1.1 STRATEGY AND STRUCTURE

Our establishment and IPO of innogy in 2016 were but the first steps on the way to a new RWE. Now we are taking another major step by exchanging our financial investment in innogy for a leading operating position in renewable energy. The basis for this is a transaction agreed with E.ON in March 2018, through which the two companies will realign themselves. Once the asset swap has been completed, we will expedite the expansion of renewable energy – with annual net capital expenditure of about €1.5 billion. We will take on a new role as an all-rounder in electricity generation, ensuring security of supply with our flexible power stations, while playing an active part in the transformation of the energy system which will increase climate protection.

Planned asset swap with E.ON: laying the foundation for a new RWE. RWE is in the midst of a transformation through which the company is giving itself a new operational and organisational setup. The basis for this is an agreement reached with E.ON in March 2018 pursuant to which the two companies will conduct an extensive exchange of business activities and shareholdings. It is envisaged that E.ON will acquire our financial investment of 76.8 % in innogy while we will receive nearly the entire renewables business of E.ON and innogy. Furthermore, we will receive a 16.67 % shareholding in E.ON, the non-controlling interests of the E.ON subsidiary PreussenElektra in our Gundremmingen (25 %) and Emsland (12.5 %) nuclear power stations, innogy's gas storage business, and innogy's 37.9 % stake in the Austrian energy utility Kelag. We will also make a one-off cash payment of €1.5 billion to E.ON as part of the transaction. The business activities and equity interests will be transferred with retrospective economic effect to 1 January 2018. We are confident of being able to complete the asset swap by the end of 2019.

RWE will become Europe's No. 3 in renewable energy. The transaction with E.ON will give us approximately 9 GW of zero-carbon electricity generation capacity from renewable sources, mostly from onshore and offshore wind farms. This will make us Europe's No. 3 in renewables and the world No. 2 in offshore wind. In addition to generation assets, we will receive a large portfolio of growth projects in various stages of development. Here again, the focus is on wind energy, followed by photovoltaics. Renewable energy will account for more than half of the RWE Group's adjusted EBITDA as early as the first year after the completion of the asset swap with E.ON, making this business our strongest income generator.

Refinement of RWE's strategy. Concurrently to the implementation of the asset swap with E.ON, we have begun to develop the key points of our future renewable energy strategy. We presented the first results of our deliberations to the Supervisory Board of RWE AG and our employees at the end of 2018. We intend to rapidly expand the leading position in renewable energy that we will obtain through the transaction. To this end, we plan to invest about a net €1.5 billion every year. These funds should be sufficient to increase capacity by between 2 GW and 3 GW per annum. Our technological focus rests on wind energy, photovoltaics and storage solutions. Geographically, we will concentrate on markets in Europe, the Americas and the Asia-Pacific region. We will maintain the integrated business model pursued by innogy and E.ON to date, meaning that our new projects will cover the entire value chain from development to construction and operation wherever possible. To ensure efficient management, we will divide the renewable energy business into the following business fields: (1) Onshore Wind and Photovoltaics in Europe and Asia-Pacific, (2) Onshore Wind and Photovoltaics in the Americas and (3) Global Offshore Wind. These activities will be spearheaded by a six-member management team, including three chief operating officers, each in charge of one of the aforementioned business fields.

In parallel to our growth ambitions in renewable energy, we want to maintain our leading position in conventional electricity production. With our power plant fleet – one of the largest in Europe – we are making an indispensable contribution to ensuring a reliable supply of electricity that satisfies demand in our core markets, i. e. Germany, the United Kingdom and the Benelux region. Wind turbines and PV installations cannot accomplish this due to their strongly fluctuating load. Electricity storage techniques are not yet able to meet the technical and economic requirements necessary to be used for ensuring the supply of electricity on a large scale. This is why conventional generation capacity that is capable of adjusting to the fluctuations of wind and solar feed-ins will be needed for a long time to come.

Energy trading will also remain one of RWE's core areas of activity, not least due to its strong connection to the generation business. Our trading company RWE Supply & Trading is in charge of marketing the electricity of our power stations while procuring the fuel and emission allowances needed to produce it. In this role, combined with the commercial optimisation of our generation asset dispatch, it makes a major contribution to the Group's operational success.

Our deliberations concerning the strategy of the new RWE have not yet been finalised. For example, we still have to determine the dividend policy we intend to pursue and the leverage we will aim for. We will be able to reach decisions on the details of our strategy once the asset swap with E.ON has been completed and we have operational control of the new activities. After that, we want to provide comprehensive information on our new strategy.

RWE in fiscal 2018: Group structure featuring four segments. In the transitional period leading up to the completion of the transaction, the RWE Group is divided into four segments (divisions), which are described in detail below. In addition to the three RWE operating divisions Lignite & Nuclear, European Power and Supply & Trading, they consist of the innogy activities that will remain with us.

(1) Lignite & Nuclear. This is where we report our German electricity generation from lignite and nuclear power as well as our lignite mining in the Rhineland. These activities are managed by our subsidiary RWE Power. This segment also encompasses our equity holdings in the Dutch nuclear power plant operator EPZ (30 %) and the German company URANIT (50 %), which holds a 33 % stake in the uranium enrichment specialist Urenco. Our 51 % interest in Hungary-based Mátra, which generates electricity from lignite, was also included in this segment until it was sold in March 2018.

Lignite and nuclear power plants are primarily used to generate base-load power due to their relatively low and stable fuel costs. Their profitability is primarily determined by the price level on the wholesale market. Electricity prices were on a downward trend until 2016, after which they recovered. A massive cost cutting exercise enabled us to curb the resulting earnings shortfalls. Our ongoing efficiency-enhancement programme in conventional power generation is designed to cut annual expenditure by a total of €300 million compared to 2016. Of this sum, €200 million and €100 million are allocable to the Lignite & Nuclear and European Power segments, respectively. We aim to conclude the programme by the end of 2019. We have already achieved the planned savings for the most part.

Lignite and nuclear power stations will lose importance within our generation portfolio even though their earnings prospects have improved. This is mainly due to the energy policy framework in Germany. Nuclear energy is subject to a legally binding phase-out roadmap, which stipulates a latest possible shutdown date for every single plant. Two RWE stations are still online: Gundremmingen C and Emsland. We can operate these units until the end of 2021 and the end of 2022, respectively, after which they must be closed.

Electricity generation from lignite is also subject to a time limit. This results from the global and national climate protection goals. Germany wants to reduce greenhouse gas emissions in the energy sector by slightly more than 60 % by 2030 compared to the level in 1990. We have made a major contribution to this in the past and will continue to do so in the future. For example, we are participating in the lignite security standby scheme, which involves eight power plant units – including five of RWE's – being gradually taken off the market from 2016 to 2019 and being used as the last resort to ensure security of supply for four years each, before they are decommissioned. On 30 September 2017, our Frimmersdorf Units P and Q were taken off the grid, followed twelve months later by Units E and F at Niederaussem. Neurath's Unit C is scheduled to follow suit at the end of September 2019. This will cause our carbon dioxide emissions in the Rhenish lignite mining region to drop by about 15 % compared to 2015.

We expect to have to take further lignite units offline early in the coming years. This is a consequence of the proposals submitted by the Growth, Structural Change and Employment Commission, on which we provide detailed information on page 33. The body recommends a complete exit from coal by 2038. It envisages the capacity of lignite-fired power stations on the market being reduced to a total of 15 GW by the end of 2022. This would represent a decline of nearly 5 GW compared to the end of 2017. The objective is to have only 9 GW remaining on the market in 2030. The federal government is expected to follow these recommendations. The timing and choice of the stations that will be shut down remains to be clarified. Talks will be held with the companies to this end. We believe we should receive appropriate compensation – as recommended by the Commission – for our plants that are affected by the measures.

(2) European Power. Our electricity generation from gas, hard coal and biomass is subsumed under this segment. Here, the geographic focus is on Germany, the United Kingdom and the Benelux region. The segment also contains our 70 % stake in the Denizli gas-fired power station in Turkey, some hydroelectric power plants in Germany and Luxembourg and RWE Technology International, which specialises in project management and engineering services. All of these activities are overseen by RWE Generation.

The economic and political environment is also challenging for our gas and hard coal-fired power stations, which usually cover medium and peak loads. The rapid expansion of renewable energy has resulted in a significant decline in the use of some of these assets compared to the beginning of the decade. In some cases, their margins are far below the levels prevailing at that time. We therefore shut down several hard coal-fired power stations or saw to it that they were closed. Examples are Voerde A and B on the Lower Rhine, which were taken offline in April 2017. We held a stake of 25 % in these units and marketed their electricity generation. We have temporarily taken some gas-fired power plants off the grid that could no longer cover their fixed operating costs, for example the Dutch Moerdijk 1 unit as of 1 February 2018. They can come back online as soon as market conditions allow. Besides temporary and permanent power plant closures, we have taken additional measures to cut costs and will continue to do so in the future. As set out earlier, we aim to reduce expenses in the European Power segment by €100 million via our ongoing efficiency-enhancement programme, most of which we have accomplished.

Despite the persistent pressure from consolidation, we believe the European Power segment has long-term growth prospects. We expect that secured generation capacity will become tight, causing our stations to become more profitable. In the long run, this should benefit gas-fired power plants in particular. In light of the slight improvement in market prospects, we have put some mothballed stations back online or decided to return them to service, as was the case with the Dutch Claus C gas-fired power plant, which is scheduled to resume power production at full capacity in 2020, following about six years of inactivity.

In terms of installed capacity, gas is already our most important fuel, and its share in our generation portfolio will probably grow even more. Political decisions play a major role. The governments in our most important generation markets, i. e. Germany, the United Kingdom and the Netherlands, are pursuing ambitious climate protection goals and are relying on a rapid phase-out of electricity production from coal to achieve them. Therefore, gas will become an increasingly important energy source in the coming years in order to secure electricity supply. Gas-fired power stations emit less carbon dioxide than coal-fired power plants and are therefore accepted more by the public as a partner to renewable energy.

The proportion of our electricity generation accounted for by hard coal should continue to decline in 2019, in part because we will decommission the coal unit of Gersteinwerk in Werne (Westphalia) in the spring. In addition, we are currently converting our two Dutch hard coal-fired power stations Amer 9 and Eemshaven for biomass co-firing. We have been granted up to €2.6 billion in state subsidies due to the required expenditure and the much higher price of biomass compared to hard coal. We will receive these funds over a period of eight years, enabling biomass shares of 80 % at Amer 9 and 15 % at Eemshaven. The conversion work is making good progress and we are confident that we will be able to establish the technical prerequisites for achieving these quotas before the end of this year.

(3) Supply & Trading. This segment encompasses the multi-faceted activities of RWE Supply & Trading, which acts as the commercial centre for the RWE Group. Its core business, energy trading, forms the economic link between the elements of our value chain, the regional markets and the various energy commodities. Our subsidiary mainly trades electricity, natural gas, coal, oil, CO_2 certificates and biomass. RWE Supply & Trading increasingly conducts these activities outside of Europe: it already runs trading floors in New York, Singapore and Shanghai. Another of the company's activities consists of marketing the electricity from RWE power stations and procuring the fuel and emission allowances required to produce it. One objective is to limit price risks. On top of that, RWE Supply & Trading is in charge of the commercial optimisation of our power plant dispatch. The resulting earnings are reported in the generation segments. The company also markets its expertise to major European customers outside of the RWE Group, offering services ranging from traditional energy supply contracts and comprehensive energy management solutions to sophisticated risk management concepts.

Another focal point of RWE Supply & Trading's activities is the gas business. The company supplies gas to companies outside of the RWE Group. To this end, it enters into long-term supply agreements with producers, organises gas transportation by booking pipelines and optimises the timing of deliveries using leased gas storage facilities. The company also concludes transactions involving liquefied natural gas (LNG). The objective is to take advantage of differences in price between regional gas markets which are not connected via pipelines. RWE Supply & Trading intends to establish itself as one of Europe's leading gas intermediaries. To this end, the company also looks at markets outside of RWE's core regions, because the greater the size and diversification of the procurement and supply portfolios, the greater the chances are to commercially optimise them.

RWE Supply & Trading also leverages its expertise to make short to medium-term investments in energy assets or energy companies, for which value-enhancing measures can be taken in order to realise high returns upon resale (referred to as principal investments). At the end of 2018, RWE Supply & Trading had a portfolio of ten investments, a large portion of which was in the USA.

(4) innogy – continuing operations. This is the segment in which we report all of the innogy assets that should remain within the RWE Group over the long term: renewables, gas storage and the 37.9 % stake in the Austria-based power utility Kelag. Once E.ON has acquired our majority interest in innogy, it will return the aforementioned activities to us.

innogy ranks among Europe's leading renewable energy companies. In terms of generation capacity, our subsidiary's strongest presence is currently in Germany and the United Kingdom, followed by Spain, the Netherlands and Poland. In terms of energy sources, its focus is on onshore and offshore wind, followed by hydroelectric power and photovoltaics. innogy further expanded its generation capacity last year. One milestone was the inauguration of the Galloper large-scale UK North Sea wind farm, in which innogy holds a 25 % stake. Furthermore, the company has initiated the continued expansion of its wind power capacity by beginning the onshore work on Triton Knoll, another large-scale wind farm in the UK North Sea. Our subsidiary holds a 59 % stake in it. In addition, innogy acquired a project portfolio with over 2 GW in the USA and secured subsidies under the German Renewable Energy Act for the Kaskasi offshore wind project in Germany. We report on the projects mentioned here in detail on page 37 et seq.

With Belectric Solar & Battery, a subsidiary acquired in early 2017, innogy is also one of the largest international suppliers of ground-mounted solar panel arrays and battery storage facilities with a presence in Europe, the Middle East, North Africa, India, Australia, South America and the USA. Photovoltaics is one of the fastest growing technologies in the energy sector and has become profitable without subsidies in many markets since its introduction. In addition to the development and construction of ground-mounted solar farms, Belectric also handles operation and maintenance. Since its inception in 2001, the company has already set up solar panel arrays with a total capacity of about 2 GW. It is currently building such a facility in Australia, which on completion will probably be the country's largest to date (see page 38). Moreover, by manufacturing battery storage units, Belectric is making a major contribution to distributed power supply and will play a pivotal role in stabilising electricity grids in the future.

Besides the renewable energy and electricity storage business, we will continue innogy's gas storage activities. Our subsidiary currently owns eleven gas storage facilities, of which five, with a combined capacity of 1.6 billion cubic metres, are located in Germany, and six, with a total capacity of 2.5 billion cubic metres, are situated in the Czech Republic. innogy leases the capacities to companies such as RWE Supply & Trading, which use them for timing arbitrage transactions. Storage units are filled in the warm months, when little gas is needed to heat buildings, and gradually emptied in the cold season, when demand is high. The income achieved through such arbitrage transactions and, in turn, storage capacity auctions depends on the seasonal differences in gas prices. The differences in price between summer and winter gas are much smaller today than they have been in the past. However, we believe that periods of scarcity and price spikes will become more frequent again in the future, in part due to rising demand for gas used to generate electricity. Therefore, we feel there is a good chance of achieving attractive returns in the gas storage business once again.

It is also envisaged that innogy's minority interest in Kelag will remain in the RWE Group. Headquartered in Klagenfurt (Carinthia), Kelag is a leading Austrian energy utility. Its activities cover all stages of the value chain, from electricity generation, energy trading and distribution system operation to the sale of electricity, gas and innovative energy solutions. Kelag primarily produces its electricity from renewable sources such as hydro, wind and photovoltaics. The minority interest in the company is therefore a good complement to our future renewable energy activities.

RWE AG's management system. Ensuring sustainable growth in shareholder value is at the heart of our business policy. To manage the Group companies, RWE AG deploys a groupwide planning and controlling system, which ensures that resources are used efficiently, and provides timely, detailed insight into the current and prospective development of the company's assets, financial position and net worth. Based on the targets set by RWE's Executive Board and our expectations regarding the development of the business, once a year we formulate our medium-term plan, in which we forecast the development of key financial indicators. This plan contains the budget figures for the following fiscal year and planned figures for the years thereafter. The Executive Board submits the plan to the Supervisory Board, which reviews and approves it. The Supervisory Board occasionally requests adjustments to be made prior to giving its approval. During the fiscal year, we produce internal forecasts linked to the budget. The Executive Boards of RWE AG and the main operating units meet regularly to analyse the interim and annual financial statements and update the forecasts. In the event that the updated forecast figures deviate significantly from the budget figures, the underlying reasons are analysed and countermeasures are taken if necessary. We also immediately notify the capital market if published forecasts need to be modified.

The main key performance indicators we use in managing our business are adjusted EBITDA, adjusted EBIT, adjusted net income, and net debt. As set out in more detail on page 40, the business activities of our subsidiary innogy are considered in these figures either in full or in part, although we classify this company as a pure financial investment. For management purposes, we therefore also use key figures calculated in deviation from IFRS consolidation principles: our majority interest in innogy is recognised in the 'other financial assets' line item on the balance sheet and we only consider the dividend received on the income statement. More detailed information on this can be found on page 58.

Adjusted EBITDA is defined as earnings before interest, taxes, depreciation and amortisation. In order to improve its explanatory power in relation to the development of ordinary activities, we remove non-operating or aperiodic effects: capital gains or losses, temporary effects from the fair valuation of derivatives, impairments and other material special items are shown in the non-operating result. Subtracting operating depreciation and amortisation from adjusted EBITDA yields adjusted EBIT. Net income corrected to exclude all major special items ('adjusted net income'), is another key operating indicator. However, we will determine this figure solely using the method deviating from IFRS consolidation principles until the transaction with E.ON has been completed. Adjusted EBIT and adjusted net income are key performance indicators regarding the variable compensation of the Executive Board and executives (see page 63 et seqq.).

We primarily use the internal rate of return for evaluating the attractiveness of investment projects. The Group's financial position is analysed using cash flows from operating activities, amongst others. We also attach special importance to the development of free cash flow. It is the result of deducting capital expenditure from cash flows from operating activities and adding to them proceeds from divestments and asset disposals. Net debt is another indicator of RWE's financial strength. It consists of net financial debt together with provisions for pensions and similar obligations, for nuclear waste management, for mining damage (e. g. the recultivation of opencast mining sites) and for the dismantling of wind farms. One half of the liabilities from hybrid bonds is recognised in net debt.

Sustainability – a standard we hold ourselves to. We can only succeed over the long term if we ensure society's acceptance by embracing our corporate responsibility (CR). In order to focus on the various aspects of this responsibility, we maintain a dialogue with all our stakeholder groups, such as shareholders, employees, customers, politicians, associations and non-governmental organisations. We are making use of the findings from this exchange to revise our CR strategy. This involves identifying our major sustainability challenges and determining how we can overcome them. We still believe that contributing to achieving national and international climate protection goals through continuous emission reductions is a key task. Our carbon dioxide emissions have dropped steadily in the last six years, in part because we took coal-fired power plants offline. We believe that this trend will continue. Furthermore, we aim to be a driving force in the creation of a sustainable energy system by spurring the expansion of renewable energy.

Further information on our measures in relation to CR can be found in our separate non-financial statement in accordance with Section 315b, Paragraph 3 of the German Commercial Code, which will be published as part of our CR Report in April 2019 and does not form part of the combined review of operations. The CR Report is entitled 'Our responsibility' and can be accessed on the internet at www.rwe.com/cr-report.

1.2 INNOVATION

Those who are innovative need not be afraid of change. This also holds true for companies in a changing market environment – companies like RWE. We have a whole host of development projects looking for new technical solutions. Our goal is to make opencast mines more profitable, power plants less emissions-intensive as well as develop and refine future-oriented uses of lignite and carbon dioxide. In addition, we support start-ups and receive important stimulus for our business by working with them. In our daily operations, we benefit from the ingenuity and entrepreneurial spirit of our employees. Once again, they had thousands of good ideas in 2018, which will allow us to achieve millions of euros in savings.

With about 520 inventions, we are in the leading pack of European utilities. RWE is innovative in many ways. Our motivation is to remain competitive in an environment undergoing substantial change as well as to be a driving force behind this transformation. With a tally of around 1,760 patents and patent applications, based on roughly 520 inventions, the RWE Group is in the vanguard of Europe's most innovative utilities. These figures also consider all of the activities of our subsidiary innogy SE. Last year, we worked on about 360 research and development (R & D) projects. In many of these projects, we co-operate with companies or research institutes and usually only have to bear a portion of the costs. The RWE Group's operating R & D spending including innogy amounted to €116 million in 2018 (previous year: €182 million). A total of about 600 of the Group's employees were solely or partially dedicated to R & D activities.

RWE AG: solutions for more economic opencast mining, lower emissions and new ways of using carbon dioxide. RWE AG is responsible for the R & D activities of the areas of the Group under its management. Its measures are therefore primarily dedicated to conventional electricity generation. They aim to make the operation of our opencast mines and power stations more profitable and reduce emissions. Another major area of research is converting lignite and carbon dioxide for use as starting materials for the chemical industry. Furthermore, we work with start-ups, the ideas of which have the potential to help us make further progress. Since 2016, R & D activities in the fields of renewable energy, grids and retail have been the responsibility of innogy SE.

In this chapter, we present a small selection of RWE AG's important R & D projects, followed by an overview of our co-operation with new companies as well as a brief insight into the innovative work done by innogy. We end with an example of how valuable our employees' ideas are to us.

The transformation of mining: increasingly automated and digital. Opencast lignite mining is a complex, multi-stage process, involving the use of numerous heavy-duty machines: huge bucketwheel excavators dig out the coal and the topsoil (known as the overburden) from the terraced opencast mines and deposit it on conveyor belts, on which it is often transported for several kilometres. The coal is then temporarily stored in a bunker before being transported by rail or conveyor belts to the surrounding power stations and refining plants. At the same time, the overburden is transported to the other side of the opencast mine where mining has already been completed. Here, stackers use it to fill the depression resulting from coal extraction. Automation and digitisation enable the processes described above to be rendered much simpler and more efficient. We began automating heavy machinery components as early as the 1990s, and we have made substantial headway in this area since then. We are also making good progress in terms of digitisation. For instance, we are currently working on a digital, three-dimensional representation of opencast mine operations. As is the case for automobile navigation devices, a satellite is used to determine the current position of our heavy machinery, while sensors monitor the material flow on the conveyor belts. This transparency offers multiple benefits: control centre personnel receive precise information as to the location of the on-site machinery and the progress of the work performed using it, thereby creating a reliable basis for resource planning. Excavator operators can monitor the exact job data via a display, enabling them to control their machine as efficiently as possible. Furthermore, workers around the stacker operators are able to preplan their daily activities, based on the information on the overburden that is already on its way over via the conveyor belt. Above and beyond this, the 3D visualisation of the working environment makes it easier for them to adhere to the specified heights for backfilling and modelling the surfaces for recultivation. By taking the measures described above, we are lifting our opencast mines to a new technological level, establishing major prerequisites for being able to operate them profitably in the future as well.

New opportunities for CO_2 use: carbon dioxide is turned into methanol. For some time now, we have been working on various processes to enable us to separate carbon dioxide from power plant flue gases (CO_2 washing). At the Coal Innovation Centre in Niederaussem, we have developed one of the world's leading technologies in this field together with BASF and Linde. This technology has been tested in a pilot plant and has proven its efficiency over more than 70,000 operating hours since 2009 with carbon capture rates of 90 %. Now we are taking the next step: we use the carbon dioxide from the pilot plant to produce fuel and feedstock for the chemical industry, which can be used to replace fossil fuels such as crude oil and natural gas. We are doing this within the scope of four projects that are subsidised by the EU. One of them is MefCO_2 (Methanol from CO_2). Its purpose is to show how carbon dioxide, water and electricity can be used to make methanol, which is traditionally produced with natural gas or coal, on a large technical scale. A wide variety of chemical products are based on methanol, one of the most commonly produced chemicals in the world, which is also suitable as a long-term storage medium for renewable energy. Therefore, the benefits of conversion extend far beyond simply reducing industrial CO_2 emissions. Nine partners from seven European countries are involved in MefCO_2, amongst them industrial companies, universities and research institutes. The project was launched in 2014, and we joined it in 2017 during the project partners' search for a site for a demonstration plant that could be used to convert carbon dioxide into methanol. Today, the plant is located at Niederaussem. It went into operation in early 2019 and has a production capacity of about 1 metric ton of methanol per day, making it one of the largest CO_2 utilisation plants in Europe.

The path to carbon-neutral economic cycles: an opportunity for the coal mining regions. Many experts believe that human intervention in the climate can only be limited effectively if the global social and economic system successfully makes the shift to largely closed carbon cycles. Ideally, only as much carbon enters the atmosphere as is bound by other processes at the same time. However, this is not without its own challenges. The crux of the matter is that we will ultimately continue to rely on electricity in the future and we will also want to live in warm homes. In addition, industry remains reliant on carbon-based raw materials. The transition to the circular carbon economy is a herculean task, which cannot be accomplished without investment. RWE has been co-operating with the Fraunhofer Institute for Environmental, Safety and Energy Technology (Fraunhofer UMSICHT) in Oberhausen and Bochum Ruhr University since September 2018 to develop the technical and systemic framework necessary for a circular carbon economy. Our goal is to establish a centre of competence for carbon conversion which brings together the know-how, equipment and components as well as research work. We are focusing on regions in which the phase-out of carbon-intensive technologies will result in the demise of established industrial structures. The centre, which will be called ITZ CC (Innovation and Technology Centre for Carbon Conversion), will initiate structural change in the Rhenish lignite mining region and the Ruhr area by way of technologies and know-how relating to the use of carbon. The objective is to build a bridge from conventional to innovative carbon usage and make a contribution to new industries replacing old ones.

A key method in transitioning to the circular carbon economy is the gasification of carbonaceous material. We intend to dedicate ourselves intensively to this process at the Niederaussem Innovation Centre. We are doing this as part of an initiative of the Fraunhofer Institute named Carbon Chains (IK2). The project is based on the fact that coal and other carbonaceous materials can be used to produce raw materials for the chemical industry and for fuels through gasification. What is special about this method is that, during the combustion process, rather than carbon dioxide and water vapour, carbon monoxide and hydrogen are produced. The latter are building blocks of a synthesis gas that is already being used in the production of fuels, plastics and fine chemicals. From 2020 onwards, pilot plants are due to be built in Niederaussem to develop suitable gasification, processing and synthesis technologies. We use lignite, which is increasingly losing importance as a fuel for generating electricity, as a base raw material. Its use in the production of basic materials will open up exciting long-term prospects to the Rhenish coal mining region. In addition, waste products, residual materials and biomass can also be converted through gasification. In this way, previously unused carbon sources could be integrated in order to supply industry with raw materials.

Lower mercury emissions thanks to rotary hearth furnace coke. We want to operate our power plants in as an environmentally-friendly manner as possible and legislation gives us strict guidelines in this regard, e. g. in relation to mercury emissions. In 2021, they will be subjected to new EU limits making the framework conditions for the operation of our lignite-fired power plants stricter than ever. We are already able to successfully separate and extract most of the mercury contained within flue gases so, as a result, our plants are already well below the current upper limits. Independently of this, we have been investing in intensive research for some years now, in order to identify ways which allow us to further reduce mercury emissions cost effectively. We have been giving much consideration to a process which makes use of furnace coke from lignite. We are already using this substance to extract mercury at our refining plants and then use it to manufacture lignite briquettes or lignite dust for the cement and lime industries. Tests in a pilot plant at the Coal Innovation Centre at the Niederaussem power station show that lignite-based furnace coke can also help reduce emissions from power plants. We mixed finely ground furnace coke with water and sprayed the resulting mixture into one of the power station's smoke stacks (wet spraying). This results in the mercury attaching itself to the fine furnace coke particles; both materials are extracted by the electrostatic precipitator and disposed of. The tests indicate a significant reduction in mercury emissions. The findings gained have since influenced the construction of a large-scale demonstration plant, also located in Niederaussem, which took up operation at the beginning of 2019. This is where wet spraying will be compared to the alternative method of dry spraying in a long-term test. We intend to implement the more suitable of the two technologies in other lignite-fired power stations.

Detailed information on these projects and other RWE R&D ventures can be found at www.rwe.com/innovation.

Promoting new companies and their ideas. In addition to working on our own research projects, we also support fledgling, innovative companies. RWE has been involved in the third High-Tech Gründerfonds (HTGF III) since 2017. HTGF is Germany's largest start-up financer. It acquires stakes in firms that make commercial use of technological progress and has invested in over 500 companies since 2005, being part of numerous success stories. HTGF is a public-private partnership: its group of investors includes the Federal Ministry of Economics and Energy, the KfW Group, Fraunhofer Gesellschaft and numerous companies. RWE has been investing in venture capital funds since 2006. This allows us to more easily identify start-ups with ideas that could be interesting for our business. To deepen our ties to the founder scene and pave the way for potential co-operations, we held our first Start-up Day in 2018. A large number of the attendees were attracted through our involvement in HTGF. The valuable talks and contacts resulting from the event have encouraged us to hold at least one further Start-up Day in 2019.

Innovation at innogy: contributing to the success of the energy transition. Our subsidiary innogy is pursuing a broad range of innovation projects designed to contribute to making the energy transition a success. They are described in more detail at www.innogy.com/innovation. An example of a project that turned out especially well is the development of the Smart Wind Farm Output Controller (SWOC), a remote control for onshore wind farms. SWOC is a cube, no larger than a hat box, with integrated software. It enables any wind turbine variant to be controlled from several locations. Thanks to SWOC, the operators of the grids which receive the electricity can ramp down production, thereby protecting powerlines from overload. Direct marketers of wind energy can also ramp down output, for example if there is an oversupply of power on the market resulting in negative electricity prices. The control box makes wind turbine operation more flexible and efficient. innogy has already started using these devices for its German and Dutch wind farms and intends to upgrade solar farms with the intelligent switch cubes.

We leverage the experience and know-how of our employees. Another source of useful ideas can be found within our daily operations. Many of our employees pass on their observations from their day-to-day activities, thereby enabling the company to progress. Last year, employees of the Group submitted approximately 2,000 suggestions for ways in which to improve the business to their idea managers. We estimate the economic benefit of their suggestions for the first year of implementation to be €2.6 million. The suggestions can make operating procedures both more efficient and environmentally friendly, while being less dangerous than before. For example, workers in the Rhenish lignite mining region observed that the process of refuelling vehicles and machines was much too cumbersome: the tank lorry drivers would climb atop the tank, hose in hand, in order to refuel the vehicles and machines through their top-mounted filler necks using a conventional pump nozzle. Besides being hazardous, this resulted in small residual amounts of fuel escaping and seeping into the ground. The employees therefore suggested retrofitting the vehicles and machines for pressure fuelling. There are several advantages to this solution: the filler necks can be mounted where they are more convenient to reach, the fixed connection between the hose and the tank prevents fuel from overflowing, and fuelling times are reduced considerably. These benefits were so compelling that the ball soon got rolling. At the beginning of 2019, where technically possible and sensible, all track vehicles in the Rhenish opencast mine and even some emergency back-up generators for heavy-duty equipment were converted to pressure refuelling.

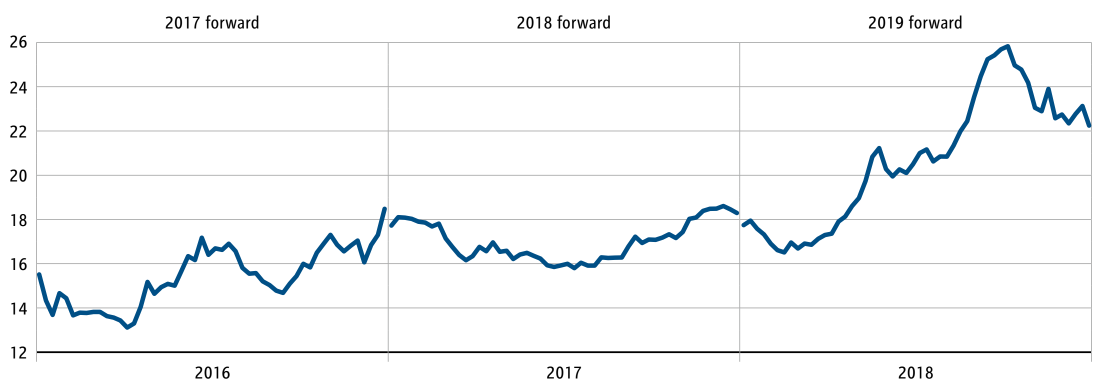
1.3 ECONOMIC ENVIRONMENT

The global economic upswing continued in 2018, but lost some steam over the course of the year. The economic trend stimulated demand for commodities and contributed to the increase in the price of gas and coal compared to the previous year. Furthermore, a reform of the European Emissions Trading System caused a rapid increase in CO_2 certificate prices. These developments were responsible for the recovery of wholesale electricity prices in 2018, which began at the beginning of 2016. However, this has not had a significant affect on RWE's earnings so far, because we had sold forward most of our electricity generation for 2018 in earlier years when prices were still far below the current level.

Eurozone posts 2 % economic growth. The global economy continued its upward trend in 2018, but lost some momentum during the year. One reason was the trade conflict between the USA and other nations, in particular China. Based on initial estimates, global economic output was a respectable 3 % higher in 2018 than in the previous year. The Eurozone may well have recorded approximately 2 % growth. Germany, the currency area's largest economy, appears to have recorded a gain of just 1.5 %, whereas the Netherlands occupied one of the top spots among the euro countries, posting an expansion of about 2.5 %. In the United Kingdom, our most important market outside the currency union, gross domestic product rose by nearly 1.5 %. Brexit and the associated risks slowed the UK economy.

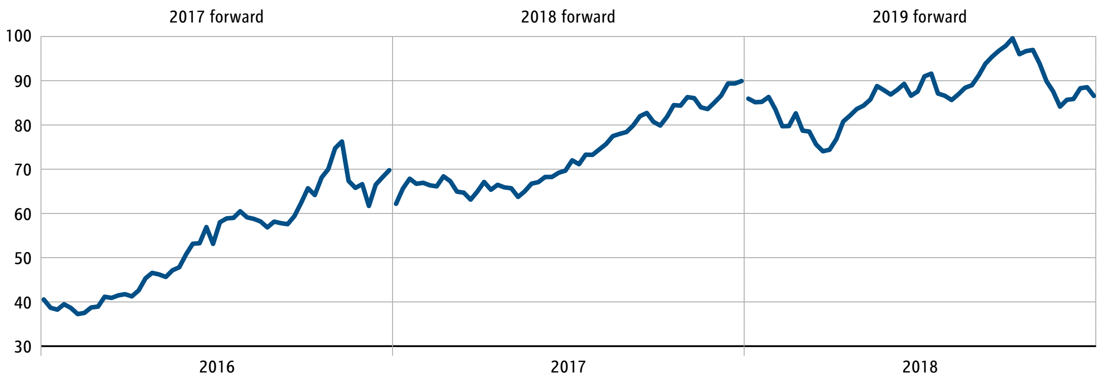
German electricity consumption flat. Economic growth stimulated demand for electricity, whereas the trend towards energy savings had an opposing effect. According to proforma calculations by the German Association of Energy and Water Industries (BDEW), German electricity usage was roughly on a par year on year. Data available for the UK indicates that the country did not experience a significant change compared to 2017, either. Conversely, power consumption is estimated to have risen by 2 % in the Netherlands, with the country's above-average growth probably playing a role.

One-year forward prices of gas on the TTF wholesale market
€/MWh (average weekly figures)



Source: Bloomberg.

One-year forward prices of coal deliveries to Amsterdam/Rotterdam/Antwerp
US$/metric ton (average weekly figures)

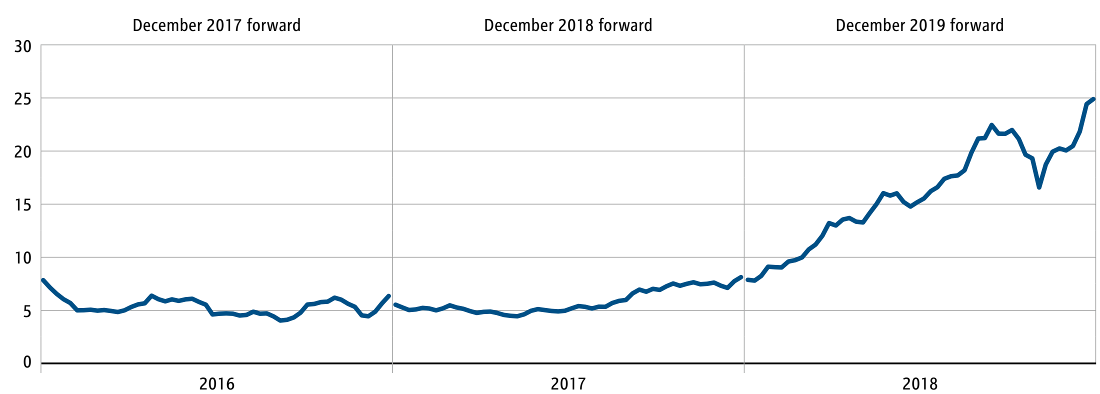


Source: RWE Supply & Trading.

Hard coal and gas quotations up year on year. In addition to demand for electricity, the development of fuel costs also determines power plant deployment. In the financial year that just came to a close, the freely tradeable energy sources of most importance to us, i. e. gas and hard coal, were much more expensive than a year before: gas spot prices at the Dutch Title Transfer Facility (TTF) averaged €23 per MWh, up €6 compared to 2017. In TTF forward trading, contracts for delivery in the following calendar year (2019 forward) were settled for €21 per MWh. By comparison, in 2017 the price paid for the 2018 forward was €17. Gas prices were influenced in part by oil quotations, which were higher than in 2017 overall. Furthermore, the positive economic cycle came to bear.

Hard coal trading developed as follows: including freight and insurance, hard coal imports via the ARA ports (Amsterdam/Rotterdam/Antwerp) were settled at an average of US$92 (€78) per metric ton in spot trading in 2018, an increase of US$8 compared to 2017. The 2019 forward (API 2 Index) traded at US$87 (€74) per metric ton, US$13 higher than the comparable figure for the previous year. This was in part due to the dynamic economy in the Asia-Pacific region and its stimulating effect on demand for coal.

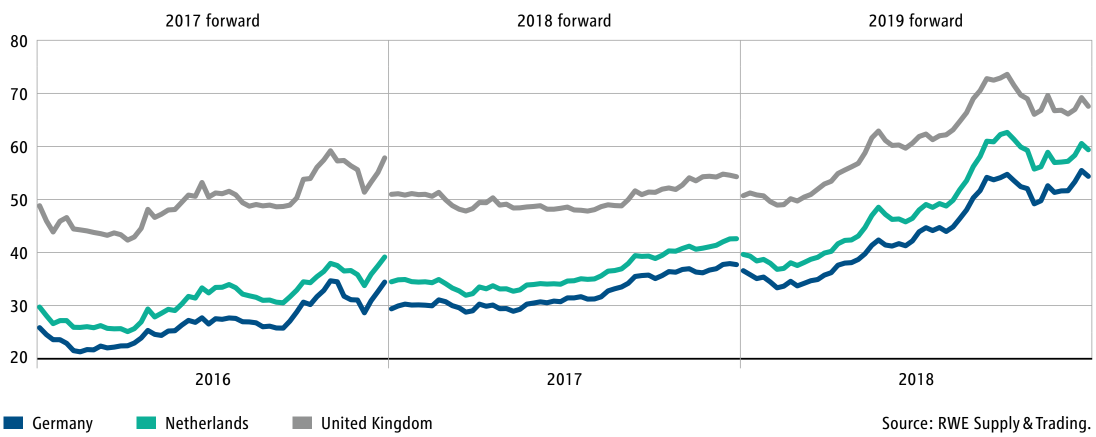
Forward prices of CO_2 emission allowances (EU Allowances)
€/metric ton of CO_2 (average weekly figures)



Source: RWE Supply & Trading.

Reform of European Emissions Trading System causes rapid increase in CO_2 certificate prices. An important cost factor of fossil fuel-fired power stations is the procurement of CO_2 emission allowances. The price of an EU Allowance (EUA), which confers the right to emit one metric ton of carbon dioxide, tripled to €25 over the course of the year. The average for 2018 was €16, which was €10 more than in 2017. These figures relate to contracts for delivery in December of the following year. There continue to be many more emission allowances on the market than companies need to cover their carbon dioxide emissions. However, in the meantime the EU has adopted a package of measures enabling it to significantly reduce the surplus of certificates from 2019 onwards (see page 32). This has apparently given many market participants a reason to expect a reduction in available emission allowances, which has made them more expensive and resulted in early purchases. Consequently, EUAs have risen in price even before the package of reforms was implemented.

One-year forward prices of base-load electricity on the wholesale market
€/MWh (average weekly figures)

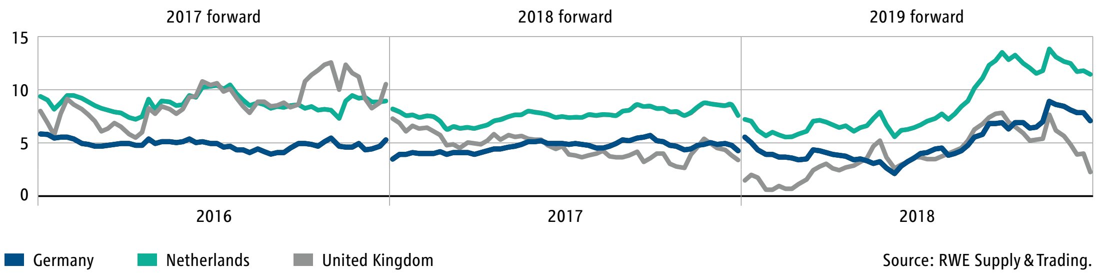


Source: RWE Supply & Trading.

Wholesale electricity prices continue upward trend. The rise in fuel and emission allowance prices was reflected in the development of wholesale electricity prices, which continued to trend upwards. Last year, base-load power traded for an average of €44 per MWh on the German spot market, up €10 on the figure recorded in 2017. Significant price increases were also observed on RWE's two other major generation markets: quotations on the UK spot market advanced by £12 to £57 (€65) per MWh and by €14 to €53 per MWh in the Netherlands.

Forward markets displayed the following development: last year, the average quotation of the 2019 base-load forward in Germany was €44 per MWh, €12 more than what was paid for the 2018 forward in 2017. The price of base-load power in year-ahead forward contracts rose by £10 to £54 (€61) per MWh in the United Kingdom and by €13 to €49 per MWh in the Netherlands.

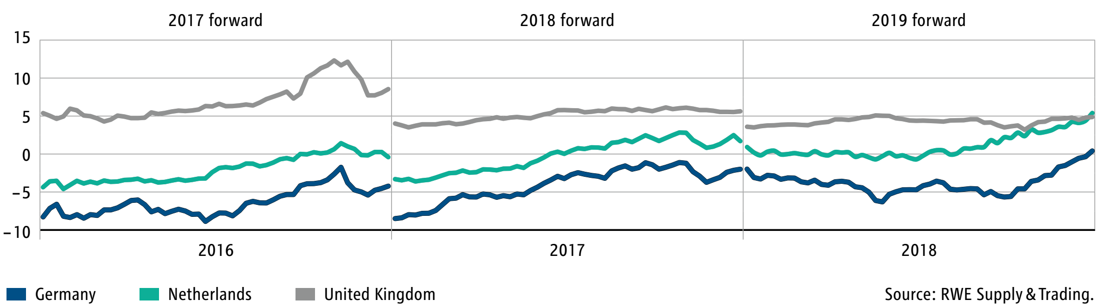
Clean dark spreads[1] forward trading
€/MWh (average weekly figures)



Source: RWE Supply & Trading.

1 Price of base-load electricity minus the cost of hard coal and CO_2 emission allowances based on a power plant efficiency of 40 %; including CO_2 tax in the UK.

Clean spark spreads[1] forward trading
€/MWh (average weekly figures)



Source: RWE Supply & Trading.

1 Price of base-load electricity minus the cost of gas and CO_2 emission allowances based on a power plant efficiency of 50 %; including CO_2 tax in the UK.

Rise in German generation margins. Power plant margins are the difference between the price of electricity and the costs (including taxes) of the fuel and CO_2 emission allowances required to produce it. We generally source the fuel for our hard coal and gas-fired power plants from liquid markets at prevailing conditions. Therefore, the generation costs of these stations can change significantly. The margins are referred to as clean dark spreads for hard coal-fired power plants and clean spark spreads for gas-fired power plants.

The two above graphs illustrate the development of the aforementioned spreads in our main generation markets since 2016, based on the respective year-forward transactions. In Germany and the Netherlands, clean dark spreads and clean spark spreads grew somewhat after a moderate first six months. For the full year, they therefore slightly exceeded the 2017 level. By contrast, in the UK, clean spark spreads and clean dark spreads were slightly and significantly lower than their respective averages in the previous year.

Fuel costs for lignite-fired and nuclear power stations are generally more stable as we source uranium via long-term contracts at firm conditions and produce lignite from our own opencast mines. The rise in wholesale power prices caused realisable nuclear energy margins to increase substantially. By contrast, the margins of lignite-fired power stations only improved slightly as the price of both electricity and CO_2 emission allowances rose.

Decline in income from RWE power stations. We sell forward most of the output of our power stations and secure the prices of the required fuel and emission allowances in order to reduce short-term volume and price risks. Therefore, the income we earned from our power plants in the year under review was determined by the conditions at which we concluded forward contracts for 2018 years in advance. We conducted such sales relatively early on for our lignite and nuclear power plants, which mostly cover the need for base-load electricity, realising lower prices than in the contracts for 2017. Given that generation costs were virtually stable, the margins of these stations dropped accordingly. We typically conduct forward sales of electricity produced by hard coal and gas-fired power plants with a smaller lead time. As a result, we benefited more from the recovery of prices in wholesale electricity trading. However, we had to pay much more for fuel. Therefore, overall the margins realised in forward contracts also deteriorated for these stations.

Wind speeds below average in Central Europe and the United Kingdom. The utilisation and profitability of renewable generation assets greatly depend on weather conditions. Wind speeds are particularly important to innogy. At the company's generation sites in Central Europe and the United Kingdom they were much lower than the average of the last 30 years. By contrast, they matched the long-term average in Italy and Spain. Wind speeds recorded at all innogy sites were lower than in 2017. The utilisation of run-of-river power stations strongly depends on precipitation and melt water volumes. In Germany, our main hydroelectric power region, these volumes were below the long-term average and the level observed in 2017.

1.4 POLITICAL ENVIRONMENT

Climate protection remains at the top of the energy policy agenda. The European Union has fundamentally reformed the European Emissions Trading System and set itself an ambitious goal regarding the expansion of renewable energy through to 2030. In addition, Germany and the Netherlands are setting the course for an early coal phase-out. The government in The Hague presented a first bill in this respect in May 2018. Berlin is set to follow suit soon, orientating itself towards the proposals of a state commission, which at the beginning of 2019 recommended a German exit from coal by 2038. It further envisages the number of coal-fired power plants on the market being reduced significantly by 2022. It is foreseeable that the proposals will have serious ramifications for RWE's lignite business.

Reform of European Emissions Trading System decided. In February and March 2018, the European Parliament and the Council of Ministers decided to fundamentally reform the European Emissions Trading System (ETS). This was preceded by trilateral talks held by representatives of the two bodies and the European Commission. The objective of the reform, which entered into force in April 2018, is to strengthen the ETS and bring it in line with the European greenhouse gas reduction goal for 2030. By then, branches of industry participating in the ETS must reduce their emissions by a total of 43 % compared to 2005. Therefore, the number of CO_2 certificates issued will be lowered by 2.2 % annually during the fourth trading period, which runs from 2021 to 2030. Until then, the reduction rate will be 1.74 %. Another objective of the amendment to the ETS is to reduce the existing glut of allowances on the market. This will be done by transferring a much larger volume of allowances into the 'market stability reserve' (MSR) compared to what was prescribed by former legislation. The MSR, which has been used since the beginning of the year, is a tool capable of providing more flexibility in bringing the supply of certificates in line with demand. The new regulation envisages reducing the number of certificates placed on the market via auctions accounting for 24 % of the surplus annually from 2019 to 2023 and transferring them to the MSR. It also envisages cancelling MSR emission allowances exceeding the auctioned volume in the preceding year from 2023 onwards. In addition, it will allow member states to cancel certificates in exchange for emission reductions resulting from national measures leading to power plant closures.

EU Winter Package: new energy efficiency and renewables expansion goals. At the end of 2018, the European Parliament and the Council of Ministers adopted new versions of the directives concerning renewable energy and energy efficiency as well as a regulation for monitoring progress in climate and energy policy. The legal acts entered into force on 24 December after they were published in the Official Journal of the European Union. They are part of a legislative package entitled 'Clean Energy for all Europeans' (also referred to as the 'Winter Package'), which has largely been adopted. In the package, the EU has set itself an ambitious goal in relation to the expansion of renewable energy, which is envisaged to cover at least 32 % of energy demand by 2030. The EU currently aims to achieve a share of 20 % by 2020. The target in respect of energy efficiency is also ambitious: the EU intends to reduce its primary energy consumption by 32.5 % by 2030, relative to the development under normal circumstances. Furthermore, the member states are obliged to present national energy and climate plans for the period running until 2030 and to develop long-term climate-protection strategies by the end of 2019. Germany has already fulfilled these requirements.

EU limits participation of coal-fired power plants in capacity mechanisms. The EU also achieved a breakthrough by amending the Electricity Market Directive and the Electricity Market Regulation, which are also part of the Winter Package. The European Parliament and the Council of Ministers agreed on a joint position in December. Both of these bodies intend to introduce provisions to the EMR which national governments must comply with if they are introducing capacity mechanisms or have already done so. Participation of power plants emitting more than 550 g CO_2/kWh in such mechanisms will be very limited in the future. The prerequisite for this is that they do not emit more than 350 kg CO_2 per kilowatt of installed capacity per year. A modern lignite-fired power plant achieves this threshold after a maximum of 375 hours under full load, whereas a modern hard coal-fired power station hits this mark after no more than 470 hours. In concrete terms, this means that coal-fired power plants cannot participate in a general capacity market under full load, but can be part of back-up schemes envisaging a small number of operating hours. An example of such rules is the existing lignite security stand-by regime, which is conceivable under the new EU regulations in the future. The ceiling of 550 grams will apply to new power plants as of 1 January 2020. Existing assets will be subject to transitional arrangements until the middle of 2025. Capacity agreements already in place and contracts concluded during the current year will be entirely unaffected by the threshold values. This is the concession made by the EU in particular to Poland: the country has already introduced a general capacity market including coal-fired power stations. The amendments to the Electricity Market Directive and the Electricity Market Regulation require formal approval from the European Parliament and the Council of Ministers to enter into force. This is expected to happen in the first half of 2019.

Commission for structural change proposes roadmap for German coal phase-out. An accelerated coal phase-out is materialising in Germany, our most important generation market. In January 2019, following lengthy consultations, the Growth, Structural Change and Employment Commission established by the German government presented a concept for the country achieving its climate protection goals in the energy sector avoiding structural upheaval, social hardship or jeopardising security of supply. The body, which consists of representatives from industry, trade unions, the scientific community, associations, civic initiatives and environmental organisations, recommends that Germany phase out coal by no later than 2038. However, it envisages reviewing the feasibility of this goal in 2032 and possibly bringing the exit date forward to 2035. In addition, the Commission has set milestones for the coal phase-out: it envisages the total capacity of lignite and hard coal-fired power stations on the market being reduced to 15 GW each by the end of 2022 through shutdowns or conversions. Compared to the end of 2017, this corresponds to a decrease of at least 12.5 GW, of which nearly 5 GW and 7.7 GW will be accounted for by lignite and hard coal, respectively. These figures include shutdowns that have already occurred or have been announced as well as lignite-fired units which had not yet been placed on security stand-by at the end of 2017. The objective is to have lignite and hard coal-fired power stations with a total capacity of only 9 GW and 8 GW (excluding back-up capacity) on the market in 2030. Moreover, the Commission recommends removing emission allowances matching the additional CO_2 savings from the national auction budget, as otherwise the certificates no longer needed for the decommissioned power plants would be available to other participants in the European Emissions Trading System, enabling additional emissions from their assets.

The Commission further proposes that the German government conduct reviews in 2023, 2026 and 2029 involving an analysis of the effects of measures taken by then on security of supply, electricity prices, climate protection and structural development in the affected regions and that countermeasures be initiated if necessary. It is also recommended that policymakers implement the phase-out roadmap in agreement with the operators and grant them appropriate compensation. The Commission also deems it desirable that Hambach Forest be preserved. With respect to relocations in the opencast mining regions, the states are being asked to enter into dialogue with the affected residents in order to avoid social and financial hardship. Layoffs and undue social and economic disadvantages for the workers should be prevented, in part by paying them an adjustment allowance.

By and large, the Commission's proposals met with the approval of politicians and stakeholder groups. It was viewed positively that widespread consensus has now been reached, which can serve as a basis for policymakers in order to establish planning certainty for companies, employees and regions. Observers therefore anticipate that the German government will implement the main points of the Commission's concept. This would have serious ramifications for our Rhenish lignite business. RWE has already taken four power plant units offline prematurely under the security stand-by scheme, with a further block to follow at the end of September 2019. Additional shutdowns are therefore all the more difficult and result in burdens going far beyond the lost electricity revenue. For instance, we would have to implement substantial job cuts and introduce redundancy programmes for the affected workers at short notice. If opencast mines are closed early, new recultivation concepts would have to be developed and the mining provisions would have to be increased as they would be used earlier. Additional costs would be incurred if Hambach Forest were preserved, provided that this is at all technically feasible. In addition, substantial investments are needed in order to adapt opencast mines and power plants to a new operating concept. We can only reliably estimate the burdens we will face when the government presents specific plans and initiates talks with us. We welcome the fact that the Commission has recognised the need to pay power plant operators adequate compensation and has also considered the knock-on costs for the opencast mines.

Netherlands plans exit from coal-fired generation. There is also a high probability of an early coal phase-out in the Netherlands. The government adopted a bill to this end in May. It envisages power plants dating back to the 1990s being prohibited from running on hard coal from 2025 onwards. The ban will enter into force five years later for newer stations. This would mean that, in the Netherlands, power would no longer be produced from coal starting in 2030. This objective has also been set out in the coalition agreement signed by the four governing parties under Prime Minister Mark Rutte in October 2017. Following a public consultation in the summer of 2018, the government revised the draft law and submitted an as yet unpublished new version to the Dutch State Council, a constitutional body that advises the government. The parliament is scheduled to decide on the draft in the spring of 2019. Five hard coal-fired power stations are still in operation in the Netherlands, with two belonging to us: Amer 9 and Eemshaven. The former has a net installed capacity of 631 MW and was commissioned in 1993. According to the draft law of May, this power plant would have to stop generation from coal at the end of 2024. The Eemshaven power station is a 1,554 MW twin unit, which we have been operating since 2014. It would be subject to the later exit date, which is the end of 2029. Amer 9 and Eemshaven would have to be shut down or operated only using alternative fuels. Both stations are being retrofitted for co-firing biomass. We are receiving subsidies for this, with which we are financing the investment outlay and the additional cost of sourcing the fuel. A full conversion to biomass would result in substantial additional burdens. In our dialogue with policymakers, we are discussing the options for compensation for the financial disadvantages that we would suffer as a result of the planned coal phase-out and will take legal recourse to this end if necessary.

Dutch government intends to introduce CO_2 emissions price floor. In addition, the government in The Hague wants to flank the European Emissions Trading System with a national carbon tax in the electricity sector. The objective is to prevent the total cost per metric ton of carbon dioxide emitted from falling below a predefined floor even if certificate prices are low. The introduction of the levy is part of a national climate accord, which is likely to be adopted this year. In the convention, the government intends to agree measures with environmental associations, trade unions and energy companies through which the country can achieve its ambitious emission-reduction goals. Initial plans envisaged the tax guaranteeing a minimum price of €18 per metric ton of carbon dioxide when it is introduced in 2020 and gradually lifting the floor to €43 by 2030. However, the government was criticised for this. A state-commissioned study reached the conclusion that the reform would only make a small contribution to reducing emissions and could jeopardise security of supply. For the same reasons, the energy sector opposed the levy, referring to the significant rise in prices in European emissions trading in the meantime. Despite this, policymakers did not want to abandon the undertaking entirely. Following talks with the energy companies and environmental associations, a much lower floor was established, along with a more gradual increase than the one planned originally. It starts at €12.30 in 2020 and rises incrementally to €31.90 in 2030. The path is based on estimates regarding the future development of prices in European emissions trading. It is assumed that certificate quotations will rise substantially and exceed the pre-determined CO_2 floor along the entire path.

1.5 MAJOR EVENTS

Fiscal 2018 was an eventful year for us. Through the asset swap agreed with E.ON, we have set the course towards a new RWE, which will rank among Europe's leading producers of electricity from renewable sources. In addition, our subsidiary innogy passed further milestones in the expansion of its wind and solar power capacity. The past year was less pleasing for our lignite business: the Münster Higher Administrative Court ordered a temporary halt to the clearance of Hambach Forest, which will curtail our opencast mining activities and reduce our electricity generation. In this chapter, we present the major events that occurred in 2018 and the beginning of 2019. We focus on events that have not been commented on in detail elsewhere in this report.

Events in the fiscal year

Extensive asset swap agreed: E.ON will acquire innogy – RWE will become Europe's No. 3 in renewables. RWE and E.ON have jointly set the course for a fundamental redistribution of their business activities. RWE will become Europe's No. 3 in renewable energy while E.ON will enlarge its grid and retail operations. The two companies envisage that this will be achieved through a substantial asset swap, which was contractually agreed on 12 March 2018. According to the deal, E.ON will acquire RWE's 76.8 % stake in innogy SE. In return, RWE will receive the following assets: (1) a 16.67 % stake in E.ON which will be created by way of a capital increase from authorised capital in exchange for a contribution in kind; (2) nearly all of E.ON's and innogy's renewable energy activities; (3) the minority interests held by the E.ON subsidiary PreussenElektra in the RWE-operated nuclear power stations Gundremmingen and Emsland of 25 % and 12.5 %, respectively; (4) innogy's gas storage business and (5) the 37.9 % stake in the Austrian energy utility Kelag held by innogy. The deal also involves RWE paying €1.5 billion to E.ON. It is envisaged that the transfers take retrospective economic effect from 1 January 2018. The transaction was based on a valuation of our 76.8 % stake in innogy of €40 per share when the contract was concluded. This corresponds to a premium of 28 % on the closing quotation of the innogy share on 22 February (€31.29), the last figure that was largely unaffected by takeover speculation. The €40 per share includes the dividends of innogy SE for fiscal 2017 and 2018, to which RWE will continue to be entitled.

Through the transaction, RWE will become an all-rounder in electricity production, making a major contribution to security of supply with its flexible power stations while spurring the transition of the energy sector towards climate-friendly electricity production. We will not only broaden our operating base, but also establish a more robust financial position. The renewables business is characterised by a large portion of stable regulated income. After the transaction closes, it should contribute more than half of the RWE Group's adjusted EBITDA. Our leverage factor, which represents the ratio of net debt to adjusted EBITDA, will then probably be below 3.0. More detailed information on the effects of the transaction on our business model can be found on page 18 et seq.

We are confident of being able to complete the asset swap by the end of 2019. It will be carried out in several steps, some of which have already been taken:

- On 27 April 2018, E.ON made a voluntary public offer to innogy's minority shareholders for the acquisition of their shares. At €40 per share minus the innogy dividends for the 2017 and 2018 fiscal years, the offer price was in line with the conditions underlying the transaction between E.ON and us. When the acceptance deadline expired on 25 July 2018, 9.4 % of the shares in innogy were tendered to E.ON.

- On 18 July, RWE and innogy as well as E.ON and innogy reached agreements to co-operate in implementing the transaction. innogy's management has committed to supporting the implementation of the asset swap – also vis-à-vis the capital market. It is envisaged that the integration will be a transparent process in which all employees are treated as equally as possible, irrespective of the company they currently work for. Another objective is that the integration plays to the strengths of each company. The agreement paves the way to the early joint planning of the integration measures and an expedited completion of the transaction.

- On 22 January 2019, we registered the acquisition of the business activities and shareholdings to which we are entitled with the European Commission and received clearance from Brussels on 26 February. This was preceded by an advance review lasting several months through which the Commission gained an accurate picture of the effects of the transaction on competition. E.ON registered the acquisition of innogy with the Commission on 31 January 2019. Furthermore, national antitrust approvals must be obtained. One relates to the acquisition of the financial investment in E.ON. Requests for this clearance were filed with the German Cartel Office on 28 January 2019 and with the UK Competition and Markets Authority (CMA) on 25 February 2019. We received the go-ahead from the German Cartel Office on 26 February 2019, the day on which we also received approval from the Commission.

It is envisaged that the transaction be completed in two steps as soon as all of the necessary approvals have been obtained from the relevant competition and regulatory authorities. First, E.ON will receive our 76.8 % shareholding in innogy and the agreed €1.5 billion in cash and we will acquire the 16.67 % stake in E.ON as well as the minority interests in the Gundremmingen and Emsland nuclear power stations. Second, E.ON will transfer to us its own and innogy's renewable energy activities, innogy's gas storage business, and the shareholding in Kelag.

German Court orders temporary halt to clearance of Hambach Forest – RWE anticipates decline in earnings due to curtailment of opencast mining operations. On 5 October, the Münster Higher Administrative Court ruled in summary proceedings that RWE Power may not clear Hambach Forest, which is near Cologne, for the time being. This will lead to a massive curtailment of lignite production from the Hambach opencast mine. We anticipate annual volume shortfalls of 10 million to 15 million metric tons over the medium term (2019 to 2021). This will probably reduce adjusted EBITDA by €100 million to €200 million per year. The clearance of Hambach Forest is part of the mine's main operating plan for 2018 to 2020, which was approved in March 2018 by the relevant district government under an immediate implementation order. Thereupon, the BUND environmental activist group filed a motion to set aside the immediate implementation, which was denied by the Cologne Administrative Court. An appeal lodged by BUND against the Cologne ruling was allowed by the Münster Higher Administrative Court in October, which ordered the temporary halt to the clearance of Hambach Forest, during which the other opencast mining operations could be continued. The reasons given by the Court for its decision were that the matter could not be clarified in expedited proceedings due to the complexity of the legal situation.

Whether and when Hambach Forest can be cleared must now be decided in the principal proceedings, which are pending before the Cologne Administrative Court. The main question is whether the remainder of the forest, which covers about 200 hectares, is subject to the protective provisions applicable to flora and fauna habitats (FFH areas) under European law. According to an expert opinion published by the Kiel Institute for Landscape Ecology at the beginning of 2018, this is not the case. The same conclusion was reached by the Cologne Administrative Court in an earlier lawsuit filed by BUND concerning the general operating plan for 2020 to 2030. The case was dismissed on 24 November 2017. On 5 October 2018, the Münster Higher Administrative Court granted the motion for an appeal by BUND against this decision. As a result, both the Cologne Administrative Court and the Münster Higher Administrative Court are addressing the FFH issue in principal proceedings. It remains to be seen when a final ruling will be handed down, but it is possible that this will not happen before the end of 2020. However, it cannot be ruled out that the matter is placed on the agenda of the federal government beforehand. The preservation of Hambach Forest is deemed desirable in the final report of the Growth, Structural Change and Employment Commission published on 26 January 2019. We provide detailed information on the recommendations of the Commission to the federal government on page 33.

Electricity generated from Hambach lignite corresponds to about 15 % of demand in the state of North Rhine-Westphalia. It is not only the power plants at the Neurath and Niederaussem sites that are connected to the opencast mine, but also refining factories, which supply a large number of small and medium-sized enterprises with lignite products for their electricity and heat generation. There are currently about 4,600 RWE employees working in the Hambach mining area as well as in the downstream power stations and businesses. In addition, personnel in the supply chain are affected.

EU Court shelves UK capacity market. In mid-November, the General Court of the Court of Justice of the European Union declared that the approval of the UK capacity market granted by the European Commission was invalid. The judges found that the Commission should have conducted an extensive investigation before giving the go-ahead for the state aid. The UK capacity market has been suspended since the ruling. This means that no capacity payments may be made under existing agreements and no new capacity auctions may be held until the Commission has reapproved the subsidies. This caused the capacity payments we received in the year under review to be about €50 million lower than expected. The UK Department for Business, Energy and Industrial Strategy (BEIS) declared that it will do everything within its power to regain approval for the capacity market as soon as possible. This may happen during the current year. The European Commission has since initiated an in-depth investigation through which it intends to clarify whether the UK capacity market qualifies for state aid under EU regulations. If the Commission grants the UK's original request for approval again, capacity payments could be resumed. Although we are confident that the UK capacity market can be continued in its current form, we have not budgeted any payments for the year under review. We had been granted a total of approximately €180 million in capacity payments for 2019 in earlier auctions.

Niederaussem E and F units placed on security standby. On 30 September, we took two 300 MW units (E and F) of the Niederaussem lignite-fired power plant offline as planned. These units have been placed on lignite security stand-by and can be brought back onto the grid within ten days to bridge electricity shortages. These security stand-by regulations were enshrined in law in 2016 for environmental reasons. Under the regime, a total of eight lignite units with a combined 2.7 GW must be taken off the market from 2016 to 2019 and placed on standby as the last resort to ensure security of supply for four years each until they are shut down for good. Five of the eight stations, which have a total capacity of 1.5 GW, belong to RWE. In 2017 – also at the end of September – we placed units P and Q of the Frimmersdorf power plant on security standby. Unit C of the Neurath power station will follow suit in 2019.

RWE sells majority stake in Hungarian generator Mátra. RWE and the energy utility EnBW jointly sold their stakes of 51 % and 21.7 % in Hungarian power producer Mátrai Erőmű ZRt. (Mátra for short). The transaction was completed in March 2018. The buyer is a consortium consisting of Czech Republic-based EP Holding and Hungarian investor Lőrinc Mészáros. Mátra specialises in producing lignite and generating electricity from this fuel. At the end of 2017, the company had slightly more than 2,000 people on its payroll and a net generation capacity of about 840 MW. Mátra is no longer of strategic importance to us, because we want to focus our conventional electricity generation business on our core markets Germany, the United Kingdom and the Benelux region.

Dutch Claus C gas-fired power station to go back online. Claus C, our mothballed Dutch gas-fired power plant in Maasbracht, will return to operation. This was decided by the Executive Board of RWE Generation in October. The station has a net installed capacity of 1,304 MW and, at 58 %, meets the highest efficiency standards. It was commissioned in 2012 but taken offline two years later due to its lack of profitability. The reasons for it coming back online are improved market conditions and rising demand for flexible generation capacity. Commercial opportunities could also arise as Belgium intends to phase out nuclear energy and would therefore need additional generation capacity. Claus C could be connected directly to the Belgian grid thanks to its proximity to the border. However, the power station will probably not be fully operational again until the autumn of 2020, because extensive maintenance work has to be carried out first.

Unlike Claus C, the neighbouring gas-fired power plant Claus A will not go back online. The station, which has a net installed capacity of 610 MW, was taken off the grid in March 2012 and shut down for good in 2018. It would not have been worthwhile to reactivate it given its technical condition. In addition, we temporarily took the Moerdijk 1 gas-fired power station offline as of 1 February 2018, a decision that was made for economic reasons in 2016. Moerdijk 1 is located south of Rotterdam in the Dutch province of North Brabant and has a net installed capacity of 348 MW.

UK's Galloper offshore wind farm completed. Our subsidiary innogy expanded its electricity generation capacity from renewables with the completion of Galloper, a large-scale wind farm in the UK North Sea. It consists of 56 turbines with a total capacity of 353 MW. innogy owns 25 % of the wind farm, operates it and was mainly responsible for its development and construction. Galloper has been fully online since March 2018 and has the capability to supply about 380,000 UK households. The total investment in Galloper amounted to £1.5 billion.

RWE subsidiary innogy partners up for Triton Knoll offshore wind project. In line with its strategy of carrying out large-scale wind projects with partners, innogy sold stakes of 25 % and 16 % in the Triton Knoll offshore project to the Japanese energy groups J-Power and Kansai Electric Power. innogy retains the majority of Triton Knoll (59 %). The transaction was contractually agreed in August and closed in September. Triton Knoll is a wind farm with a capacity of approximately 860 MW which is due to be built in the North Sea off the English coast. innogy and its new partners will invest a total of around £2 billion to this end. A large portion of this sum (£1.75 billion) will be provided by an international consortium of banks. innogy developed Triton Knoll and will also be responsible for the construction, operation and maintenance of the wind farm. Once project financing had been secured, work began in September on the onshore grid connection. If the project progresses as planned, the 90 wind turbines could be commissioned successively from 2021 onwards. The state has guaranteed a payment of £74.75 per MWh for the electricity fed into the grid. The subsidy period is 15 years.

Acquisition of a major wind project pipeline in the USA. innogy also aims to grow its renewable energy business outside of Europe. Our subsidiary took a major step in accomplishing this in 2018. In July, it purchased a portfolio of wind power projects in the USA. The envisaged turbines have a total capacity of over 2 GW. The seller is the UK investment company Terra Firma Capital Partners. The acquired portfolio encompasses more than 20 projects across eight states that have progressed to various degrees. innogy has already taken the final investment decision on one of the projects: in November 2018, our subsidiary gave the go-ahead for the construction of the Scioto Ridge wind farm in the US state of Ohio, which is scheduled to take its full capacity of 242 MW online by the end of 2020. It will be able to supply about 60,000 Ohio homes with green electricity.

Subsidies for wind farm in German North Sea secured. In the spring of 2018, innogy set the stage for a further attractive offshore wind project. The company secured state subsidies for the Kaskasi wind farm under the German Renewable Energy Act at an auction. The decision on the construction of Kaskasi is scheduled to be taken in 2020. It is expected to have a generation capacity of 325 MW and could begin operating in 2022. Its location in the vicinity of Heligoland has good wind conditions and moderate water depths. Another advantage is its proximity to innogy's existing wind farm Nordsee Ost.

innogy to build Australia's largest solar farm. In September, innogy decided to invest in the Limondale ground-mounted solar array in the state of New South Wales in Australia. The solar farm should have a total net installed capacity of 349 MW when it is commissioned in the middle of 2020. This would currently make it the largest solar farm in Australia. Belectric, the company acquired by innogy in early 2017, is responsible for construction and will also handle Limondale's operation and maintenance.

Solar developer Birdseye grants innogy exclusive rights to projects in the USA. In June 2018, innogy agreed to join forces with US-based Birdseye Renewable Energy to develop solar projects. The partnership encompasses 13 projects with a total capacity of about 440 MW, which have been initiated by Birdseye and are in various stages of development. As a result of the agreement, innogy has secured the right of first refusal to acquire projects from the pipeline as soon as they have reached construction maturity. Moreover, innogy and Birdseye want to explore further opportunities to work together.

Events after the close of the fiscal year

Commission publishes recommendations concerning German coal phase-out. In January 2019, the Growth, Structural Change and Employment Commission set up by the German government submitted its final report. Consisting of representatives of industry, trade unions, associations, the scientific community, civic initiatives and environmental organisations, the report advocates an exit from German electricity generation from coal by 2038. It envisages the capacity of the lignite and hard coal-fired power stations on the market being reduced to a total of 15 GW each through shutdowns or conversions by as early as the end of 2022. The Commission further envisages that by 2030, lignite and hard coal power plants on the market will have a combined capacity of 9 GW and 8 GW, respectively. The federal government now intends to present a package of laws on the basis of the recommendations and conduct talks with the affected companies. We provide detailed information on the Commission's recommendations and the consequences they may have for RWE on page 33.

STEAG acquires majority stake in Bergkamen hard coal-fired power plant from RWE. As of 1 January 2019, we sold our 51 % shareholding in the Bergkamen hard coal-fired power station to the Essen-based energy utility STEAG. The buyer previously owned 49 % of the plant and exercised a contractual purchase option. The parties agreed to keep the price confidential. The power station has been in operation since 1981 and has a generation capacity of 720 MW. RWE was in charge of commercial management, while STEAG was responsible for technical plant management. The disposal of the stake put an end to a contract that obliged us to purchase electricity produced by the station.

RWE sells Belgian CHP station. A further divestment was completed when we sold the Inesco CHP station in Belgium to the UK chemicals group INEOS at the end of February 2019. The plant is eleven years old and located in a chemical park operated by INEOS near Antwerp. It is gas-fired, has a net electric capacity of 133 MW and supplies the companies situated in the chemical park with steam and demineralised water in addition to electricity. One of the reasons for our decision to sell the station was its tight integration in the business activities of INEOS.

German government takes over interim storage for radioactive waste from RWE. As of 1 January 2019, we transferred the interim storage facilities for highly radioactive waste on the sites of our Emsland, Biblis and Gundremmingen nuclear power plants to BGZ, the state-owned company responsible for interim storage. The legal basis for this is the law on the reassignment of responsibility for nuclear waste disposal which was passed at the end of 2016, pursuant to which the government assumed responsibility for processing and financing interim and final nuclear waste storage. German power plant operators gave the government €24.1 billion for this. In the middle of 2017, these funds were paid into a public-law fund for financing nuclear waste disposal. Responsibility for shutting down and safely dismantling the stations remains with the companies. They are also responsible for packaging the radioactive waste properly before it is handed over to BGZ. A total of eleven decentralised interim storage facilities were transferred from the nuclear power plant operators to BGZ as of 1 January 2019. The interim storage facilities for low and medium-radioactive waste are to follow at the beginning of 2020, including two at RWE's Biblis site.

RWE cancels £750 million hybrid bond. At the beginning of February 2019, we announced that we will cancel our £750 million hybrid bond as of 20 March 2019 without replacing it with fresh hybrid capital. The bond had been issued seven years earlier. It has a 7 % coupon and a theoretically perpetual tenor. We are exercising our right to cancel it at the earliest possible date. In doing so, we are taking account of RWE's solid financial position and the significantly improved earnings prospects resulting from the planned asset swap with E.ON.

RWE acquires Czech grid investment from innogy for resale to E.ON. At the end of February 2019, RWE purchased the majority stake in the Czech gas network operator innogy Grid Holding (IGH) held by innogy SE. We had committed to this as part of the exchange of business activities and equity interests agreed with E.ON. We had also undertaken to sell on the stake in IGH to E.ON. We are financing the temporary acquisition using cash and a bank credit line secured for this purpose. innogy held a 50.04 % interest in IGH, with the remainder being owned by the Australian financial service provider and infrastructure investor Macquarie.

1.6 NOTES ON REPORTING

The asset swap agreed with E.ON requires a methodological change in reporting before it is implemented. International Financial Reporting Standards (IFRS) require us to state the innogy activities that will no longer be part of the RWE Group following the transaction separately when presenting our business performance. We have set out the consequences this has in detail in this chapter. Furthermore, we explain how the new IFRS 9 and IFRS 15 accounting standards affect our consolidated financial statements.

New presentation of innogy's activities. As set out on page 19 et seqq., our financial reporting is based on a Group structure with four segments. Whereas the first three segments (Lignite & Nuclear, European Power and Supply & Trading) are unchanged from 2017, the fourth segment has been adjusted due to the asset swap agreed with E.ON. In the past, we presented innogy in this segment in its entirety. Now, we consider only those parts of the company that are due to remain within the RWE Group in the long run. Accordingly, the new segment is called 'innogy – continuing operations'. The other parts of innogy, which will be transferred to E.ON, are presented outside of this segment as 'discontinued operations'. This primarily applies to the distribution grid and retail businesses.

The recognition of 'discontinued operations' has substantial effects on the income statement, the balance sheet and the cash flow statement:

- We recognise the innogy business assigned to E.ON in the income statement only in condensed form under 'income from discontinued operations'. It is no longer considered in the Group's revenue, adjusted EBITDA, adjusted EBIT, non-operating result, financial result, or taxes on income. Prior-year figures are adjusted accordingly.

- On the consolidated balance sheet, discontinued operations have been combined under 'assets held for sale' and 'liabilities held for sale'. In accordance with IFRS, we are maintaining the presentation of the previous year's balance sheet figures.

- In the cash flow statement in the consolidated financial statements, we present the cash flows from discontinued operations for the reporting and prior-year periods separately. We take a different approach in the condensed cash flow statement in the review of operations. Here, we only state cash flows from continuing operations.

The change in reporting caused some of the statements made in our forecasts for 2018, which we published on page 83 et seqq. of the 2017 Annual Report, to become irrelevant. Amongst other things, this relates to our statements regarding adjusted EBITDA and capital expenditure. We brought these forecasts in line with our new reporting method in the report on the first half of 2018. The forecast concerning adjusted net income also became irrelevant: this key performance indicator will not be determined for the time being, as it is only of limited informational value during the transitional period until the completion of the asset swap with E.ON.

In the 2017 Annual Report, we also made forecasts in relation to key performance indicators in which innogy was considered as a pure financial investment instead of as a fully consolidated company. These figures are not in compliance with IFRS. We explain how we calculate them on page 58. There is no need for methodological adjustments here until the asset swap with E.ON has been completed. Therefore, we maintained our forecasts relating to adjusted EBITDA and adjusted net income, the latter of which continues to be determined based on the above distinction.

Change in revenue recognition due to adoption of IFRS 15. In the 2018 fiscal year, we began applying the new accounting standard IFRS 15 'Revenue from Contracts with Customers'. One of the consequences is that changes in the fair value of commodity derivatives, which occur before the contracts are realised, are now recognised in other operating income instead of in revenue or the cost of materials. Therefore, our 2018 revenue is lower, particularly in the gas business. Prior-year figures have not been adjusted.

Financial instruments have stronger effect on earnings due to adoption of IFRS 9. We also started to apply the new accounting standard IFRS 9 'Financial Instruments' in 2018. This results in changes to the classification and measurement of financial instruments and to the recognition of impairments based on expected credit losses. Again, prior-year figures have not been adjusted. Changes in the fair value of some of our securities, which previously had no effect on profit or loss, were recognised on the income statement for the first time in 2018. Furthermore, the recognition of expected credit losses reduced the value of our assets. In consequence, net debt was slightly higher.

Forward-looking statements. This annual report contains forward-looking statements regarding the future development of the RWE Group and its companies as well as of the economic and political environment. These statements are assessments that we have made based on information available to us at the time this document was prepared. In the event that the underlying assumptions do not materialise or unforeseen risks arise, actual developments can deviate from the developments expected at present. Therefore, we cannot assume responsibility for the correctness of these statements.

References to the internet. The contents of pages on the internet and publications to which we refer in the review of operations are not part of the review of operations and are merely intended to provide additional information. The corporate governance declaration in accordance with Section 289f as well as Section 315d of the German Commercial Code is an exception.

1.7 BUSINESS PERFORMANCE

The RWE Group achieved its operating earnings goal for 2018: at €1.5 billion, adjusted EBITDA was within the forecast range. We had to contend with some unexpected burdens. For example, the temporary suspension of the UK capacity market caused us to lose contractually committed capacity payments. Furthermore, utilisation of innogy's wind farms was low due to the weather. The strongest effect was felt from the market-induced decline in our generation margins, which we had already considered in our forecast. Efficiency-enhancing measures cushioned the earnings shortfalls somewhat. The continued expansion of innogy's wind energy capacity also had a positive impact.

Business performance in 2018: what we forecast and what we accomplished

Outlook vs. actual € million	2017 actual	Outlook for fiscal 2018[1]	2018 actual	Forecast fulfilled?
Adjusted EBITDA	2,149	1,500–1,800	1,538	Yes
Lignite & Nuclear	671	350–450	356	Yes
European Power	463	300–400	334	Yes
Supply & Trading	271	100–300	183	Yes
innogy - continuing operations	785	700–800	699	Actual < Outlook

1 See page 83 et seq. of the 2017 Annual Report and page 26 of the interim report on the first half of 2018.

Electricity production 12 % down on previous year. In the financial year that just came to a close, the RWE Group produced 176.0 billion kWh of electricity. In 2018, 38 % of our electricity generation was from lignite, 27 % from gas, 16 % from hard coal, 12 % from nuclear, and 6 % from renewables. Our electricity production was 12 % lower than in the previous year. We recorded declines across all generation technologies. Nuclear power production (–8.5 TWh) was primarily affected by the fact that we had to take Gundremmingen B (1,284 MW) offline at the end of 2017 as part of the German nuclear phase-out. Volumes declined in electricity generation from lignite (–7.0 TWh) due to the sale of our majority interest in Mátra in Hungary. The decommissioning of four 300 MW units in the Rhenish lignite mining region and their placement in legally mandated security standby (two on 30 September 2017 and two on 30 September 2018) also came to bear. Unfavourable market conditions resulted in a decline in production volume from our gas-fired power stations (–5.7 TWh). Furthermore, we mothballed Moerdijk 1 in the Netherlands for economic reasons. The drop in generation from hard coal (–1.9 TWh) was caused in part by the closure of the Voerde A/B dual unit (1,390 MW) as of 1 April 2017. In addition, our Aberthaw hard coal-fired power plant in the UK was only in use occasionally due to market conditions. Unusually low wind speeds in the United Kingdom and Central Europe caused renewable energy volumes to drop (–0.5 TWh). This was contrasted by the positive effects of commissioning new wind turbines.

In addition to our in-house generation, we procure electricity from external suppliers. In the year being reviewed, these purchases totalled 49.0 billion kWh (previous year: 36.6 billion kWh). In-house generation and power purchases combined for 225.0 billion kWh (previous year: 236.8 billion kWh).

Power generation	Gas		Lignite		Hard coal		Nuclear		Renewables		Pumped storage, other		Total	
Billion kWh	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Lignite & Nuclear	–	–	67.2	74.2	–	–	21.8	30.3	–	–	0.2	0.7	89.2	105.2
European Power	47.2	52.9	–	–	27.4	29.3	–	–	1.1	1.1	2.3	2.4	78.0	85.7
of which:														
Germany[1]	5.5	7.4	–	–	13.0	13.3	–	–	0.7	0.7	2.3	2.4	21.5	23.8
United Kingdom	33.2	32.4	–	–	0.5	2.6	–	–	0.4	0.4	–	–	34.1	35.4
Netherlands/Belgium	5.5	9.3	–	–	13.9	13.4	–	–	–	–	–	–	19.4	22.7
innogy - continuing operations	–	–	–	–	–	–	–	–	8.8	9.3	–	–	8.8	9.3
RWE Group	**47.2**	**52.9**	**67.2**	**74.2**	**27.4**	**29.3**	**21.8**	**30.3**	**9.9**	**10.4**	**2.5**	**3.1**	**176.0**	**200.2**

1 Including electricity from generation assets not owned by RWE that we can deploy at our discretion on the basis of long-term use agreements. In 2018, it amounted to 5.0 billion kWh (previous year: 6.3 billion kWh), of which 2.3 billion kWh (previous year: 3.5 billion kWh) were from hard coal-fired power stations.

One of Europe's biggest power producers, with 41.7 GW in generation capacity. At the end of 2018, we had a total installed power generation capacity of 41.7 GW, giving us a leading market position in Europe. This figure includes power plants that we took offline temporarily for economic reasons and the four lignite units we put into security standby. Our generation capacity declined by 1.6 GW over the course of the past year. This was because we sold our majority interest in the Hungarian lignite-based power producer Mátra and shut down the Dutch Claus A gas-fired power plant (see page 37). A positive effect was felt from innogy's commissioning of new wind turbines, primarily in the United Kingdom.

In terms of generation capacity, gas is our major source of energy. At the end of 2018, it accounted for 34 %. Lignite was in second place with 25 %, followed by hard coal, with 17 %. Renewables and nuclear energy had a share of 10 % and 7 %, respectively. The geographic focus of our generation business is Germany, where 61 % of our installed capacity is located. The United Kingdom and the Netherlands follow, accounting for shares of 23 % and 12 %, respectively.

Power generation capacity As of 31 Dec 2018, in MW	Gas	Lignite	Hard coal	Nuclear	Renewables	Pumped storage, other	Total	Total 31 Dec 2017
Lignite & Nuclear	400	10,255	–	2,770	7	27	13,459	14,297
European Power	13,686	–	7,210	–	331	2,679	23,906	24,727
of which:								
Germany[1]	3,767	–	3,675[2]	–	55	2,375	9,872	10,125
United Kingdom	6,676	–	1,560	–	55	304	8,595	8,541
Netherlands/Belgium	2,456	–	1,975	–	221	–	4,652	5,274
Turkey	787	–	–	–	–	–	787	787
innogy - continuing operations	235	–	10	–	3,955	137	4,337	4,245
RWE Group	**14,321**	**10,255**	**7,220**	**2,770**	**4,293**	**2,844[3]**	**41,703[3]**	**43,269**

1 Including generation capacity not owned by RWE that we can deploy at our discretion on the basis of long-term use agreements. As of the end of 2018, it amounted to a net 2,986 MW, including hard coal-fired power stations with a total capacity of 783 MW.
2 The Bergkamen hard coal-fired power plant (720 MW) is still included in this figure: we sold our 51% stake in the station as of 1 January 2019 (see page 39).
3 Including small capacities at RWE Supply & Trading.

Significant decline in CO_2 emissions. Last year, our power stations emitted 118.0 million metric tons of carbon dioxide. Compared to 2017, our CO_2 emissions declined by 13.8 million metric tons, or 10 %. This resulted from the decline in our electricity generation from coal and gas. By contrast, specific emissions, i. e. carbon dioxide emissions per megawatt hour of electricity generated, rose from 0.66 to 0.67 metric tons. This was mainly because last year we produced much less zero-carbon electricity from our nuclear power stations owing to the decommissioning of Gundremmingen B.

We purchase most of the emission allowances we need on the market. This is because, since the beginning of the third emissions trading period, which started on 1 January 2013, the countries of Western Europe have only allocated free CO_2 certificates to energy utilities in exceptional cases. Of our emissions in EU countries (116.9 million metric tons) in the year being reviewed, we were only able to cover 1.3 million metric tons with such state allocations.

Emissions balance	CO_2 emissions		Free allocation of CO_2 certificates		Shortage of CO_2 certificates	
Million metric tons of CO_2	2018	2017	2018	2017	2018	2017
Lignite & Nuclear	79.4	88.5	0.7	0.7	78.7	87.8
European Power[1]	38.6	43.3	0.6	0.6	36.9	41.3
of which:						
Germany[2]	13.0	14.1	0.6	0.6	12.4	13.5
United Kingdom	12.4	14.0	–	–	12.4	14.0
Netherlands/Belgium	12.1	13.8	–	–	12.1	13.8
innogy - continuing operations	–	–	–	–	–	–
RWE Group	**118.0**	**131.8**	**1.3**	**1.3**	**115.6**	**129.1**

1 Includes the CO_2 emissions of our gas-fired power station in the Turkish town of Denizli, which amounted to 1.1 million metric tons in 2018 (previous year: 1.4 million metric tons). As Turkey does not participate in European emissions trading, we do not need emission allowances for these volumes.

2 Including figures relating to generation capacity not owned by RWE that we can deploy at our discretion on the basis of long-term use agreements. In 2018, these stations emitted a total of 2.0 million metric tons of CO_2 (previous year: 3.1 million metric tons).

86.3 million metric tons of lignite produced. The fuel used by our power stations is procured by our generation companies either directly on the market or via RWE Supply & Trading. We source lignite from proprietary opencast mines. In our mining region, which is west of Cologne, we produced 86.3 million metric tons of lignite last year (previous year: 91.3 million metric tons), of which 74.2 million metric tons were used to generate electricity in our power plants. The remainder was used to manufacture refined products (e. g. lignite briquettes) and, to a limited extent, to generate process steam and district heat.

Electricity sales 5 % lower – gas sales 5 % higher. The RWE Group's continuing operations sold 216.1 billion kWh of electricity and 67.0 billion kWh of gas to external customers. Most of these volumes are allocable to the Supply & Trading segment. Electricity sales experienced a drop of 5 %, in part due to the decline in the amount of in-house production sold by RWE Supply & Trading on the wholesale market. Further volume shortfalls were recorded as a result of the sale of the Hungarian lignite-based power producer Mátra, which sold its generation independently. A positive effect was felt from RWE Supply & Trading winning new industrial and corporate customers. This affected both electricity and gas sales and was the main reason why the latter were 5 % higher year on year.

External revenue € million	2018	2017	+/– %
Lignite & Nuclear	1,132	1,259	–10.1
European Power	925	923	0.2
Supply & Trading	10,190	10,517	–3.1
innogy - continuing operations	1,124	1,087	3.4
Other, consolidation	17	36	–52.8
RWE Group (excluding natural gas tax/electricity tax)	**13,388**	**13,822**	**–3.1**
Natural gas tax/electricity tax	141	131	7.6
RWE Group	**13,529**	**13,953**	**–3.0**

External revenue by product[1] € million	2018	2017	+/– %
Electricity revenue	**10,090**	**10,430**	**–3.3**
of which:			
Lignite & Nuclear	303	451	–32.8
European Power	542	594	–8.8
Supply & Trading	8,447	8,628	–2.1
innogy - continuing operations	799	755	5.8
Gas revenue	**1,565**	**1,795**	**–12.8**
of which:			
Supply & Trading	1,502	1,738	–13.6
innogy - continuing operations	47	48	–2.1
Other revenue	**1,733**	**1,597**	**8.5**
RWE Group (excluding natural gas tax/electricity tax)	**13,388**	**13,822**	**–3.1**

1 Immaterial electricity revenue in the 'other, consolidation' item and immaterial gas revenue in the European Power segment is not stated separately.

External revenue down 3 % on previous year. In the year being reviewed, we posted external revenue of €13,388 million (excluding natural gas and electricity tax). This represents a decline of 3 % compared to 2017. At €10,090 million, our electricity revenue was also 3 % lower than in the preceding year. The decline in sales volume came to bear. The Group's gas revenue dropped by 13 % to €1,565 million. It therefore trended against delivery volumes, in part due to a decrease in revenue from the realisation of hedging transactions. Furthermore, our initial adoption of IFRS 15 played a role, because it caused certain items to no longer be recognised in revenue (see commentary on page 40).

Adjusted EBITDA € million	2018	2017	+/– %
Lignite & Nuclear	356	671	–46.9
European Power[1]	334	463	–27.9
Supply & Trading	183	271	–32.5
innogy - continuing operations	699	785	–11.0
Other, consolidation	–34	–41	17.1
RWE Group	**1,538**	**2,149**	**–28.4**

1 In the period under review, €102 million was attributable to the UK (previous year: €205 million).

Adjusted EBITDA of €1.5 billion in line with expectations. Our adjusted earnings before interest, taxes, depreciation and amortisation (adjusted EBITDA) amounted to €1,538 million. This confirmed our August 2018 forecast envisaging a range of €1.5 billion to €1.8 billion (see page 26 of the interim report on the first half of 2018). As set out on page 40, during the year we had to adjust our forecast for 2018 that we published in the 2017 Annual Report, because the asset swap agreed with E.ON required us to change our reporting. Adjusted EBITDA was 28 % lower than in 2017. Shrinking margins and volumes in conventional electricity generation were the main reasons. Furthermore, Supply & Trading and innogy – continuing operations delivered lower earnings.

The following developments were observed in the segments:

- Lignite & Nuclear: This division's adjusted EBITDA totalled €356 million, which is within the forecast range of €350 million to €450 million. It represents a decline of 47 % compared to the previous year. A major reason for this is that we realised lower wholesale prices for the generation from our lignite-fired and nuclear power stations than in 2017. We had already sold forward nearly all of the production of these plants in earlier years. The closure of unit B of the Gundremmingen nuclear power station at the end of 2017 also had a negative effect on earnings. Savings achieved through our efficiency-enhancement programme cushioned the aforementioned burdens slightly.

- European Power: We recorded €334 million in adjusted EBITDA in this segment. This confirmed our forecast, which envisaged a range of €300 million to €400 million. Compared to 2017, we recorded a decline of 28 %. One reason was that EBITDA in the previous year included capital gains on property sales. In addition, the margins of our gas and hard coal-fired power stations shrank. The suspension of the UK capacity market caused the payments which we received for the availability of our stations to be significantly lower than planned. However, at €47 million, they were higher than in 2017 (€16 million). Efficiency-enhancing measures had a positive effect on earnings.

- Supply & Trading: Here, adjusted EBITDA totalled €183 million, which is within the forecast range of €100 million to €300 million. Earnings therefore decreased by 32 % relative to 2017, caused in part by a weaker trading performance. In addition, we recognised a value adjustment for an equity stake acquired by RWE Supply & Trading within the scope of its principal investments (see page 21). Fortunately, we were able to pick up where we left off in terms of earnings in the gas business.

- innogy – continuing operations: Adjusted EBITDA posted by the innogy business remaining with RWE amounted to €699 million, which was just below the forecast range of €700 million to €800 million. One of the reasons for this was the unexpectedly low electricity production due to unfavourable wind conditions. Compared to 2017, adjusted EBITDA decreased by 11 %. In addition to the weather conditions, the positive impact of income resulting from the revaluation of innogy's stake in the Triton Knoll offshore wind project in the prior year did not recur. Furthermore, start-up costs were incurred in the year under review, which will result in revenue later on. A positive effect was felt from innogy's commissioning of new wind turbines and realisation of higher prices for electricity and green energy certificates.

Adjusted EBIT € million	2018	2017	+/– %
Lignite & Nuclear	77	399	–80.7
European Power[1]	37	155	–76.1
Supply & Trading	177	265	–33.2
innogy - continuing operations	349	398	–12.3
Other, consolidation	–21	–47	55.3
RWE Group	**619**	**1,170**	**–47.1**

1 In the year under review, –€48 million was attributable to the UK (previous year: €40 million).

Reconciliation to net income characterised by the non-recurrence of exceptional income from 2017. The reconciliation from adjusted EBITDA to net income in 2017 was characterised by the substantial exceptional income in Germany from the nuclear fuel tax refund, whereas there were no such positive effects in 2018. This led to a significant deterioration in the non-operating result and the financial result.

As expected, adjusted EBIT recorded by the RWE Group declined considerably, falling by 47 % to €619 million. This figure differs from adjusted EBITDA in that it does not include operating depreciation and amortisation, which amounted to €919 million (prior year: €979 million).

Non-operating result € million	2018	2017	+/– € million
Disposal result	–25	107	–132
Impact of derivatives on earnings	–146	–480	334
Other	10	1,322	–1,312
Non-operating result	**–161**	**949**	**–1,110**

The non-operating result, in which we recognise certain effects which are not related to operations or to the period being reviewed, totalled –€161 million (prior year: €949 million). Its components developed as follows:

- Disposals of investments and assets resulted in a net book loss of €25 million compared to the book gain of €107 million posted in the previous year. The loss was incurred in connection with the sale of our 51 % stake in the Hungarian company Mátra in March 2018. This caused charges resulting from the conversion of Mátra's financial statements to euros, which were recognised in equity until the transaction, to have an effect on earnings. Capital gains on property sales were unable to offset this effect.

- The 'impact of derivatives on earnings' totalled –€146 million, as opposed to –€480 million in the previous year. We use derivatives to hedge price risks. Pursuant to IFRS, these types of financial instruments are recognised at fair value at the corresponding balance-sheet date, whereas transactions which are hedged with them are only recognised as a profit or loss when they are realised. This results in temporary effects on earnings, which are neutralised over time.

- The earnings stated under 'other' amounted to €10 million, which was much less than the high figure recorded in the preceding year (€1,322 million), which benefited from the nuclear fuel tax refund. In the year under review, a positive effect came from the write-up performed by innogy on its Polish wind farms due to a rise in the price of electricity and green energy certificates and the resulting improvement in the earnings prospects of the stations. This was contrasted by smaller burdens resulting in part from the accrual of provisions for partial retirement measures and costs associated with the execution of the asset swap with E.ON. Moreover, we recognised an impairment for the Staythorpe gas-fired power station in the UK because a slight downward correction had to be made to the expected earnings from this plant.

Financial result € million	2018	2017	+/– € million
Interest income	166	197	–31
Interest expenses	–180	–298	118
Net interest	**–14**	**–101**	**87**
Interest accretion to non-current provisions	–264	–226	–38
Other financial result	–131	264	–395
Financial result	**–409**	**–63**	**–346**

Our financial result deteriorated by €346 million to –€409 million. Its components changed as follows:

- Net interest improved by €87 million to –€14 million, above all due to lower interest expenses. One of the reasons for this was our cancellation and buyback of hybrid bonds in the prior year (see page 54 of the 2017 Annual Report).

- The interest accretion to non-current provisions curtailed earnings by €264 million, having a bigger effect than in 2017 (–€226 million). One contributing factor was the reduction in the discount rate we use to calculate nuclear provisions. The resulting increase in the net present value of the obligations was recognised in part as an expense in the interest accretion.

- The 'other financial result' amounted to –€131 million, which was much lower than the preceding year's figure (€264 million). The latter figure was unusually high, because it contained the interest we were granted for the nuclear fuel tax payments we had made until 2016 and were refunded thereafter. Furthermore, in the year under review, there was a decline in the quotations of marketable securities which were recognised through profit or loss due to the initial adoption of IFRS 9, as explained on page 41. In the previous year, such changes in fair value had been recognised without an effect on earnings. Smaller losses from the sale of securities provided some relief.

Reconciliation to net income		2018	2017	+/– %
Adjusted EBITDA	€ million	**1,538**	**2,149**	**–28.4**
Operating depreciation, amortisation and impairment losses	€ million	–919	–979	6.1
Adjusted EBIT	€ million	**619**	**1,170**	**–47.1**
Non-operating result	€ million	–161	949	–117.0
Financial result	€ million	–409	–63	–549.2
Income from continuing operations before taxes	€ million	**49**	**2,056**	**–97.6**
Taxes on income	€ million	–103	–333	69.1
Income from continuing operations	€ million	**–54**	**1,723**	**–103.1**
Income from discontinued operations	€ million	1,127	592	90.4
Income	€ million	**1,073**	**2,315**	**–53.7**
of which:				
Non-controlling interests	€ million	679	373	82.0
RWE AG hybrid capital investors' interest	€ million	59	42	40.5
Net income/income attributable to RWE AG shareholders	€ million	**335**	**1,900**	**–82.4**
Earnings per share	€	0.54	3.09	–82.5
Number of shares outstanding (annual average)	millions	614.7	614.7	–

At €49 million, income from continuing operations before tax was far below the comparable figure for 2017 (€2,056 million). Income taxes amounted to €103 million. The effective tax rate was therefore above the theoretical normal level. The reason for this was that RWE AG's tax group did not capitalise any deferred tax assets unless they were matched by deferred tax liabilities. This was because we are unlikely to be able to use the deferred tax claims in the foreseeable future. They can only be used in coming fiscal years if tax gains are achieved against which the claims can be netted. There is currently no sufficient certainty that this will occur in RWE AG's tax group.

After taxes, we posted income from continuing operations of –€54 million (prior year: €1,723 million). Income from discontinued operations amounted to €1,127 million, a significant gain compared to 2017 (€592 million). This is primarily a result of IFRS accounting rules: they stipulate that we no longer consider depreciation or amortisation for discontinued operations from their separate statement as of 30 June 2018 onwards. By contrast, the preceding year's income included depreciation and amortisation for a full twelve months and was further curtailed by an impairment recognised for the UK retail business.

Income from non-controlling interests rose by €306 million to €679 million. In the previous year, impairments recognised for the Hungarian power producer Mátra led to a decline in the earnings of RWE and the co-owners, which did not recur. In addition, we state much higher income for innogy in RWE's consolidated financial statements. Accordingly, there was also a rise in the income allocable to the minority shareholders of our subsidiary, which hold a total stake of 23.2 %.

The portion of earnings attributable to hybrid capital investors amounted to €59 million (prior year: €42 million). This sum corresponds to the finance costs related to our £750 million hybrid bond. This bond, which was called in the beginning of 2019, did not have a predefined fixed tenor. Associated proceeds were therefore classified as equity according to IFRS. RWE's remaining hybrid capital is classified as debt and we record interest accrued on it in the financial result.

As a consequence of the above developments, net income decreased considerably compared to 2017, falling to €335 million (prior year: €1,900 million). Based on the 614.7 million in RWE shares outstanding, earnings per share amounted to €0.54 (prior year: €3.09).

Capital expenditure on property, plant and equipment and on intangible assets € million	2018	2017	+/– € million
Lignite & Nuclear	230	269	–39
European Power	245	147	98
Supply & Trading	13	7	6
innogy – continuing operations	592	285	307
Other, consolidation	–1	–2	1
RWE Group	**1,079**	**706**	**373**

Capital expenditure on financial assets € million	2018	2017	+/– € million
Lignite & Nuclear	–	1	–1
European Power	4	1	3
Supply & Trading	37	30	7
innogy – continuing operations	141	153	–12
Other, consolidation	–1	11	–12
RWE Group	**181**	**196**	**–15**

Significant rise in capital expenditure on renewables. In the financial year that just came to a close, RWE recorded capital expenditure of €1,260 million, up €358 million, or 40 % compared to 2017. Spending on property, plant and equipment and on intangible assets increased by 53 % to €1,079 million. The considerable rise was primarily attributable to innogy's continuing operations, in particular the large-scale Triton Knoll and Limondale projects, on which we report on page 38. In the European Power segment, the conversion of the Dutch hard coal-fired power stations Amer 9 and Eemshaven to biomass co-firing drove up capital spending. Furthermore, there was a rise in expenditure on maintenance. We spent €181 million on financial assets, 8 % less than in 2017. A large portion of the funds was used by innogy to acquire a portfolio of onshore wind projects in the USA (see page 38).

Workforce[1]	31 Dec 2018	31 Dec 2017	+/– %
Lignite & Nuclear	11,292	13,132	–14.0
European Power	2,738	2,656	3.1
Supply & Trading	1,267	1,156	9.6
innogy – continuing operations	2,192	1,952	12.3
Other[2]	259	210	23.3
RWE Group	**17,748**	**19,106**	**–7.1**

1 Converted to full-time positions.
2 This item exclusively comprises employees of the holding company RWE AG.

Lower headcount due to sale of Mátra. As of 31 December 2018, the RWE Group's continuing operations had 17,748 people on the payroll, of which 15,101 were employed in Germany and 2,647 worked at locations abroad. Part-time positions were considered in these figures on a pro-rata basis. The workforce in Germany expanded by 582 staff members compared to the end of 2017. By contrast, elsewhere in the Group, 1,940 employees left the company, predominantly due to the sale of our majority stake in the Hungarian power producer Mátra (see page 37). In purely operating terms, i. e. disregarding such consolidation effects, our headcount rose by 702. Personnel figures do not include apprentices or trainees. At the end of 2018, 666 young adults were learning a profession at RWE, compared to 615 in the previous year. This information relates exclusively to the RWE Group's continuing operations.

1.8 FINANCIAL POSITION AND NET WORTH

RWE's financial position and net worth is fundamentally solid despite the difficult framework conditions in our business. This is demonstrated by the credit ratings issued by Moody's and Fitch: both rating agencies confirmed their investment grade rating of RWE last year. The good operating and financial prospects arising from the planned acquisition of the renewable energy activities of E.ON and innogy were among the influential factors. In fiscal 2018, we generated very high operating cash flows of €4.6 billion. However, this was largely due to temporary effects. The Group's net debt declined to €19.3 billion and amounted to a mere €4.4 billion excluding the innogy activities that are up for sale.

Responsibility for procuring funds. Responsibility for financing within the RWE Group lies with the parent company RWE AG and its operationally independent subsidiary innogy. The two companies procure funds for the business that they control. They act independently of each other in doing so. Companies which are controlled by RWE AG or innogy SE only raise debt capital in specific cases, for example if it is advantageous economically to make use of local credit markets. RWE AG and innogy SE act as co-ordinators when subsidiaries assume a liability. This allows for the central management and monitoring of financial risks. Moreover, it strengthens our position when negotiating with banks, business partners, suppliers and customers.

Tools for raising debt capital. RWE AG and innogy SE have a wide range of tools which they can use in addition to cash flows from operating activities to meet their financing needs.

- Debt Issuance Programmes (DIPs) give the companies latitude in procuring debt capital on the capital market for the long term. A DIP is a framework prospectus for the flexible issuance of bonds. RWE AG's current programme enables us to make issuances with a total nominal value of €10 billion. The innogy DIP has a maximum financing volume of €20 billion.

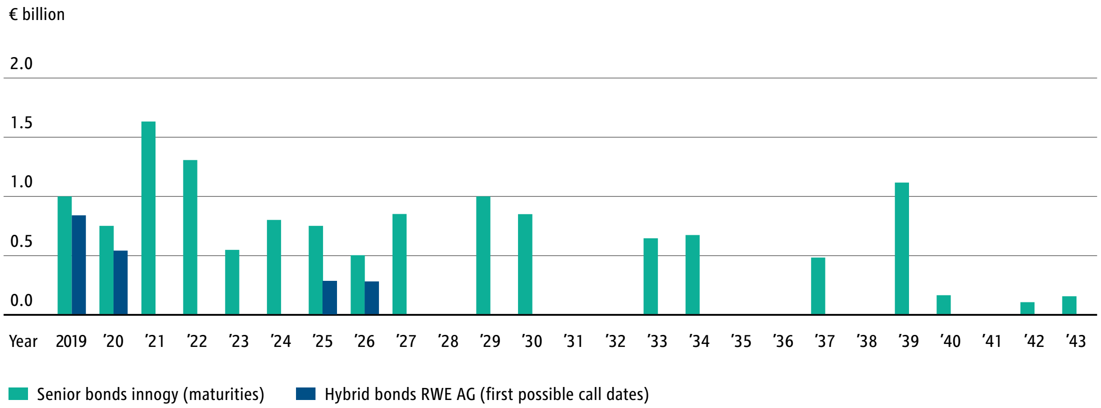
- RWE AG has a Commercial Paper Programme for short-term refinancing that enables it to raise funds equivalent to up to US$5 billion on the money market. We intermittently used a maximum of €0.8 billion of this headroom in the year under review. innogy also launched a Commercial Paper Programme. It has a funding framework of €3 billion. Up to €1.1 billion thereof was used in the financial year that just ended.

- To secure liquidity, RWE AG and innogy SE can resort to lines of credit granted them by international bank syndicates. RWE AG has such a credit line with a volume of €3 billion which expires in March 2021. It has not been used so far. The same holds true for innogy's syndicated credit line, with which our subsidiary can cover up to €2 billion in financing needs. Its original tenor expires in October 2022 and can be prolonged twice for a year at a time subject to the banks' approval. innogy has already received the approval of nearly the whole of the bank consortium for a first extension through to October 2023. Moreover, the credit line can be topped up by €1 billion. This option is also subject to the approval of the consortium of banks.

Bond volume increases to €15.2 billion. At the end of 2018, the Group (including innogy) had bonds with a total nominal volume of an equivalent of €15.2 billion outstanding, compared to €14.0 billion a year before. The total of 26 issues are denominated in euros, sterling, US dollars and yen. We concluded hedges to manage our currency exposure. Taking such transactions into account, the RWE Group's debt broke down into 66 % in euros and 34 % in sterling on the balance-sheet date. At the end of the year, the senior bonds outstanding had an average remaining maturity of 8.5 years.

As of 31 December 2018, the volume of bonds commercially and legally attributable to RWE AG amounted to €1.9 billion. It was essentially unchanged compared to the previous year. RWE AG's long-term debt financing is primarily based on four hybrid bonds with outstanding volumes of £750 million (7 % coupon; earliest possible redemption in March 2019), €539 million (2.75 %; October 2020), €282 million (3.5 %; April 2025) and US$ 317 million (6.625 %; March 2026). We will redeem the first of the above bonds, with a volume of £750 million, on 20 March 2019, without replacing it with new hybrid capital (see page 39). We do not plan to issue senior bonds for the time being.

RWE Group bonds: maturities/first possible call dates (as of 31 Dec 2018)



By the end of 2018, innogy had a total of €13.3 billion in outstanding bonds, €1.2 billion more than a year before. These include a total of 21 senior bonds in euros (13), sterling (6), US dollars (1) and yen (1). innogy conducted three new placements in the financial year that just came to a close. The company started by issuing a €1 billion bond with a tenor of 11.5 years and a coupon of 1.5 % in January. This was followed by two further placements in May: one with a volume of €500 million, a tenor of eight years and a coupon of 1.625 %, and another, also with a volume of €500 million, with a tenor of 4.5 years and a coupon of 0.75 %. The latter bond was topped up to €750 million soon thereafter. The issuances were contrasted in July 2018 by the redemption of a 15-year bond with a nominal volume of €980 million and a coupon of 5.125 %.

Shortly after the end of the year under review, innogy took advantage of the favourable interest rates to issue another bond. At the end of January 2019, the company placed paper with a nominal volume of €750 million, a tenor of 4.5 years and a coupon of 0.75 %. One of the purposes of the issuance is to refinance liabilities as they mature.

RWE AG's borrowing costs reflect decline in refinancing via commercial paper. In 2018, the cost of debt for RWE AG was 3.4 %, as opposed to 2.5 % in the preceding year. These figures were calculated for the liabilities allocable to the Group parent from bonds, commercial paper and bank loans at the end of the year. Only hybrid bonds classified as debt pursuant to International Financial Reporting Standards (IFRS) were considered. The rise in the cost of capital was primarily due to our reduction to zero of short-term financing via low-interest commercial paper due to high operating cash flows by the end of 2018. innogy's cost of debt dropped from 4.1 % to 3.6 %. One reason was that the bonds issued during the year being reviewed have relatively small coupons due to the development of market interest rates, whereas the redeemed bond had a much higher yield.

Credit rating of RWE AG (as of 31 Dec 2018)	Moody's	Fitch
Non-current financial liabilities		
Senior debt	Baa3	BBB
Subordinated debt (hybrid bonds)	Ba2	BB+
Current financial liabilities	P-3	F2
Outlook	Stable	Stable

Rating agencies confirm RWE's investment grade rating. The level of our borrowing costs partially depends on the rating agencies' assessment of our creditworthiness. Moody's and Fitch are currently providing such credit ratings for RWE. Another leading agency, Standard & Poor's, withdrew its RWE rating in February 2018 at our request. As next to no RWE senior bonds are outstanding due to the transfer of debt to innogy, we therefore deem the ratings by Moody's and Fitch sufficient. Before discontinuing its rating of RWE, Standard & Poor's had issued us a rating of BBB– for long-term financing, which is investment grade. This is the same category as the credit assessments of our current rating agencies. The RWE ratings by Moody's and Fitch are Baa3 and BBB, respectively. Once our envisaged asset swap with E.ON was announced, the two agencies reviewed our creditworthiness in 2018, confirming their assessments – both with a stable outlook. Fitch even raised its rating of our short-term financial debt by one notch to F2.

By contrast, innogy continues to receive credit ratings from all three of the aforementioned agencies, which are each one notch higher than for RWE, with a stable outlook. The creditworthiness of our subsidiary is rated BBB at Standard & Poor's, Baa2 at Moody's and BBB+ at Fitch (with a rating of A– for its senior bonds). One of the reasons for the good grades is that innogy has a relatively stable earnings profile due to its high share of regulated business. The company provides detailed information on its credit rating in its 2018 Annual Report.

Cash flow statement[1] € million	2018	2017	+/– € million
Funds from operations	138	–3,971	4,109
Change in working capital	4,473	200	4,273
Cash flows from operating activities of continuing operations	**4,611**	**–3,771**	**8,382**
Cash flows from investing activities of continuing operations	**–2,999**	**3,750**	**–6,749**
Cash flows from financing activities of continuing operations	**–1,559**	**–997**	**–562**
Effects of changes in foreign exchange rates and other changes in value on cash and cash equivalents	13	–19	32
Total net changes in cash and cash equivalents	**66**	**–1,037**	**1,103**
Cash flows from operating activities of continuing operations	4,611	–3,771	8,382
Minus capital expenditure[2]	–1,246	–902	–344
Plus proceeds from divestitures/asset disposals[2]	74	234	–160
Free cash flow	**3,439**	**–4,439**	**7,878**

1 All items relate solely to continuing operations.
2 This item solely relates to transactions with an effect on cash.

Extraordinarily high operating cash flows due to received collateral. In the past fiscal year, our continuing operations generated €4,611 million in cash flows from operating activities. This was much more than the negative figure recorded in the prior year (–€3,771 million), which was significantly curtailed by the endowment of the German nuclear energy fund. However, our operating cash flows also improved disregarding this effect. The fact that we obtained high variation margins in connection with forward contracts for electricity, commodities and CO_2 certificates in 2018 played a major role. Variation margins are payments with which transaction partners offset profit and loss positions resulting from the daily revaluation of active contracts. However, their influence on cash flows is temporary and ends once the transactions are realised.

Investing activities of our continuing operations resulted in cash outflows of €2,999 million. In addition to the capital expenditure presented on page 50, purchases of securities also made a contribution, whereas proceeds on sales of property, plant and equipment and financial assets had a counteracting effect. In the previous year, we recorded substantial cash inflows of €3,750 million, which largely resulted from the sale of securities. We used the funds to make our contribution to the nuclear energy fund.

Financing activities of our continuing operations resulted in cash outflows of €1,559 million (previous year: €997 million). €1.0 billion thereof was used to make dividend payments to RWE shareholders, co-owners of fully consolidated RWE companies and hybrid investors. In the period under review, we redeemed €2.8 billion and issued €1.6 billion in financial debt. In addition, there were proceeds from the sale of minority stakes in the Triton Knoll offshore wind project (see page 37 et seq.).

On balance, the aforementioned cash flows from operating, investing and financing activities increased our cash and cash equivalents by €66 million.

The significant variation margins mentioned above were also reflected in free cash flow, which amounted to €3,439 million. By contrast, the figure recorded in the preceding year (–€4,439 million) was characterised by the contribution to the nuclear energy fund.

Net debt[1] € million	31 Dec 2018	31 Dec 2017	+/– € million
Cash and cash equivalents	3,523	3,933	–410
Marketable securities	3,863	5,131	–1,268
Other financial assets	2,809	1,863	946
Financial assets	**10,195**	**10,927**	**–732**
Bonds, other notes payable, bank debt, commercial paper	1,657	15,099	–13,442
Hedge transactions related to bonds	12	27	–15
Other financial liabilities	1,107	2,102	–995
Financial liabilities	**2,776**	**17,228**	**–14,452**
Net financial debt	**7,419**	**–6,301**	**13,720**
Provisions for pensions and similar obligations	3,287	5,420	–2,133
Surplus of plan assets over benefit obligations	–213	–103	–110
Provisions for nuclear waste management	5,944	6,005	–61
Mining provisions	2,516	2,322	194
Provisions for dismantling wind farms	362	359	3
Adjustment for hybrid capital	–88	–77	–11
Plus 50 % of the hybrid capital stated as equity	470	470	–
Minus 50 % of the hybrid capital stated as debt	–558	–547	–11
Net debt of continuing operations	**4,389**	**–**	**–**
Net debt of discontinued operations	**14,950**	**–**	**–**
Net debt	**19,339**	**20,227**	**–888**

1 As of the balance-sheet date, discontinued operations were recognised in the collective item 'net debt of discontinued operations', whereas at the end of 2017, they were still included in the individual items of the table.

Net debt slightly down on 2017. As of 31 December 2018, our net debt amounted to €19.3 billion, of which €4.4 billion was allocable to continuing operations and the remainder was allocable to discontinued operations. We only disclose the figures for the Group as a whole for the previous year. Our net debt dropped by €0.9 billion compared to 2017. Therefore, our forecast of March 2018, which envisaged a moderate increase, was not confirmed. The main reason was the unexpectedly high cash inflows from variation margins. Operating cash flows of continuing operations (€4.6 billion) and of discontinued operations (€2.0 billion) reduced net debt, whereas investing activities (€1.2 billion and €1.7 billion) and dividend payments (€1.0 billion and €0.5 billion) had a counteracting effect. In addition, pension provisions rose by €0.8 billion and €0.7 billion, respectively. One reason is that the plan assets which cover the majority of the pension obligations declined due to negative market developments.

Slightly higher off-balance-sheet obligations from electricity and fuel. Net debt does not include our off-balance-sheet obligations, which largely stem from long-term fuel and electricity purchase agreements. As of the balance-sheet date, payment obligations from material procurement contracts amounted to €27.9 billion for fuel (previous year: €25.8 billion) and €7.8 billion for electricity (previous year: €6.8 billion). These figures are based on assumptions regarding the prospective development of commodity prices. For further information on our off-balance-sheet obligations, please see page 151 in the Notes.

Group balance sheet structure	31 Dec 2018		31 Dec 2017	
	€ million	%	€ million	%
Assets				
Non-current assets	18,595	23.2	45,694	66.2
of which:				
Intangible assets	2,193	2.7	12,383	17.9
Property, plant and equipment	12,409	15.5	24,947[1]	36.1
Current assets	61,513	76.8	23,365	33.8
of which:				
Receivables and other assets[2]	12,254	15.3	12,487	18.1
Assets held for sale	40,496	50.6	128	0.2
Total	**80,108**	**100.0**	**69,059**	**100.0**
Equity and liabilities				
Equity	14,257	17.8	11,991	17.4
Non-current liabilities	20,007	25.0	36,774	53.3
of which:				
Provisions	15,863	19.8	19,249	27.9
Financial liabilities	1,998	2.5	14,414	20.9
Current liabilities	45,844	57.2	20,294	29.3
of which:				
Provisions	2,615	3.3	5,137	7.4
Financial liabilities	766	1.0	2,787	4.0
Other liabilities[3]	9,667	12.1	12,259	17.8
Liabilities held for sale	32,796	40.9	111	0.2
Total	**80,108**	**100.0**	**69,059**	**100.0**

1 Figure adjusted due to the assignment of investment property to property, plant and equipment.
2 Including financial accounts receivable, trade accounts receivable and income tax refund claims.
3 Including trade accounts payable and income tax liabilities.

Equity ratio records slight increase to 17.8 %. As of the cut-off date for the financial statements, we had a balance-sheet total of €80.1 billion, compared to €69.1 billion as of 31 December 2017. We have subsumed the innogy assets that are to be transferred to E.ON over the long term separately under the items 'assets held for sale' (€40.5 billion) and 'liabilities held for sale' (€32.8 billion). In line with IFRS, prior-year figures were not adjusted. This was a major reason why certain balance-sheet items decreased substantially: on the assets side, intangible assets were €10.2 billion and property, plant and equipment was €12.5 billion down year on year; on the equity and liabilities side, financial liabilities declined by €14.4 billion, with provisions falling by €5.9 billion. The change in the reporting did not have an impact on the development of the balance-sheet total. Its increase of €11.0 billion relative to 2017 was primarily driven by the rise in the value of commodity derivatives. The RWE Group's equity climbed by €2.3 billion to €14.3 billion, with its share of the balance sheet total (equity ratio) also rising, advancing by 0.4 percentage points to 17.8 %.

1.9 NOTES TO THE FINANCIAL STATEMENTS OF RWE AG (HOLDING COMPANY)

The financial statements of RWE AG primarily reflect the business performance of its subsidiaries. On the whole, the electricity margins achieved by our generation companies RWE Power and RWE Generation deteriorated last year. Furthermore, the financial statements for fiscal 2017 benefited from the positive one-off effect of the nuclear fuel tax refund. At €0.5 billion, RWE AG's net profit was therefore significantly lower year on year. However, it gives us enough leeway to pay an attractive dividend: the Executive Board and the Supervisory Board of RWE AG will propose to the Annual General Meeting taking place in May that a dividend of €0.70 per share be paid for fiscal 2018.

Financial statements. RWE AG prepares its financial statements in compliance with the rules set out in the German Commercial Code and the German Stock Corporation Act. The financial statements are submitted to Bundesanzeiger Verlag GmbH, located in Cologne, Germany, which publishes them in the Federal Gazette. The financial statements of RWE AG can be ordered directly from us and are also available on the internet at www.rwe.com/reports.

Balance sheet of RWE AG (abridged) € million	31 Dec 2018	31 Dec 2017
Assets		
Financial assets	25,166	24,901
Accounts receivable from affiliated companies	3,669	4,811
Other accounts receivable and other assets	479	505
Marketable securities and cash and cash equivalents	4,864	3,951
Total assets	**34,178**	**34,168**
Equity and liabilities		
Equity	5,654	6,104
Provisions	2,700	2,368
Accounts payable to affiliated companies	23,169	22,623
Other liabilities	2,655	3,073
Total equity and liabilities	**34,178**	**34,168**

Income statement of RWE AG (abridged) € million	2018	2017
Income from financial assets	1,091	2,268
Net interest	−391	−339
Other income and expenses	−227	−345
Taxes on income	−1	−172
Net profit	**472**	**1,412**
Transfer to other retained earnings	−42	−490
Distributable profit	**430**	**922**

Assets. RWE AG had €34.2 billion in total assets as of 31 December 2018, just as much as in the previous year. Major changes occurred on the assets side of the balance sheet, e.g. a decline in accounts receivable from affiliated companies. One reason for this was that RWE Power transferred to us its 2017 profit, which was unusually high due to the nuclear fuel tax refund received from the government. There was an increase in marketable securities and cash and cash equivalents, in part because our subsidiary RWE Supply & Trading received substantial amounts of collateral relating to forward transactions involving electricity, commodities and CO_2 certificates (see page 53). On the equity and liabilities side of the balance sheet, there was a rise in provisions for pensions. A downward adjustment to the discount rates used to calculate the net present values of obligations and value adjustments of the assets covering the pension obligations came to bear here. There was a rise in liabilities to affiliated companies arising from our obligation to assume their losses. By contrast, other liabilities dropped, in part because we eliminated short-term refinancing via commercial paper by the balance-sheet date. Equity also decreased, as did the equity ratio, in view of the unchanged amount of total assets. As of 31 December 2018, the equity ratio was 16.5 % as opposed to 17.9 % in the previous year. The special dividend of €1 per share paid by RWE AG for fiscal 2017 played a role in the decline.

Financial position. RWE AG is set up solidly in financial terms and has a number of flexible financing tools at its disposal. This is reflected in our long-term credit ratings, which are investment grade. A detailed presentation of RWE's financial position and financing activity in the year under review has been made on page 51 et seqq.

Earnings position. RWE AG's earnings position deteriorated compared to 2017. This was primarily due to factors reflected in income from financial assets, which declined by €1,177 million to €1,091 million. As set out earlier, RWE Power benefited from the nuclear fuel tax refund in fiscal 2017. This one-off effect did not recur. Moreover, margins in conventional electricity generation and energy trading declined.

Net interest deteriorated by €52 million to –€391 million. The main reason for this was the aforementioned value adjustments of the assets covering the pension obligations.

The net amount from other income and expenses improved by €118 million to –€227 million because expenses from the reversal of deferrals in the previous year did not recur. Burdens in the year under review resulted in part from project costs in connection with the impending asset swap with E.ON on which we report in detail on page 35 et seq.

With a tax expense of €1 million (previous year: €172 million), RWE AG achieved a net profit of €472 million in fiscal 2018 (previous year: €1,412 million).

The distributable profit of €430 million corresponds to the planned dividend payment to our shareholders. The Supervisory Board and the Executive Board of RWE AG will propose to the Annual General Meeting on 3 May 2019 that a dividend of €0.70 be paid per share for fiscal 2018.

Outlook for 2019. RWE AG's earnings prospects largely depend on the business performance of its subsidiaries. Our current assessments make us confident of being able to achieve a net profit in 2019 that is slightly higher than in 2018.

Corporate governance declaration in accordance with Section 289f and Section 315d of the German Commercial Code. On 15 February 2019, the Executive Board of RWE AG issued a corporate governance statement in accordance with Section 289f and Section 315d of the German Commercial Code. It is published on the internet at www.rwe.com/corporate-governance-declaration.

1.10 PRESENTATION OF THE RWE GROUP WITH INNOGY AS A PURE FINANCIAL INVESTMENT

Since its IPO in October 2016, our subsidiary innogy has been able to conduct its business activities independently. Consequently, we consider it as a purely financial investment. Therefore, our company planning also considers Group figures which better reflect this status than those determined by applying IFRS consolidation principles. We calculate these figures by recognising innogy in the financial assets on the balance sheet and based on the dividend it pays to us on the income statement. Adjusted EBITDA calculated in this manner amounted to €1.5 billion in 2018, which was in line with our expectations. Net debt amounted to €2.3 billion, which was lower than we had assumed initially.

Full consolidation reflects economic status of RWE investment in innogy only to a limited extent. Pursuant to International Financial Reporting Standards (IFRS) we must include companies that are indirectly or directly controlled by RWE AG in the Group's financial statements on a fully consolidated basis. This means that the income, expenses, cash flows, assets, liabilities, etc. of these activities are considered in the Group figures. This approach must also be applied to our 76.8 % stake in innogy, whereas we recognise the business activities of this company, which will be transferred to E.ON as a result of the asset swap, separately as 'discontinued operations'. However, this representation only partially reflects the manner in which we manage our subsidiary. For us, innogy has the status of a pure financial investment. This is documented by a comprehensive agreement which stipulates that our subsidiary can act independently in business matters and that RWE AG may only exercise its influence by way of the legally mandated bodies, i. e. the Supervisory Board and the Annual General Meeting.

Adjusted figures. For planning purposes, we therefore adopt a presentation that does not conform with IFRS consolidation principles and better represents the actual relationship between RWE AG and innogy. This involves assigning the investment in innogy to the 'other financial assets' line item on the balance sheet. The figure stated is calculated by multiplying the number of shares we hold in innogy with the share price of €38.40 established by the conditions governing the impending sale to E.ON. The Group's earnings figures consider innogy only based on the dividend for RWE, which amounted to €683 million in 2018. In addition, the change in accounting also has an indirect effect on our figures, because business transactions between the rest of the Group and innogy are treated as transactions with third parties.

Adjusted EBITDA in line with expectations. The following is an overview of some key financial indicators calculated applying the aforementioned method. Adjusted EBITDA amounted to €1,521 million (prior year: €2,066 million) and adjusted net income totalled €591 million (prior year: €973 million). Therefore, the actual figures were within the forecast ranges of €1.4 billion to €1.7 billion and €0.5 billion to €0.8 billion, respectively (see page 85 of the 2017 Annual Report). Net debt amounted to €2,280 million (prior year: €4,510 million), which was less than planned. At the start of the year, we had anticipated a slight increase. The significant drop was a result of unexpectedly high cash inflows from variation margins (see page 53).

Key figures for the RWE Group including innogy as a financial investment that is not fully consolidated[1] € million	2018	2017	+/– %
Adjusted EBITDA	1,521	2,066	–26.4
Adjusted EBIT	953	1,474	–35.3
Income before taxes	305	2,320	–86.9
Net income	265	2,160	–87.7
Adjusted net income	591	973	–39.3
Net financial assets	9,266	6,070	52.7
Net debt	2,280	4,510	–49.4

1 Figures not calculated according to IFRS requirements. In addition to recognising innogy as a financial investment, this relates to the following items: supply and service agreements of the rest of the Group with innogy have all been accounted for as executory contracts, although they would have had to be measured at fair value. We have not formed provisions for contingent losses from these transactions. Figures for supply and service relationships with external third parties and associated provisions have been accounted for as in the IFRS consolidated financial statements. The same applies to the accounting effects of hedges and deferred taxes.

1.11 DISCLOSURE RELATING TO GERMAN TAKEOVER LAW

The following disclosure is in accordance with Section 315a, Paragraph 1 and Section 289a, Paragraph 1 of the German Commercial Code as well as with Section 176, Paragraph 1, Sentence 1 of the German Stock Corporation Act. The information relates to company-specific regulations, for example relating to adjustments to the capital structure by the Executive Board or a change of control of the company. At RWE, these provisions are in line with the standards of German listed companies.

Composition of subscribed capital. RWE AG's subscribed capital consists of 575,745,499 no-par-value common shares and 39,000,000 no-par-value preferred shares without voting rights, each in the name of the bearer. They account for 93.7 % and 6.3 % of the subscribed capital, respectively. Holders of preferred shares are given priority when distributable profit is distributed. Pursuant to the Articles of Incorporation, it is appropriated in the following order:

1) to make any back payments on shares of the profit allocable to preferred shares from preceding years,

2) to pay a preferred share of the profit of €0.13 per preferred share,

3) to pay the share of the profit allocable to common shares of up to €0.13 per common share, and

4) to make equal payments of potential further portions of the profit allocable to common and preferred shares, unless the Annual General Meeting decides in favour of a different appropriation.

The composition of the subscribed capital and the rights and obligations of the shareholders comply with the requirements of the law and the Articles of Incorporation.

Shares in capital accounting for more than 10 % of voting rights. As of 31 December 2018, no holding in RWE AG exceeded 10 % of the voting rights.

Limitation of share transfers. Within the scope of the employee share plan of RWE AG, 196,560 RWE common shares were issued to employees in the financial year that just ended. These securities must be held until 31 December 2019.

Last year, employee stock purchase plans were also launched for the first time in the United Kingdom. Employees of RWE Generation UK plc, RWE Technology UK Limited and RWE Supply & Trading GmbH UK Branch qualified for them. A total of 29,452 RWE common shares were purchased under these plans. These shares are subject to a five-year holding period starting from their respective issue dates.

Appointment and dismissal of Executive Board members/ amendments to the Articles of Incorporation. Executive Board members are appointed and dismissed in accordance with Section 84 et seq. of the German Stock Corporation Act in conjunction with Section 31 of the German Co-Determination Act. Amendments to the Articles of Incorporation are made pursuant to Section 179 et seqq. of the German Stock Corporation Act in conjunction with Article 16, Paragraph 6 of the Articles of Incorporation of RWE AG. According to the aforementioned provision in the Articles of Incorporation, unless otherwise required by law or the Articles of Incorporation, the Annual General Meeting shall adopt all resolutions by a simple majority of the votes cast or – if a capital majority is required – by the simple majority of the capital stock represented when the resolution is passed. Pursuant to Article 10, Paragraph 9 of the Articles of Incorporation, the Supervisory Board is authorised to pass resolutions in favour of amendments to the Articles of Incorporation that only concern the wording without changing the content.

RWE AG authorisation to implement share buybacks. Pursuant to a resolution passed by the Annual General Meeting on 26 April 2018, RWE AG is authorised to buy back up to 10 % of its capital stock as of the entry into force of said resolution or – if this figure is lower – at the exercise of this authorisation in shares of any kind until 25 April 2023. At the Executive Board's discretion, the acquisition shall be made on the stock exchange or via a public purchase offer.

Shares purchased in this way may then be cancelled. Furthermore, they may be transferred to third parties or sold otherwise in connection with mergers or acquisitions of companies, parts of companies, operations, or of stakes in companies. Shares that are not sold on the stock exchange or through a tender to all shareholders may only be sold for cash. Moreover, in such cases, the sale price may not be significantly lower than the price at which the shares are listed on the stock market. The company may transfer shares bought back to the holders of option or convertible bonds and also use the shares to fulfil its obligations resulting from employee share schemes. In the aforementioned cases, shareholder subscription rights are waived. These authorisations may be exercised in full or in part, or once or several times for partial amounts.

Executive Board authorisation to issue new shares. Pursuant to the resolution passed by the Annual General Meeting on 26 April 2018, the Executive Board is authorised to increase the company's capital stock, subject to the Supervisory Board's approval, by up to €314,749,693.44 until 25 April 2023, through the issuance of up to 122,949,099 new bearer common shares in return for contributions in cash or in kind (authorised capital). These authorisations may be exercised in full or in part, or once or several times for partial amounts.

In principle, shareholders are entitled to subscription rights. However, subject to the approval of the Supervisory Board, the Executive Board may waive them in the following cases: they may be waived in order to prevent the number of shares allocated from the subscription resulting in fractional amounts (fractions of shares). Subscription rights may also be waived in order to issue shares in exchange for contributions in kind for the purposes of mergers or acquisitions of companies, parts of companies, operations, or of stakes in companies. Subscription rights may be waived in the event of a cash capital increase if the price at which the new shares are issued is not significantly lower than the price at which shares are quoted on the stock market and the portion of the capital stock accounted for by the new shares, for which subscription rights are waived, does not exceed 10 % in total. Furthermore, subscription rights may be waived in order to offer shares to potential holders of convertible or option bonds commensurate to the rights to which they would be entitled on conversion of the bond or on exercise of the option.

The Executive Board is authorised, subject to the approval of the Supervisory Board, to determine the further details and conditions of the share issuance.

In sum, the capital stock may not be increased by more than 20 % through the issuance of new shares waiving subscription rights.

Effects of a change of control on debt financing. Our debt financing instruments often contain clauses that take effect in the event of a change of control. The following rule applies to a residual amount of a senior bond remaining with RWE AG after the transfer of debt to innogy: in the event of a change of control in conjunction with a drop in RWE AG's credit rating below investment-grade status, creditors may demand immediate redemption. In such cases, RWE AG has the right to cancel its subordinated hybrid bonds within the defined change of control period; if this does not occur, the annual compensation payable on the hybrid bonds increases by 500 basis points.

RWE AG's €3 billion syndicated credit line also includes a change-of-control clause, which essentially has the following content: in the event of a change of control or majority at RWE, drawings are suspended until further notice. The lenders shall enter into negotiations with us on a continuation of the credit line. Should we fail to reach an agreement with the majority of them within 30 days from such a change of control, the lenders may cancel the line of credit. A similar rule applies to the credit line we were granted in connection with the temporary acquisition of the 50.04 % stake in innogy Grid Holding (see page 39).

Effects of a change of control on Executive Board and executive remuneration. Members of the Executive Board of RWE AG have the special right to terminate their employment contract in the event that shareholders or third parties obtain control over the company and this would be linked to significant disadvantages for them. In such a case, they are free to resign from their position within six months of the change of control with cause by giving three months' notice. In addition, they can request the termination of their employment contract and receive a one-off payment.

The amount of the one-off payment shall correspond to the compensation that would have been due until the end of the contractually agreed term of service, but no more than three times the total contractual annual remuneration. Share-based payment is not included in this. This is in line with the current recommendations of the German Corporate Governance Code.

The Strategic Performance Plan presented on page 64 et seq. stipulates for the Executive Board and executives of RWE AG and subordinated associated companies that in the event of a change of control the granted performance shares, which have already been finally determined but not yet paid out, shall be paid out early. The payout amount shall correspond to the number of performance shares multiplied by the sum of the average closing price of the RWE common share on the last 30 trading days prior to the announcement of the change of control and the amount of dividend paid out per share until then, calculated starting from the time when the number of performance shares was finally granted. All performance shares granted on a preliminary basis at the time of the change of control shall expire without replacement or compensation.

1.12 REMUNERATION REPORT

Performance-oriented and transparent supervisory and management board remuneration are fundamental to good corporate governance. This is ascribed great importance in particular by institutional investors. In this chapter, we have provided information on the structure and level of the remuneration of the Supervisory Board and Executive Board of RWE AG. In addition to the requirements of German stock corporation and commercial law, we also consider the recommendations of the German Corporate Governance Code concerning the design and presentation of remuneration systems.

Structure of Supervisory Board remuneration

Fundamentals. The remuneration of the Supervisory Board is governed by the provisions of the Articles of Incorporation of RWE AG. Accordingly, the Chairman of the Supervisory Board receives fixed remuneration of €300,000 per fiscal year. His Deputy receives €200,000 per fiscal year. The other members of the Supervisory Board receive fixed remuneration of €100,000 and additional compensation for committee mandates according to the following rules.

Members of the Audit Committee receive additional remuneration of €40,000. This payment is increased to €80,000 for the Chair of this committee. With the exception of the Nomination Committee, the members of which do not receive additional remuneration, the members and the Chairs of all the other Supervisory Board committees receive an additional €20,000 and €40,000 in remuneration, respectively. Remuneration for a committee mandate is only paid if the committee is active at least once in the fiscal year.

Supervisory Board members who concurrently hold several offices in this body only receive compensation for the highest-paid position. Remuneration is prorated if a Supervisory Board member only performs a function for part of a fiscal year.

In addition to the remuneration paid, out-of-pocket expenses are refunded to the members of the Supervisory Board. Some Supervisory Board members also receive income from the exercise of Supervisory Board mandates at subsidiaries of RWE AG.

The members of the Supervisory Board imposed on themselves the obligation, subject to any commitment to relinquish their pay, to use 25 % of the total compensation paid (before taxes) to buy RWE shares and to hold them for the duration of their membership of the Supervisory Board of RWE AG. Last year, all of the members who do not relinquish their compensation met this self-imposed obligation for their compensation for 2017. For the new members who joined the Board in 2018, this self-imposed obligation applies for the first time to the remuneration for fiscal 2018, which was paid out at the start of fiscal 2019.

Level of Supervisory Board remuneration

Remuneration for fiscal 2018. In total, the remuneration of the Supervisory Board (excluding out-of-pocket expenses) amounted to €3,480,000 in fiscal 2018 (previous year: €3,637,000). Of this sum, €460,000 (previous year: €459,000) was remuneration paid for mandates on committees of the Supervisory Board and €720,000 (previous year: €877,000) was remuneration paid for mandates at subsidiaries.

The remuneration of all individuals who have served on the Supervisory Board in 2017 and/or 2018 is shown in the following table.

Supervisory Board remuneration[1]	Fixed remuneration		Remuneration for committee offices		Remuneration for mandates at subsidiaries[2]		Total remuneration[3]	
€ '000	2018	2017	2018	2017	2018	2017	2018	2017
Dr. Werner Brandt, Chairman	300	300	–	–	–	300	300	600
Frank Bsirske, Deputy Chairman	200	200	–	–	200	200	400	400
Michael Bochinsky (since 1 August 2018)	42	–	17	–	–	–	59	–
Reiner Böhle	100	100	20	20	–	120	120	240
Sandra Bossemeyer	100	100	20	20	–	–	120	120
Martin Bröker (since 1 September 2018)	33	–	–	–	–	–	33	–
Ute Gerbaulet (since 27 April 2017)	100	68	–	–	–	–	100	68
Reinhold Gispert (27 April 2017 to 31 July 2018)	58	68	23	26	–	14	81	108
Arno Hahn (until 27 April 2017)	–	32	–	13	–	18	–	63
Andreas Henrich (until 31 August 2018)	67	100	–	–	–	–	67	100
Prof. Dr. Hans-Peter Keitel	100	100	20	20	–	–	120	120
Dr. h.c. Monika Kircher	100	100	–	–	–	–	100	100
Martina Koederitz (20 April 2016 to 27 April 2017)	–	32	–	–	–	38	–	71
Monika Krebber	100	100	20	20	120	67	240	187
Harald Louis	100	100	20	20	20	40	140	160
Dagmar Mühlenfeld	100	100	20	20	–	–	120	120
Peter Ottmann	100	100	20	20	–	–	120	120
Günther Schartz	100	100	20	20	–	–	120	120
Dr. Erhard Schipporeit	100	100	80	80	300	–	480	180
Dr. Wolfgang Schüssel	100	100	40	40	–	–	140	140
Ullrich Sierau	100	100	40	40	–	–	140	140
Ralf Sikorski	100	100	40	40	50	50	190	190
Marion Weckes	100	100	40	40	–	–	140	140
Leonhard Zubrowski	100	100	20	20	30	30	150	150
Total[3]	**2,300**	**2,301**	**460**	**459**	**720**	**877**	**3,480**	**3,637**

1 Supervisory Board members who joined or retired from the corporate body during the year receive prorated remuneration.
2 Remuneration for exercising mandates at subsidiaries is only included for periods of membership of the Supervisory Board of RWE AG.
3 The commercial rounding of certain figures can result in inaccurate sums.

Structure of Executive Board remuneration

Executive Board remuneration. The structure and level of the Executive Board's remuneration are determined by the Supervisory Board of RWE AG and reviewed on a regular basis to determine whether they are appropriate and in line with the market. The remuneration system described in the following has been applied since 1 October 2016. It is made up of non-performance-based and performance-based components. The former consists of the fixed salary, the pension instalment as well as fringe benefits. The performance-based components include the bonus and a share-based payment, the latter of which is a long-term compensation component.

Recipients of Executive Board remuneration. In the financial year that just ended, Rolf Martin Schmitz and Markus Krebber received compensation for their work on the Executive Board of RWE AG. Rolf Martin Schmitz has been a member of the Executive Board since 1 May 2009 and its Chairman since 15 October 2016. His tenure on the Executive Board expires on 30 June 2021. Markus Krebber was appointed to this corporate body for an initial period of three years with effect from 1 October 2016 and has been in charge of finance since 15 October 2016. In December 2018, his appointment was extended by five years through to 30 September 2024.

Non-performance-based Executive Board remuneration

Fixed compensation and pension instalments. The members of the Executive Board of RWE AG receive a fixed annual salary, which is paid in twelve monthly instalments. As a second fixed remuneration component, they are entitled to a pension instalment for every year of service, which is determined on an individual basis, unless – as is the case with Rolf Martin Schmitz – they belonged to the Executive Board before the pension instalment was introduced and have therefore received a pension commitment (see page 67).

The pension instalment is paid in cash or retained in part or in full in exchange for a pension commitment of equal value through a gross compensation conversion. RWE has concluded a reinsurance policy to finance the pension commitment. The accumulated capital may be drawn upon on retirement, but not before the Executive Board member turns 62. Members of the Executive Board of RWE reach the established age limit when they are 63 years old. They can be reappointed for one year at a time thereafter, but may not hold office beyond their 65th birthday.

When retiring, Executive Board members can choose a one-time payment or a maximum of nine instalments. They and their surviving dependants do not receive any further benefits. Vested retirement benefits from earlier activities within the RWE Group remain unaffected by this.

Fringe benefits. Non-performance-based compensation components also include fringe benefits, primarily consisting of company cars and accident insurance premiums.

Performance-based Executive Board remuneration

Bonus. Executive Board members receive a bonus which is based on the economic performance of the company and the degree to which they achieve their individual goals and the collective goals of the Executive Board. The starting point for calculating the bonus is what is referred to as the 'company bonus', which depends on the level of adjusted EBIT (EBIT minus the non-operating result) and is determined as set out in the next paragraph.

The Supervisory Board sets a target as well as a floor and a ceiling for adjusted EBIT at the beginning of every fiscal year. After the end of the fiscal year, the actual level of adjusted EBIT achieved is compared with the target figure. If the figures are identical, the target achievement is 100 %. In this case, the company bonus equals the contractually agreed baseline bonus. If adjusted EBIT is exactly at the pre-defined floor, target achievement is 50 %; if it is at the ceiling, target achievement is 150 %. Target achievement is adjusted linearly if adjusted EBIT is between the two limits. If it is below the floor, no company bonus is paid. If the ceiling is exceeded, the maximum target achievement remains 150 %. The rules of the remuneration system for the Executive Board stipulate that the Supervisory Board may make adjustments to adjusted EBIT. Such adjustments can relate to gains on disposals, changes in provisions, as well as impairments and their consequences.

The performance of each Executive Board member is considered by multiplying the company bonus by a performance factor. It may vary between 0.8 and 1.2. The value achieved depends on the following criteria, each of which is weighted by one-third: (1) achievement of individual targets, (2) collective performance of the Executive Board, and (3) performance in corporate responsibility (CR) and employee motivation. Success in CR depends on the achievement of environmental and social goals and is documented in our sustainability reporting. Employee motivation is measured with a motivation index, which is based on anonymous surveys of employee commitment and satisfaction.

After the end of every fiscal year, the Supervisory Board evaluates the individual performance of the Executive Board members relative to the three criteria above and determines their individual performance factor. This is done in line with the binding goals and targets which it sets at the beginning of the financial year. The bonus determined in this manner is paid out in full to the Executive Board members after the end of the fiscal year.

Adjusted EBIT, the target figure used to determine the company bonus, was revised per a Supervisory Board resolution of September 2018. In the past, innogy SE, in which we hold a 76.8 % stake, was considered as a fully consolidated subsidiary in determining EBIT, in accordance with International Financial Reporting Standards (IFRS). As set out on page 40, the envisaged asset swap with E.ON required methodological accounting adjustments to be made, as a result of which adjusted EBIT according to the old definition no longer exists. When measuring performance, we now use an adjusted EBIT that reflects RWE's current situation better and is determined on a continuous basis. In so doing, deviating from IFRS consolidation principles, innogy is considered as a purely financial investment. More detailed information on this approach can be found on page 58. The change in the composition of adjusted EBIT made it necessary to revise the target parameter for performance measurement retrospectively. This was decided by the Supervisory Board of RWE AG in September 2018.

The German Corporate Governance Code (GCGC) recommends prohibiting retrospective changes to performance targets and reference parameters (Item 4.2.3, Paragraph 2, Sentence 8). In our Declaration of Compliance, which was published on 21 September 2018, we stated that we deviated from the Code in this point. However, we do not believe that we acted contrary to the basic intention of the recommendation, as the update to the target figures was methodological in nature and occasioned by German stock corporation law.

Share-based payment. Executive Board members are granted a share-based payment according to RWE AG's Strategic Performance Plan (SPP). The SPP rewards the achievement of long-term goals. The key determinants of success are the level of adjusted net income and the performance of the RWE common share (return on share price development and dividend) over a period of several years. The link between compensation and the development of the share price over the long term motivates the Executive Board to consider the interests of the company's owners when taking decisions.

The SPP is based on conditionally granted performance shares. Performance shares are granted as of 1 January of every fiscal year. The SPP's conditions envisage a transitional tranche in fiscal 2016 (year of introduction) and three more regular tranches for 2017, 2018 and 2019. The Executive Board members receive a grant letter for each tranche, in which they are informed of their personal gross allocation amount. The preliminary number of performance shares is calculated by dividing the grant amount by the average closing quotation of the RWE share over the last 30 days of trading on Xetra before the grant.

The granted performance shares have a term of four years (vesting period). After the end of the first year, the number of fully granted performance shares is determined. It depends on the adjusted net income achieved by RWE for the year. The actual figure is compared to a pre-defined target figure. The procedure is similar to the approach taken when determining the company bonus. The Supervisory Board pre-defines a target, a floor and a ceiling for adjusted net income, orienting itself towards the approved medium-term plan in doing so. If the target figure is achieved exactly, 100 % of the conditionally granted performance shares of the tranche is fully allocated. If adjusted net income is exactly at the floor, 50 % of the conditionally granted performance shares is fully allocated; if it is at the ceiling, the final grant amounts to 150 %. If adjusted net income is below the floor, all of the conditionally granted performance shares from the tranche lapse. If the ceiling is exceeded, the maximum grant remains 150 %.

The fully vested performance shares are fully paid out in cash to the Executive Board member after the end of the four-year vesting period. The level of the payment depends on the performance of the RWE common share. It corresponds to the final number of performance shares multiplied by the sum of the average closing quotation of the RWE common share over the last 30 days of trading on Xetra before the end of the vesting period and the cumulative dividend paid during the holding period. However, a cap applies in this case as well: even in the event of an extremely good share performance, the payment is limited to a maximum of 200 % of the initial gross grant amount.

The members of the Executive Board are obliged to reinvest 25 % of the payment (after taxes) in RWE shares. The shares must be held until at least the end of the third year after conclusion of the vesting period.

The performance shares remain unaffected after an Executive Board member leaves the body at the end of their contract and are paid out as planned at the end of the vesting period. If an Executive Board member voluntarily leaves the company early or is dismissed with good cause, all performance shares which have not yet reached the end of the plan's duration lapse. The SPP also contains a provision which gives the Supervisory Board the power to punish infractions by Executive Board members, for example serious violations of the company's Code of Conduct, by reducing or completely voiding ongoing SPP tranches.

In 2016, the Supervisory Board established target figures for adjusted net income for the planned SPP tranches (2016 to 2019). As part of this, the aforementioned ceilings and floors were also determined. The SPP conditions stipulate that the Supervisory Board may retrospectively adjust the target and threshold values only to a very limited extent in precisely defined cases. Such adjustments are permissible if they take account of the effects of capital measures, acquisitions, divestments and regulatory changes, which were not yet known or unforeseeable when the figures were determined. As set out in the commentary on the bonus, in 2018, we changed the method used to determine the figures due to the envisaged asset swap with E.ON. This also affected adjusted net income, which we had derived from the IFRS net income in the past and now determine in the manner described on page 58, i. e. by considering innogy as a pure financial investment. Accordingly, the target figures for adjusted net income for the 2018 and 2019 SPP tranches were also adjusted retrospectively.

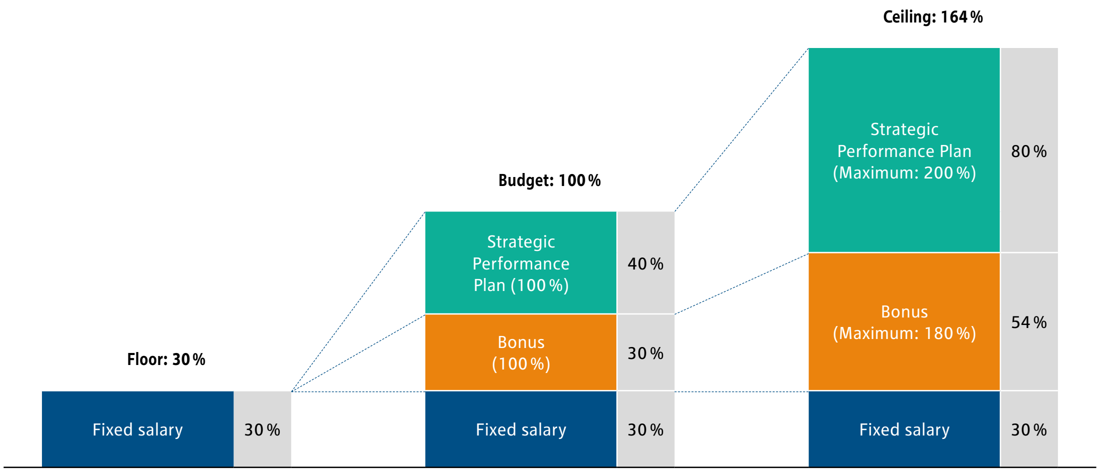
We published information on this deviation from the German Corporate Governance Code in the aforementioned statement of compliance on 21 September 2018.

Remuneration for exercising mandates. During the past fiscal year, members of the RWE AG Executive Board were paid to exercise supervisory board mandates at affiliates. This income is deducted from the bonus and therefore does not increase the total remuneration.

Shares of total remuneration accounted for by the individual components. Assuming that both the company and the Executive Board members achieve their performance targets to a degree of 100 %, the compensation structure roughly breaks down as follows: the base salary accounts for around 30 % of total remuneration. Approximately 30 % is allocable to short-term variable remuneration, i. e. the bonus. As a long-term compensation component, the SPP accounts for about 40 % of total remuneration.

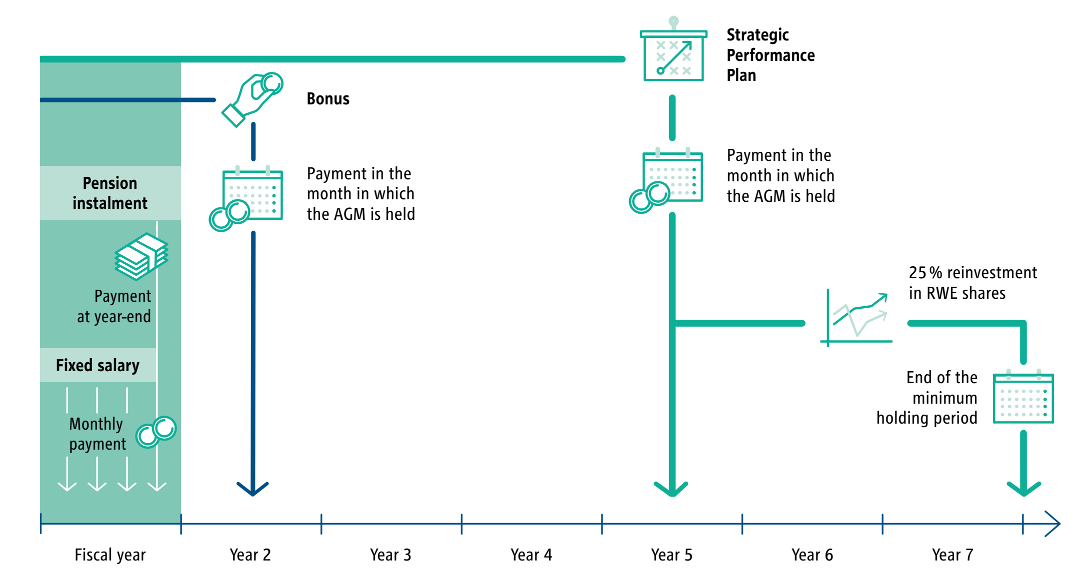
Limitation of Executive Board remuneration. As set out earlier, the level of variable compensation components is limited. The company bonus amounts to a maximum of 150 % of the contractually agreed bonus budget. Multiplying this by the individual performance factor (0.8 to 1.2), it is possible to reach a maximum of 180 % of the bonus budget. With regard to share-based payment under the SPP, payout of the performance shares after the completion of the vesting period is limited to a maximum of 200 % of the grant budget. Due to the above maximum values, there is also a cap on total compensation (see diagram overleaf).

Range of Executive Board remuneration



Payment dates. Executive Board members receive their fixed salary in twelve monthly instalments. The pension instalment is paid out at the end of the year, insofar as it is not converted into a pension commitment. After the fiscal year, the Supervisory Board determines the target achievement for the company bonus and the individual performance factor. The bonus is paid out in the month of the Annual General Meeting (AGM) which attends to the financial statements of RWE AG. After the end of the four-year vesting period, the performance shares from the SPP are paid out during the month of the Annual General Meeting held in the following year. As explained earlier, Executive Board members must invest 25 % of the payment in RWE common shares and may not liquidate these shares until after three additional calendar years have passed from completion of the four-year vesting period. As a result, it takes a total of seven years for Executive Board members to obtain the full amount of their compensation.

Executive Board remuneration payment timeline for a fiscal year



Pension scheme. Until the introduction of the pension instalment as of 1 January 2011 described earlier, pension benefits were granted to the members of the Executive Board. Of the Executive Board members in 2018, this only applies to Rolf Martin Schmitz; the pension commitment made to him in 2009 will remain unchanged. It entitles him to life-long retirement benefits in the event of retirement from the Executive Board of RWE AG upon turning 59, permanent disability, early termination or non-extension of his employment contract by the company. In the event of death, his surviving dependants are entitled to benefits. The amount of Rolf Martin Schmitz's qualifying income and the level of benefits determined by the duration of service are taken as a basis for his individual pension and surviving dependants' benefits.

Change of control. If shareholders or third parties obtain control over the company and this results in major disadvantages for the Executive Board members, they have a special right of termination. They have the right to resign from the Executive Board and to request that their employment contract be terminated in combination with a one-off payment within six months of the change of control.

A change of control as defined by this provision occurs when one or several shareholders or third parties acting jointly account for at least 30 % of the voting rights in the company, or if any of the aforementioned can exert a controlling influence on the company in another manner. A change of control also occurs if the company is merged with another legal entity, unless the value of the other legal entity is less than 50 % of the value of RWE AG.

On termination of their employment contract, Executive Board members receive a one-off payment equalling the compensation due until the end of the term of their contract: however, this amount will not be higher than three times their total contractual annual remuneration. The share-based payments under the SPP are not included in this payment.

In the event of a change of control, all of the fully granted performance shares under the SPP that have not been paid out are paid out early. All performance shares granted under the SPP on a preliminary basis lapse on the date of the change of control.

Early termination of Executive Board mandate and severance cap. Following a recommendation of the GCGC, the Executive Board's employment contracts include a provision stipulating that if an Executive Board mandate is otherwise terminated early without due cause, a severance payment of no more than the remuneration due until the end of the employment contract and no more than two total annual compensations including fringe benefits is made (severance cap).

Level of Executive Board remuneration

Total amount of the remuneration components for 2018. The following section presents the remuneration granted to the Executive Board members of RWE AG for their work in fiscal 2018. It was calculated in compliance with the rules set out in the German Commercial Code.

Total Executive Board compensation for the past fiscal year amounted to €6,880,000. The previous year's figure was €7,274,000 and included the emoluments of Uwe Tigges, who resigned from the Executive Board at the end of April 2017.

In 2018, non-performance-based components, i. e. the fixed salary of the Executive Board members, fringe benefits and the pension instalment, amounted to €2,246,000 (previous year: €2,342,000). Pursuant to the German Commercial Code, the annual service cost of the pension commitment to Rolf Martin Schmitz is not recognised as remuneration, as opposed to the pension instalment of €300,000 paid to Markus Krebber (previous year: €255,000).

In 2018, performance-based components amounted to a total of €4,634,000 (previous year: €4,932,000). Of this, €2,284,000 (previous year: €2,365,000) was attributable to the bonus for fiscal 2018 paid directly and €2,350,000 (previous year: €2,567,000) to the allocation of performance shares under the SPP.

As set out on page 64, last year we started calculating adjusted EBIT, the yardstick for determining the level of the bonus, using a new method that considers innogy as a purely financial investment. Therefore, the target for 2018 was adjusted retrospectively, to €831 million (target achievement of 100 %) with a floor of €131 million (target achievement of 50 %) and a ceiling of €1,531 million (target achievement of 150 %). The new figures were also determined on the basis of the medium-term planning prepared in 2017. We actually achieved adjusted EBIT of €953 million. The adjusted EBIT figure was adjusted by –€49 million to €904 million. The adjustment relates to changes in the amortisation periods of certain assets and valuation effects regarding provisions. The adjustment leads to a target achievement of 105 % for the company bonus.

Calculation of the 2018 company bonus	Adjusted EBIT € million	Target achievement %
Target	**831**	**100**
Floor	131	50
Ceiling	1,531	150
Actual	**953**	**–**
Adjustments[1]	–49	–
Adjusted actual	**904**	**105**

1 See commentary above.

As set out above, the company bonus resulting from this target achievement is multiplied by a personal performance factor. Based on the assessment of the personal goals, the collective performance of the Executive Board as a whole as well as the targets relating to corporate responsibility and employee motivation, the Supervisory Board set the performance factor for Rolf Martin Schmitz and Markus Krebber at 1.2. This results in a bonus of 126 % of the contractually agreed budget. The Supervisory Board acknowledged that the Executive Board made better progress than expected in implementing the strategic and financial goals established in advance. In particular, the substantial progress made in transforming RWE into a leading renewable energy company was recognised. On the whole, feedback from the capital market on the initiated transformation of the company has been positive. The annual employee opinion survey proves that personnel motivation improved even further from a level that was already high, despite the challenging environment.

The following table summarises the short-term remuneration paid in accordance with the German Commercial Code for fiscal 2018.

Short-term Executive Board remuneration	Dr. Rolf Martin Schmitz		Dr. Markus Krebber		Uwe Tigges until 30 April 2017		Total	
€ '000	2018	2017	2018	2017	2018	2017	2018	2017
Non-performance-based remuneration								
Fixed remuneration	1,160	960	750	750	–	250	1,910	1,960
Fringe benefits (company car, accident insurance)	20	15	16	20	–	7	36	42
Other payments (pension instalments)	–	–	300	255	–	85	300	340
Total	**1,180**	**975**	**1,066**	**1,025**	**–**	**342**	**2,246**	**2,342**
Performance-based remuneration								
Direct bonus payment	1,271	1,168	718	643	–	213	1,989	2,024
Remuneration for mandates[1]	115	138	180	203	–	–	295	341
Bonus	**1,386**	**1,306**	**898**	**846**	**–**	**213**	**2,284**	**2,365**
Total	**2,566**	**2,281**	**1,964**	**1,871**	**–**	**555**	**4,530**	**4,707**

1 In 2018, the remuneration for exercising intragroup supervisory board offices was fully set off against the bonus.

Share-based payment according to the Strategic Performance Plan. In fiscal 2018, Rolf Martin Schmitz and Markus Krebber were granted performance shares under the SPP of RWE AG (see the following overview). The main factor in determining the ratio of the number of performance shares granted on a preliminary basis to the final number of performance shares granted was adjusted net income in fiscal 2018. The target figure (€49 million) was derived from the 2016 medium-term plan and corresponds to an allocation of 100 %. The floor is –€351 million, and the ceiling is €449 million. Similar to adjusted EBIT, a downward adjustment to €233 million was made to the figure actually achieved (€591 million). Accordingly, the allocation was 123 %. The adjustments were made pursuant to the SPP conditions in order to eliminate unplanned exceptional effects. For example, we recognised substantial impairments for power plants in the 2016 consolidated financial statements, which had not been included in the medium-term plan at the time and have resulted in a significant decrease in depreciation. We eliminated this effect on depreciation.

Calculation of the 2018 tranche of the Strategic Performance Plan	Adjusted net income € million	Target achievement %
Target	**49**	**100**
Floor	–351	50
Ceiling	449	150
Actual	**591**	**–**
Adjustments[1]	–358	–
Adjusted actual	**233**	**123**

1 See commentary above.

Long-term incentive payment Strategic Performance Plan		Dr. Rolf Martin Schmitz			Dr. Markus Krebber		
Tranche	Year	2018	2017	2016	2018	2017	2016
Company		RWE AG	RWE AG	RWE AG	RWE AG	RWE AG	RWE AG
Grant date		1 Jan 2018	1 Jan 2017	1 Jan 2016	1 Jan 2018	1 Jan 2017	1 Jan 2016
Fair value at grant date	€ ’000	1,250	1,250	769	1,100	988	247
Share price (average)	€	18.80	11.62	13.78	18.80	11.62	13.78
Number of performance shares allocated on a provisional basis		**66,489**	**107,573**	**55,787**	**58,511**	**84,983**	**17,915**
Measurement date of performance conditions		31 Dec 2018	31 Dec 2017	31 Dec 2017	31 Dec 2018	31 Dec 2017	31 Dec 2017
Target achievement in relation to adjusted net income	%	123	115	115	123	115	115
Final number of fully granted performance shares		81,781	123,709	64,155	71,969	97,730	20,602
End of the vesting period		31 Dec 2021	31 Dec 2020	31 Dec 2019	31 Dec 2021	31 Dec 2020	31 Dec 2019

Long-term incentive payment Strategic Performance Plan		Uwe Tigges until 30 April 2017		
Tranche	Year	2018	2017	2016
Company		innogy SE	innogy SE	innogy SE
Grant date		1 Jan 2018	1 Jan 2017	1 Jan 2016
Fair value at grant date	€ ’000	–	329	706
Share price (average)	€	–	32.07	37.13
Number of performance shares allocated on a provisional basis		**–**	**10,264**	**19,021**
Measurement date of performance conditions		–	31 Dec 2017	31 Dec 2017
Target achievement in relation to adjusted net income	%	–	88	88
Final number of fully granted performance shares		–	9,032	16,738
End of the vesting period		–	31 Dec 2020	31 Dec 2019

The table below shows the level of provisions formed for share-based payment obligations under the SPP.

Addition of provisions for long-term share-based incentive payments € ’000	2018	2017
Dr. Rolf Martin Schmitz	1,413	592
Dr. Markus Krebber	934	393
Uwe Tigges (until 30 April 2017)	–	124
Total	**2,347**	**1,109**

Obligations under the former pension scheme. The service cost of pension obligations to Rolf Martin Schmitz amounted to €536,000 in 2018 (previous year: €538,000). This is not a remuneration component in accordance with the German Commercial Code. As of year-end, the net present value of the defined benefit obligation determined in accordance with IFRS amounted to €13,370,000 (previous year: €12,391,000). The present value of the pension obligation determined according to the German Commercial Code totalled €10,534,000 (previous year: €9,287,000). The pension obligation for 2018 increased by €1,248,000 (previous year: decrease of €607,000).

Based on the emoluments qualifying for a pension as of 31 December 2018, the projected annual pension of Rolf Martin Schmitz on retiring from the company as of the expiry of his appointment amounted to €556,000 (unchanged from the previous year). This includes vested pension benefits due from former employers transferred to RWE AG.

Recommendations of the German Corporate Governance Code

According to the version of the GCGC published on 7 February 2017, the total remuneration of management board members comprises the monetary compensation elements, pension commitments, other awards, fringe benefits of all kinds and benefits from third parties which were granted or paid in the financial year with regard to management board work. Item 4.2.5, Paragraph 3 of the Code lists the compensation components that should be disclosed. Unlike under German commercial law, according to the GCGC the annual service cost of pension benefits is also part of total remuneration.

The GCGC provides specific examples for the recommended presentation of management board compensation based on model tables, which distinguishes between 'benefits granted' and 'benefits received'.

- According to the GCGC, benefits or compensation are granted when a binding commitment to such is made to the management board member. In deviation from German commercial law, it is not relevant to what extent the management board member has already provided the services being remunerated.
- The term 'benefits received' defines the extent to which the management board member has already received payments. In this regard, the relevant aspect is the time at which the amount being paid is sufficiently certain and not the actual time of the payment.

This distinction made in the Code can be illustrated with the example of the bonus: the contractually agreed and promised budgeted bonus for the fiscal year in question is considered 'granted'. Conversely, the benefits received table shows the bonus level which will actually be paid with a high degree of probability. In this regard, it is irrelevant that the payment will not be made until the following year. The payment date is deemed to have been reached when the indicators and results needed to determine target achievement (and therefore the bonus) are known with sufficient certainty. The Code assumes that this is already the case at the end of the year. As a result, the Executive Board bonuses are stated in the reporting year in the benefits received table.

In the following, we present the compensation of the Executive Board of RWE AG based on the sample tables recommended by the GCGC.

Benefits granted	Dr. Rolf Martin Schmitz Chief Executive Officer since 15 October 2016				Dr. Markus Krebber Chief Financial Officer since 15 October 2016			
€ '000	2017	2018	2018 (Min)	2018 (Max)	2017	2018	2018 (Min)	2018 (Max)
Fixed remuneration	960	1,160	1,160	1,160	750	750	750	750
Pension instalment	–	–	–	–	255	300	300	300
Fringe benefits	15	20	20	20	20	16	16	16
Total fixed remuneration	**975**	**1,180**	**1,180**	**1,180**	**1,025**	**1,066**	**1,066**	**1,066**
One-year variable remuneration	**1,100**	**1,100**	**0**	**1,980**	**713**	**713**	**0**	**1,283**
Bonus	1,100	1,100	0	1,980	713	713	0	1,283
Multi-year variable remuneration	**1,250**	**1,250**	**0**	**2,500**	**988**	**1,100**	**0**	**2,200**
SPP 2017 tranche (term: 2017–2020)	1,250	–	–	–	988	–	–	–
SPP 2018 tranche (term: 2018–2021)	–	1,250	0	2,500	–	1,100	0	2,200
Total variable remuneration	**2,350**	**2,350**	**0**	**4,480**	**1,701**	**1,813**	**0**	**3,483**
Total	**3,325**	**3,530**	**1,180**	**5,660**	**2,726**	**2,879**	**1,066**	**4,549**
Service cost	538	536	536	536	–	–	–	–
Total remuneration	**3,863**	**4,066**	**1,716**	**6,196**	**2,726**	**2,879**	**1,066**	**4,549**

Benefits received	Dr. Rolf Martin Schmitz Chief Executive Officer since 15 October 2016		Dr. Markus Krebber Chief Financial Officer since 15 October 2016	
€ '000	2018	2017	2018	2017
Fixed remuneration	1,160	960	750	750
Pension instalment	–	–	300	255
Fringe benefits	20	15	16	20
Total fixed remuneration	**1,180**	**975**	**1,066**	**1,025**
One-year variable remuneration	**1,386**	**1,306**	**898**	**846**
Bonus[1]	1,386	1,306	898	846
Multi-year variable remuneration	**0**	**0**	**0**	**0**
Total variable remuneration	**1,386**	**1,306**	**898**	**846**
Total	**2,566**	**2,281**	**1,964**	**1,871**
Service cost	536	538	–	–
Total remuneration	**3,102**	**2,819**	**1,964**	**1,871**

1 The bonus includes remuneration for exercising intragroup supervisory board offices; also see the table 'Short-term Executive Board remuneration' on page 68.

1.13 DEVELOPMENT OF RISKS AND OPPORTUNITIES

RWE's risk position is significantly affected by changes in the regulatory framework in the energy sector. State intervention with the object of reducing greenhouse gas emissions could have a very negative effect on us. For instance, we may have to shut down further lignite power plants prematurely in Germany. However, we expect to receive adequate compensation in such an event. Through the envisaged transaction with E.ON, we intend to improve and stabilise our operating earnings power. However, the RWE Group already rests on a solid foundation in both financial and organisational terms. An important part of this foundation is our risk management, which has proven itself over many years, enabling us to identify, assess and control risks and opportunities systematically.

Responsibility for risk management at RWE. Responsibility for risk management within the RWE Group lies with two companies: RWE AG, which manages the risks of the companies subordinate to it that do not belong to the innogy Group, and innogy SE, which has been accountable for the management of its own risks and those of its subsidiaries since its IPO in October 2016. This distribution of tasks will remain until the sale of our stake in innogy to E.ON, which we intend to complete in 2019. However, we have adopted a new approach to recording RWE AG's risk exposure due to innogy. Until the beginning of 2018, we faced a significant risk of our 76.8 % stake in the company losing value as a result of decreasing share prices. Such declines in the share price no longer represent a notable risk because the acquisition of our share in innogy by E.ON was agreed upon at a fixed price. This would only change if the transaction failed, a scenario that has the potential to cause substantial damage, but is unlikely.

The following is a detailed presentation of RWE AG's risk management. Corresponding information regarding our subsidiary innogy can be found in its latest annual report.

Organisation of RWE AG's risk management. The primary responsibility for our risk management lies with the Executive Board of RWE AG. It monitors and manages the overall risk of the Group and its operational subsidiaries. In doing so, it determines the risk appetite of RWE and defines upper limits for risk positions.

At the level below the Executive Board, the Controlling & Risk Management Department has the task of applying and developing the risk management system. It derives detailed limits for the individual business fields and operating units from the risk caps set by the Executive Board. Its tasks also include checking the identified risks for completeness and plausibility and aggregating them. In so doing, it receives support from the Risk Management Committee, which is composed of the heads of the following five RWE AG departments: Controlling & Risk Management (Chair), Finance & Credit Risk, Accounting, Legal and Corporate Business Development. The Controlling & Risk Management Department provides the Executive Board and the Supervisory Board of RWE AG with regular reports on the company's risk exposure.

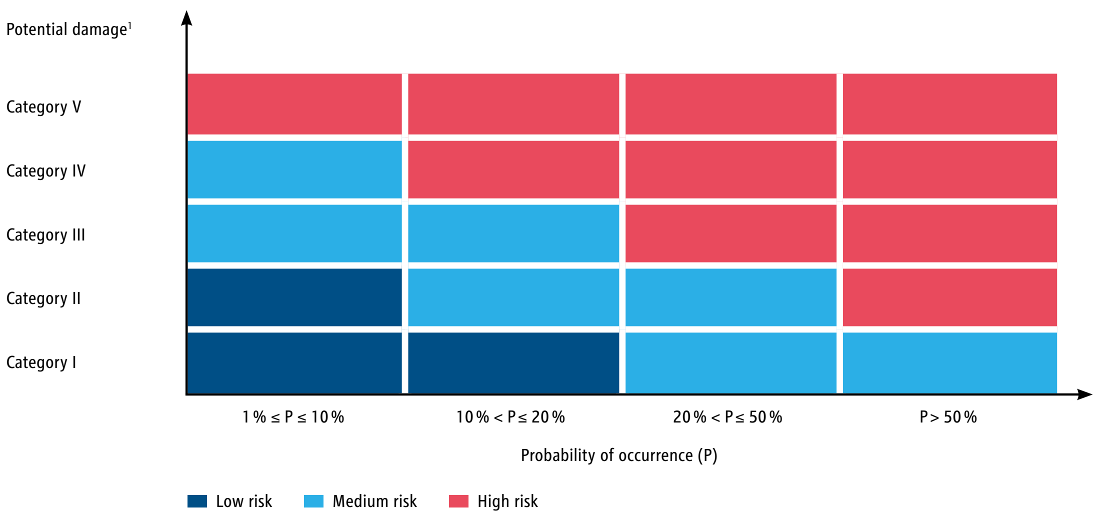
A number of additional organisational units and committees have been entrusted with risk management tasks:

- Financial risks and credit risks are managed by the Finance & Credit Risk Department, which reports directly to the CFO of RWE AG.
- The Accounting Department, which also reports to the CFO, is tasked with limiting the risk of material misstatements in financial reporting. It has an accounting-related internal control system for this purpose. Our activities for securing the quality of financial reporting are supported by a committee consisting of officers from Accounting and other departments of relevance to accounting. More detailed information can be found on page 82.
- The Internal Audit & Compliance Department monitors compliance with RWE's Code of Conduct. One of its main focal points is avoiding corruption risks. It reports to the CEO of RWE AG or, if members of the Executive Board are affected, directly to the Chairman of the Supervisory Board and the Chairman of the Supervisory Board's Audit Committee.
- Risks from changes in commodity prices are monitored by RWE Supply & Trading in so far as they relate to the conventional electricity generation, energy trading and gas businesses.
- Strategies to limit market risks from the generation business are approved by the Commodity Management Committee. This is an expert body which currently consists of the CFO of RWE AG, members of the management of RWE Supply & Trading and a representative of the Controlling & Risk Management Department.

- The strategic guidelines for the management of financial assets (including the funds of RWE Pensionstreuhand e. V.) are determined by the Asset Management Committee. This body also currently attends to this task for the financial investments of innogy SE. Its members include the CFO of RWE AG, the head of the Finance & Credit Risk Department, the head of the Portfolio Management/Mergers & Acquisitions Department and the head of Financial Asset Management from the Portfolio Management/Mergers & Acquisitions Department. The heads of the innogy Finance and Controlling & Risk Departments and the CFO of innogy's Grid & Infrastructure Division are also members.

Under the expert management of the aforementioned organisational units, RWE AG and its operating subsidiaries are responsible for identifying risks early, assessing them correctly and managing them in compliance with corporate standards. The Internal Audit Department regularly assesses the quality and functionality of our risk management system.

RWE AG risk matrix



Potential damage[1]	Earnings risks[2] Potential impact on net income quantified as a percentage of adjusted EBITDA[3] and/or equity[4]	Indebtedness/liquidity/equity risks[2] Potential impact on net debt and equity
Category V	≥ 50 % of equity	≥ €8 billion
Category IV	≥ 100 % of adjusted EBITDA and < 50 % of equity	≥ €4 billion and < €8 billion
Category III	≥ 40 % and < 100 % of adjusted EBITDA	≥ €2 billion and < €4 billion
Category II	≥ 20 % and < 40 % of adjusted EBITDA	≥ €1billion and < €2 billion
Category I	< 20 % of adjusted EBITDA	< €1 billion

1 Aggregated figure for 2019 to 2021.
2 innogy is not included in the figures as a fully consolidated company, but as a purely financial investment (see page 58).
3 Average for 2019 to 2021 derived from the medium-term plan.
4 Equity as of 30 September 2018 (€18,918 million).

Risk management as a continuous process. Risks and opportunities are defined as negative or positive deviations from expected figures. Their management is an integral and continuous part of operating processes. We assess risks every six months, using a bottom-up analysis. We also monitor risk exposure between the regular survey dates. The Executive Board of RWE AG is immediately notified of any material changes. Our executive and supervisory bodies are updated on the risk exposure on a quarterly basis.

Our analysis normally covers the three-year horizon of our medium-term plan, but can extend beyond that for long-term risks. We evaluate risks to determine their impact on net income on the one hand and on net debt and equity on the other hand. We calculate the probability of occurrence for all risks as well as their potential damage. Risks that share the same cause are aggregated to a single risk if possible. We analyse the material risks of the RWE Group using a matrix in which the risks' probability of occurrence and potential net damage are represented, i. e. taking account of hedging measures. Depending on their position in the matrix, we distinguish between low, medium and high risks. Based on this analysis, we determine whether there is a need for action and initiate measures to mitigate the risks if necessary.

We calculate the effects of risks on net income as percentages of adjusted EBITDA and equity. We apply the non-IFRS method in which innogy is recognised as a purely financial investment in calculating these key figures, as set out on page 58. We classify the potential influence on net debt and equity based on fixed threshold values.

Risk classes	Classification of the highest single risk	
	31 Dec 2018	31 Dec 2017
Market risks	Medium	Medium
Regulatory and political risks	High	High
Legal risks	Medium	Medium
Operational risks	Medium	Medium
Financial risks	Medium	High
Creditworthiness of business partners	Medium	Medium
Other risks	High	Low

Main risks for the RWE Group. As presented in the table above, our main risks can be classified into seven groups, depending on their nature. The highest individual risk determines the classification of the risk of the entire risk class. Single risks, to which innogy is exposed and on which we receive reports twice a year, are not recorded here. We currently classify two risks as 'high'. These are the 'regulatory and political risks', the overall assessment of which did not change compared to the previous year, and the 'other risks', which were in the 'low' category in the prior year and became much more significant in the year under review. The latter is due to the fact that we have recorded the potential failure of the envisaged asset swap with E.ON under 'other risks' since 2018. We believe that this is unlikely, but we realise that the damage potential is high. Therefore, we classify this risk as 'high'. In exchange, the market value risk associated with our financial stake in innogy became of secondary importance. In the previous year, it was classified as 'high', with the same therefore applying to the 'financial risks' in general. Since then, the highest risks of this class have been 'medium'.

In the following, we discuss the main risks and opportunities and explain what measures have been taken to counter the threat of negative developments.

- **Market risks.** In most of the countries in which we are active the energy sector is characterised by the free formation of prices. Declines in quotations on wholesale electricity markets can cause power plants and electricity procurement contracts concluded at fixed prices to become less economically attractive and, in some cases, even unprofitable. In such events, we may have to recognise impairments or form provisions. Since 2016, wholesale electricity prices have increased significantly in our most important generation markets, Germany, the United Kingdom and the Netherlands. This was primarily due to the recovery in prices of commodities, especially hard coal and gas. CO_2 emission allowances have also become much more expensive. It cannot be ruled out that this trend ends and electricity becomes much cheaper again. However, there is also a chance that wholesale electricity prices continue to rise and that generation margins improve.

  In addition to fuel costs, demand for electricity and the amount of generation capacity available to meet it are also decisive to the development of wholesale electricity prices. The increased use of batteries could result in households with photovoltaic units increasingly being self-sufficient in terms of energy, causing a drop in demand for electricity generated using conventional techniques. Conversely, the electrification of the heating and transportation sector would create additional demand. On the supply side, the continued expansion of renewable energy will put wholesale electricity prices under pressure. However, secured generation capacity should continue to drop. Therefore, we expect increasingly frequent periods of shortages with high electricity prices – especially in Germany.

  We assess the price risks to which we are exposed on the procurement and supply markets taking account of current forward prices and expected volatility. For our power plants, we limit margin risks by selling most of our electricity forward and securing the prices of the fuel and CO_2 emission allowances needed for its generation. Our goal is to limit the consequences of negative price developments.

RWE Supply & Trading plays a central role when it comes to managing commodity price risks. It functions as the Group's interface to the global wholesale markets for electricity and energy commodities. The company markets large portions of our power generation and purchases the necessary fuels and CO_2 certificates needed to produce electricity. The role of RWE Supply & Trading as internal transaction partner makes it easier for us to limit the risks associated with price volatility on energy markets. However, the trading transactions are not exclusively intended to reduce risks. In compliance with risk thresholds, the company also takes commodity positions to achieve a profit.

Our risk management system for energy trading is firmly aligned with best practice as applied to the trading businesses of banks. As part of this, transactions with third parties are concluded only if the associated risks are within approved limits. There are guidelines governing the treatment of commodity price risks and associated credit risks. Our subsidiaries constantly monitor their commodity positions. Risks associated with trades conducted by RWE Supply & Trading for its own account are monitored daily.

The Value at Risk (VaR) is of central importance for risk measurement in energy trading. It specifies the maximum loss from a risk position not exceeded with a given probability over a certain period of time. The VaR figures within the RWE Group are based on a confidence interval of 95 %. The assumed holding period for a position is one day. This means that, with a probability of 95 %, the daily loss will not exceed the VaR.

The VaR for the price risks of commodity positions in the trading business of RWE Supply & Trading may not rise above €40 million. In the past financial year, it averaged €12 million (previous year: €10 million), and the daily maximum was €19 million (previous year: €15 million). In addition, limits derived from the aforementioned VaR thresholds have been set for every trading desk. Furthermore, we develop extreme scenarios and factor them into stress tests, determine their consequences for earnings, and take countermeasures if we deem the risks to be too high.

In the middle of 2017, we pooled the management of our gas portfolio and the liquefied natural gas (LNG) business in a new organisational unit at RWE Supply & Trading and established a VaR cap of €12 million for these activities. The average VaR in 2018 was €4 million (previous year: €3 million), and the daily maximum was €7 million (previous year: €4 million).

We also apply the VaR concept to measure the extent to which the commodity price risks that we are exposed to outside the trading business can affect the RWE Group's adjusted EBITDA. To this end, we calculate the overall risk for the Group on the basis of the commodity risk positions of the individual companies; this overall risk mainly stems from power generation. As the majority of our generation position is already fully hedged for 2019, only minor market price risks remain for this year. Opportunities for additional profits arise, because we are able to adapt our power plant deployment to short-term market developments flexibly.

To a certain extent, financial instruments used to hedge commodity positions are considered through the statement of on-balance-sheet hedging relationships in the consolidated financial statements. This also applies to the financial instruments we use to limit interest and currency risks. More detailed information can be found on page 142 et seqq in the Notes to the consolidated financial statements.

In the UK generation business, our earnings depend not only on the development of the price of electricity, fuel and emission allowances, but also on the level of the payments we receive for participating in the national capacity market. The capacity payments are determined in annual auctions. Major differences can occur depending on supply and demand. In the auctions held so far, the range has been between €6.95/kW (2017/2018) and €22.50/kW (2020/2021; before adjusting for inflation). However, as set out on page 36 et seq., the UK capacity market has been suspended for the time being and must be approved again by the European Commission.

Our biggest market risks remain unchanged in the 'medium' category.

- **Regulatory and political risks.** Energy supply is a long-term business and companies involved in this industry are dependent on a stable, reliable framework. Stricter emissions thresholds for the electricity sector can result in massive declines in earnings, if the transition periods are too short and power plants have to be taken offline early. In the lignite industry, this could also have negative effects on the upstream opencast mines. This kind of risk emanates, inter alia, from the German Climate Action Plan 2050. According to the Plan, by 2030 the energy sector must lower its emissions by more than 60 % compared to the level of 1990. In January 2019, the Growth, Structural Change and Employment Commission charged by the federal government submitted recommendations on how to accomplish this in detail (see page 33). The body speaks out in favour of phasing out electricity generation from coal-fired power plants in Germany by 2038. It also envisages further stations being shut down or converted for alternative fuel firing by the end of 2022. We expect the federal government to follow the Commission's recommendations and demand that we close further lignite units. We cannot make any forecasts regarding the extent or timing of the burdens that we will be facing until the federal government has submitted specific plans after speaking with us. It is still unclear when this will happen. However, we firmly believe that we will receive adequate compensation for the revenue shortfalls and the additional costs. In addition, we see that the framework conditions for the lignite business could become more reliable.

  In the Netherlands, the new government aims to phase out electricity generation from coal by 2030 and submitted a draft law for this purpose in May 2018 (see page 33 et seq.). It envisages that we shut down or completely convert our Amer 9 and Eemshaven power stations for biomass firing by the end of 2024 and the end of 2029, respectively. This is still pending a decision by parliament. Earnings could be curtailed significantly if the government implemented its plans. In such an event, we would endeavour to ensure that we received appropriate compensation and take legal recourse if necessary.

In addition to the exit from coal, the Dutch government seeks to introduce a CO_2 tax (see page 34). The levy is to supplement the European Emissions Trading System and ensure a minimum price of carbon dioxide emissions from power stations. This could lead to substantial disadvantages for Dutch power plant operators. Furthermore, there is a danger that security of supply might be jeopardised. In dialogue with policymakers, the energy companies have pointed out that these risks exist and that prices in European emission allowance trading are already high. Despite this, the politicians have not abandoned this plan. However, they now intend to establish lower carbon price floors. Even in Germany, where the matter is not currently on the political agenda, we are in favour of renouncing imposing additional burdens on utilities through national CO_2 levies.

We are also exposed to risks in the field of nuclear energy, albeit to a much lesser extent than in the past. Since we made contributions to the German nuclear energy fund in the middle of 2017, the state has assumed complete responsibility for interim and final storage. However, we are still exposed to cost risks associated with disposal tasks which remain within our remit. For example, it cannot be ruled out that the dismantling of nuclear power stations will be more expensive than estimated and we will therefore have to establish higher provisions. However, we also have the opportunity to leverage synergies and cut costs. Furthermore, we face the risk that our power plants which are still in operation become less profitable or indeed unprofitable if safety standards become stricter. However, since the safety standards of nuclear power stations in Germany are already very high, we feel that this is unlikely.

In November 2018 the General Court of the Court of Justice of the European Union repealed the approval granted for the UK capacity market by the European Commission, because it had not been preceded by a comprehensive investigation. Until this requirement has been complied with, there is a ban on capacity payments – even under existing agreements. This curtailed our EBITDA by €50 million in 2018, and we have not included any capacity payments in our plans for 2019 for the time being. Theoretically, it is possible that the payments will be resumed with a substantial delay or not at all. There is also a chance that the European Commission will conclude its investigation this year and approve the capacity market retroactively. In the best case scenario, the capacity payments would be resumed immediately and the suspended payments would be refunded retrospectively.

Even in the present political environment, we are exposed to risks associated, for instance, with approvals when building and operating production facilities. This particularly affects our opencast mines and power stations. The danger here is that approvals are granted late or not at all and that granted approvals are withdrawn temporarily or for good. One example is the preliminary halt to the clearance of Hambach Forest ordered by the Münster Higher Administrative Court. As set out on page 36, this will curtail our earnings from electricity generation from lignite for several years. We are doing everything we can to see to it that the pending lawsuits are concluded as quickly as possible and the delays in the operation of our opencast mine are minimised. However, it has since become likely that the German government will become active and aim for a political solution. In doing so, it would lean on the final report by the Growth, Structural Change and Employment Commission, which deems the preservation of Hambach Forest desirable.

We continue to classify our regulatory and political risks as 'high'. We ascribe the greatest importance to the potential burdens resulting from an accelerated coal phase-out, the introduction of CO_2 taxes and an extended or permanent halt to the clearance of Hambach Forest.

- **Legal risks.** Individual RWE Group companies are involved in litigation and arbitration proceedings due to their operations or the acquisition of companies. Out-of-court claims have been filed against some of them. Furthermore, companies from the RWE Group are directly involved in various procedures with public authorities or are at least affected by their outcomes. We have accrued provisions for possible losses resulting from pending proceedings before ordinary courts and arbitration courts.

Risks may also result from exemptions and warranties that we granted in connection with the sale of shareholdings. Exemptions ensure that the seller covers the risks that are identified within the scope of due diligence, the probability of occurrence of which is, however, uncertain. In contrast, warranties also cover risks that are unknown at the time of sale. The hedging instruments described above are standard procedure in sales of companies and equity holdings.

The maximum classification of our legal risks is 'medium' There was no change in this regard compared to the previous year.

- **Operational risks.** RWE operates technologically complex, interconnected production facilities. During their construction and modernisation, delays and cost increases can occur, for example due to accidents, material defects, late deliveries or time-consuming approval processes. We counter this through diligent plant and project management as well as high safety standards. We also regularly inspect and maintain our facilities. Nevertheless, it is impossible to prevent occasional outages. If economically viable, we take out insurance policies. In relation to capital expenditure on property, plant and equipment and intangible assets, there is a risk that the return may fall short of expectations. Furthermore, prices paid for acquisitions may retrospectively prove to be too high. However, it is also possible that the returns on investments turn out to be higher than originally assumed. We conduct extensive analyses to try and map the financial and strategic effects of transactions as realistically as possible. Moreover, RWE has specific accountability provisions and approval processes in place to prepare and implement investment decisions.

  Our business processes are supported by secure data processing systems. Nevertheless, we cannot rule out a lack of availability of IT infrastructure or a breach in data security. Our high security standards are designed to prevent this. In addition, we regularly invest in hardware and software upgrades.

  We classify our operating risks as 'medium'.

- **Financial risks.** The development of market interest rates, foreign exchange rates, share prices and collateral pledged for forward transactions can have a significant effect on our financial position. As set out earlier, our greatest financial risk until the beginning of 2018 was the potential decline in the market value of our stake in innogy. This risk has become much less important because we agreed the sale of the shareholding to E.ON at a fixed price. However, the remaining shares in our financial portfolio are still exposed to the risk of decreases in value. The average VaR for the share price risk of these stocks (without innogy) in 2018 was €5 million (previous year: €2 million).

  We differentiate between several categories of interest rate risks. For example, rises in interest rates can lead to reductions in the price of the securities we hold. This primarily relates to fixed-interest bonds. The VaR for the interest rate-related price risk of capital investments was €3 million on average at RWE AG (previous year: €5 million).

  Moreover, increases in interest rates cause our financing costs to rise. We measure this risk using the Cash Flow at Risk (CFaR), applying a confidence level of 95 % and a holding period of one year. The average CFaR at RWE AG in 2018 and the previous year was €3 million.

  Furthermore, market interest rates have an effect on our provisions, as they are the point of reference for the discount rates used for determining the net present values of obligations. This means that, all other things being equal, provisions rise when market interest rates fall and vice versa.

  We are exposed to foreign exchange risks primarily owing to our business activities in the United Kingdom. Furthermore, energy commodities such as coal and oil are traded in US dollars. Companies which are overseen by RWE AG have their currency risks managed by the parent company. RWE AG aggregates the risks to a net financial position for each currency and hedges it if necessary. In 2018, the average VaR for RWE AG's foreign currency position was less than €1 million. The same applies to the prior year.

Collateral pledged for forward transactions can have a significant effect on our liquidity. Its level is determined by the extent to which the contractually agreed prices deviate from current market quotations. These differences can be substantial, especially on volatile markets. In recent times, the prices of commodities of importance to us have fluctuated considerably, in particular those of CO_2 emission allowances. This development exposes us to risks. However, this also increases the probability of receiving substantial collateral from contracting parties, resulting in a temporary increase in our equity.

Risks and opportunities from changes in the price of securities are controlled by a professional fund management system. Range of action, responsibilities and controls are set out in internal guidelines which the Group companies are obliged to adhere to when concluding financial transactions. All financial transactions are recorded using special software and are monitored by RWE AG.

The conditions at which we can finance our business on the debt capital market are in part dependent on the credit ratings we receive from international rating agencies. As set out on page 53, Moody's and Fitch place our long-term creditworthiness in the investment grade category with a stable outlook. However, the agencies may change their assessments and lower our credit rating, which can result in additional costs if we have to raise debt capital. This would probably also make it more expensive to pledge collateral for forward transactions.

We classify our financial risks as 'medium' as opposed to 'high' in the previous year. The improved classification results from the aforementioned decline in the share price risk of our stake in innogy.

- **Creditworthiness of business partners.** Our business relations with key accounts, suppliers, trading partners and financial institutions expose us to credit risks. Therefore, we track the creditworthiness of our partners closely and assess their credit standing based on internal and external ratings, both before and during the business relationship. Transactions that exceed certain approval thresholds and all trading transactions are subject to a credit limit, which we determine before the transaction is concluded and adjust if necessary, for instance in the event of a change in creditworthiness. At times, we request cash collateral or bank guarantees. Credit risks and the utilisation of the limits in the trading and financing business are measured daily.

  We agree on collateral when concluding over-the-counter trading transactions. Furthermore, we enter into framework agreements, e. g. those of the European Federation of Energy Traders (EFET). For financial derivatives, we make use of the German master agreement for forward financial transactions or the master agreement of the International Swaps and Derivatives Association (ISDA).

  As in the past, our risks stemming from the creditworthiness of our business partners do not exceed the category 'medium'.

- **Other risks.** This risk class includes reputation risks and risks associated with non-compliance and criminal offences. It also encompasses the possibility of planned acquisitions or divestments not being implemented, for example owing to regulatory requirements. Our single-largest risk in this category is the potential failure of the planned asset swap with E.ON. We endeavour to ensure that the transaction is executed as planned by maintaining intense dialogue with the parties involved and preparing and supporting the approval processes carefully. Negative developments after the successful completion of the asset swap cannot be ruled out, either. For instance, the integration of the assets that we receive from E.ON and are returned to us from the innogy portfolio may prove more difficult than anticipated. Furthermore, the operational development of these activities may lag behind expectations. As far as legally possible, we are already seeing to it that the new assets are integrated into RWE successfully and have taken the first staffing and organisational measures necessary to continue managing these activities successfully in the future.

  Despite legal and economic imponderables, we deem it improbable that the asset swap with E.ON will fail. Should this occur nevertheless, it would have extremely negative ramifications. In consequence, we classify this risk as high, and therefore the entire 'other risks' class as well (previous year: 'low').

- **Risks related to innogy – continuing operations.** As set out earlier, our subsidiary innogy manages its risks independently. The parent company RWE AG is informed of the subsidiary's risk exposure once every six months. If the asset swap with E.ON is executed as planned, the risks and opportunities relating to the innogy assets that will be transferred to E.ON will no longer affect RWE as they will be transferred with retrospective economic effect to 1 January 2018. The developments at innogy relating to the renewable energy business, gas storage and the minority interest in Austria-based Kelag are still of importance to us.

  Earnings in the renewable energy business strongly depend on state subsidy schemes. Here, there is a risk that the realisable compensation declines and new projects cease to be attractive. This can lead to investment undertakings being broken off. Reductions in the subsidisation of existing generation units cannot be fully ruled out. The revenue of these plants is also exposed to the risk of unfavourable market developments to the extent that it is determined by wholesale electricity prices. This applies for example to wind farms when subsidies have expired. If such risks materialise, impairments may have to be recognised for these plants or they may be sold below their carrying amount. However, these plants can earn unexpectedly high returns if wholesale electricity prices increase.

  The margins realisable in the gas storage business partially depend on seasonal differences in the price of gas. Significant differences enable substantial income to be achieved. Conversely, shrinking price gaps can lead to earnings shortfalls and impairments.

  innogy monitors these and its other risks continuously and takes countermeasures where necessary. The company provides more detailed information on its risk management system and the material risks and opportunities in its current annual report.

RWE's risk and opportunity situation: general assessment by management. As demonstrated by the contents of this chapter, RWE's risk exposure is largely influenced by economic and regulatory framework conditions and the implementation of the asset swap with E.ON. Regulatory risks arise inter alia from the recommendations of the Growth, Structural Change and Employment Commission. We anticipate that the German government will follow the proposals and that we will therefore have to shut down further lignite units prematurely. However, we firmly believe that we will receive adequate compensation for the economic damage. In addition, it is possible that the framework conditions for the lignite business become more reliable. We are also exposed to regulatory risks outside Germany. Of notable mention in this context is the uncertainty surrounding the continuation of the UK capacity market. The plans of the Dutch government to phase out coal in the coming decade and introduce a carbon floor price also expose us to risks. We are raising awareness of the consequences of such intervention and are lobbying for a reliable regulatory framework. We have not identified any material risks for RWE arising from the impending exit of the United Kingdom from the EU, even in the event of a hard Brexit.

Market conditions in electricity generation have a significant influence on our earnings. German wholesale prices are currently far above the record low at the beginning of 2016, in part because prices of fuel such as hard coal and gas have increased. Should these trends reverse and electricity prices drop sharply once again, significant earnings shortfalls are possible, which may lead to a downgrade of our credit rating and additional collateralisation of hedging trading transactions. However, prices may continue to trend upwards and generation margins may improve. Such a development may also be driven by the German nuclear phase-out, because additional power plant closures cause reliably available generation capacity to become tighter.

The envisaged asset swap with E.ON will enable us to broaden our operational setup and thus better cushion the risks of conventional electricity generation. The transaction will also make us stronger financially. Therefore, its failure would have a negative impact. We are confident of being able to complete the asset swap this year.

With ambitious efficiency-enhancement programmes, strict investing discipline and the IPO of innogy, we have given the Group a solid financial foundation. By analysing the effects of risks on our liquidity and pursuing a conservative financing strategy, we ensure that we always have enough cash and cash equivalents in order to meet our payment obligations punctually. We have strong operating cash flows, considerable liquid funds and great financial leeway, thanks to the Debt Issuance Programme, the Commercial Paper Programme and the syndicated credit line. We budget our liquidity with foresight, based on the short, medium and long-term funding needs of our Group companies, and have a significant amount of minimum liquidity on a daily basis.

Thanks to our comprehensive risk management system and the measures for safeguarding our financial and earning power described earlier, we are confident that we can manage the current risks to RWE. At the same time, we are working hard to ensure that this remains the case in the future.

Report on the accounting-related internal control system: statements in accordance with Sec. 289, Para. 4, and Sec. 315, Para. 4 of the German Commercial Code. Risks associated with financial reporting reflect the fact that our annual, consolidated and interim financial statements may contain misrepresentations that could have a significant influence on the decisions made by their addressees. Our accounting-related Internal Control System (ICS) aims to detect potential errors and misrepresentations that result from non-compliance with accounting standards. The foundations of the ICS are our basic principles – which are set out in RWE's Code of Conduct and, first and foremost, include our ambition to provide complete, objective, correct, clear and timely information – as well as our groupwide guidelines. Building on this, minimum requirements for the accounting-related IT systems are designed to ensure the reliability of data collection and processing.

RWE AG is responsible for the design and monitoring of the ICS. These tasks are performed by the Accounting Department, adhering to a groupwide set of rules. On top of this, we created the ICS Committee. Its objective is to ensure that the ICS is applied throughout the Group following uniform principles and meeting high ambitions in terms of correctness and transparency. The Committee consists of representatives from the Accounting, Controlling & Risk Management and Internal Auditing & Compliance departments, along with officers from the areas of human resources, procurement, trading, finance, taxes and IT, all of whom play an important role in accounting.

We subject the ICS to a comprehensive review every year. As a first step, we examine whether the risk situation is presented appropriately and whether suitable controls are in place for the identified risks. In a second step, we test the effectiveness of the controls. If the ICS reviews pertain to accounting-related processes, e. g. the receipt and processing of invoices in our service centre in Cracow, the preparation of financial statements or consolidation, they are conducted by employees from the Accounting Department. The representatives of the finance, human resources, procurement, trading and IT functions document whether the agreed ICS quality standards are adhered to by their respective areas. The Internal Audit Department and external auditing firms are also involved in the ICS reviews. The results of the reviews are documented in a report to the Executive Board of RWE AG. The review conducted in 2018 once again demonstrated that the ICS is effective.

Our ICS reviews do not cover innogy SE or its subsidiaries. However, these entities apply the aforementioned process analogously. The results obtained are considered in the assessment of the ICS of RWE AG.

Within the scope of external reporting, the members of the Executive Board of RWE AG take a half-year and full-year balance-sheet oath, confirming that the prescribed accounting standards have been adhered to and that the financial statements give a true and fair view of the net worth, financial position and earnings. When in session, the Supervisory Board's Audit Committee regularly concerns itself with the effectiveness of the ICS. Once a year, the Executive Board of RWE AG submits a report on this to the Committee.

1.14 OUTLOOK

Our generation margins will probably improve somewhat in fiscal 2019. Furthermore, electricity generation from wind is expected to increase substantially, resulting in a significant rise in earnings from the renewable energy business of our subsidiary innogy. However, we also anticipate curtailments, for example due to the temporary halt to the clearance of Hambach Forest and the suspension of payments from the UK capacity market. Based on current planning, our adjusted EBITDA will total between €1.4 billion and €1.7 billion this year. This forecast relates to RWE's continuing operations. We are confident of being able to complete the asset swap with E.ON this year. However, this forecast does not consider the impact on earnings stemming from the completion of the transaction.

Experts predict weaker growth. Based on initial forecasts, the global economy will expand by approximately 2.5 % in 2019, which would be less than last year. Economic prospects also clouded in the Eurozone, with estimated growth of some 1.5 %. Experts anticipate a similar gain in Germany, whereas growth in the Netherlands may well once again exceed the average of the Eurozone countries. The development of gross domestic product in the United Kingdom largely depends on an orderly Brexit, in which case the country could post an increase of 1.5 %.

Power consumption likely to be stable in Germany and the UK. Our forecast for this year's electricity usage is based on the economy's assumed development. If it grows as expected, demand for electricity should be roughly flat in Germany and the United Kingdom. Positive economic stimulus will probably be contrasted once again by the dampening effects of energy savings. In view of the slightly stronger economic expansion in the Netherlands, we expect the country's electricity consumption to post a marginal rise.

Electricity production for 2019 nearly completely sold forward. The development of commodity prices will depend on a number of factors that are nearly impossible to predict. At any rate, this would only have a minor impact on our earnings this year, as we have sold forward nearly all of our electricity generation for 2019 and secured the prices of the required fuel and CO_2 emission allowances. These transactions have been concluded up to three years in advance. Therefore, the realised electricity prices do not reflect current market prices, which are much higher than in 2016. The price realised for 2019 for the electricity generated by our German lignite-fired and nuclear power stations, which we sold forward with especially long lead times, was slightly higher year on year.

Adjusted EBITDA forecast € million	2018 actual	Outlook for 2019
RWE Group	1,538	1,400–1,700
of which:		
Lignite & Nuclear	356	300–400
European Power	334	250–350
Supply & Trading	183	100–300
innogy - continuing operations	699	800–900

Adjusted EBITDA in 2019: range of €1.4 billion to €1.7 billion expected. The upward trend of realised electricity prices will have a positive effect on earnings in 2019. Additional income is anticipated in the renewable energy business due to the commissioning of new generation capacity. Earnings contributed by existing stations would rise, assuming normalised wind conditions. Burdens will be imposed by the court rulings on Hambach Forest and the UK capacity market (see page 36 et seq.).

Based on our current planning for 2019, the RWE Group's adjusted EBITDA will range from €1.4 billion to €1.7 billion (2018: €1.5 billion). In light of the expected depreciation and amortisation of about €1 billion, adjusted EBIT is anticipated to be in the order of €0.4 billion to €0.7 billion. As mentioned elsewhere in this report, adjusted EBITDA and adjusted EBIT exclude material non-operating and aperiodic effects. The latter are assigned to the non-operating result, the components of which are presented in the reporting on actuals on page 47.

The aforementioned forecast ranges only relate to continuing operations. They do not consider the potential impact on earnings of a completion of the transaction with E.ON, which is scheduled for this year. However, we would recognise book gains from this transaction in the non-operating result. Likewise, the outlook does not take account of a potential coal phase-out ordered by the government as it is currently impossible to make a reliable assessment of its effects. In addition, we assume that payments on the UK capacity market will not resume this year.

We anticipate that earnings will develop as follows at the segment level:

- Lignite & Nuclear: Here, adjusted EBITDA should range between €300 million and €400 million. As mentioned earlier, we have already placed most of this year's electricity production on the market. In sum, the margins we achieved were slightly higher than those for 2018. By contrast, the temporary halt to the clearance of Hambach Forest will reduce earnings. We estimate that the curtailment will amount to between €100 million and €200 million per year for 2019 to 2021. Thanks to optimised processes, we are confident that the earnings shortfalls will be at the lower end of this range in 2019.

- European Power: Adjusted EBITDA recorded by this segment is expected to total between €250 million and €350 million. This assumes that we will not receive any capacity payments in the United Kingdom this year. About €180 million had been secured for 2019 in earlier auctions, which we have disregarded in our planning due to the suspension of the capacity market.

- Supply & Trading: We anticipate that we will be able to achieve average adjusted EBITDA in the order of €200 million per year in this segment in the long run. It is highly probable that it will range from €100 million to €300 million, which is what we expect for 2019 as well.

- innogy – continuing operations: In this segment, adjusted EBITDA is likely to close the year between €800 million and €900 million. Compared to last year (€699 million) this would represent a significant increase, which would primarily be attributable to the renewable energy business. Assuming that wind conditions in 2019 are in line with the long-term average, the usage of the UK and Central European wind farms will be much higher than in 2018. Commissioning new generation capacity will also have a positive impact on earnings. Furthermore, renewable generation assets, which are not subsidised through fixed feed-in payments, should benefit from the rise in wholesale electricity quotations.

Capital expenditure in 2019 markedly up year on year. According to current planning, capital expenditure this year is likely to be much higher than in 2018 (€1.3 billion). We expect a considerable increase to be posted by innogy's continuing operations (last year: €0.7 billion): the construction of the Triton Knoll offshore wind farm in the UK and the Limondale solar farm in Australia will increase expenditure. In conventional power generation, we anticipate spending capital in the order of €0.5 billion on property, plant and equipment, primarily on the maintenance and modernisation of power plants and opencast mines. A small portion of these funds is earmarked for growth projects, e. g. the conversion of our Dutch hard coal-fired power stations to biomass co-firing.

Significant rise in net debt expected. The net debt of the RWE Group's continuing operations, which totalled €4.4 billion at the end of 2018, is likely to rise substantially in the fiscal year underway. As set out on page 53, last year was characterised by high cash inflows from variation margins relating to forward transactions involving CO_2 certificates and other commodities. Once the contracts are realised, some of which mature in 2019, the effects will be reversed. The rise in investing activity will also be reflected in net debt.

Outlook for the RWE Group with innogy as a purely financial investment. For management purposes, we also use Group figures in which innogy is considered as a purely financial investment. On the income statement, our subsidiary is only reflected based on the dividend to which RWE is entitled. Further details on how these figures are calculated can be found on page 58. Applying this method, our adjusted EBITDA is expected to total between €1.2 billion and €1.5 billion in fiscal 2019 (last year: €1.5 billion). Net income adjusted for aperiodic and non-operating effects is anticipated to range from €0.3 billion to €0.6 billion (last year: €0.6 billion).

2 RESPONSIBILITY STATEMENT

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group review of operations includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Essen, 27 February 2019

The Executive Board

Schmitz Krebber