service provider. The HR department at PRE took over responsibility for the entire payroll accounting at the beginning of 2017 and human resources management, social issues and training from the middle of the year. They then took over responsibility for occupational, fire and environmental protection at the beginning of 2018. The HR department at PRE was able to perform all these tasks for the new subsidiary without increasing its own personnel thanks to the modification and streamlining of its internal processes.

VNG started an earnings performance programme in 2015 against the background of poor results of operations. As part of this programme, the total number of 400 employees at VNG AG was reduced by around 100 in a socially responsible manner in 2016 and 2017 via semi-retirement schemes, severance payments and through the natural turnover of employees.

Health management: 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 key companies. A centrally managed and anonymous online survey on the subject of "Risk assessment – psychological stress" was thus carried out at 18 Group companies from 24 April to 16 May 2017. The survey was precipitated by the legal requirement to supplement risk assessments with the aspect of psychological work stress. The aim of the survey was to identify collective psychological stresses at work in order to derive possible areas for action and preventative measures. The results were available to the Board of Management from the end of June and were also shared with management personnel and the works councils. The areas and teams have introduced, where necessary, specific measures based on the evaluation reports. Managers are legally obligated to document the measures and examine their effectiveness. SWD and VNG had already complied with the legal obligation and had already conducted their own surveys at the time the centrally managed survey was completed. Overall, 85% of the workforce within the scope of the law were covered by the survey.

In the area of generation at EnBW AG and EnBW Kernkraft GmbH, a number of staggered health days were held at seven power plant sites – dealing with the theme of "Health and movement". In cooperation with the staff restaurants and a number of statutory health insurance funds, a holistic health programme was subsequently offered at the individual sites. Employees were able, for example, to have their flexibility, endurance or strength measured as part of the programme. In addition, it was possible for employees to talk to specialists from the areas of occupational medicine and health management at all of the sites involved in the health programme. The aim of these campaigns was not only to make the theme of health more tangible for employees but also to create new momentum in relation to health issues and use this for further campaigns.

Our subsidiaries are also active in the area of health management: Occupational health management was intensified at the Swiss company Energiedienst Holding during the course of 2017 on the basis of targeted interviews with employees and managers. PRE offers, amongst other things, a comprehensive cancer prevention programme that focuses on breast, skin and prostate cancer. SWD has a programme focussing on health-oriented management at the team leader level. VNG offers a comprehensive range of preventative occupational medicine via its company doctors and also arranges appointments with specialist doctors at short notice in cooperation with a healthcare centre in Leipzig.

Sickness ratio

in %	2017	2016	Change
Sickness ratio	5.0	4.8	0.2

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

Other performance indicators

Employees of the EnBW Group[1]

	31/12/2017	31/12/2016	Change in %
Sales	3,331	3,244	2.7
Grids	8,858	8,330	6.3
Renewable Energies	1,050	1,029	2.0
Generation and Trading	5,457	5,076	7.5
Other	2,656	2,730	-2.7
Total	**21,352**	**20,409**	**4.6**
Number of full-time equivalents[2]	19,939	18,923	5.4

1 Number of employees excluding apprentices/trainees and inactive employees.
2 Converted into full-time equivalents.

As of 31 December 2017, the EnBW Group had 21,352 employees. The increase compared to the figure at the end of the 2016 financial year was primarily attributable to the first-time consolidation of the VNG Group. This effect impacts all of the segments with the exception of Renewable Energies. The further increase in the number of employees in the Grids segment was due to the growing importance of regulated business and the associated increase in activities. In Other, the increase in employees due to VNG was more than balanced out by efficiency programmes in the functional units at EnBW AG and the planned departure of employees based on an earlier restructuring programme. Alongside the increase due to VNG, the acquisition of Messerschmid Energiesysteme GmbH and winsun AG by Energiedienst Holding AG increased the number of employees in the Sales segment. However, these two effects were almost balanced out by the closure of the B2B business under the EnBW and Watt brands and the reduction in employees in the operations area of EnBW AG.

The expansion of the offshore business led to an increase in the number of employees in the Renewable Energies segment. In the Generation and Trading segment, the increase in the number of employees due to VNG is partially compensated for by the reduction in employees in conventional generation.

Turnover

in %	2017	2016	Change
Employee turnover ratio	7.0	5.2	1.8

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

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

We also refer you to the details provided in the "Report on opportunities and risks" (p. 96).

Occupational safety

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 responsibilities, roles and processes. In order to achieve these targets, EnBW already founded the Occupational Safety Working Group (AK KAS) in 2003. AK KAS has the task of regulating issues that affect all companies uniformly within the Group. Its scope of application covers those companies that use LTIF as a performance indicator. AK KAS is headed by the Chief Technical Officer of EnBW and has the power to make binding decisions in accordance with the company's rules of procedure.

TOP LTIF

The key performance indicator LTIF is used to measure the number of accidents at work and the resulting days of absence. Every Group company included in the consolidated companies for the LTIF receives an individual target from the Board of Management for the relevant year – the fulfilment of this LTIF target flows into the monetary assessments for the achievement of relevant targets. Above and beyond these targets, the companies also set their own individual targets.

Key performance indicator

	2017	2016	Change in %	Forecast 2017
LTIF[1]	3.0	3.9	-23.1	≤ 3.7[2]

1 Variations in the group of consolidated companies; see also the definition of key performance indicators on p. 30.
2 Three-year target for 2017, 2018 and 2019.

The LTIF improved significantly in 2017 to 3.0 compared to the previous year (3.9) – average days of absence per accident increased slightly to 16.8 compared to the previous year (14.5).

In the reporting year, there was a fatal accident at a third-party company that was working on behalf of the EnBW Group.

The measures for achieving the target are independently defined by the Group companies. There were various different activities focussing on occupational safety in 2017:

The new software EcoWebDesk (EWD) was introduced into further areas at EnBW. In the next few months, it will be rolled out to around 10,000 employees. Important elements of the EWD are the documentation of risk assessments and hazardous substance management.

In the Grids segment, a series of campaigns to further improve the safety culture have been or will be carried out:

- Seminars for managers to raise awareness and explain different tools such as incentives, safety briefings and inspections of behavioural conduct
- A short workshop for managers on the practical completion of safety briefings
- The preventative health programme "Think about me, your back" for technical and commercial employees
- The project "Working safely on the grid" (SaiN) that is designed to ensure that employees working on behalf of the grid operating company are trained sufficiently

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

We also refer you to the details provided in the "Report on opportunities and risks" (p. 96).

Environment goal dimension

The main Group companies at EnBW have an environmental management system certified according to DIN ISO 14001:2015. It follows a concept of continuous improvement in environmental performance and is based on the method Plan – Do – Check – Act (PDCA). The system encompasses the definition and realisation of environmental targets with their performance indicators and corresponding measures, the procedures and responsibilities and the identification of environmentally relevant risks and opportunities. Using defined due diligence processes and an audit programme, the agreed regulations and guidelines are then monitored in terms of legal and other requirements, as well as with regard to the defined targets. If necessary, the processes and guidelines, as well as the targets and measures, will be adjusted. The consistent implementation and further development of the environmental management system guarantees that negative impacts on the environment can be avoided as well as possible during all activities (p. 78 ff.). Risks generally exist in the area of environmental protection due to the operation of power plants and the possible consequences for the air, water and soil. These risks are countered by EnBW using an emergency and crisis management system that has been implemented throughout the Group and includes comprehensive organisational and procedural measures.

Our key environmental targets are related to the expansion of renewable energies and making our contribution to climate protection. These targets are measured using the key performance indicators "installed output of renewable energies (RE) and the share of the generation capacity accounted for by RE" and CO_2 intensity.

Expansion of Renewable Energies

Key performance indicator

	2017	2016	Change in %	Forecast 2017
Installed output of RE in GW and the share of the generation capacity accounted for by RE in %	3.4/25.9	3.1/23.1	9.7/12.1	3.3–3.4/ 25–26

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

In the reporting year, the installed output of renewable energies increased by 241 MW to around 3.4 GW and was thus within the range of the forecast.

Some 204 MW of this was attributable to the construction and expansion of several onshore wind farms with a total of 66 wind turbines. In contrast, the installed output of the EnBW Group fell to 13.0 GW, primarily as a result of the transfer of the RDK 4 S power plant at the Rheinhafen Steam Power Plant in Karlsruhe (gas) and the Combined Heat and Power Plant 1 (HKW 1) in Altbach/Deizisau (hard coal) to the grid reserve. As a result, the share of the generation capacity accounted for by RE increased – as forecast – to 25.9%.

Own generation of the EnBW Group fell significantly in 2017 compared to the previous year to around 50.2 TWh. This was caused by a considerable reduction in own generation from nuclear power due to the temporary shutdown of KKP 2, while generation based on renewable energies increased slightly. The proportion of own generation from renewable energy sources increased to 16.5%, which was attributable to higher production in the area of wind power. This was offset by the lower electricity generation from run-of-river power plants due to consistently low water levels.

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

Electrical output[2] in MW	2017	2016
Renewable energies	**3,381**	**3,140**
Run-of-river power plants	1,034	1,032
Storage/pumped storage power plants using the natural flow of water[2]	1,327	1,322
Wind onshore	540	336
Wind offshore	336	336
Other renewable energies	144	114
Thermal power plants[3]	**9,673**	**10,442**
Brown coal	875	875
Hard coal	3,523	3,956
Gas	1,448	1,784
Other thermal power plants	349	349
Pumped storage power plants that do not use the natural flow of water[2]	545	545
Nuclear power plants	2,933	2,933
Installed output of EnBW Group[5]	**13,054**	**13,582**
of which renewable in %	25.9	23.1
of which low CO_2 in %[4]	15.3	17.1

1 The generation portfolio includes long-term procurement agreements and generation from partly owned power plants.
2 Output values irrespective of marketing channel, for storage: generation capacity.
3 Including pumped storage power plants that do not use the natural flow of water.
4 Excluding renewable energies; only gas power plants and storage power plants that do not use the natural flow of water.
5 In addition, power plants with an installed output of 1,706 MW were registered for decommissioning. However, they were classified as system relevant by the Federal Network Agency and TransnetBW and are thus used by TransnetBW as reserve grid capacity.

Own generation of the EnBW Group[1] by primary energy source

in GWh	2017	2016
Renewable energies	**8,290**	**8,257**
Run-of-river power plants	5,012	5,284
Storage/pumped storage power plants using the natural flow of water	946	1,052
Wind onshore	661	413
Wind offshore	1,416	1,265
Other renewable energies	255	243
Thermal power plants[2]	**41,904**	**44,538**
Brown coal	6,027	5,802
Hard coal	12,977	12,625
Gas	3,436	3,199
Other thermal power plants	211	174
Pumped storage power plants that do not use the natural flow of water	1,721	1,722
Nuclear power plants	17,532	21,016
Own generation of the EnBW Group	**50,194**	**52,795**
of which renewable in %	16.5	15.6
of which low CO_2 in %[3]	10.3	9.3

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

Climate protection

Key performance indicator

	2017	2016	Change in %	Forecast 2017
CO_2 intensity in g/kWh	556	577	-3.6	-5% to +5%

TOP CO_2 intensity

The E CO_2 intensity of own generation of electricity excluding nuclear power fell in comparison to the previous year – despite the higher utilisation of the power plants for redispatch due to the requirements of the transmission system operators – by 3.6% to 556 g/kWh and was thus within our forecasted range. The fall was due to the higher generation from renewable sources in comparison to 2016 and the simultaneous increase in electricity generation from a more efficient mix of fossil fuel-fired power plants, especially the use of block RDK 8 at the Rheinhafen Steam Power Plant in Karlsruhe.

Other performance indicators

In addition to the key performance indicators in the area of the environment, EnBW utilises a broad range of additional environmental indicators for measuring, controlling and presenting the other results of our environmentally relevant activities. The most important performance indicators are presented in the following table on page 79. A comprehensive presentation of the environmental performance indicators for EnBW can be found on the Internet at www.enbw.com/umweltschutz.

There is also information available here on our wide-ranging measures to improve energy efficiency, 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.

Carbon footprint: Direct CO_2 emissions are determined mainly by the deployment of power plants. Despite the increase in electricity generation from renewable energies, direct CO_2 emissions increased moderately from 16.3 to 16.8 million t CO_2eq. This was due to the slightly higher electricity generation from fossil fuels in comparison to the previous year. Slightly higher indirect CO_2 emissions from grid losses led to an increase in Scope 2 CO_2 emissions from 1.1 million t CO_2eq to 1.2 million t CO_2eq. The Scope 3 CO_2 emissions are mainly influenced by the gas consumption of our customers. EnBW significantly expanded its gas sales due to the full consolidation of VNG. Accordingly, EnBW recorded a significant increase in Scope 3 CO_2 emissions. Numerous activities at EnBW also avoid CO_2 emissions: primarily that of generating electricity from renewable energy sources. The reduction in the underlying avoidance factors by the German Environment Agency by more than 10% (publication Climate Change 23/2017, Version October 2017) led to a decrease in the CO_2 emissions avoided in 2017 compared to the previous year from 6.8 million t CO_2eq to 6.6 million t CO_2eq despite the increase in electricity generation from renewable energies.

Energy consumption: Total final energy consumption includes the consumption of final energy for the business activities of EnBW. It does not include conversion losses during energy generation or grid losses. Total final energy consumption is mostly influenced by pump energy as well as the company's own consumption requirements and the operating consumption of the power plants. In comparison to the previous year, final energy consumption increased from 2,784 GWh to 3,247 GWh. The main reasons for this were the increase in the pump energy at the pumped storage power plants as well as the higher own consumption and operating consumption of the power plants due to increased electricity generation from fossil fuels.

The proportion of renewable energies in final energy consumption increased from 47.9% in 2016 to 48.8% in 2017. This was primarily due to an increase in the pump energy at the pumped storage power plants operated by Vorarlberger Illwerke, which utilises green electricity.

The energy consumption of our buildings per employee increased from 9,456 kWh in 2016 to 9,582 kWh in 2017. The reason for this increase was the above-average fall in energy consumption in buildings in 2016 due to extraordinary effects.

Environmental protection expenditure: We report environmental protection expenditure in line with the requirements of the statistical offices and using the guidelines published by our sector association, BDEW. Due to the increased expansion in the areas of onshore and offshore wind power, investment in environmental protection increased to €650 million and current environmental protection expenses increased to €348 million.

Environmental performance indicators[1]

	Unit	2017	2016
Carbon footprint			
Direct CO_2 emissions (Scope 1)[2, 3]	millions of t CO_2eq	16.8	16.3
Indirect CO_2 emissions (Scope 2)[4]	millions of t CO_2eq	1.2	1.1
Other indirect CO_2 emissions (Scope 3)[5]	millions of t CO_2eq	23.7	12.4
CO_2 emissions avoided[3, 6]	millions of t CO_2eq	6.6	6.8
CO_2 intensity of business journeys and travel[7]	g CO_2/km	176	180
Energy consumption			
Total final energy consumption[8]	GWh	3,247	2,784
Proportion of renewable energies in final energy consumption[3, 9]	%	48.8	47.9
Energy consumption of buildings per employee[10]	kWh/MA	9,582	9,456
Environmental protection expenditure[11]			
Investment in environmental protection	€ millions	650	315
Current environmental protection expenses	€ millions	348	311

1 Unless otherwise indicated, the data reflect the business entities and plants of the consolidated Group.
2 Preliminary data.
3 The figures for the previous year have been restated.
4 Includes greenhouse gas emissions through electricity grid losses and through electricity consumption of plants in the gas and electricity grid, water supplies and buildings.
5 Includes greenhouse gas emissions through consumption of purchased electricity volumes by customers, consumption of gas by customers, fuel provision and business travel.
6 Includes CO_2 emissions avoided through the expansion of renewable energies, through energy efficiency projects with customers/partners and through the generation and sale of biogas.
7 Includes all business travel and business activities (Scope 1 and Scope 3).
8 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.
9 For electricity consumers for which the proportion of renewable energies is unknown, a proportion of renewable energies in accordance with the current Bundesmix (federal mix) label for electricity of 32% is used. For fuels, a proportion of 5% bioethanol is generally used
10 Calculated partially on the basis of assumptions and estimations.
11 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).

Electromobility at EnBW: In 2017, EnBW expanded its fleet of electric vehicles even further. Netze BW has now passed the mark of 100 electric vehicles and is thus the largest operator of electric fleets in Germany. The purchased vehicles once again include numerous e-Golfs and a number of "Streetscooters" adapted by the company Deutsche Post. The vehicles are operated from around 20 Netze BW locations across the whole of Baden-Württemberg.

Conservation of biological diversity: EnBW initiated the programme "Stimuli for Diversity" for the protection of amphibian species together with the LUBW (Baden-Württemberg State Institute for the Environment) in 2011. Due to the major success of, and positive response to, the programme in the first five years, the funding programme was updated in 2016 to include funding for protective measures for reptiles. The EnBW funding programme "Stimuli for Diversity" is part of the project "The economy and business for nature", which is a component of the state initiative "Active for biological diversity". It still remains the first conservation programme of this scope from a company both in Baden-Württemberg and nationwide that not only funds the protection of one single species but two whole groups of species across the state. The successful realisation of the 100th project was celebrated in the reporting year. Due to the numerous different measures implemented in the programme, it was possible to successfully improve the living conditions for numerous endangered species in the state. EnBW will also continue the funding programme in 2018 based on this tried-and-tested method.

We also refer you to the details provided in the "Report on opportunities and risks" (p. 96).