

## 1.1 STRATEGY

**Ambitious political goals in relation to climate protection and the expansion of renewable energy are increasingly determining the regulatory environment in the energy sector. This presents RWE with substantial challenges in terms of competitiveness, capacity for innovation and financial strength. Our strategy is in line with our mission statement, which takes account of all of these aspects: becoming the most trusted, high-performing partner for the sustainable transformation of the European energy system.**

**Increasing financial strength and contributing to the transformation of the energy sector are the focal points of our strategy.** Europe's energy markets are undergoing profound change, especially in our established generation business. The rapid, heavily subsidised expansion of renewable energy is playing an important role in this. Based on available information, renewable energy accounted for 45% of Germany's total electricity generation capacity at the end of 2013. Solar panels alone had a share of 19%. Four years before, this figure only stood at 6%. The solar boom and the steep decline in the price of hard coal and CO<sub>2</sub> emission allowances have put wholesale electricity quotations under pressure. As a consequence, the profitability of our power plants has recently deteriorated significantly. This is reflected in the 2013 consolidated financial statements by lower operating earnings and high impairments. Whereas conventional power generation was responsible for more than half of RWE's operating result in 2012, it contributed slightly less than a quarter a year later. It has also become clear that the return on the power plant investment programme, which we launched in the past decade and has an investment volume of more than €12 billion, will not be as high as originally expected.

We have taken the developments witnessed in the last few years, in particular the U-turn in German energy policy, as an occasion to formulate a mission statement reflecting our role in the energy world of tomorrow and to establish specific goals based on it. We have provided extensive commentary on this on page 32 et seqq. In the past, we described the course of the company as being 'more sustainable,' 'more robust' and 'more international' (see page 32 of the 2012 Annual Report). Tapping into new markets is no longer a priority for us, in part due to financial restrictions. Conversely, the goals of sustainable management and becoming more robust continue to be cornerstones of our strategy.

### **Leading position in numerous European energy markets.**

Europe remains the geographic focus of our electricity and gas business. We have established ourselves as a leading supplier of electricity and gas and have tapped into the markets which are the most important to us. These are Germany, the Benelux region, the United Kingdom as well as Central Eastern and South Eastern Europe. In the field of electricity and heat generation from renewables, we are also active outside of these regions, for example in Spain and Italy.

<b>Market positions of the RWE Group in terms of sales</b>	<b>Electricity</b>	<b>Gas</b>
Germany	No. 1	No. 3
Netherlands	No. 2	No. 2
United Kingdom	No. 4	No. 5
Central Eastern and South Eastern Europe	No. 1 in Hungary No. 5 in Slovakia No. 5 in Poland No. 7 in the Czech Republic Active in Croatia Active in Turkey	No. 1 in the Czech Republic No. 2 in Slovakia
<b>Total Europe</b>	<b>No. 3</b>	<b>No. 5</b>

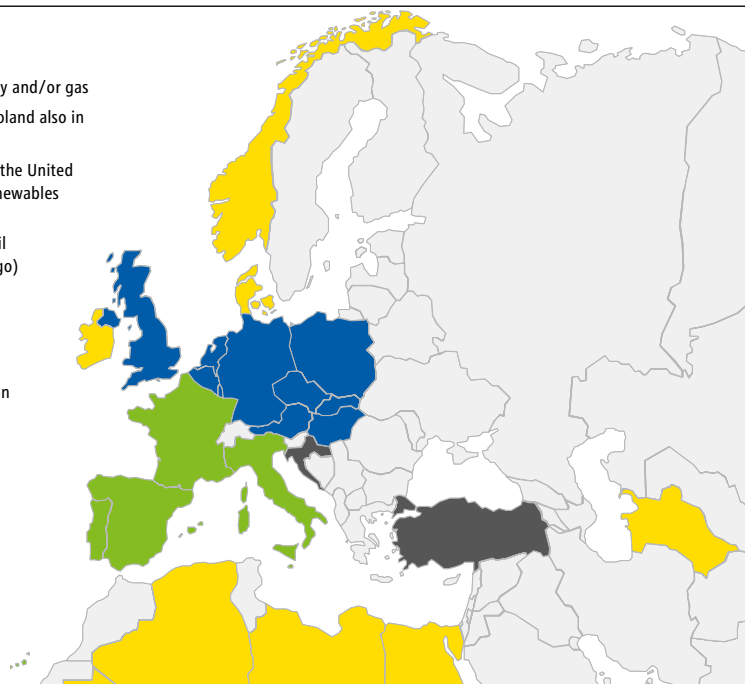
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We only see limited potential for growth in the mature markets, namely Germany, the Benelux countries and the United Kingdom. The exception is Belgium, where we are expanding our energy supply business. In the other countries, we want to defend our market shares in the face of mounting competition by offering innovative products tailored to the needs of our customers. In Germany, our home market, we are required to further develop the energy infrastructure so that the ambitious goals of policymakers in relation to the expansion of renewable energy, energy efficiency and climate protection can be achieved. Only those companies which play an active role will meet with society's acceptance and succeed over the long term.

In Central Eastern Europe, we primarily intend to take advantage of opportunities to expand our supply business. We have identified an opportunity of this kind in the Czech Republic, where we are the No. 1 player in the gas business, and intend to use the existing supply infrastructure as a basis for becoming a leading provider of electricity. Another example is Croatia, where we already have a presence in the wastewater treatment business in the country's capital Zagreb and are co-owner of the Plomin hard coal-fired power station. We are now also becoming active in the Croatian energy supply business and at the end of 2013, we were already supplying 28,000 customers with electricity. We are also establishing a supply business in Turkey, where we have been operating a gas-fired power station near the town of Denizli since 2013. In addition, we intend to become active in the country's energy trading sector.

## Where RWE is active

- Established market position in electricity and/or gas  
 In Germany, the United Kingdom and Poland also in upstream gas and oil  
 In Germany, the Netherlands, Belgium, the United Kingdom, Poland and Austria also in renewables
- Market presence in upstream gas and oil  
 (also in Surinam and Trinidad and Tobago)
- Market presence in renewables
- Market presence in electricity generation and supply



#### **Sustainable business management strengthens**

**acceptance and competitiveness.** Energy supply is a long-term oriented business. It is therefore all the more important that our actions be in line with the expectations and goals of society in the long run. Our decisions must be economically, environmentally and socially sustainable. We have defined ten fields of action which we believe address the major challenges in the field of corporate responsibility. We have set ourselves goals for each of these action fields and defined key performance indicators with which we measure the degree to which we achieve these targets. We subsequently communicate this to the public.

Climate protection is particularly important in this context. As Europe's largest emitter of carbon dioxide (CO<sub>2</sub>), we shoulder a special responsibility, given that high emissions go hand in hand with high economic risks. We aim to reduce our CO<sub>2</sub> emissions to 0.62 metric tons per megawatt hour (MWh) of electricity generated by 2020. In 2013, our specific emissions totalled 0.76 metric tons. To this end, we place significant emphasis on the expansion of renewable energy. Furthermore, the average efficiency of our power stations will continue to increase, reducing the emission factor. We set the stage for this with our new-build power plant programme, which is scheduled to be completed in 2014: it created the basis for decommissioning even more old, emission-intensive plant in the future, without jeopardising security of supply. However, our sustainability goals are not limited to our own carbon emissions: one of our tasks as a large operator of energy infrastructure is to support the conversion of the energy system, in line with climate protection goals. This is a key element of our mission statement and applies especially to Germany, where we see our role in helping to enable the transformation of the energy market.

#### **Financial robustness more important than ever in today's volatile market environment.**

The ambitious political goals of energy policy and tight state budgets have led to an increase in government intervention in the electricity and gas markets. An example of this is the ordered tariff cuts and additional tax burdens in Hungary. Succumbing to the pressure of the sovereign debt crisis, the Spanish government actually went as far as reducing renewable subsidies retrospectively. The sudden change of course by the German government in respect of nuclear energy after the reactor accident at Fukushima demonstrates that the regulatory environment has become much less reliable for energy utilities than in the past. Only companies with financial clout will be capable of managing the resulting earnings risks. This is a major reason why we want to increase our financial strength significantly. To us, robustness means also having a well-balanced presence at all stages of the energy value chain. This enables us to at least partially cushion reductions in earnings at one stage, for example in conventional electricity generation, with stable or increased earnings at other stages.

**RWE's mission statement.** The strategy of the RWE Group is based on a mission statement which takes account of the ambitious political goals regarding climate protection and the expansion of renewable energy as well as the resulting challenges with respect to RWE's competitiveness, capacity for innovation and financial strength: becoming the most trusted and high-performing partner for the sustainable transformation of the European energy system. This mission statement leads to three strategic goals: we aim to (1) increase our financial strength, (2) make RWE more efficient and competitive and (3) successfully contribute to the sustainable transformation of the European energy system. These three goals and what they mean to us in concrete terms are set out in more detail hereinafter.

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#### Our mission statement:

Becoming the most trusted and high-performing partner for the sustainable transformation of the European energy system.

#### Our strategic goals:

<b>Increasing financial strength</b>	<ul style="list-style-type: none"> <li>▪ Safeguarding our unlimited access to the capital market</li> <li>▪ Reducing net debt to a maximum of 3.0 times EBITDA over the medium term</li> <li>▪ Fully financing capital expenditure and the dividend payment from cash flows from operating activities from 2015 onwards</li> </ul>
<b>Improving performance and competitiveness</b>	<ul style="list-style-type: none"> <li>▪ Strengthening competitiveness through more efficient processes and a more effective organisation</li> <li>▪ Establishing a performance-orientated corporate culture</li> </ul>
<b>Contributing to the sustainable transformation of the European energy system</b>	<ul style="list-style-type: none"> <li>▪ Securing electricity supply through flexible and efficient power plants</li> <li>▪ Expanding renewable energy</li> <li>▪ Further developing distribution network infrastructure</li> <li>▪ Strengthening our retail position through innovative products and services</li> </ul>

**Increasing financial strength.** We currently have a high level of debt due to our extensive capital expenditure in recent years and the disappointing returns on investment due to the market environment. This has had a negative effect on our credit ratings by the leading rating agencies Moody's and Standard & Poor's, which are currently Baa1 and BBB+, respectively, but still confirm our high creditworthiness. Due to our significant need for refinancing, our top priority is to ensure that we can always raise debt capital at acceptable conditions, even during crises on financial markets. To accomplish this, we have set ourselves an upper limit for the leverage factor (the ratio of net debt to EBITDA) of 3.0. However, in the last three years, the factor was a constant 3.5. In the medium term, we intend to ensure that it is below the upper limit. Furthermore, from fiscal 2015 onwards, we want to return to fully financing our capital expenditure and dividend payments from cash flows from operating activities. Due to our high level of capital expenditure, we have not managed to do this since 2008, but only just fell short of this goal in 2013.

We are taking several steps to increase our financial strength.

- **Efficiency improvements.** In 2012, we launched the 'RWE 2015' programme, which included an extensive set of measures to reduce costs and increase revenue. Our current efficiency-enhancement programme, which runs until 2016, is designed to have a permanent effect of at least €1.5 billion on the operating result. As set out on page 72, we are on track to achieving this goal.
- **Asset disposals.** The sale of assets should also contribute to improving our financial position. Activities requiring substantial capital expenditure, in particular the oil and gas upstream business overseen by RWE Dea, are at the top of our list of possible disposals. In 2012, we divested assets accounting for a total of €2.1 billion. Last year, a volume of €2.2 billion was added, including the sale of the Czech long-distance gas network operator NET4GAS. Currently, the single-largest divestment project is the sale of RWE Dea, for which we hope to achieve a deal over the course of the year. We also want to sell our minority interest in Urenco, a company specialising in the enrichment of uranium.

- **Reducing capital expenditure.** On completion of the new-build power plant programme this year, we will reduce our capital expenditure on property, plant and equipment significantly. We plan to spend €4.5 billion in capital in 2014. This sum should drop to €3.5 billion and €3 billion in the next two years. These figures still contain an average of €1 billion allocable to RWE Dea. Excluding the upstream business, we expect capital expenditure to total €2 billion starting in 2016. From this point onwards, we will focus on investments required to sustain our business activities, in particular the operation of our networks and power stations. We intend to continue expanding renewable energy, albeit at a reduced pace.
- **New dividend policy.** In previous years, the Supervisory Board and the Executive Board have oriented the dividend proposal to a payout ratio of 50% to 60% of recurrent net income. This range will be reduced to between 40% and 50% for fiscal years from 2014 onwards. A dividend of €1 per share has been proposed for 2013, which is below both ranges (27%). If the corresponding resolution is passed by the Annual General Meeting on 16 April 2014, this will provide us with over €600 million in financial relief compared to last year.

**Improving performance and competitiveness.** To survive in the face of competition, energy utilities can no longer limit their role to that of a reliable supplier of electricity or gas. Their products must also be offered at attractive prices. In addition, they must cater to the customers' specific needs. To be competitive in terms of price and quality, companies must have efficient production operations, an effective organisation and a corporate culture of performance and innovation. Only if we rise to these challenges can RWE become a fixture in the energy world of tomorrow.

Our 'RWE 2015' programme addresses all of these topics. We have already commented on the measures it includes to reduce costs and increase revenue, which aim not only to streamline processes, but also to improve our organisation.

An example of this is the pooling of the management of our conventional power plants in the newly established RWE Generation, which became operational at the beginning of 2013. RWE Group Business Services took up commercial operation at the same time and handles cross-divisional functions such as accounting, purchasing and HR management. To leverage synergies from our supply activities, with effect from 1 January 2014, we established RWE Retail, in which we have pooled our supply expertise. This new management unit is responsible for the groupwide supply strategy, among other things (see page 54). We are increasingly running functional business units as profit centres. Standard processes are being pooled in shared service centres and expert knowledge is being unified in centres of expertise.

Another focal point of 'RWE 2015' is the further development of our corporate culture. We need employees who can draw on their creativity and initiative to improve products and processes, who help the company progress with their ideas, and who do not wait for signals from management to act. If meaningful innovations were only introduced from the top down, we would not be dynamic enough to keep up with the competition. Our business has become far too complex to do so. Creativity and innovation are in demand now more than ever, across all fields of activity and all divisions. In this context, we strive to improve cooperation between RWE's employees, departments and companies. We also want to strengthen our reputation as a trustworthy, competent and service-oriented provider. We measure our success in this respect based on the satisfaction of our customers. Therefore, we were extremely pleased that the customer service representatives of RWE Vertrieb received the German Service Award in 2013. RWE came in first among 65 entrants. High grades were awarded for friendliness, personalised advice and competence. RWE Vertrieb was recognised for its high quality of service in January 2014 once again. The company obtained the first spot in a market survey conducted by the renowned consulting firm imug.

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**Contributing to the sustainable transformation of the European energy system.** Thanks to our integrated business model covering the entire energy value chain, we are able to contribute to the transformation of the European energy system in a variety of areas.

- **Securing electricity supplies through flexible and efficient power plants.** Conventional power stations are indispensable, despite the further expansion of renewable energy. Without them, the fluctuation in the availability of wind turbines and solar panels would result in regular outages, as electricity from renewables is not available at the push of a button because it can only be stored to a very limited extent. According to a study conducted by the German Energy Agency (dena), gas and coal-fired power plants will still have to provide about two-thirds of secured capacity in 2050. Based on dena's calculations, this corresponds to 60 gigawatts (GW). In the last few years, we have increasingly invested in the flexibility of our power stations, in order to enable them to react better to fluctuations in feed-ins of renewable energy. A case in point is the lignite-fired power plant at Neurath near Cologne, which has a capacity of up to 2,100 megawatts (MW). It was commissioned in 2012 and can adjust its capacity utilisation by 500 MW within 15 minutes. In addition, in the Germany/Netherlands region we own the largest amount of capacity of flexible gas-fired power stations. However, these plants have been especially hard hit by the rise in electricity from renewables fed into the system. Today, many gas-fired power stations, including some in our fleet, are unable to cover their operating costs. This has already caused us to mothball some of these facilities (see page 53). Furthermore, a large portion of our efficiency-enhancing measures is designed to make the generation business, which has come under pressure, more profitable with a view to safeguarding our position as one of Europe's leading power plant operators over the long term.

- **Expanding renewable energy.** The expansion of electricity produced from renewable sources continues to be a cornerstone of our strategy. However, for financial reasons, we must further reduce our pace of growth and find new ways to finance our business. RWE Innogy, our Group company specialising in the generation of electricity and heat from renewables, is expected to invest a total of about €1 billion in the expansion of renewable energy from 2014 to 2016. This is less than originally planned. By the end of 2013, RWE Innogy was operating generation facilities with a total net installed capacity of 2.9 GW. This figure should rise to 3.4 GW during the current year.

As regards the expansion of renewable energy, we are focusing on onshore wind turbines in Germany, the United Kingdom, the Netherlands and Poland. In addition, we are building two offshore wind farms: we hold a 60% stake in Gwynt y Môr off the coast of Wales, which has a total installed capacity of 576 MW, and we are the sole investor in Nordsee Ost (295 MW) near Heligoland, Germany. On completion of these two projects, we intend to stop pursuing several new offshore wind projects simultaneously, following a one-at-a-time strategy instead. Furthermore, we will look for partners. We have not taken any concrete investment-related decisions so far.

RWE Innogy will not launch any new biomass projects. The company is currently focusing on the completion of a biomass-fired power station with combined heat and power technology at Markinch in Scotland. It will have a net installed electric capacity of 46 MW and is scheduled to start production in the spring of 2014. A second biomass project, in Enna, Sicily, has already been completed: the 19 MW plant has been online since the middle of 2013.

Given the limitation of financial resources, we increasingly involve public and private investors in our projects. However, we draw on our technical expertise to remain the plant developer and operator. We also raise funds for our ongoing capital expenditure by selling stakes in existing assets. For example, last year we sold minority interests in several UK wind farms with a total net installed capacity of over 200 MW to financial investors (see page 51). Proceeds from transactions of this kind enable us to invest in a larger number of projects, which diversifies our portfolio and reduces its risk exposure.

In addition, we forge project partnerships with municipalities and municipal utilities. An example of this is Green GECCO, a joint venture between RWE Innogy and 29 municipal utilities, which was established in April 2010 and already has four wind farms with a total net installed capacity of 57 MW. Together with municipal partners, we are currently planning and implementing projects with a total net installed capacity of 450 MW. Centre stage is taken by the construction and operation of wind turbines. However, our range of activities is much wider than that. For example, last year we carried out a project with the town of Kerpen, Germany: we have built a two kilometre-long photovoltaic power station along the A4 motorway, which will supply electricity to more than 500 households. What is special about this plant is the financing concept: local residents were given the opportunity to take a share in the €2.5 million of construction costs by making a capital contribution limited to five years.

▪ **Further developing the distribution network infrastructure.**

The network business will remain a fixture in our portfolio. Due to the regulations governing our return on capital and revenue caps, the earnings risk exposure arising from our operation of German electricity and gas distribution networks is fairly low. However, we are witnessing a trend towards returning the ownership of assets in the energy sector to municipalities: public utilities increasingly want to take charge of operating local networks themselves. We are reacting to this by offering participation models, strengthening our partnerships with municipalities as a result.

The power grid plays a key role in the transformation of the German energy market. As a distribution system operator, we face huge challenges from the rising amounts of electricity fed into the grid from weather-dependent sources such as wind and solar, as well as the mounting number of small, decentralised energy generation units. In order to ensure a reliable supply of electricity under these conditions, we must invest in the maintenance and expansion of German network infrastructure. We estimate that this will require €650 million in funds per year until 2016. To use networks more effectively and flexibly, we are developing new control technologies and testing them in field trials. An example of this is the 'Smart Operator' project on which we report on page 85.

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- **Strengthening our supply position through innovative products and services.** By the end of 2013, we were supplying 16.1 million households and companies in Europe with electricity and 7.4 million with gas. Our customers expect fair prices and offerings that satisfy their needs. In the face of ever fiercer competition, we are extending our field of activity beyond the classical supply of electricity and gas, in order to defend our market positions. We develop new business models for all customer segments by pooling our know-how in the fields of energy supply and information technology. The result is innovative products and solutions tailored to suit individual needs, distinguishing us from other utilities.

In view of rising energy costs, more and more households want to reduce consumption, albeit without diminishing their quality of life. We have the right products for this, e.g. smart meters, automated domestic consumption controls (smart homes) and offerings for electric cars. We also market our energy efficiency expertise to commercial and medium-sized industrial enterprises. Using state-of-the-art measuring techniques and RWE's energy controlling system, our experts analyse energy consumption and develop tailored optimisation measures.

We also have a strong position in the field of decentralised energy supply. In Germany, we currently operate over 1,000 combined heat and power (CHP) generation plants with a total net installed capacity of about 3,000 MW. In many cases, we do this together with municipal partners or industrial enterprises. In addition, we develop new business models based on decentralised generation technologies such as micro-CHP units and photovoltaics. For example, we launched an innovative system for the local storage of solar power named 'RWE HomePower solar' in the spring of 2013. Users of the system can consume electricity produced with their solar panels themselves to a far greater extent. The advantage is two-fold: our customers save money and, as fluctuating solar feed-ins drop, the grid becomes more stable.

**Value added: the key control parameter of the RWE Group.** We measure the economic success of our strategy based on the extent to which it contributes to increasing the company's value. The value management concept presented on page 68 et seq. serves as a basis for this. The central control parameter for all of the Group's activities is value added, which we derive from the operating result, the costs of capital and capital employed. In addition to other individually agreed targets, value added is also a parameter for the variable compensation of our executives. Conversely, the company-linked bonus component for the Executive Board of RWE AG is based on the operating result and, to a limited extent, on the degree to which we achieve our goals in the field of corporate responsibility.



## 1.2 ECONOMIC ENVIRONMENT

**Last year was characterised by economic uncertainty. Based on available data, the economy shrank in the Eurozone, whereas it expanded marginally in Germany. Electricity consumption in our Western European markets decreased slightly due to the weak economy and continued energy savings, but demand for gas was revitalised due to the colder weather. The pressure on margins of conventional power plants increased, particularly in Germany and the Netherlands. This was due to low hard coal prices and the subsidised expansion of renewable energy.**

**Europe's economy remains weak.** Based on available data, global economic output in 2013 was 2% higher than a year earlier. The sovereign debt crisis continues to characterise the general economic situation in the Eurozone, where gross domestic product (GDP) may have declined overall. However, based on initial estimates by the German Bureau of Statistics, GDP in Germany, the currency area's largest economy, rose by 0.4%, partly due to robust consumer spending. Conversely, the Netherlands followed the European trend: Dutch GDP probably declined by 1%. In contrast, a gain of 1.9% was calculated for the United Kingdom, with positive stimulus coming in particular from the service sector. The above-average momentum of the economy in Central Eastern Europe waned substantially. Initial surveys for Poland and Hungary indicate GDP growth of 1.3% and just under 1%, respectively. Conversely, a decline of 1.5% has been estimated for the Czech Republic.

**Weather colder than in 2012.** Whereas the economic trend is primarily reflected in demand for energy from industrial enterprises, residential consumption of electricity and gas is strongly influenced by weather conditions. The colder it is, the greater the need for heating. In the west of Europe, overall temperatures in 2013 were slightly below the average of the ten preceding years, whereas in the north easternmost countries of Europe, they were slightly above it. Compared to 2012, the weather in all of our key European markets was marginally colder.

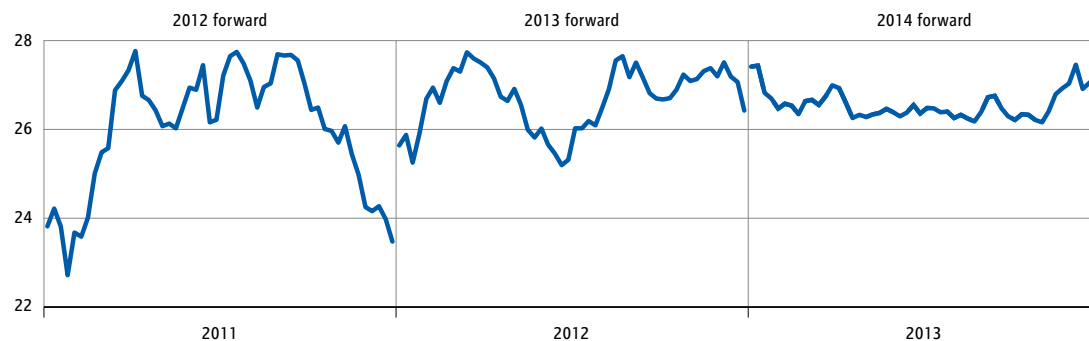
The generation of electricity is also affected by the weather, with wind levels playing a major role. In Germany and Poland, average utilisation of our wind farms was down on 2012, whereas in the United Kingdom, the Netherlands and Spain, it was slightly higher. Our German run-of-river power stations benefited from the fact that, in the spring, rivers had higher water levels due to the significant amount of

rainfall and melting water. As a consequence of the substantial rise in solar power capacity in Germany, solar intensity also influences developments on the electricity market. In Germany, an average of 1,591 hours of sunshine was recorded in 2013, as opposed to 1,647 a year before.

**Weather-driven growth in gas consumption, weak development of demand for electricity.** The weak economy curtailed electricity consumption in our core markets. According to estimates made by the German Association of Energy and Water Industries (BDEW) for 2013, demand for electricity in Germany was 1.8% lower than in 2012. Based on available data, demand for electricity in the Netherlands and the United Kingdom was also down, whereas it rose marginally in Poland and grew by 4% in Hungary. In contrast, demand for gas was revitalised by the colder weather: based on figures calculated by BDEW, consumption in Germany was approximately 6% higher year on year. Network operators in the Netherlands and the United Kingdom calculated rises of just over 2% and just under 1%, respectively. Gas consumption in the Czech Republic rose by an estimated 2%.

**Uncertainty about demand weighs on oil prices.** In 2013, prices on international crude oil markets slightly lagged behind the high level achieved a year earlier. A barrel of North Sea Brent traded at an average of US\$109 (€82) on the London spot market. This is US\$3 less than in 2012. The marginal decline in price reflects the uncertainty concerning the development of demand in China, the USA and euro crisis countries. Another factor was that US oil inventories occasionally hit all-time highs. The price drop was mitigated by the continued tension in the Middle East, particularly in Syria. Furthermore, the need for crude oil has risen in emerging countries. Unexpected supply stoppages at some producers also contributed to stabilising oil prices.

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



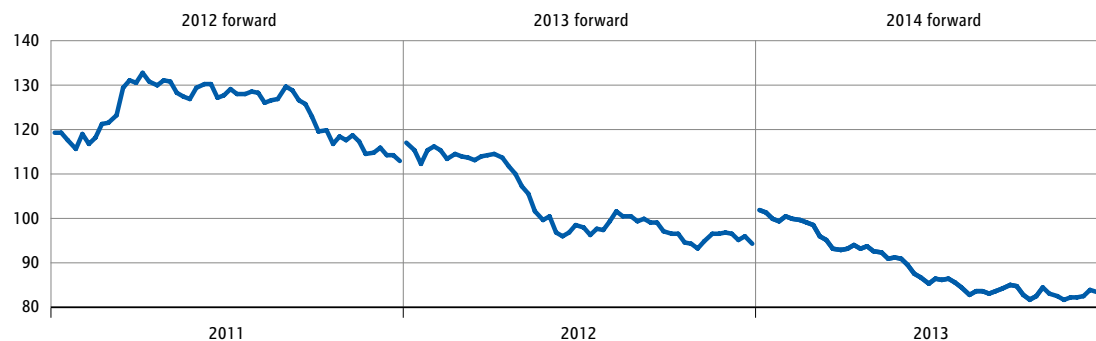
Source: RWE Supply & Trading.

**Forward prices in gas trading stable.** Some gas imports to Continental Europe are based on long-term agreements indexed to the price of oil concluded between energy utilities and producing companies. Therefore, import prices are partly determined by developments on the oil market. Gas supplied to Germany in 2013 was settled at an average of €28 per megawatt hour (MWh), €2 less than a year earlier. In contrast, oil prices do not have a direct impact on the development of quotations in European gas trading. Spot prices at the Title Transfer Facility (TTF), the Dutch trading hub and reference market for Continental Europe, averaged €27 per MWh, €2 up on 2012. The weather-driven increase in demand for gas was a major factor. Gas forward contracts

(2014 forward) were also traded at €27 per MWh. This roughly equals the price of the 2013 forward in 2012.

Gas prices in the customer business developed as follows: households in Germany had to pay slightly higher tariffs than in 2012. In the Netherlands and the United Kingdom, the same customer group had to pay 2% and 8% more, whereas in the Czech Republic, their bills were reduced by 5%. Industrial customers did not experience a notable change in price compared to 2012 in Germany. In the Netherlands and the Czech Republic, gas was 13% and 5% cheaper for them, whereas in the United Kingdom, it was 11% more expensive.

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



Source: RWE Supply & Trading.

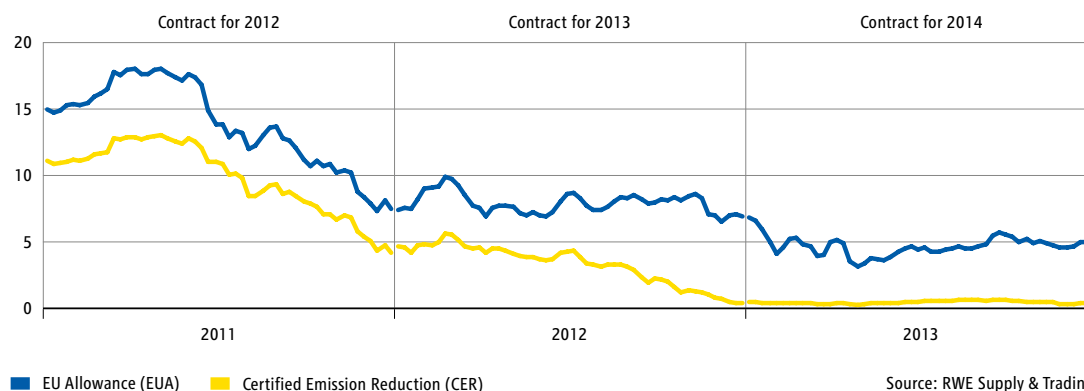
**Further drop in prices on the hard coal market.** The downward trend in hard coal prices witnessed in the previous year continued. In 2013, coal shipments including freight and insurance to Amsterdam/Rotterdam/Antwerp were quoted at an average of US\$82 (€62) in spot trading, US\$11 less than in 2012. The one-year forward (API 2 Index) was listed at US\$89 (€67), US\$14 less than in 2012. The global coal market tends to be oversupplied. On the demand side, China's slowed growth is coming to bear. In addition, the devaluation of the rupee is curtailing India's coal imports, while low-cost shale gas is reducing the need for other energy sources in the USA. On the supply side, the fact that many countries expanded their mining capacities in the past is having an effect. Despite shrinking margins, production volumes are only hesitantly being adjusted to the new circumstances. The development of coal quotations also reflects sea freight rates, which recently stabilised after a long downward trend. Last year, the standard route from South Africa to Rotterdam cost an average of US\$9 per metric ton, US\$1 more than in 2012.

**Weak industrial activity depresses prices in emissions trading.** European trading of carbon dioxide (CO<sub>2</sub>) emission allowances is also characterised by a persistent slump. In 2013, the standard certificate (referred to as an EU Allowance or EUA) for 2014 traded at an average of €4.70 per metric ton of CO<sub>2</sub> as opposed to the previous year's comparable figure of €7.90. The substantial decline in price observed since 2011 is partly due to the economy-driven weakening in both industrial output and electricity

generation. The rapid expansion of renewable energy also plays a role, especially in Germany: feed-ins from solar panels and wind turbines are increasingly replacing electricity generated by fossil-fuelled power stations, also causing demand for emission allowances to decline. In the meantime, it is becoming apparent that far more certificates will be available than are actually needed in the third emissions trading period, which runs from 2013 to 2020. However, based on current legislation, surplus EUAs may be transferred to later trading periods, which means that the development of prices will also be significantly influenced by the market's expectations of the future of the emissions trading system after 2020.

As a result of the Clean Development Mechanism created by the Kyoto Protocol, European companies may also cover their domestic emissions up to a specified cap by submitting Certified Emission Reductions (CERs). These are credits earned from emission-reducing measures in developing and emerging countries. CERs also became much cheaper: in the year under review, certificates for 2014 traded at an average of €0.50 as opposed to the previous year's comparable figure of €3.30. The drop in price is due to the fact that the EU set volume caps for recognising CERs in the European Emissions Trading System. In addition, there are currently no significant sales markets for these certificates outside of Europe. Therefore, in view of the large number of emission-reducing projects around the world, it is expected that far more CERs will be generated than can ever be used.

CO<sub>2</sub> certificate prices in the European emissions trading system  
€/metric ton of CO<sub>2</sub> (average weekly figures)



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### Wholesale electricity market: decline in prices in Germany, rise in prices in the UK.

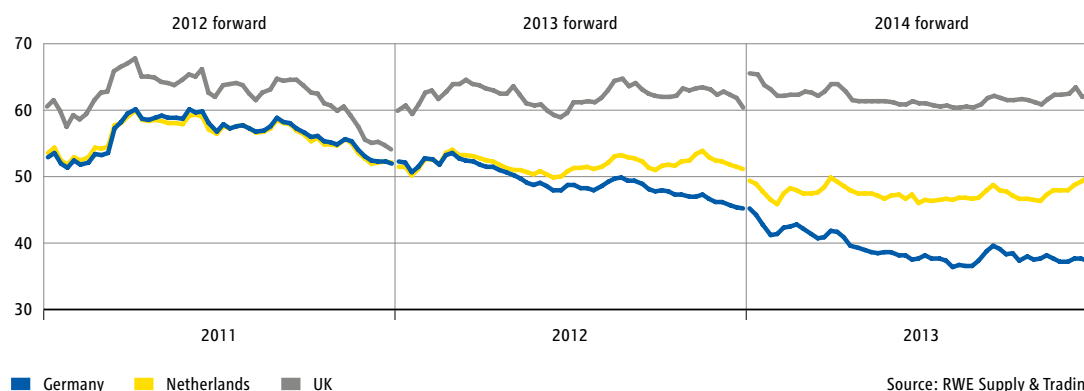
The significant decrease in the price of hard coal and emission allowances as well as the increase of feed-ins under the German Renewable Energy Act (REA) caused wholesale electricity prices in Germany, our largest generation market, to drop considerably. On the spot market last year, base-load power sold for an average of €38 per MWh, €5 down on 2012. Quotations on the forward market also fell: the 2014 base-load forward was priced at an average of €39 per MWh, €10 less than what had to be paid for the 2013 forward in 2012.

In the United Kingdom, where we have our second-largest generation position, base-load power traded at an average of £50 (€59) per MWh on the spot market, compared to £45 a year earlier. The gas price spikes in March 2013 caused by the weather played a role: in the United Kingdom, gas-fired power plants account for a much bigger share of electricity generated than in Germany and therefore have a stronger influence on electricity prices. A tax on CO<sub>2</sub>

emissions introduced by the government with effect from 1 April 2013 also had a price-increasing impact. Quotations in UK forward trading were also up. The one-year base-load forward was settled at £53 per MWh in 2013, as opposed to £50 a year earlier. Converted to euros, forward prices were flat (€62). This is due to the devaluation of the British pound.

Wholesale electricity prices in the Netherlands, our third-largest market, are greatly influenced by developments in Germany and therefore also by the rise in feed-ins pursuant to the REA. This is due to cross-border electricity flows. However, as network capacity is limited, prices in the two countries can differ from one another considerably. Last year, wholesale electricity prices in the Netherlands were much higher than in Germany. Averaged for the year, the Dutch base-load spot price was €52 per MWh, €4 more than in 2012. Conversely, forward quotations declined: electricity supply contracts for the following calendar year were settled at an average of €47 in 2013, compared to €52 a year earlier.

One-year forward base load  
 €/MWh (average weekly figures)



**Declining electricity generation margins.** The earnings of our power stations depend not only on the development of wholesale prices, but also on the cost of the fuel and emission allowances required to produce electricity. We cover the uranium consumption of our nuclear power plants

via long-term agreements at stable conditions. The fuel costs of our lignite-fired power stations also hardly fluctuate. This is because, in general, lignite is not traded, and we mine it ourselves. In contrast, we source nearly all the fuel for our hard coal and gas-fired power plants from liquid

trading points. This explains why the generation costs of these stations typically fluctuate more. We operate hard coal and gas-fired power plants primarily in Germany, the United Kingdom and the Netherlands. Their margins are referred to as clean dark spreads (hard coal) and clean spark spreads (gas) and are the result of deducting the costs (including taxes) of the required fuel and CO<sub>2</sub> certificates from the unit price of electricity.

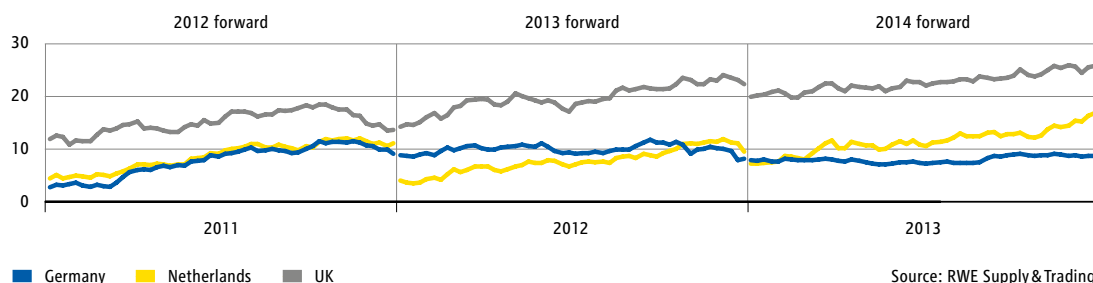
The two following graphs illustrate the development of clean dark spreads and clean spark spreads since 2011 based on one-year forward transactions. Clean dark spreads in Germany were relatively stable. The average margins for one-year forwards in 2012 were slightly higher than in 2011.

The spreads in 2013 declined. An opposing trend was witnessed in the Netherlands. In the United Kingdom, clean dark spreads trended upward throughout the entire reporting period, clearly exceeding the German and Dutch levels.

Margins realisable by gas-fired power stations were much lower than the clean dark spreads. In addition, the gap between the two spreads widened over time. Clean spark spreads shrank considerably in Germany. They were also down in the Netherlands, albeit to a lesser extent. In contrast, they were almost flat in the United Kingdom, but still much higher than in Continental Europe.

#### Clean dark spreads<sup>1</sup> forward trading

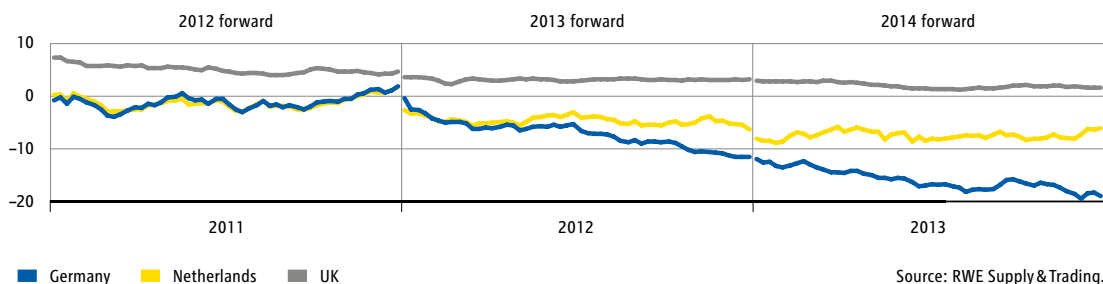
€/MWh (average weekly figures)



<sup>1</sup> Price of base-load electricity minus the cost of hard coal and CO<sub>2</sub> emission allowances based on a power plant efficiency of 35% to 36%, including tax burdens.

#### Clean spark spreads<sup>1</sup> forward trading

€/MWh (average weekly figures)



<sup>1</sup> Price of base-load electricity minus the cost of gas and CO<sub>2</sub> emission allowances based on a power plant efficiency of 49% to 50%, including tax burdens.

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### Early electricity forward sales curtail earnings drop.

We sell forward most of the output of our power plants and secure the prices of the required fuel and emission allowances in order to reduce short-term volume and price risks. Therefore, developments on wholesale markets in 2013 only had a minor impact on the income we generated in that year. What was decisive instead was the conditions at which electricity contracts for delivery in 2013 were concluded in preceding years.

The average wholesale price we realised for our 2013 electricity generation was above the level realisable on today's forward markets, especially in Germany. We sold the electricity produced by our lignite-fired and nuclear power stations for an average of €51 per MWh, falling short of the previous year's comparable figure (€55). As explained earlier, the fuel costs of these two generation technologies are fairly stable. Therefore, the earnings shortfalls were not contrasted by comparable relief on the procurement side, causing margins to deteriorate. We experienced some slight relief in electricity generation from lignite from the decrease in quotations in CO<sub>2</sub> emissions trading. Average prices realised by our gas and hard coal-fired power stations in Germany, the United Kingdom and the Netherlands were also unable to match the previous year's levels. However, in hard coal-based generation, this was mitigated by relief provided by purchases of fuel and emission allowances, whereas in gas-based generation, we recorded shrinking margins.

**Heavy burdens due to abolition of free CO<sub>2</sub> emission allowance allocations.** The fact that power producers in Western Europe are hardly being allocated any free certificates by government for the third CO<sub>2</sub> emissions trading period, which runs from 2013 to 2020, also resulted in substantial earnings shortfalls. This effect applies to nearly all of RWE's fossil fuel-fired power plants, but is being cushioned somewhat by the decline in prices in emissions trading. It does not have a direct impact on electricity prices or spreads as these are determined by the market prices of emission allowances and not by the manner in which they are allocated by government. About two-thirds of the certificates RWE needed for 2012 were allocated for free.

### Electricity retail business: state surcharges drive up

**German residential tariffs.** Unlike on the wholesale market, prices in the German customer business rose: they were 12% and 4% higher year on year in the residential and industrial sectors, respectively. This is mainly due to state surcharges included in electricity bills, which account for half of the total price paid by households. A main contributing factor is the REA apportionment, which was increased from 3.59 euro cents to 5.28 euro cents as of 1 January 2013 and experienced another significant rise as of 1 January 2014, advancing to 6.24 euro cents. The levy in support of combined heat and power plants has also increased. In addition, the offshore liability surcharge in accordance with Section 17f of the German Energy Act was introduced with effect from 1 January 2013. The funds are set aside for financing compensatory payments for delays in connecting offshore wind farms to the grid.

Customers in the United Kingdom also had to pay more for electricity. UK residential tariffs rose by an average of 7% compared to 2012. Electricity bills reflect the costs of energy savings measures in households, which the major utilities are obliged to undertake within the scope of a government programme (see page 48). Electricity became about 4% more expensive for industrial enterprises. In the Netherlands, prices charged to households also rose, increasing by nearly 4%, whereas industrial enterprises paid some 3% less.

In our Central Eastern European markets, residential tariffs developed as follows: for households in Poland they were up marginally, whereas in Slovakia they declined by about 2% and in Hungary they dropped by 12% due to regulatory requirements. Prices paid by Polish industrial enterprises dropped even more: electricity for this customer group was 18% cheaper due to a collapse in prices on the wholesale market. The level of prices charged to Hungarian and Slovak industry was essentially unchanged.

## 1.3 POLITICAL ENVIRONMENT

Energy policy reforms are on the agenda in many of the markets in which we operate. In Germany, the new governing coalition intends to make the promotion of green electricity more market-oriented and cost efficient. The coalition also envisages the creation of a mechanism for supporting conventional power stations, without which security of supply may be at risk over the long term. The United Kingdom has already decided to introduce a mechanism of this kind. National reforms are being monitored by the European Union. By issuing new framework requirements, Brussels wants to improve the harmonisation of national regulations. However, in addition to these encouraging activities, there were also some setbacks in 2013: political intervention in Hungary and Spain continued, to the detriment of utilities.

**EU publishes guidelines for state intervention in the electricity sector.** The future of energy supply is at the very top of the political agendas of European countries. Brussels also accords significant importance to the issue. In February 2011, the European Council reached an agreement to complete the single energy market by 2014. In light of the slow progress made, this goal was confirmed in May 2013. The reduction of competition-distorting regulatory intervention is considered the main prerequisite for a functioning single market. Against this backdrop, the EU Commission submitted a notification on 5 November 2013 in which it provided EU member states with guidelines for government intervention in the electricity sector. One of the main topics is the promotion of renewable energy, which is being reformed in many countries. The EU Commission is of the opinion that financial support for renewables should be reduced to a minimum. It believes that subsidised technologies should gradually be exposed to market prices as they mature, eventually having their subsidies removed. The Commission recommends that the member states coordinate their strategies for promoting renewable energy better than in the past. It further suggests avoiding unannounced or retrospective changes to applicable rules.

In its communication, the EU Commission also addresses reserve capacity, which is becoming increasingly important as the amount of fluctuating electricity feed-in from wind turbines and solar panels grows. In this context, it builds on the plans of several countries for creating a capacity mechanism. This type of mechanism ensures that power producers are compensated for keeping power plant capacity in reserve in addition to receiving income from the sale of electricity. In the Commission's view, governments should examine the reasons for insufficient generation before reaching decisions on capacity

mechanisms. It feels that the first step should entail removing all distortions of competition which prevent the market from providing the right incentives for investing in generation capacity. Investment hurdles might result from regulated electricity prices or exaggerated renewable energy subsidies, among other things. Furthermore, governments should ensure that green energy producers react to market signals and should support flexibility on the demand side, for example by promoting the introduction of various consumer tariffs as an incentive to use electricity in off-peak periods. If capacity mechanisms are introduced, they should be aligned with the European perspective and not just with their respective national markets.

The Commission's guidelines are not legally binding. However, they should be applied when examining state intervention for the promotion of renewable energy, capacity mechanisms and demand-side measures. Therefore, they are decisive to the enforcement of EU rules governing state subsidies and of EU energy law.

**Brussels seeks to harmonise the promotion of renewable energy.** On 18 December 2013, EU Competition Commissioner Joaquín Almunia submitted a draft guideline on state energy and environmental subsidies for consultation among EU member states. This initiative also aims to strengthen the single market. Some of the main points of the draft correspond to those of the Commission guidelines for government intervention in the electricity sector set out above. For instance, it recommends a more market-friendly, cost-effective approach to the promotion of renewable energy. Furthermore, the draft confirms the secondary importance of capacity mechanisms as it specifies that they should only be allowed in cases where concerns about the availability of generation capacity cannot be

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allayed by building additional energy infrastructure or other measures enabling more flexible demand or storage. The finalised subsidy guidelines are scheduled to be submitted in the middle of 2014, after the consultations have ended. They will replace current guidelines, which expire at the end of 2014. From 2015 onwards, for the first time, there may be uniform criteria according to which Brussels decides whether measures to promote renewable energy conform with EU law. So far, Brussels has decided on state aid in the electricity and gas sectors on a case-by-case basis.

**Competition Commissioner examines industry rebates on the green energy levy.** Concurrent to the submission of the draft guidelines for energy and environmental subsidies, the European Commission opened an investigation into the subsidies under the German Renewable Energy Act (REA). The objective is to determine whether the rebates on the REA apportionment granted to energy-intensive industrial enterprises distort competition and therefore violate EU law. The probe targets the version of the REA that entered into force on 1 January 2012 and enlarged the group of privileged companies. EU regulators are also looking into what is termed the green energy privilege pursuant to Sec. 39 of the REA, which exempts power producers from paying the REA apportionment if certain conditions are met. The Commission has made it extremely clear that the launch of the investigation of the aids is not prejudicial to the final decision. Should the probe reach the conclusion that the special equalisation rule and/or the green energy privilege are impermissible subsidies, they would be illegal. However, the German government or other stakeholders could take legal action against such a decision. In the meantime, Germany's new Christian Democrat/Christian Social Union/Social Democrat government has initiated a reform of the REA (see page 46).

**EU sets the stage for temporary shortage of CO<sub>2</sub> emission allowances.** In November 2013, the EU member states approved intervention into the European carbon emissions trading system to support certificate prices. It is envisaged that the allocation of emission allowances

covering a total of 900 million metric tons of carbon dioxide from the auction contingent for 2014 to 2016 be withheld until the last two years of the third emissions trading period, which runs from 2013 to 2020 (referred to as backloading). The European Parliament had given the go-ahead for this on 3 July 2013. Backloading is being introduced as a quick reaction to the huge surpluses of emission allowances. However, experts estimate that these surpluses clearly exceed the volume of withheld certificates. Therefore, the general consensus is that price signals – and in turn the incentivising effect of the emissions trading system – can only be strengthened through structural reforms. The EU Commission has taken a first step in this direction by submitting the Climate and Energy Package, which we have outlined below.

**EU Commissioner Hedegaard proposes ambitious climate protection roadmap.** At the end of January 2014, Connie Hedegaard, the EU Commissioner for Climate Protection, presented a Climate and Energy Package specifying measures for reducing greenhouse gas emissions after 2020. The roadmap envisages a 40% drop in EU emissions by 2030 compared to 1990. At the same time, the package aims to increase the share of gross final energy consumption accounted for by renewable energy at the European level to 27% by 2030. It does not include country-specific targets. Another goal is to strengthen the European Emissions Trading System by making the supply of certificates flexible (Supply Adjustment Mechanism). The basis for this is an annual measurement of the certificate surplus, which corresponds to the difference between the certificates issued and used since 2008. If certain threshold values are exceeded or not reached, the volume of certificates auctioned in subsequent years would be reduced or increased. The Adjustment Mechanism has already been included in a proposed law on structural reforms of the emissions trading system, which is being negotiated between the European Council and the European Parliament under the codecision procedure. However, the emission reduction target is subject to approval by the heads of state and government at the EU Summit in March 2014.



#### **New German government sets course for energy policy.**

At the end of November 2013, two months after the German Federal elections, the Christian Democrats/Christian Social Union and the Social Democrats entered into a coalition agreement containing guidelines for their joint governmental activities. In the contract, the coalition parties confirm the former course of Germany's energy policy. However, they have emphasised that "the cost-efficiency and economic viability of the system as a whole – including network expansion and the necessary reserve capacity – be accorded higher significance" within the context of the expansion of renewable energy. The government coalition seeks to introduce a rapid and fundamental reform of the REA, which is scheduled to be outlined by Easter 2014. The coalition agreement already includes some of the cornerstones of this project. One of the objectives of the reform is to reduce the compensation paid to owners of wind farms in onshore locations with high wind levels, in order to avoid over-subsidisation. The German government plans to maintain the feed-in fees for electricity generated by offshore wind farms for the time being, but has lowered its offshore capacity expansion target to 6.5 gigawatts (GW) by the end of 2020 (previously 10 GW). Generators of electricity complying with the REA will be increasingly obliged to sell their electricity on the exchange themselves instead of leaving this up to the electricity network operators. Direct sales of this kind are already possible today. In such cases, power producers are refunded the difference between the feed-in tariff and the sales price. Moreover, the government intends to abolish the green energy privilege.

The coalition agreement confirms that lignite, hard coal and gas-fired power stations will be an indispensable part of the domestic energy mix in the foreseeable future, as electricity generated by wind turbines and solar panels alone cannot ensure security of supply. It further sets out that there is currently enough conventional generation capacity, conceding that this situation could change by the end of this decade. This point in the paper considers the recent drop in the profitability of conventional power plants. As a result of the significant decline in German wholesale electricity prices, many stations are not capable of covering their operating costs and should actually be shut down. In addition, since it has largely become unprofitable to build new power plants, it is conceivable that at some point, there may no longer be enough available conventional generation capacity to guarantee security of supply. This is why the coalition agreement stipulates that, over the medium term,

a capacity mechanism be developed which is cost-efficient, competition-oriented, open to all technologies and in line with European regulations.

At the end of January, the German government held a convention at which the energy market reform was discussed, and the plans included in the coalition agreement were given more detail. They envisage reducing the capacity expansion of solar panels and onshore wind turbines to 2,500 MW per year for each of the technologies. The objective is to reduce REA compensation. Last year, it averaged 17 euro cents per kilowatt hour (kWh) for all existing plant. An average fee of 12 euro cents for new plant has been targeted for 2015. By then, a cap of 9 euro cents is envisaged for onshore wind power. Furthermore, the government wants to oblige operators of new plant with a net installed capacity of 500 kilowatts or more to sell green energy directly on the market. The obligation would then be gradually expanded to include smaller units. The coalition also wants the REA apportionment to be paid for electricity generated for self-consumption. Facilities which were commissioned before 2013 would be subject to a reduced fee of 0.96 euro cents per kWh. Operators of new plant would pay 90% of the current REA apportionment, which amounts to 6.24 euro cents per kWh. Conversely, the government wants to maintain the exemption from the green energy apportionment for small self-consumers.

**German Lower House passes law on selection of final storage facility for highly radioactive waste.** On 28 June 2013, the German Lower House enacted the German Site Selection Act, the law governing the search for a final storage facility for highly radioactive waste. At the beginning of July, the Upper House also gave the go-ahead. According to the Act, the search for a site will be conducted nationwide and without a preselection of locations. In addition, sites such as Gorleben in the State of Lower Saxony will not be ruled out from the start. A Committee of Enquiry composed of 33 members representing the federal government, state administrations and non-governmental organisations will prepare the procedure. Their proposals must be submitted by the end of 2015. The period envisaged for the selection process ends in 2031. This does not include the actual approval process or the construction of the final storage facility. By law, the costs of the selection process must be borne by the nuclear power plant operators. These have been set at approximately €2.7 billion in nominal terms. Based on the applicable formula, about a quarter of this sum would be allocable to RWE.

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### **The Netherlands reaches consensus on National Energy Plan.**

On 6 September 2013, the Dutch government signed a national energy agreement ('Energieakkoord'), which outlines the future course of the country's energy policy. This was preceded by months of negotiations between the Dutch state, industry, the association of power utilities, consumer organisations and environmental associations. Talks were coordinated by the Socio-economic Council of the Netherlands (SER), which advises the government. The agreement envisages at least 14% of energy needs in the Netherlands being covered by renewable sources by 2020 and 16% by 2023. In 2013, this ratio was just 4.4%. In expanding renewables, the Netherlands is focusing on wind power and biomass. The government aims to increase net installed wind power capacity to 6,000 MW onshore by 2020 and 4,450 MW offshore by 2023. A new subsidy system has been planned for co-generation using sustainably produced biomass in coal-fired power stations. Distributed renewables-based electricity supply will be incentivised by tax privileges. Energy efficiency measures are expected to be supported by a number of initiatives, including the creation of a dedicated fund. The objective is to reduce the country's energy usage by an annual 1.5% through to 2020.

The Dutch government has further agreed with the power utilities that five coal-fired power stations, which were built in the 1980s, will be shut down as of 1 January 2016. This includes block 8 of our Amer power plant. In turn, the Dutch coal tax, which we have been paying since 2013 (see page 46 of the 2012 Annual Report), will be abolished – also as of 1 January 2016. However, the Dutch Competition Authority has appealed against this provision in the energy agreement because it believes that it constitutes a restrictive arrangement. Given the widespread acceptance of the Energieakkoord and the contracting parties' intention to maintain its cornerstones, ways are now being sought to implement this part of the agreement nevertheless.

### **United Kingdom: law to reform the electricity market passed.**

In December 2013, the UK Parliament passed the Energy Act, which includes the legal framework for a fundamental reform of the UK electricity market ('Electricity Market Reform' or EMR). The reform's primary objective is to achieve goals relating to domestic climate protection and the expansion of renewables. The targeted reduction in the UK's carbon dioxide emissions is 34% by 2020 compared to 1990. The goal is to have renewable energy cover at least 15% of final energy consumption and account for 30% of electricity generation by 2020. The Act includes the key points of a system for supporting climate-friendly electricity generated from renewable sources, nuclear energy and fossil fuel in combination with carbon capture and storage. Green electricity producers currently receive Renewables Obligation Certificates (ROCs). A mechanism referred to as a Contract for Difference (CFD) will be introduced in the future. The idea is to guarantee that electricity generators receive a contractually agreed fee for the electricity they feed into the system. If the price they can realise on the wholesale market is below the fee, they will be refunded the difference. If it exceeds the fee, they will be obliged to make payments. The subsidy will be financed by supply companies in line with the amounts of electricity which they purchase on the market. CFDs are scheduled to be concluded starting in 2014. The prerequisite is that they comply with the EU's future state aid guidelines.

The EMR will also include the introduction of an Emission Performance Standard, limiting allowable carbon emissions for new plants to 450 grams per kilowatt hour of electricity generated. Plans also envisage the introduction of a capacity market, as the expansion of renewable energy is also causing the margins of conventional power stations to shrink in the UK. This will exclude plants that are already receiving subsidies under the ROC or CFD system. Capacity auctions are scheduled to begin in 2014 and will relate to capacity for 2018.

Major elements of the EMR remain to be clarified even though the Energy Act has been passed. They will be addressed by regulations in 2014. It cannot be ruled out that the reform may only be implemented after the parliamentary elections in May 2015.

#### UK government aims to reduce residential energy costs.

Mounting energy costs and the resulting public resentment will be one of the pivotal issues in the campaign for the next parliamentary elections in the UK. Ed Miliband, the Leader of the Labour Party, announced in September 2013 that residential electricity and gas tariffs would be frozen for 20 months in the event of a Labour victory. In reaction, the Conservative-Liberal government announced a catalogue of measures in December, which would lead to a reduction in energy costs as early as 2014. The government's goal is to reduce the average residential electricity and gas bill by a total of £50 (about €60) in the current year. One of the measures it has taken to this end is to scale back the Energy Companies Obligation (ECO), a programme launched by the state. ECO obliges the major power providers to take measures to improve energy efficiency in homes. The resulting costs have made a significant contribution to the increase in electricity prices. In addition, the government intends to make a one-off payment to energy companies in the autumn of 2014, which they will be obliged to pass on to their customers to reduce their energy bills by £12. At the beginning of January, RWE npower announced lower tariffs with effect from 28 February 2014, which will fully take the relief offered by the ECO programme into account. Together with the one-off payment in autumn, the tariff cut will reduce the energy bills of customers who purchased both electricity and gas from us by the targeted £50.

Doubts concerning fair competition in the energy sector have surfaced repeatedly in the debate on energy costs. Although switching providers is more commonplace in the UK supply business than in most other European markets, the government wants to further promote customer willingness to switch. One of the factors it is relying on to achieve this is an increased transparency of price comparisons. From 1 January 2014 onwards, energy companies will be allowed to offer no more than four residential tariffs and from 1 April 2014, they will be obliged to indicate on bills which of their tariffs is most affordable for their customers. In the future, the UK regulator Ofgem (Office of Gas and Electricity Markets) will conduct an analysis of the competitive environment in the energy sector once a year. The first review is scheduled to be completed in the spring of 2014.

As in Germany, there is a widespread lack of public knowledge about the real reasons for the development of prices on the UK energy market. Politicians and the media complaining about a lack of competition and making the energy companies' quest for profits responsible for rising energy costs can therefore expect the public's widespread approval. Against this backdrop, RWE npower initiated the 'Energy Explained' campaign in 2013, through which the company provides detailed information on items making up electricity and gas bills. Among other things, this demonstrates that the energy costs for which the government is responsible have risen disproportionately: their share of the total bill rose from 8% in 2007 to 15% in 2013.

#### Hungarian government imposes further burdens on energy companies.

The difficult energy policy framework conditions in Hungary worsened dramatically last year. In particular, the fiscal burdens on utilities rose substantially. The Hungarian government continued imposing a special tax on companies from the energy, telecommunication and retail sectors, which was set to expire at the end of 2012. In addition, it increased the tax rate: the tariff for energy companies rose from 8% to 31%. Whereas the levy used to apply only to utilities active in the non-regulated sector, since 2013 it has also been imposed on income from regulated businesses. Including the corporate tax (19%), the income tax rate applicable to energy utilities now totals 50%. Furthermore, the country introduced a cable tax in 2013. It affects electricity, gas, district heating and water utilities as well as telecommunications companies. They have to pay an annual 125 forints (€0.43) per metre of cable or pipe. Utilities were also subjected to additional burdens by the Hungarian regulatory authorities: the Energy Authority and the National Development Ministry determined that residential electricity and gas tariffs in the regulated sales segment be reduced by 10% with effect from 1 January 2013 and an additional 11.1% as of 1 November 2013. The interventions mentioned above curtailed our 2013 operating result by approximately €50 million. Against this backdrop, we exited from the Hungarian gas business at the end of the year (see page 51). In contrast, we are still active along the entire value chain in the electricity business.

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#### **Spain decides to make drastic cuts in renewable energy**

**subsidies.** Subsidies received by producers of electricity from renewables in Spain will decline substantially. This has been established by a law on the reform of the electricity market, which entered into force at the end of December 2013. The fixed feed-in tariffs paid so far will be replaced retrospectively to July 2013 by a new compensation system, the details of which will be set out in a decree. The system should ensure that the generation facilities achieve a pre-tax return on capital equivalent to the ten-year average of Spanish government bonds plus 300 basis points. At present, this would be 7.4%. Based on previous legislation, green energy producers received a fixed tariff, which could be as high as €460 per MWh for old plant, and was set for 25 years. Since 2010, state intervention detrimental to electricity generators has risen in Spain due to the country's tight state budget. We recognised an impairment in the Renewables Division (see page 70) due to the latest amended law and the impending implementation regulation.

## 1.4 MAJOR EVENTS

**In 2013, the critical situation in the conventional electricity generation business caused us to take further measures to strengthen RWE's finances and earnings. We decided to take a number of loss-making gas-fired power stations offline. We significantly expanded and accelerated our current efficiency-enhancement programme. Furthermore, we adopted a new dividend policy, which reflects the tighter financial framework. We successfully concluded the planned sale of the Czech long-distance gas network operator NET4GAS. This and other divestments resulted in total proceeds of €2.2 billion. The outcome of the arbitration proceedings with Gazprom was also encouraging: our loss-making gas purchase agreement with the Russian gas group was adapted and we were awarded a significant compensation payment for earlier losses.**

**RWE adopts new dividend policy.** In light of the deterioration in the earnings prospects of the conventional electricity generation business, in September 2013 the Executive Board of RWE AG decided to adjust the company's dividend policy. The Supervisory Board endorses this decision. The two corporate bodies will propose to the Annual General Meeting, which will take place on 16 April 2014, a dividend of €1 per common and preferred share for fiscal 2013, compared to €2 for the 2012 financial year. The dividend proposal for fiscal years from 2014 onwards will be in line with a payout ratio of 40% to 50% of recurrent net income, as opposed to 50% to 60% in the past years. The funds retained as a result of the reduced payout ratio will be set aside to reduce debt.

**New measures to improve efficiency.** In November, the Executive Board of RWE AG announced the expansion of the current efficiency-enhancement programme, which we had launched in 2012. We originally intended to take measures to reduce costs and increase revenue, in order to make a recurrent contribution to earnings of €1 billion. We wanted to achieve this goal by the end of 2014. We now aim to reach at least €1.5 billion by 2016. Most of the measures which we started implementing in 2013 concern the conventional electricity generation business.

**RWE secures improved price conditions for gas purchases from Gazprom.** At the end of June, an arbitration court largely granted RWE's motion for an adjustment of the price conditions for gas under the long-term procurement contract with Gazprom. The contract had caused us to incur losses for several years, as due to its link to the price of oil, the costs incurred for that gas were far above the prices realisable on

European wholesale markets. Gas procurement agreements indexed to the price of oil used to be the standard. However, short-term trades, the prices of which oil does not influence directly, became increasingly significant once energy markets were liberalised. Since 2009, prices paid for such transactions have been much lower than those established in gas procurement contracts linked to the price of oil. In its final ruling, the court awarded us a reimbursement of payments. Furthermore, the formula used to determine the purchase conditions was supplemented by gas price indexation, which the judges believe to reflect the relevant market conditions in May 2010, when the price revision began. However, the influence of the price of oil, which put us at a disadvantage, was not eliminated, but reduced. Therefore, the contract still weighs on our result. In consequence, we started a new price revision in May 2013.

**RWE puts upstream business up for sale.** In March 2013, the Executive Board of RWE AG decided to withdraw from the oil and gas exploration and production business. Since then, we have been considering options for selling RWE Dea. The company was an integral part of the Group's portfolio in the past, as having access to proprietary gas sources was strategically important. This stopped being the case when liquid gas markets were formed in Europe. Furthermore, there are hardly any synergies between RWE Dea and the rest of our core business. We expect the sale of the company to contribute to strengthening our financial power, especially because we will be able to save substantial funds, which have been earmarked for capital expenditures necessary to tap RWE Dea's full potential for growth.

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**RWE sells Czech long-distance gas subsidiary.** In the year under review, we completed the sale of our Czech long-distance gas network operator NET4GAS. It was acquired in early August by a consortium consisting of Allianz Capital Partners and Borealis Infrastructure Management. The transaction resulted in proceeds of €1.6 billion. NET4GAS owns the exclusive license for the operation of the long-distance gas network in the Czech Republic, which has a length of more than 3,600 kilometres. As part of our exit from the Czech gas transmission business, we also withdrew from the Nabucco gas pipeline project, which has since been discontinued. We sold our stake in Nabucco to OMV, the Austrian consortium manager, at the beginning of March 2013.

**Exit from LNG company Excelerate Energy.** We also divested our 50% interest in Excelerate Energy, a company active in the liquefied natural gas (LNG) business, which was held by RWE Supply & Trading. The buyer was George B. Kaiser, who was the company's other shareholder. The transaction was completed in September, but took retrospective commercial effect from 30 June 2013. Having specialised in trading and transporting LNG initially, the company now focuses on providing LNG infrastructure globally. This is not part of RWE's core business.

**RWE Innogy sells minority stakes in UK wind farms.** To raise more capital for the expansion of renewable energy, RWE divested minority interests in four UK wind farms. RWE remains the majority owner and operator of the plants. The biggest of these transactions was the sale of a 49.9% share in the Welsh offshore wind farm Rhyl Flats, which has a total net installed capacity of 90 megawatts (MW). The stake was purchased in equal parts by Greencoat UK Wind, a listed investment trust in the field of renewable energy, and state-

owned UK Green Investment Bank. In addition, RWE Innogy sold minority interests in three UK onshore wind farms to Greencoat UK Wind: 41% of Little Cheyne Court (60 MW) and 49% of both Middlemoor (54 MW) and Lindhurst (9 MW). The aforementioned transactions provided total proceeds of £237 million (€279 million).

**RWE npower sells two supply companies to Telecom Plus.**

In December, RWE npower sold the supply companies Electricity Plus Supply and Gas Plus Supply to UK-based energy and telecommunications provider Telecom Plus. The price amounted to £218 million (€261 million). We have already received £196 million of this sum, and the remainder falls due after three years. The divested companies have a total of about 770,000 customers, who now buy electricity and gas from us indirectly via Telecom Plus. A 20-year supply agreement to this effect was concluded as part of the sale. The reason for the transaction was that UK energy companies may only offer four electricity and four gas tariffs from 2014 onwards. As Electricity Plus and Gas Plus charge their customers separate tariffs, keeping them would have further limited RWE npower's flexibility in terms of pricing.

**FÖGÁZ shareholding sold to Hungarian MVM Group.**

At the end of the year, we signed a contract for a further disposal: the state-owned Hungarian energy utility MVM will become the new owner of our 49.8% stake in the regional gas utility FÖGÁZ. The transaction has a volume of 41 billion forints (about €137 million) and is pending approval from the competition authorities. FÖGÁZ operates a gas network with a length of 5,800 kilometres and serves over 800,000 customers. The remaining 50.2% of the company is owned by the City of Budapest. The divestment was conducted against the backdrop of the significant rise in regulatory pressure in the Hungarian gas business.

**Sale of Dutch district heating business initiated.** Also in December, we agreed with pension fund PGGM and energy service provider Dalkia that these two companies would acquire Essent Local Energy Solutions (ELES), our Dutch subsidiary which specialises in district heating. It is also envisaged that PGGM and Dalkia purchase three gas-fired power plants using combined heat and power generation technology from us. The stations in Helmond, Eindhoven and Enschede were previously operated by RWE Generation. It was agreed to keep the transaction volume confidential.

**RWE starts producing electricity in Turkey.** At the beginning of August, our new gas-fired power station near the town of Denizli in the southwest of Turkey began commercial operation. The plant has a net installed capacity of 787 MW and is among the most modern of its kind, with an efficiency of 57%. The owner and operator is a joint venture, in which RWE and Turkey-based energy company Turcas hold interests of 70% and 30%, respectively. A total of €0.5 billion in capital was spent on the construction of the station.

**New wind farms go online.** Last year, the RWE Group expanded its wind farm portfolio even further. Early July saw the completion of the expansion of the Belgian Thornton Bank offshore wind farm's net installed capacity from an initial 30 MW to a total of 325 MW. RWE Innogy has a stake of 26.7% in the wind farm, making it the largest private shareholder. Thornton Bank generates enough electricity to supply approximately 600,000 households. Total capital expenditure on the wind farm amounted to €1.3 billion. We also increased our onshore wind power capacity: wind farms with a total net installed capacity of about 140 MW went online in 2013. The single-largest projects completed were Middlemoor in the United Kingdom (54 MW) and Nowy Staw in Poland (45 MW).

**RWE Innogy discontinues Atlantic Array wind farm project.** In November, we announced that we would end the development of the Atlantic Array offshore wind project off the southern coast of Wales. Following a thorough review, we reached the conclusion that the undertaking is not profitable in the current market environment due to technical hurdles. The water depth and the unfavourable characteristics of the seabed in particular would have driven up costs significantly. The British Crown had awarded RWE Innogy the exclusive rights to develop Atlantic Array in the middle of 2008. The company had originally planned to build wind farms with a total net installed capacity of 1,200 MW.

**RWE takes about 3,700 MW of generation capacity offline in the UK.** Three of our UK power stations were decommissioned in the fiscal year under review. They were all subject to lifetime limitations resulting from the implementation of EU emission regulations for large combustion plants. Therefore, in March, we ceased the operation of the Didcot A hard coal-fired power station, which had a net installed capacity of 1,958 MW. Also in March, our oil-fired power plant at Fawley was permanently taken offline. With a net installed capacity of 968 MW, this facility had not reached the end of its allotted lifetime, but had become unprofitable. In August, our biomass-fired power station at Tilbury also stopped generating electricity. The three units, which had a total net installed capacity of 742 MW, had originally run on hard coal, before being converted to biomass in 2011. Despite the retrofit, this power plant was also subject to the lifetime limitation under emission law. We would have had to make substantial investments to continue operating it. However, this would have been unprofitable given the current regulatory framework.

**Gas-fired power plant in Duisburg-Huckingen sold.** In late December, we reached an agreement with Hüttenwerke Krupp Mannesmann GmbH (HKM) to sell our gas-fired power plant in Duisburg-Huckingen to HKM. We will receive €99 million for it. The station has a net installed capacity of approximately 600 MW and has been in operation since the mid-1970s. It supplies electricity and steam to the HKM metallurgical plant, which is located on the same premises. RWE will retain the operating management of the station until at least 2024.

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**RWE announces power plant closures.** In August 2013 and February 2014, we announced that we intended to take German and Dutch gas-fired power stations with a combined net installed capacity of about 3,800 MW off the market by the middle of 2014. These include the Claus C and Moerdijk 2 stations, which we had only commissioned at the beginning of 2012. The backdrop to this decision is the plants' lack of economic viability due to the substantial drop in wholesale electricity prices. However, the stations may be recommissioned if market conditions improve. In contrast, the 610 MW Dutch hard coal-fired power plant Amer 8 will be shut permanently. This is a result of the Dutch energy agreement, on which we have provided some information on page 47. It requires hard coal power stations built in the 1980s to be closed in 2016. In August, we also announced that we would stop using German hard coal-fired power plants with a total net installed capacity of 1,170 MW, to which RWE has contractual usage rights. These agreements will expire by the end of 2014 at the latest and will not be extended.

**Gas production started in the Disouq and Breagh concession areas.** RWE Dea has passed some major milestones in expanding its upstream position. At the beginning of September, our subsidiary began producing gas in the Disouq concession in the Egyptian Nile Delta. Since the middle of October, it has also been producing gas from the Breagh UK North Sea field. Disouq is our first gas project in Egypt and we are the sole proprietor of the concession. The Breagh field is one of the highest-yielding gas discoveries in the southern part of the UK North Sea. We have a 70% share in the production license, with the remaining 30% being held by Sterling Resources UK. The total reserves of the Disouq and Breagh fields are an estimated 11.4 billion and 19.8 billion cubic metres. RWE Dea's projected output from the two fields from 2014 to 2017 is an annual 1.8 billion cubic metres of gas and 1.1 billion cubic metres of gas, respectively.

#### **German nuclear fuel tax becomes a case for German Constitutional Court and European Court of Justice.**

At the end of January 2013, the Hamburg Fiscal Court announced that it found the German Nuclear Fuel Tax Act unconstitutional and would therefore refer the case to the German Constitutional Court for review. The Hamburg judges found that the levy was not an excise duty but instead aimed to skim corporate profits. Income taxes of this kind cannot be introduced by the government alone. In addition, the Hamburg Fiscal Court expressed its doubts about the nuclear fuel tax's compliance with European law. Therefore, it announced in the middle of November 2013 that it would let the European Court of Justice in Luxembourg clarify the main issues concerning the tax. The key question is whether the Nuclear Fuel Tax Act is in line with the Energy Tax Directive and the Excise Tax System Directive. We do not expect the German Constitutional Court or the European Court of Justice to issue their rulings until after 2014. In view of the considerable doubts about the legality of the nuclear fuel tax, we filed a motion for the tax payments to be suspended until the legal situation has been clarified definitively and to be provisionally reimbursed payments already made. A decision was still pending when this report went to print.

#### **Administrative Court finds nuclear moratorium imposed on Biblis illegal.**

At the end of February 2013, the Hessian Administrative Court of Justice in Kassel ruled that the order to shut down our Biblis nuclear power station immediately after the reactor catastrophe at Fukushima was illegal. In March 2011, the German government had ordered a three-month stoppage of seven German nuclear power plants (nuclear moratorium), including the Biblis A and B units. We filed suits against this order, as we were of the opinion that it lacked a legal basis. The Kassel judges confirmed this assessment. Their judgement became legally binding after the German Administrative Court dismissed an appeal against the rejection of the appeal lodged by the State of Hesse in December 2013. We are preparing a civil suit for compensation for damages.



#### **RWE pools supply expertise in new organisational unit.**

In November 2013, the Executive Board of RWE AG decided to establish RWE Retail, which will be responsible for all of the Group's supply activities. Its tasks will also entail developing a groupwide supply strategy as well as control measures across companies and countries. Another objective is to make the special expertise and successful concepts of individual regional supply units usable throughout the Group. RWE Retail is not a company: it is a management unit created by RWE AG as of 1 January 2014, which will gradually take on its envisaged tasks over the course of the year. The management team consists of six management board members from RWE supply companies, who will fulfil their new duties in addition to their existing ones. RWE Retail is headed by the Chairman of the Executive Board of RWE Deutschland AG, Dr. Arndt Neuhaus.

#### **RWE streamlines company structure in Czech Republic.**

We have made our Czech energy business more powerful and efficient by pooling local gas distribution and supply activities in two companies. The basis for this was a complex sequence of transactions: first, in January 2013, we combined the gas distribution activities of our four Czech regional utilities and assigned them to a new company, RWE Grid Holding a.s. (RGH). Then we transferred just under 35% of RGH to a group of funds managed by Macquarie. In addition to a cash payment, we received additional shares in three of our four regional utilities, which Macquarie had purchased from their sole proprietors SPP, E.ON and GDF Suez. This and the acquisition of the last outstanding minority shareholdings increased our stakes in the four

regional utilities to 100% and met the prerequisite for bundling our regional supply activities in a single company, RWE Energie, with effect from 1 January 2014. RGH and RWE Energie are managed by RWE Česká republika a.s., which we established in 2012.

#### **RWE AG Executive Board reduced to four mandates;**

**contract extension for Dr. Rolf Martin Schmitz.** At its meeting on 27 February 2013, the Supervisory Board of RWE AG extended the contract of the Executive Board member Dr. Rolf Martin Schmitz by five years until 31 January 2019. Dr. Schmitz joined the Executive Board in May 2009 and has been its Deputy Chairman since 1 July 2012. Dr. Leonhard Birnbaum, the Executive Board member in charge of commercial management, resigned his office with immediate effect from 22 March 2013. Alwin Fitting resigned from the corporate body as of 31 March 2013 as he retired. His successor, Uwe Tigges, who joined the Executive Board on 1 January 2013, was appointed Labour Director on 1 April 2013. After Dr. Birnbaum's resignation, the Supervisory Board decided to distribute the tasks of RWE's Executive Board among the four remaining mandates. This decision is also a demonstration of the efforts being made to simplify structures and reduce costs.

#### **Major events after the end of the period under review.**

In the period from 1 January 2014 until the editorial deadline for this report on 14 February 2014, there were no events which have a material effect on the financial, asset, or earnings positions of the RWE Group.

## 1.5 COMMENTARY ON THE REPORTING STRUCTURE

RWE Group							
Conventional Power Generation	Supply/ Distribution Networks Germany	Supply Netherlands/ Belgium	Supply United Kingdom	Central Eastern and South Eastern Europe	Renewables	Upstream Gas & Oil	Trading/ Gas Midstream
RWE Generation	RWE Deutschland	Essent	RWE npower	RWE East	RWE Innogy	RWE Dea	RWE Supply & Trading
Internal Service Providers RWE Consulting RWE Group Business Services RWE IT RWE Service							

As of 31 December 2013.

**Group structure with eight divisions.** The presentation of our business performance in 2013 is based on a new reporting structure. We pooled nearly all of our fossil-fuelled and nuclear electricity generation in the newly established RWE Generation SE with effect from 1 January 2013. This gives us a more efficient setup and allows us to react more swiftly to the significant changes in the power plant sector. The establishment of RWE Generation created the new segment called 'Conventional Power Generation.' The RWE Group is now divided into eight segments based on geographic and functional criteria, which are also referred to as divisions. We have adjusted prior-year figures to the new structure, in order to enable like-for-like comparisons.

The following is an overview of the RWE Group's divisions:

- **Conventional Power Generation:** The electricity generation activities of RWE Power (including opencast lignite mining), Essent and RWE npower have been assigned to this segment. It also includes our new gas-fired power plant near the Turkish town of Denizli and RWE Technology, which specialises in project management and engineering. All of these activities are managed by RWE Generation.
- **Supply/Distribution Networks Germany:** This division is in charge of the supply of electricity, gas and heat as well as the operation of our German electricity and gas distribution networks. It is overseen by RWE Deutschland, to which Westnetz, RWE Vertrieb (including eprimo and RWE Energiedienstleistungen), RWE Effizienz,

RWE Gasspeicher and our German regional companies belong. Our minority interests in Austria-based KELAG and Luxembourg-based Enovos are also assigned to the Supply/Distribution Networks Germany Segment.

- **Supply Netherlands/Belgium:** This is where we report on the activities of Essent, a leading energy utility in the Netherlands. Since the Dutch electricity generation operations were transferred to RWE Generation, the company has focused on the supply of electricity, gas and heat. Essent is becoming increasingly active in the Belgian supply market.
- **Supply United Kingdom:** Assigned to this division is RWE npower, which ranks among the six major energy companies in the United Kingdom. As our UK power stations are now operated by RWE Generation, like Essent, RWE npower's focus is solely on the supply business.
- **Central Eastern and South Eastern Europe:** This division contains our activities in the Czech Republic, Hungary, Poland, Slovakia, Turkey and Croatia. Our Czech business focuses on the supply, distribution, supranational transmission, transit and storage of gas. We are the nation's market leader in this field. However, as we sold NET4GAS at the beginning of August 2013, we have withdrawn from the gas transmission and transit sector. In 2010, we also started selling electricity in the Czech Republic. In Hungary, we cover the entire electricity value chain, from production through to the operation of the distribution system and sales to end-customers. We

were also active in the Hungarian gas supply sector via a minority stake, but have discontinued this business. In addition, the Central Eastern and South Eastern Europe Division includes our Polish activities, consisting of the distribution and supply of electricity. In Slovakia, we are active in the electricity network and electricity retail businesses via a minority interest and in the gas supply sector via RWE Gas Slovensko. We have started to sell electricity in Turkey, an activity in its very early stages. Our wastewater business in Zagreb (Croatia), which used to be assigned to RWE Deutschland, has belonged to the Central Eastern and South Eastern Europe Division since 1 January 2013. In addition, we became active in the Croatian energy supply business via Energija 2 (now RWE Energija), a company which we acquired in early June 2013.

- **Renewables:** This is where we present the figures of RWE Innogy, which generates electricity and heat from renewable sources, particularly wind, water and biomass. Its major production sites are located in Germany, the United Kingdom, the Netherlands, Spain and Poland.
- **Upstream Gas & Oil:** This division consists of the activities of RWE Dea. The company produces gas and oil, focusing on Germany, the United Kingdom, Norway and Egypt.
- **Trading/Gas Midstream:** Assigned to this division is RWE Supply & Trading, which is responsible for trading energy and commodities, marketing and hedging the RWE Group's electricity position over the long and short term, and running the entire gas midstream business. Furthermore, it supplies some major German and Dutch industrial and corporate customers with electricity and gas.

**The 'other, consolidation' item.** We present certain groupwide activities outside the divisions as part of 'other, consolidation.' These are the Group holding company RWE AG as well as our in-house service providers RWE Group Business Services, RWE Service, RWE IT and RWE Consulting. This item also includes our minority interest in the electricity transmission system operator Amprion.

## 1.6 BUSINESS PERFORMANCE

The deterioration in the market conditions for our power plants clearly left its mark on the consolidated financial statements: significant impairments in the conventional electricity generation business resulted in us recording a negative net income in 2013. In contrast, as expected, the operating result amounted to €5.9 billion. The burdens in the electricity generation business also came to bear here, particularly the abolition of free allocations of emission allowances. However, a substantial positive effect was felt from compensatory payments, which we were awarded in the successful price revision proceedings with Gazprom. The major progress we made in implementing our ongoing efficiency-enhancement programme was also encouraging.

Electricity production by division	Lignite		Hard coal		Gas		Nuclear		Renewables		Pumped storage, oil, other		Total	
Billion kWh	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012
Conventional Power Generation	75.8	75.6	47.6	59.6	36.1	38.2	30.5	30.7	4.8	4.3	2.9	2.4	197.7	210.8
of which:														
Germany <sup>1</sup>	75.8	75.6	29.4	35.5	6.4	7.3	30.5	30.7	0.9	0.8	2.9	2.4	145.9	152.3
Netherlands/Belgium	–	–	6.5	7.3	5.8	5.9	–	–	1.0	1.4	–	–	13.3	14.6
United Kingdom	–	–	11.7	16.8	22.3	25.0	–	–	2.9	2.1	–	–	36.9	43.9
Turkey	–	–	–	–	1.6	–	–	–	–	–	–	–	1.6	–
Central Eastern and South Eastern Europe	5.4	5.4	0.1	0.1	0.1	0.1	–	–	–	–	–	–	5.6	5.6
Renewables	–	–	–	–	0.2	0.2	–	–	8.0 <sup>2</sup>	7.1 <sup>2</sup>	–	–	8.2	7.3
<b>RWE Group<sup>3</sup></b>	<b>81.2</b>	<b>81.0</b>	<b>51.3</b>	<b>60.6</b>	<b>37.0</b>	<b>39.6</b>	<b>30.5</b>	<b>30.7</b>	<b>13.8</b>	<b>12.4</b>	<b>2.9</b>	<b>2.8</b>	<b>216.7</b>	<b>227.1</b>

1 Including electricity from power plants not owned by RWE that we can deploy at our discretion on the basis of long-term agreements. In 2013, it amounted to 21.8 billion kWh (previous year: 25.2 billion kWh), of which 18.5 billion kWh were generated by hard coal-fired power plants (previous year: 22.4 billion kWh).

2 Including electricity procured from power plants co-financed by RWE, which are owned by companies that are not fully consolidated. In 2013, these purchases totalled 1.8 billion kWh (previous year: 1.4 billion kWh).

3 Including small generation volumes of other divisions.

**Electricity generation down 5%.** In the financial year that just came to a close, the RWE Group produced 216.7 billion kilowatt hours (kWh) of electricity, 5% less than in 2012. During 2013, 37% of electricity generation was from lignite, 24% from hard coal, 17% from gas, and 14% from nuclear. The share of renewable energy amounted to 6%.

The decline in electricity production is in part due to the decrease in our generation capacity. At the end of March 2013, we shut down Didcot A power station in the UK, which had a net installed capacity of 1,958 megawatts (MW). Furthermore, we stopped using some German hard coal stations owned by third parties because the corresponding contracts had expired at the end of the preceding year. The further deterioration in market conditions for our gas-fired

power plants also had a negative effect. However, we generated more electricity from renewables than in 2012. This is partly due to the improved availability of the Tilbury biomass-fired power plant in the UK, which had been offline for several months after a fire in 2012. It has since been decommissioned. In addition, the continued expansion of our wind turbine capacity contributed to the increase in electricity generated from renewables. Another factor was the weather-driven rise in the use of our German run-of-river power plants compared to 2012.

In addition to our in-house generation, we procure electricity from external suppliers. These volumes totalled 70.6 billion kWh in 2013, as opposed to 67.2 billion kWh in the previous year.

**Among Europe's leading electricity generators, with a capacity of 49 gigawatts.** At the end of the 2013 financial year, the RWE Group had an installed capacity of 49.0 gigawatts (GW), ranking it fourth in Europe. This includes mothballed stations, which are currently not operated for economic reasons. Since the end of 2012, our power plant capacity has dropped by 2.9 GW. The decommissioning of Didcot A (hard coal), Fawley (oil) and Tilbury (biomass) power stations in the UK played an important role. However, capacity was also added, in particular the gas-fired power plant near the town of Denizli in the west of Turkey, which was completed in the middle of 2013. In addition, we expanded our onshore wind power portfolio. We have reported on the aforementioned closures and commissioning of plant in more detail on page 52.

At the end of 2013, gas accounted for the biggest share of the RWE Group's installed generation capacity at 34% (preceding year: 30%), followed by lignite at 23% (21%), hard coal at 20% (23%), nuclear at an unchanged 8% and renewables at 7% (8%). The portion accounted for by renewables declined somewhat due to the closure of the Tilbury biomass-fired power plant. The core region for our electricity production is Germany, where 61% of our installed capacity is located. The United Kingdom and the Netherlands follow, accounting for shares of 23% and 10%, respectively.

Power plant capacity by division as of 31 Dec 2013, in MW	Gas	Lignite	Hard coal	Nuclear	Renewables	Pumped storage, oil, other	Total	Total 31 Dec 2012
Conventional Power Generation	15,955	10,291	9,152	3,901	386	4,031	43,716	47,104
of which:								
Germany <sup>1</sup>	5,006	10,291	6,662	3,901	55	2,342	28,257	28,785
Netherlands/Belgium	3,429	–	936	–	331	–	4,696	4,696
United Kingdom	6,733	–	1,554	–	–	1,689	9,976	13,623
Turkey	787	–	–	–	–	–	787	–
Central Eastern and South Eastern Europe	151	780	–	–	3	–	934	935
Renewables	44 <sup>2</sup>	–	10 <sup>2</sup>	–	2,854	–	2,908	2,803
<b>RWE Group<sup>3</sup></b>	<b>16,440</b>	<b>11,071</b>	<b>9,950</b>	<b>3,901</b>	<b>3,496</b>	<b>4,178</b>	<b>49,036</b>	<b>51,977</b>

<sup>1</sup> Including capacities of power stations not owned by RWE that we can deploy at our discretion on the basis of long-term agreements. As of 31 December 2013, these generation capacities amounted to 6,424 MW (preceding year: 6,623 MW), of which 4,259MW were based on hard coal (preceding year: 4,458 MW).

<sup>2</sup> Mostly combined heat and power plants.

<sup>3</sup> Including capacities of other divisions.

**CO<sub>2</sub> emissions 9% down year on year.** In fiscal 2013, our power stations emitted 163.8 million metric tons of carbon dioxide. Our own plants accounted for 144.3 million metric tons, and the remaining 19.5 million metric tons came from contractually secured capacity. Our emissions were 16.0 million metric tons, or 9%, lower year on year. This is mainly due to the decrease in electricity generation from hard coal. The emission factor of our power stations, reflecting the CO<sub>2</sub> emissions per megawatt hour (MWh) of

electricity produced, dropped to 0.76 metric tons (previous year: 0.79 metric tons). The increase in electricity generated from renewables was a significant factor. In contrast, the highly efficient gas-fired power stations we commissioned in the Netherlands and the United Kingdom in 2012 were unable to make the desired contribution to improving our CO<sub>2</sub> balance due to the unfavourable market conditions for these plants.

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Emissions balance by division million metric tons of CO <sub>2</sub>	CO <sub>2</sub> emissions		Free allocation of CO <sub>2</sub> certificates		Shortage of CO <sub>2</sub> certificates	
	2013	2012	2013	2012	2013	2012
Conventional Power Generation	153.4	171.4	6.7	114.2	146.2	57.2
of which:						
Germany <sup>1</sup>	125.7	136.1	6.3	85.4	119.4	50.7
Netherlands/Belgium	8.3	8.4	0.3	8.6	8.0	-0.2
United Kingdom	18.9	26.9	0.1	20.2	18.8	6.7
Turkey <sup>2</sup>	0.5	-	-	-	-	-
Central Eastern and South Eastern Europe	6.5	6.6	0.2	5.2	6.3	1.4
<b>RWE Group<sup>3</sup></b>	<b>163.8</b>	<b>179.8</b>	<b>7.4</b>	<b>121.4</b>	<b>155.9</b>	<b>58.4</b>

- 1 Includes power stations not owned by RWE that we can deploy at our discretion on the basis of long-term agreements. In the year under review, they produced 19.5 million metric tons of CO<sub>2</sub> (preceding year: 21.1 million metric tons) and stopped receiving free allocations of CO<sub>2</sub> certificates (preceding year: allocation for 18.9 million metric tons).  
2 As Turkey does not participate in the European Emissions Trading System, we do not need allowances for our CO<sub>2</sub> emissions in that country.  
3 Including small emission volumes of other divisions.

#### Free emission allowances only cover 5% of CO<sub>2</sub> emissions.

Since the beginning of the third emissions trading period, which runs from 2013 to 2020, the countries of Western Europe have only allocated energy utilities emission allowances for free in exceptional cases. After covering 121.4 million metric tons in carbon emissions with such allocations in 2012, the amount covered in 2013 dropped to a mere 7.4 million metric tons. This results in a shortage of 155.9 million metric tons compared to 58.4 million metric tons in the previous year. We made up for most of the shortage by buying certificates.

We cover a small amount of our CO<sub>2</sub> emissions by submitting certificates obtained through emission reductions within the scope of Kyoto Clean Development Mechanism (CDM) and Joint Implementation (JI) projects. In the past decade, RWE launched a number of projects to acquire certificates of this kind. However, their market price has dropped so much that new projects are hardly worthwhile. In addition, regulatory restrictions hardly leave any room for new projects. Since we began our CDM and JI activities, we have contractually secured emission allowances for 64.4 million metric tons of carbon dioxide. Many of these contracts are still in force. The actual number of certificates received in this manner will probably be smaller than the contractually secured volume as some projects may fail or their carbon savings may lag behind expectations. Taking such risks into account, we expect to have emission allowances covering 49.5 million metric tons of CO<sub>2</sub>. By the end of 2013, we had already received certificates for 43.9 million metric tons, almost all of which we have already submitted to the German Emissions Trading Authority or sold on the exchange.

#### Marginal decline in hard coal purchasing volumes.

Raw materials are sourced by our generation companies either directly on the market, or via RWE Supply & Trading. In 2013, the amount of hard coal procured to generate electricity totalled 15.1 million metric tons of hard coal unit (HCU), compared to 18.1 million metric tons in the previous year. The decrease is a result of the reduced utilisation of our hard coal-fired power stations. The figures include coal for plants not owned by RWE that we can deploy at our discretion on the basis of long-term agreements. We meet most of our need with imports from Colombia, the USA and Russia. In Germany, we buy limited amounts of domestically produced hard coal. Most of the biomass used at our Amer (Netherlands) and Tilbury (United Kingdom) power stations was imported from North America, some of which came from our wood pellet factory in Georgia.

RWE sources lignite from proprietary opencast mines. In the Rhineland, our main mining region, we produced 98.3 million metric tons of lignite in the year under review (prior year: 101.7 million metric tons). Of this, our power plants used 85.8 million metric tons to generate electricity, and we used 12.5 million metric tons to manufacture refined products.

We procure nearly all of the gas needed for electricity production and the supply business via RWE Supply & Trading. Our purchasing volume for 2013 amounted to 39 billion cubic metres, slightly more than the previous year's level (38 billion cubic metres). This was mainly due to the development of sales volumes presented on page 62. Roughly half of our purchasing was based on long-term take-or-pay contracts, largely

with producers in Norway, Russia, the Netherlands and Germany. Furthermore, we sourced gas from European wholesale markets and from external suppliers on the basis of short-term agreements. We procured small amounts from our upstream company RWE Dea.

**Upstream position remains strong.** Via RWE Dea, we are active in the exploration and production of oil and gas. Our main production sites are in Germany, the UK North Sea, off the coast of Norway and in Egypt. As of 31 December 2013, RWE Dea had 20 million cubic metres in crude oil reserves and 57 billion cubic metres in natural gas reserves. Converting the gas to oil equivalent (OE) and adding it to the crude oil results in a total of 75 million cubic metres of OE. Reserves is the term used for raw materials stored under the ground, the existence of which has been proven, and the production of which is economically feasible and legally secured. These are different to proven resources, which are recoverable raw material deposits, for which it has not yet been established whether production is economically feasible and for which no development plan exists. At the end of 2013, RWE Dea had proven resources of 50 million cubic metres of oil and 108 billion cubic metres of gas. This totals 155 million cubic metres of OE, 38 million more than in the prior year, whereas reserves declined by 47 million cubic metres of OE. The main reason is that the hydrocarbon volumes of the large-scale Egyptian project West Nile Delta, formerly classified as reserves, are now reported as proven resources due to an ongoing revision of the field development plan.

**Slight increase in gas production.** In the fiscal year that just ended, RWE Dea produced 2,625 million cubic metres of gas and 2,316,000 cubic metres of oil. In oil equivalent, this results in a total output of 4,858,000 cubic metres, or 30.6 million barrels. This was nearly on a par with the volume achieved in the previous year, which totalled 4,892,000 cubic metres, or 30.8 million barrels. Natural gas production was up 2% on 2012. This was primarily because we started production in four new fields. The Clipper South and Devenick UK North Sea fields were commissioned in August and September 2012. They were followed in the year being reviewed by the Egyptian field Disouq in September and the UK North Sea field Breagh in October. However, production from Breagh was interrupted from the beginning of November to the end of December due to technical problems. In addition, the reduction in volume caused by the natural depletion of reserves came to bear. This primarily had an impact on our fields in Germany and the United Kingdom. Our gas output was positively affected by the fact that, as production progressed in the Norwegian Gjøa field, the share of output accounted for by gas rose, whereas the proportion allocable to oil dropped. This was also the main reason why RWE Dea produced 3% less oil year on year. In addition, our oil production operations in Denmark were halted for a few months due to problems with processing and storage infrastructure. Conversely, we produced more oil from our German Mittelplate field than in 2012. Besides technical improvements, a new production well was a contributing factor.

External electricity sales volume	Residential and commercial customers		Industrial and corporate customers		Distributors		Electricity trading		Total	
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012
Billion kWh										
Conventional Power Generation	0.3	0.3	0.8	1.0	11.1	9.1	–	–	12.2	10.4
Supply/Distribution Networks Germany	23.1	24.0	30.0	30.8	78.0	69.3	–	–	131.1	124.1
Supply Netherlands/Belgium	11.3	11.2	10.2	9.5	1.6	–	–	–	23.1	20.7
Supply United Kingdom	17.1	17.9	30.6	30.8	0.2	–	–	–	47.9	48.7
Central Eastern and South Eastern Europe	8.3	8.1	9.2	8.9	6.0	6.1	–	–	23.5	23.1
Renewables	0.1	0.1	–	–	2.0	1.9	–	–	2.1	2.0
Trading/Gas Midstream	–	–	20.7	31.7	–	–	10.2	17.0	30.9	48.7
<b>RWE Group<sup>1</sup></b>	<b>60.3</b>	<b>61.7</b>	<b>101.5</b>	<b>112.7</b>	<b>98.9</b>	<b>86.4</b>	<b>10.2</b>	<b>17.0</b>	<b>270.9</b>	<b>277.8</b>

<sup>1</sup> Including small volumes subsumed under 'other, consolidation.'

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**Electricity sales volume 2% down year on year.** In the year under review, RWE sold 270.9 billion kWh of electricity to external customers, 2% less than in 2012. Volumes in the Trading/Gas Midstream Division declined significantly, because RWE Supply & Trading has not auctioned off electricity since 1 January 2013. In 2007, we had agreed with the Federal Cartel Office that we would conduct such auctions for the supply period from 2009 to 2012. Customer losses and energy savings by households led to a marginal drop in volume at our UK Group company RWE npower. Conversely, we posted gains in the German supply business, predominantly in the distributor business, thanks to

successful customer acquisitions and stronger demand from existing customers. However, the sales volumes we achieved from reselling electricity feed-ins under the German Renewable Energy Act (REA) to transmission network companies were down on 2012. This is because operators of plant covered by the REA increasingly market their electricity directly instead of selling it to the network operators. Furthermore, the divestment of Koblenzer Elektrizitätswerk und Verkehrs-Aktiengesellschaft (KEVAG) in December 2012 removed supply volumes. As in Germany, we also sold more electricity in the Netherlands/Belgium region, where the share of high-volume buyers rose.

Electricity customers by region Thousands	Total		Of which: residential and commercial customers	
	2013	2012	2013	2012
Germany	6,696	6,730	6,644	6,679
Netherlands	2,171	2,181	2,167	2,177
Belgium	332	285	330	283
United Kingdom	3,583	4,030	3,396	3,865
Hungary	2,123	2,152	2,121	2,150
Poland	908	898	907	897
Czech Republic	238	167	236	166
Croatia	28	-	28	-
<b>RWE Group</b>	<b>16,079</b>	<b>16,443</b>	<b>15,829</b>	<b>16,217</b>

As of 31 December 2013, the RWE Group's fully consolidated companies supplied electricity to 16,079,000 customers, of which 6,696,000 were in Germany. Compared to 2012, customer figures decreased by 364,000. The number of households and small commercial enterprises served declined by 388,000 to 15,829,000. This was largely due to the sale of the supply subsidiary Electricity Plus Supply in the United Kingdom,

on which we reported on page 51. RWE's customer base in the other major markets it serves, namely Germany, the Netherlands, Hungary and Poland, was stable. We recorded double-digit percentage gains in Belgium and the Czech Republic. Furthermore, we now state figures for electricity customers in Croatia, because we acquired the supply company Energija 2 (now called RWE Energija) in June 2013.



External gas sales volume	Residential and commercial customers		Industrial and corporate customers		Distributors		Total	
	2013	2012	2013	2012	2013	2012	2013	2012
Billion kWh								
Supply/Distribution Networks Germany	29.2	29.0	22.3	19.3	38.4	25.7	89.9	74.0
Supply Netherlands/Belgium	41.7	37.7	41.5	43.2	–	–	83.2	80.9
Supply United Kingdom	43.1	44.2	2.1	2.2	0.8	–	46.0	46.4
Central Eastern and South Eastern Europe	18.3	20.3	31.2	26.9	1.7	16.1	51.2	63.3
Upstream Gas & Oil	–	–	7.0	1.7	13.3	14.2	20.3	15.9
Trading/Gas Midstream	–	–	20.4	13.5	23.9	12.7	44.3	26.2
<b>RWE Group<sup>1</sup></b>	<b>132.3</b>	<b>131.2</b>	<b>124.6</b>	<b>106.9</b>	<b>78.1</b>	<b>68.7</b>	<b>335.0</b>	<b>306.8</b>

<sup>1</sup> Including small volumes in the Conventional Power Generation Division.

**Weather drives up gas sales volume by 9%.** At 335.0 billion kWh, RWE's gas sales volume was 9% higher year on year. We recorded increases in all customer segments at the Group level. In business with households and small commercial enterprises, we benefited from the weather-induced rise in heating needs. Moreover, we won industrial and commercial customers in particular in the German and Czech markets. The strongest rise in sales volume was posted in the distributor segment. Customer

acquisitions made a major contribution here, especially in Germany, where, in addition, numerous existing customers increased their purchases, partly due to the weather. The Trading/Gas Midstream Division also posted significant growth in sales to distributors, whereas the Central Eastern and South Eastern Europe Division recorded a decline of a similar order. This is a result of the transfer of the Czech wholesale business to RWE Supply & Trading.

Gas customers by region	Total		Of which: residential and commercial customers	
	2013	2012	2013	2012
Thousands				
Germany	1,305	1,302	1,291	1,292
Netherlands	1,967	1,958	1,962	1,953
Belgium	209	173	208	172
United Kingdom	2,322	2,655	2,315	2,648
Czech Republic	1,451	1,598	1,445	1,594
Slovakia	97	59	96	59
<b>RWE Group</b>	<b>7,351</b>	<b>7,745</b>	<b>7,317</b>	<b>7,718</b>

As of balance sheet date, our fully consolidated companies had a total of 7,351,000 gas customers, most of which were in the United Kingdom, followed by the Netherlands, the Czech Republic and Germany. Compared to the previous year, our customer base shrank by 394,000. In the residential and small commercial enterprises segment, it declined by 401,000 to 7,317,000, primarily due to the sale

of the UK subsidiary Gas Plus Supply (see page 51). The significant competitive pressure in the Czech Republic also played a role. We defended our shares of the residential and commercial customer markets in Germany and the Netherlands. In 2013, we successfully maintained the course for expansion charted in Slovakia and Belgium.

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External revenue € million	2013	2012	+/- %
Conventional Power Generation	1,570	1,626	-3.4
Supply/Distribution Networks Germany	25,718	23,710	8.5
Supply Netherlands/Belgium	6,308	5,863	7.6
Supply United Kingdom	8,982	8,708	3.1
Central Eastern and South Eastern Europe	4,852	5,274	-8.0
Renewables	402	387	3.9
Upstream Gas & Oil	1,837	1,848	-0.6
Trading/Gas Midstream	4,313	5,698	-24.3
Other, consolidation	88	113	-22.1
<b>RWE Group</b>	<b>54,070</b>	<b>53,227</b>	<b>1.6</b>
Natural gas tax/electricity tax	2,677	2,456	9.0
<b>RWE Group (excluding natural gas tax/electricity tax)</b>	<b>51,393</b>	<b>50,771</b>	<b>1.2</b>

External revenue by product € million	2013	2012	+/- %
Electricity revenue	34,896	34,256	1.9
of which:			
Supply/Distribution Networks Germany	20,643	19,173	7.7
Supply Netherlands/Belgium	2,278	2,144	6.3
Supply United Kingdom	6,168	6,107	1.0
Central Eastern and South Eastern Europe	2,310	2,391	-3.4
Trading/Gas Midstream	2,701	3,707	-27.1
Gas revenue	14,616	14,222	2.8
of which:			
Supply/Distribution Networks Germany	4,128	3,553	16.2
Supply Netherlands/Belgium	3,850	3,551	8.4
Supply United Kingdom	2,312	2,188	5.7
Central Eastern and South Eastern Europe	2,421	2,761	-12.3
Upstream Gas & Oil	501	469	6.8
Trading/Gas Midstream	1,402	1,697	-17.4
Oil revenue	1,325	1,540	-14.0
of which:			
Upstream Gas & Oil	1,257	1,289	-2.5
Trading/Gas Midstream	68	251	-72.9
Other revenue	3,233	3,209	0.7
<b>RWE Group</b>	<b>54,070</b>	<b>53,227</b>	<b>1.6</b>

**External revenue 2% up year on year.** RWE generated €54,070 million in external revenue (including natural gas and electricity taxes), confirming the forecast of €54 billion, which we published in the 2012 Annual Report at the beginning of March 2013. Compared to the previous year, external revenue was 2% higher. Despite a drop in supply

volumes, our electricity revenue rose by the same percentage to €34,896 million. Price increases came to bear here. For example, most of our German regional companies raised tariffs for residential and commercial customers. Among other things, this was in response to the considerable rise in the green energy levy. A marked

increase in up-front costs also caused us to raise residential tariffs in the United Kingdom. In the gas business, we posted €14,616 million in revenue. This represents a gain of 3% compared to 2012, largely driven by the growth in sales volumes. The development of Group revenue was also affected by consolidation effects, particularly the sale of NET4GAS at the beginning of August 2013. Changes in

currency exchange rates also came to bear. The British pound cost an average of €1.18, less than in 2012 (€1.23). Other currencies of importance to us such as the US dollar, Czech crown, Polish zloty and the Hungarian forint also depreciated against the euro, albeit marginally. Net of material consolidation and currency effects, external revenue rose by 4%.

<b>EBITDA</b> € million	2013	2012	+/- %
Conventional Power Generation	2,432	4,378	-44.4
of which:			
Continental Western Europe	2,251	3,928	-42.7
United Kingdom	165	456	-63.8
Supply/Distribution Networks Germany	2,316	2,266	2.2
Supply Netherlands/Belgium	368	293	25.6
Supply United Kingdom	366	371	-1.3
Central Eastern and South Eastern Europe	1,281	1,312	-2.4
Renewables	397	364	9.1
Upstream Gas & Oil	938	1,041	-9.9
Trading/Gas Midstream	841	-591	-
Other, consolidation	-177	-120	-47.5
<b>RWE Group</b>	<b>8,762</b>	<b>9,314</b>	<b>-5.9</b>

<b>Operating result</b> € million	2013	2012	+/- %
Conventional Power Generation	1,383	3,275	-57.8
of which:			
Continental Western Europe	1,450	3,085	-53.0
United Kingdom	-76	194	-
Supply/Distribution Networks Germany	1,626	1,578	3.0
Supply Netherlands/Belgium	278	190	46.3
Supply United Kingdom	290	286	1.4
Central Eastern and South Eastern Europe	1,032	1,052	-1.9
Renewables	196	183	7.1
Upstream Gas & Oil	521	685	-23.9
Trading/Gas Midstream	831	-598	-
Other, consolidation	-276	-235	-17.4
<b>RWE Group</b>	<b>5,881</b>	<b>6,416</b>	<b>-8.3</b>

### Operating result of €5,881 million in line with expectations.

The RWE Group achieved EBITDA of €8,762 million and an operating result of €5,881 million, coming close to the forecast of €9.0 billion and €5.9 billion, respectively. Efficiency-enhancement measures added more to the result than expected, but this was contrasted by unexpectedly heavy one-off burdens caused by an unfavourable electricity procurement agreement and a below-par trading performance. Compared to the preceding year, EBITDA and the operating result decreased by 6% and 8%, respectively. This was mainly due to the huge earnings shortfalls in the conventional electricity generation business, a significant deterioration in earnings in the upstream business of RWE Dea and the sale of NET4GAS. The Trading/Gas Midstream Division achieved extraordinarily strong earnings, as we were awarded high compensation payments as a result of the successful revision of the gas procurement agreement with Gazprom. Disregarding material consolidation and currency effects, EBITDA and the operating result declined by 3% and 5% year on year, respectively.

The following is a breakdown of the development of the operating result by division:

- **Conventional Power Generation:** As expected, the division's operating result decreased considerably: at €1,383 million, it was €1,892 million, or 58%, lower year on year. We experienced a decline of €1,635 million to €1,450 million in Continental Western Europe (Germany and the Netherlands/Belgium) and of €270 million to –€76 million in the United Kingdom. This reflected a number of negative factors, the most significant of which is that governments of Western Europe have hardly granted any free allocations of CO<sub>2</sub> emission allowances since 2013. For 2012, we had received free allocations of emission allowances equivalent to 114.2 million metric tons of carbon dioxide for the Conventional Power Generation Division. They had provided around €1.2 billion in relief. Earnings shortfalls also stemmed from the fact that quotations in Continental European electricity forward trading decreased. In addition, in the preceding year suppliers compensated us for delays in power plant projects, an exceptional effect which did not recur in 2013. Furthermore, we had to significantly increase a provision for impending losses from a loss-making electricity procurement contract. This was contrasted by relief provided by lower purchase prices of

hard coal and CO<sub>2</sub> emission allowances as well as a drop in expenses incurred to maintain power plants. Moreover, we benefited from efficiency-enhancement measures, which we implemented more rapidly than expected.

- **Supply/Distribution Networks Germany:** As expected, the operating result recorded by this division was of the previous year's order (€1,578 million), amounting to €1,626 million. Efficiency improvements and the weather-induced rise in gas sales volumes had a positive impact on earnings. A counteracting effect was felt from the fact that we divested our stakes in the Koblenz-based regional utility KEVAG and in the Berlin waterworks in the prior year. Therefore, the aforementioned activities are no longer included in the division's result. The same applies to our wastewater business in Zagreb, which we reassigned to the Central Eastern and South Eastern Europe Division as of 1 January 2013.
- **Supply Netherlands/Belgium:** We had originally expected this division to post an operating result in the order of the preceding year's level. However, we recorded a substantial gain of 46% to €278 million, primarily because we released provisions. In addition, we benefited from higher gas sales volumes. As expected, measures taken as part of our efficiency-enhancement programme also had a positive effect. However, gas supply margins declined due to the competition. Furthermore, the introduction of a new customer billing system led to a temporary rise in costs.
- **Supply United Kingdom:** The operating result achieved by this division totalled €290 million. This slightly exceeded the year-earlier figure and was in line with our forecast. Net of currency effects, it would have grown by 6%. Continued efficiency enhancements strengthened earnings power across all supply segments. However, network usage fees were higher year on year. We also spent more on measures to improve the energy efficiency of households, which major UK energy companies are obliged to do by the government. This trend towards lower energy usage resulted in an additional reduction in earnings. Price increases partly offset these burdens: at the end of November 2012, RWE npower raised its residential electricity and gas tariffs by 8.8% and 8.6%, respectively. We had to increase them again at the beginning of December 2013, by 9.3% and 11.1%, respectively.

- **Central Eastern and South Eastern Europe:** The operating result recorded by this division declined by 2 % to €1,032 million, essentially due to the sale of NET4GAS as of 2 August 2013. Until it was deconsolidated, the Czech long-distance gas network operator achieved a result of €171 million, as opposed to €298 million in 2012. The company's earnings were better than expected. Consequently, the drop in the operating result of the Central Eastern and South Eastern Europe Division was not as significant as we had assumed in our March forecast. Excluding the impact of NET4GAS and currency translation, the division's operating result was up 15 % year on year. This was due to a considerable improvement in earnings from transactions to limit currency risks. Risks of this kind arise in part because gas and electricity purchases for our markets in Central Eastern Europe are usually settled in euros and US dollars, whereas these volumes are settled in local currency when they are sold on. In addition to this special item, we also benefited from improved distribution network and supply margins in the Czech gas and Polish electricity business. Conversely, in Hungary, a state-ordered reduction in network fees and residential tariffs led to substantial earnings shortfalls in the electricity and gas businesses.
- **Renewables:** The operating result recorded by RWE Innogy was up 7 % to €196 million. This confirmed the outlook we published in March 2013, although we occasionally feared a weaker development. The strongest driver of earnings at RWE Innogy is the continued expansion of our generation capacity. For example, the Greater Gabbard offshore wind farm, which was completed in September 2012 and in which we hold a 50 % stake, contributed its full capacity of 504 MW to electricity production throughout the year under review. Furthermore, we benefited from the increased utilisation of our German hydroelectric power stations. In addition, a supplier paid us compensation for damages caused by defective wind turbines in Spain. However, these positive factors were contrasted by burdens due to impairments recognised for the Atlantic Array offshore wind project, which has since been terminated (see page 52), and a subsidiary which finances venture capital projects, the income of which is falling short of expectations. We also recognised an impairment loss for our minority interest in the Andasol 3 solar thermal power station in Spain, where the government retrospectively cut renewable energy subsidies. Our Spanish wind farms were also affected by this. In addition, the reduction in wholesale electricity prices curtailed the earnings of RWE Innogy.
- **Upstream Gas & Oil:** The operating result posted by RWE Dea fell by 24 % to €521 million. One of the main reasons was that realised oil prices were lower year on year, with the weaker US dollar playing a role. Our forecast for RWE Dea originally included an operating result in the order of the level recorded in 2012. However, we did not progress in expanding gas production as rapidly as expected. For example, there was a delay to the start of production at our North Sea field Breagh. Furthermore, some of our exploration wells were not successful, forcing us to recognise associated costs directly as an expense instead of capitalising them. In consequence, exploration costs were much higher than initially anticipated.
- **Trading/Gas Midstream:** RWE Supply & Trading met our expectations by increasing its operating result by €1,429 million to €831 million. A major contributing factor was the arbitral ruling on our long-term gas procurement agreement with Gazprom at the end of June, on which we have reported on page 50. We had already negotiated improved price conditions for our procurement agreements with other gas suppliers before 2013. Whereas earnings in the gas midstream business improved considerably for the aforementioned reasons, we were unable to match the performance posted in energy trading in the preceding year.

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Key figures for value management	Operating result 2013	Capital employed 2013 <sup>1</sup>	ROCE 2013	Capital costs before taxes 2013	Absolute value added 2013	Capital costs before taxes 2012	Absolute value added 2012
	€ million	€ million	%	%	€ million	%	€ million
Conventional Power Generation	1,383	20,458	6.8	9.5	-561	9.5	1,490
Supply/Distribution Networks Germany	1,626	16,344	9.9	8.25	278	8.25	201
Supply Netherlands/Belgium	278	2,263	12.3	8.5	85	8.5	-6
Supply United Kingdom	290	2,366	12.3	8.5	89	8.5	78
Central Eastern and South Eastern Europe	1,032	6,257	16.5	8.0	532	8.0	495
Renewables	196	5,377	3.6	8.75	-275	8.75	-254
Upstream Gas & Oil	521	3,309	15.7	12.75	99	12.75	294
Trading/Gas Midstream	831	1,918	43.3	10.0	639	10.0	-879
Other, consolidation	-276	-3,947	-	-	104	-	170
<b>RWE Group</b>	<b>5,881</b>	<b>54,345</b>	<b>10.8</b>	<b>9.0</b>	<b>990</b>	<b>9.0</b>	<b>1,589</b>

1 Average of 2012 and 2013 year-end figures.

#### RWE achieves a return on capital employed of 10.8%.

In the financial year that just ended, we earned a return on capital employed (ROCE) of 10.8%, which was lower than a year earlier (12.0%) but higher than the Group's cost of capital before taxes (9.0%). ROCE minus the cost of capital, multiplied by capital employed, equals absolute value added, which amounted to €990 million, down 38% compared to 2012 (€1,589 million). This reflects the decline in the operating result. The fact that capital employed increased also had a negative effect, albeit

only marginal. At the divisional level, the development of the operating result was the key determinant of change in value added. We experienced the most significant drop in the Conventional Power Generation Segment, where the value added decreased by €2,051 million to -€561 million. In 2012, the division had posted the highest value added of all divisions, but it delivered the weakest performance in 2013. The Trading/Gas Midstream Division posted the opposite development, increasing its value added by €1,518 million to €639 million.

## The RWE Group's value management

**Return-oriented control of the company.** Increasing shareholder value is a key element of our strategy. We use our value management concept to determine whether and to what extent we succeed in accomplishing this. Additional value is created when the return on capital employed (ROCE) exceeds the cost of capital. ROCE reflects the pure operating return. It is the ratio of the operating result to capital employed.

The table at the top of page 69 shows the parameters used to calculate the cost of capital. We calculate it as a weighted average cost of equity and debt. The cost of equity corresponds to the expectation of company-specific returns on the capital market when investing in an RWE share. The cost of debt is linked to long-term financing conditions for the RWE Group. The figures we used as a basis for determining the cost of capital for 2013 are the same as those of the previous year.

We calculate the cost of equity as follows: we use a long-term average interest rate for a risk-free investment of 3.8% as a basis, plus risk charges specific to the Group and the Group's divisions, which are also referred to as 'market premiums.' The risk charge for the Group amounts to 5.0%. Accordingly, the sum of the 'risk-free interest rate' and the market premium is 8.8%. In the next step, it is multiplied by what is termed the beta factor, which is based on the Capital Asset Pricing model developed in the 1960s. It is the key figure for the systematic risk exposure connected to an investment, which is also referred to as the market risk. The applied beta factor for RWE's value management is 1.03. This results in a cost of equity of 8.9%. As the cost of equity is not tax-deductible, this figure is the same both before and after taxes.

The cost of debt is 5.0% before tax. The imputed tax rate is 27.4%. Multiplying these two figures results in the tax shield, which is the amount by which the cost of debt is reduced because it is classified as tax deductible. The calculated tax shield of 1.4 percentage points results in a cost of debt of 3.6% after taxes.

The ratio of equity to debt is 50:50. We do not derive this parameter from the amounts carried on the balance sheet, but, among other things, from the marked-to-market valuation of equity and assumptions concerning the long-term development of our net financial position and provisions.

In sum, the RWE Group's total cost of capital is 9.0% before tax.

When determining capital employed, depreciable non-current assets are not stated at carrying amounts. Instead, we recognise half of their historic costs over their entire useful life. The advantage of this procedure is that the determination of ROCE is not influenced by the depreciation period. This reduces the fluctuation in value added caused by the investment cycle. In contrast, goodwill from acquisitions is fully recognised; amortisation is not recognised with a value-reducing effect until the subsequent year.

ROCE minus the cost of capital equals relative value added. Multiplying this figure by the capital employed results in the absolute value added, which we employ as a central management benchmark. The higher the value added, the more attractive a particular activity is for our portfolio. Absolute value added is an important parameter for evaluating capital expenditure and for determining the performance-linked compensation of RWE Group executives.

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RWE Group – capital costs		2013
Risk-free interest rate	%	3.8
Market premium	%	5.0
Beta factor		1.03
Cost of equity after tax	%	8.9
Cost of debt before tax	%	5.0
Tax rate for debt	%	27.4
Tax shield	%	–1.4
Cost of debt after tax	%	3.6
Proportion of equity	%	50
Proportion of debt	%	50
Capital costs after tax	%	6.3
Tax rate for blanket conversion	%	31
Weighted average cost of capital (WACC) before tax	%	9.0

RWE Group – determining capital employed		31 Dec 2013	31 Dec 2012
Intangible assets/property, plant and equipment <sup>1</sup>	€ million	57,078	59,314
+ Investments including loans <sup>2</sup>	€ million	5,018	5,433
+ Inventories	€ million	2,360	3,128
+ Trade accounts receivable	€ million	7,950	8,024
+ Other accounts receivable and other assets <sup>3</sup>	€ million	6,875	7,174
– Non-interest-bearing provisions <sup>4</sup>	€ million	12,650	12,021
– Non-interest-bearing liabilities <sup>5</sup>	€ million	13,768	15,474
– Adjustments <sup>6</sup>	€ million	847	797
Capital employed	€ million	52,016	54,781

RWE Group – determining value added		2013
Capital employed before adjustments (averaged for the year)	€ million	53,399
+ Adjustments <sup>7</sup>	€ million	946
Capital employed after adjustments (averaged for the year)	€ million	54,345
Operating result	€ million	5,881
ROCE	%	10.8
Relative value added	%	1.8
Absolute value added	€ million	990

- Intangible assets; property, plant and equipment; and investment property were stated at half of their cost (see the statement of changes in assets on page 160 et seqq.); goodwill and the customer base were recognised at carrying amounts. For 2012 and 2013, €808 million in non-productive assets were deducted.
- Investments accounted for using the equity method and other financial assets (excluding non-current securities).
- Including tax refund claims; excluding derivative financial instruments in the amount of €740 million (previous year: €1,033 million) and the net present value of defined contribution pension benefit obligations.
- Tax provisions and other provisions; excluding non-current provisions in the amount of €1,429 million (previous year: €927 million).
- This item includes trade liabilities, income tax liabilities and other liabilities; it excludes derivative financial instruments in the amount of €620 million (previous year: €818 million) and purchase price liabilities of €1,187 million (previous year: €1,320 million) from put options.
- Assets essentially capitalised in accordance with IAS 16.15 in the amount of €498 million (previous year: €471 million) are not taken into account since they do not employ capital.
- Corrections to reflect timing differences, which are primarily made to eliminate the distorting effects of first-time consolidations and deconsolidations during the year and to neutralise the impact of the amortisation of goodwill at RWE Generation for 2013.



Non-operating result € million	2013	2012	+/- € million
Capital gains	476	487	-11
Impact of commodity derivatives on earnings	72	470	-398
Goodwill impairment losses	-1,404	-	-1,404
Restructuring, other	-4,619	-3,051	-1,568
<b>Non-operating result</b>	<b>-5,475</b>	<b>-2,094</b>	<b>-3,381</b>

**Reconciliation to net income: significant impairments in the Conventional Power Generation Segment.** The

significant deterioration of the earnings prospects in the conventional electricity generation business left clear marks on the reconciliation from the operating result to net income. This primarily affected the non-operating result, which declined to -€5,475 million, a considerable drop compared to the year-earlier figure, which was already negative (-€2,094 million). Its components developed as follows:

- The disposal of investments and assets led to a book gain totalling €476 million, roughly as high as in 2012. The largest contribution to earnings was €236 million and came from the sale of the Czech long-distance gas network operator NET4GAS. Added to this was €199 million from the sale of the UK supply companies Electricity Plus Supply and Gas Plus Supply. More detailed information on the aforementioned transactions can be found on page 51 et seq.
- The accounting treatment of certain derivatives with which we hedge the prices of commodity forward transactions resulted in a gain of €72 million compared to €470 million in the previous year. Pursuant to International Financial Reporting Standards (IFRS), such derivatives are accounted for at fair value at the corresponding balance sheet date, whereas the underlying transactions (which display the opposite development) are only recognised as a profit or loss when they are realised. These timing differences result in short-term effects on earnings, which are neutralised over time and are therefore assigned to the non-operating result.
- Unlike in the preceding year, we had to write down goodwill, resulting in an impairment of €1,404 million in the Conventional Power Generation Segment. This was because expectations of the medium and long-term

development of electricity prices, the future regulatory environment and the load hours of fossil-fuelled power stations were adjusted. The write-down of goodwill is the result of an impairment test, which we conducted as part of a regular update to our mid-term plan.

- We recognised a €4,619 million loss in the 'restructuring, other' item. This includes €3.4 billion in impairment losses on property, plant and equipment and financial assets (previous year: €2.3 billion). €2.4 billion is attributable to our Dutch generation portfolio, the earnings prospects of which deteriorated significantly due to market conditions. Here, the substantial expansion of German solar power generation capacity comes to bear, which is pushing conventional power plants out of the market not just in Germany, but also in its neighbouring countries. In addition, we wrote down our German gas storage activities by €216 million as the situation in that business also worsened: imports of liquefied natural gas (LNG) and the expansion of pipeline infrastructure contributed to a rise in gas supply during peak usage periods (winter), resulting in less demand being covered by stored gas. Impairments also had to be recognised for RWE Innogy. Here, the write-downs totalled about €620 million, of which €260 million was due to delays and additional costs incurred in the construction of the Nordsee Ost offshore wind farm and about €270 million was due to the substantial cutbacks to renewable energy subsidies in Spain. In addition to the impairment losses, expenses were also incurred to accrue provisions for restructuring measures. They amounted to approximately €970 million (previous year: €433 million) and mainly affected the Conventional Power Generation and Supply/Distribution Networks Germany Divisions. A positive effect was felt from the fact that we depreciated RWE npower's customer base for the last time in May 2012. This provided €113 million in relief in the year under review.

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Financial result € million	2013	2012	+/- € million
Interest income	319	413	-94
Interest expenses	-1,073	-1,249	176
<b>Net interest</b>	<b>-754</b>	<b>-836</b>	<b>82</b>
Interest accretion to non-current provisions	-973	-1,208	235
Other financial result	-166	-48	-118
<b>Financial result</b>	<b>-1,893</b>	<b>-2,092</b>	<b>199</b>

The RWE Group's financial result improved by €199 million to -€1,893 million. Its components developed as follows:

- Net interest rose by €82 million to -€754 million. One of the reasons is that the compensatory payments we were awarded in the arbitration proceedings with Gazprom also bore interest. In addition, the decline in financial liabilities and the recently favourable refinancing conditions reduced our interest expense.
- The interest accretion to non-current provisions decreased by €235 million to €973 million. In fiscal 2012, we had recognised an increase in 'other non-current provisions' in this item, which resulted from a reduction in discount rates. No effect of this kind occurred in 2013.
- The 'other financial result' worsened by €118 million to -€166 million. Negative effects were felt from the marked-to-market valuation of financial transactions, which had a positive impact in the preceding year. Furthermore, we generated lower proceeds from the sale of securities.

Income before tax amounted to -€1,487 million. Nevertheless, €956 million in taxes on income were paid. This is because the lion's share of the substantial impairment losses were not tax-deductible in 2013. Income after tax totalled -€2,443 million, down €4,147 million year on year.

The minority interest in income dropped by €92 million to €210 million, owing to the deterioration in the earnings of fully consolidated companies in which third-parties hold stakes, in particular in Hungary.

The portion of our earnings attributable to hybrid investors amounts to €104 million. This sum corresponds to the finance costs after tax. Of our five hybrid bonds, only two are considered here, namely those which are classified as equity pursuant to IFRS. These are the issuances of €1,750 million in September 2010 and of £750 million in March 2012.

The aforementioned developments are the reason for the deterioration in net income by €4,063 million to -€2,757 million compared to 2012. Based on the 614.7 million in RWE shares outstanding, this corresponds to earnings per share of -€4.49 (previous year: €2.13).

At €2,314 million, recurrent net income was in line with the forecast of approximately €2.4 billion. It decreased by 6% compared to 2012. When calculating this figure, the non-operating result and the tax on it as well as major non-recurrent effects in the financial result and income taxes are deducted. The consequence for these financial statements was that substantial burdens arising from impairments were not considered.

Reconciliation to net income		2013	2012	+/- %
<b>EBITDA</b>	€ million	<b>8,762</b>	<b>9,314</b>	<b>-5.9</b>
Operating depreciation and amortisation	€ million	-2,881	-2,898	0.6
<b>Operating result</b>	€ million	<b>5,881</b>	<b>6,416</b>	<b>-8.3</b>
Non-operating result	€ million	-5,475	-2,094	-
Financial result	€ million	-1,893	-2,092	9.5
<b>Income before tax</b>	€ million	<b>-1,487</b>	<b>2,230</b>	<b>-</b>
Taxes on income	€ million	-956	-526	-81.7
<b>Income</b>	€ million	<b>-2,443</b>	<b>1,704</b>	<b>-</b>
Minority interest	€ million	210	302	-30.5
RWE AG hybrid investors' interest	€ million	104	96	8.3
<b>Net income/RWE AG shareholders' share in income</b>	€ million	<b>-2,757</b>	<b>1,306</b>	<b>-</b>
<b>Recurrent net income</b>	€ million	<b>2,314</b>	<b>2,457</b>	<b>-5.8</b>
Earnings per share	€	-4.49	2.13	-
Recurrent net income per share	€	3.76	4.00	-6.0
Number of shares outstanding (average)	millions	614.7	614.5	-
Effective tax rate	%	-	24	-

**Efficiency-enhancement programme: target for 2013 exceeded.** We launched a new programme immediately after the successful completion of our €1.5 billion efficiency-enhancement programme in 2012. By taking measures to reduce costs and increase revenue, we intend to tap into more and more earnings potential every year. The programme is designed to improve operational processes as well as achieve savings in administration and IT. Our original goal was to achieve a recurrent effect on the operating result of €1 billion by the end of 2014. In November 2013, we supplemented the programme with further measures, a large number of which are designed to improve the earnings power of our conventional electricity generation business.

With the expanded programme, we now aim to realise an effect on earnings of at least €1.5 billion. We want to achieve it in 2016, a year earlier than we initially thought was possible. The more ambitious timeline was enabled by the fact we made better progress than expected in implementing the efficiency improvements in 2013. Having achieved a recurrent effect of €200 million on earnings in 2012, we realised another €800 million last year. This was €250 million more than planned. The reasons for this are that we have already greatly reduced headcount and have made major progress with respect to the availability of our lignite-fired power stations.

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Capital expenditure on property, plant and equipment and on intangible assets € million	2013	2012	+/- € million
Conventional Power Generation	1,360	1,784	-424
Supply/Distribution Networks Germany	871	904	-33
Supply Netherlands/Belgium	28	43	-15
Supply United Kingdom	106	89	17
Central Eastern and South Eastern Europe	320	518	-198
Renewables	1,074	999	75
Upstream Gas & Oil	663	684	-21
Trading/Gas Midstream	14	4	10
Other, consolidation	58	56	2
<b>RWE Group</b>	<b>4,494</b>	<b>5,081</b>	<b>-587</b>

Capital expenditure on financial assets € million	2013	2012	+/- € million
Conventional Power Generation	3	75	-72
Supply/Distribution Networks Germany	101	255	-154
Supply Netherlands/Belgium	-	-	-
Supply United Kingdom	-	-	-
Central Eastern and South Eastern Europe	12	1	11
Renewables	9	94	-85
Upstream Gas & Oil	-	-	-
Trading/Gas Midstream	1	38	-37
Other, consolidation	4	-	4
<b>RWE Group</b>	<b>130</b>	<b>463</b>	<b>-333</b>

**Capital expenditure down 17%.** In the financial year that just ended, capital spending amounted to €4,624 million. This was 17 % less than the level recorded in 2012 (€5,544 million). Our capital expenditure on property, plant and equipment and intangible assets totalled €4,494 million, compared to €5,081 million a year earlier. Spending on financial assets, which amounted to €463 million in 2012, was almost negligible in 2013, totalling €130 million.

Our new-build power plant programme continued to be a focal point of our investing activity. However, capital expenditure in this area has already dropped significantly, as four large stations had begun commercial operation in 2012 (see page 49 of RWE's 2012 Annual Report). In the year being reviewed, three plants were under construction,

of which one, the 787 MW gas-fired power station near the Turkish town of Denizli, took up commercial operation in August 2013. The programme will end in 2014, once the dual-block hard coal power plants at Hamm (Germany) with a capacity of 1,528 MW and at Eemshaven (Netherlands) with a capacity of 1,554 MW have been completed.

We are also placing significant emphasis on the expansion of renewables. Our largest projects in this area are two offshore wind farms: Gwynt y Môr (576 MW) off the north coast of Wales, which we intend to complete in November 2014, and Nordsee Ost (295 MW), which is scheduled to put all its turbines online in the spring of 2015. Expanding onshore wind power is also on the agenda. In this area, we are focusing on sites in the United Kingdom, Poland and Germany.

RWE Dea also spent a considerable amount of capital. Centre stage was taken by the development of oil and gas fields in preparation for production. Thanks to such measures, in 2013, we were able to start producing gas in the Egyptian concession area Disouq in September and in the UK North Sea field Breagh in October (see page 53). Production from the Norwegian oil field Knarr is scheduled to begin in 2014. We also invested in ongoing production projects, particularly in Germany, Norway and Egypt, and acquired shares in licenses in the United Kingdom and Surinam.

Funds in the Supply/Distribution Networks Germany and Central Eastern and South Eastern Europe Divisions were primarily used to improve electricity and gas network infrastructure. In Germany, besides maintenance, the focus was on the connection of distributed generation units and network expansion required by the transformation of the German energy sector. Essent mainly invested in the heating network and in IT projects. RWE npower concentrated on measures to develop and introduce smart meters. Furthermore, the company improved its customer billing system.

Workforce <sup>1</sup>	31 Dec 2013	31 Dec 2012	+/- %
Conventional Power Generation	16,311	17,583	-7.2
Supply/Distribution Networks Germany	19,127	19,510	-2.0
Supply Netherlands/Belgium	3,115	3,376	-7.7
Supply United Kingdom	8,730	9,528	-8.4
Central Eastern and South Eastern Europe	10,062	10,900	-7.7
Renewables	1,482	1,573	-5.8
Upstream Gas & Oil	1,445	1,375	5.1
Trading/Gas Midstream	1,524	1,457	4.6
Other <sup>2</sup>	4,545	4,906	-7.4
<b>RWE Group</b>	<b>66,341</b>	<b>70,208</b>	<b>-5.5</b>
Germany	39,268	40,272	-2.5
Outside Germany	27,073	29,936	-9.6

<sup>1</sup> Converted to full-time positions.

<sup>2</sup> As of 31 December 2013, 2,239 were accounted for by RWE IT (previous year: 2,624) and 1,650 were accounted for by RWE Service (previous year: 1,692).

**Personnel down 6% since 2012.** In terms of full-time equivalent, the RWE Group had 66,341 employees as of 31 December 2013. Part-time positions were only included in this figure proportionate to their share of full-time positions. Headcount declined by 3,867, or 6%, compared to 31 December 2012. Seventy-four percent of the workforce reduction affected our operations outside Germany. It was in great part due to streamlining measures taken in the

conventional power generation and the UK supply businesses. The sale of NET4GAS also played a major role: about 560 staff members had been on the company's payroll as of 31 December 2012. As in previous years, we trained far more people than required to cover our own needs. By the end of 2013, some 2,715 young adults were in a professional training programme at RWE. Staff figures do not include trainees.

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## 1.7 FINANCIAL POSITION AND NET WORTH

**Last year, our need for financing was mainly covered by cash flows from operating activities. They were not yet able to completely fund our capital expenditure and the dividend payment. However, this should always be the case from 2015 onwards. In addition to our operations, divestments provided substantial income, particularly the sale of NET4GAS. These funds were the main reason why we succeeded in reducing our net debt by €2.3 billion to €30.7 billion. As expected, the ratio of net debt to EBITDA was unchanged, at 3.5. We intend to return it below an upper limit of 3.0 over the medium term.**

**Central financing.** The RWE Group's financing is the responsibility of RWE AG, which obtains funds from banks or on the money and capital markets. When issuing bonds, it usually turns to its Dutch subsidiary RWE Finance B.V., which issues bonds backed by RWE AG. Only in specific cases do other subsidiaries raise debt capital directly, especially if it is more advantageous economically to make use of local credit and capital markets. Furthermore, RWE AG acts as coordinator when Group companies assume a liability: the holding company decides on the scope of warranties issued and letters of comfort signed. Pooling these activities enables us to manage and monitor financial risks centrally. Moreover, this strengthens our position when negotiating with banks, business partners, suppliers and customers.

**Flexible tools for raising debt capital.** We largely meet our financing needs with cash flows from our operating activities. In addition, we have access to a number of flexible financing instruments. We raise long-term debt capital primarily within the scope of our Debt Issuance Programme. The programme enables us to issue a total of €30 billion in bonds. Furthermore, a commercial paper programme gives us a maximum of US\$5 billion in headroom for short-term financing on the money market. A €4 billion syndicated credit line with a tenor expiring in November 2017 serves as an additional liquidity reserve. We have not used it so far.

Neither the aforementioned financing instruments nor the current credit facilities contain specific financial covenants such as interest coverage, leverage or capitalisation ratios that could trigger actions, like the acceleration of repayment, provision of additional collateral, or higher interest payments. Likewise, they do not contain rating triggers.

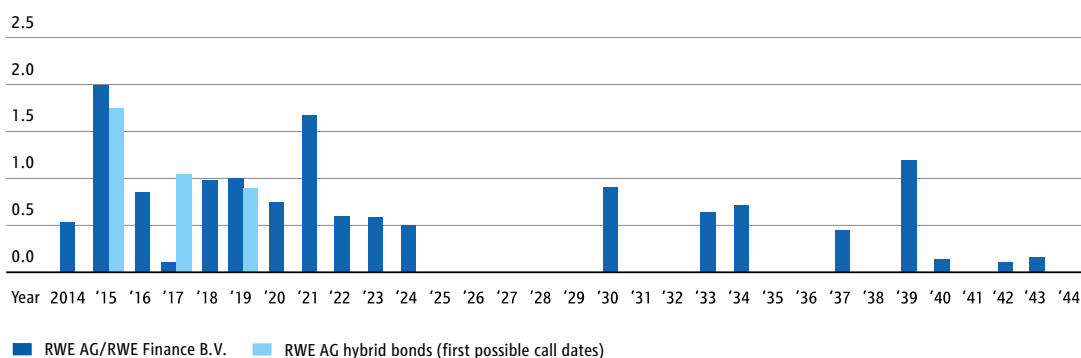
### **RWE conducts public and private bond placements.**

We took advantage of the unusually favourable financing conditions on the debt market to issue two euro bonds in 2013. The first issuance was in January and had a volume of €750 million. The paper has a seven-year tenor and a 1.875% coupon. We raised €500 million from the second issuance, which took place in October. It has a tenor of just over ten years and a coupon of 3.0%. We increased the volume of this bond by €300 million to €800 million in February 2014.

In addition to these public issuances, we conducted several private placements. The largest of these transactions, which took place in February 2013, provided proceeds of €150 million over 30 years. Furthermore, we topped up a €270 million private bond with a 25-year tenor, which we had issued in October 2012, to €500 million in three steps through to February 2014.

#### Maturity profile of the RWE Group's capital market debt (as of 31 Dec 2013)

Maturity in € billion



#### A total of €17.6 billion in bonds was outstanding at the end of 2013.

The aforementioned public and private issuances conducted last year had a total volume equivalent to €1.6 billion. This was contrasted by an equivalent of €2 billion in maturities: we redeemed public bonds in the amount of US\$250 million (February/coupon: 2%), £630 million (June/6.375%) and €1 billion (November/5.75%). On balance, the total volume of bonds outstanding in 2013 was reduced by €0.5 billion to €17.6 billion (including hybrid bonds). Besides the redemptions, changes in foreign exchange rates were a reason for the decline. Our bonds are denominated in euros, sterling, Swiss francs, US dollars and yen. We concluded hedges to manage our currency exposure. Taking such transactions into account, at the balance sheet date, our debt broke down into 68% in euros and 32% in sterling. This means that we did not have any currency exposure from capital market debt in US dollars, Swiss francs or yen.

Our bonds' initial tenors range from six to 30 years. Their weighted average remaining term to maturity at the end of 2013 was just under ten years. Hybrid bonds are not

included in this figure. Our maturities in 2014 are limited to a €530 million bond with a 4.625% coupon, which falls due at the end of July. An issuance with a volume of €2 billion and a coupon of 5% is repayable in February 2015. Furthermore, in September 2015, we will be allowed to cancel the €1.75 billion hybrid bond which we issued in 2010 for the first time. It has a coupon of 4.625%.

#### Bridge financing via commercial paper reduced to zero.

We only exercised the option to conduct short-term refinancing by issuing commercial paper in the first three quarters of 2013, during which our issue volume totalled €3.7 billion. Due to the cash flows provided by the arbitral ruling in the price review proceedings with Gazprom and the sale of NET4GAS, we were able to redeem all the commercial paper in the third quarter without conducting any further issuances through to the cut-off date for the financial statements. By comparison, €1.0 billion in commercial paper was outstanding at the end of 2012.

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RWE Group's capital market debt as of 31 Dec 2013 by maturity <sup>1</sup>		2014–2018	2019–2022	2023–2027	From 2028
Nominal volume	€ billion	4.5	4.0	1.1	5.3
Share of total volume of capital market debt (€14.9 billion)	%	30	27	7	36

1 Excluding the €1,750 million and £750 million hybrid bonds with a theoretically perpetual tenor. The other hybrid bonds are considered based on the end of their tenors.

Cash flow statement € million	2013	2012	+/- € million
Funds from operations	7,068	5,446	1,622
Change in working capital	-1,313	-1,051	-262
<b>Cash flows from operating activities</b>	<b>5,755</b>	<b>4,395</b>	<b>1,360</b>
Cash flows from investing activities	-2,646	-1,285	-1,361
Cash flows from financing activities	-1,857	-2,463	606
Effects of changes in foreign exchange rates and other changes in value on cash and cash equivalents	-19	16	-35
<b>Total net changes in cash and cash equivalents</b>	<b>1,233</b>	<b>663</b>	<b>570</b>
Cash flows from operating activities	5,755	4,395	1,360
Minus capital expenditure on property, plant and equipment and on intangible assets	-4,488	-5,081	593
<b>Free cash flow</b>	<b>1,267</b>	<b>-686</b>	<b>1,953</b>

**Cash flows from operating activities up 31 %.** In 2013, we covered most of our financing with cash flows from operating activities. Amounting to €5,755 million, they were 31 % higher than in 2012, clearly outperforming the operating result. One of the reasons is that the previous year's financial statements were strongly characterised by changes in the fair values of commodity contracts, which resulted in income, but did not lead to corresponding cash inflows because the contracts had not yet been realised by the end of the year. In addition, in 2013 the operating result was curtailed by the accrual of non-cash-effective provisions to a greater degree than in 2012. A negative effect on cash flows was felt from tax prepayments, which we made in connection with an ongoing tax audit. The related decline in our tax liabilities was reflected in the change in working capital.

Our investing activity led to a cash outflow of €2,646 million, which was much less than what we spent on property, plant and equipment, intangible assets and financial assets. This is due to the proceeds from the sale of investments and non-current assets, which were offset.

Cash outflows from financing activities amounted to €1,857 million. One main contributing factor was the €1,229 million dividend payment for fiscal 2012. Bond and commercial paper issuances and redemptions resulted in a net cash outflow of €1,307 million. The aforementioned cash flows caused our cash and cash equivalents to rise by €1,233 million.

Cash flows from operating activities, minus capital expenditure on property, plant and equipment and intangible assets, result in free cash flow. Amounting to €1,267 million, the latter was much higher than the year-earlier figure (-€686 million).



<b>Net debt</b> € million	31 Dec 2013	31 Dec 2012	+/- %
Cash and cash equivalents	3,905	2,672	46.1
Marketable securities	3,207	3,047	5.3
Other financial assets	1,156	1,892	-38.9
<b>Financial assets</b>	<b>8,268</b>	<b>7,611</b>	<b>8.6</b>
Bonds, other notes payable, bank debt, commercial paper	16,224	17,748	-8.6
Other financial liabilities	2,464	2,198	12.1
<b>Financial liabilities</b>	<b>18,688</b>	<b>19,946</b>	<b>-6.3</b>
<b>Net financial debt</b>	<b>10,420</b>	<b>12,335</b>	<b>-15.5</b>
Provisions for pensions and similar obligations	6,227	6,856	-9.2
Surplus of plan assets over benefit obligations	-	36	-
Provisions for nuclear waste management	10,250	10,201	0.5
Mining provisions	2,952	2,874	2.7
Adjustment for hybrid capital (portion of relevance to the rating)	817	785	4.1
Plus 50% of the hybrid capital stated as equity	1,351	1,351	-
Minus 50% of the hybrid capital stated as debt	-534	-566	5.7
<b>Net debt of the RWE Group</b>	<b>30,666</b>	<b>33,015</b>	<b>-7.1</b>

**Net debt drops by €2.3 billion.** As of the balance sheet date, our net financial debt totalled €10.4 billion, down €1.9 billion on the year-earlier figure. Net debt declined by €2.3 billion to €30.7 billion. In addition to the high level of free cash flow, proceeds from the disposal of investments and assets made a decisive contribution. Moreover, pension,

nuclear and mining provisions, which are considered in net debt, declined by a total of €0.5 billion. The dividend payment mentioned earlier had a debt-increasing effect. Furthermore, €0.4 billion in profits were distributed among minority shareholders of subsidiaries of RWE AG and hybrid bond investors.

<b>Credit rating</b>	<b>Moody's</b>	<b>Standard &amp; Poor's</b>
Non-current financial liabilities		
Senior debt	Baa1	BBB+
Subordinated debt (hybrid bonds)	Baa3	BBB-
Current financial liabilities	P-2	A-2
Outlook	stable	stable

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**Moody's downgrades RWE.** Assessments of creditworthiness made by independent rating agencies have a substantial influence on a company's options to raise debt capital. Generally, the better the rating, the easier it is to gain access to international capital markets and the better the conditions for debt financing. Therefore, we benefit from rating agencies confirming our high creditworthiness. However, due in particular to the crisis in conventional electricity generation, Standard & Poor's and Moody's, the two leading rating agencies, lowered their long-term credit ratings for RWE by one notch, from A- and A3 to BBB+ and Baa1, respectively. Standard & Poor's took this step in July 2012, with Moody's following in June 2013. As part of their downgrades, the two rating agencies raised their rating outlooks from 'negative' to 'stable.' Increasing our financial strength over the long term continues to be a major priority for us. The prime objective in this context is to ensure that we are capable of refinancing our business on the debt capital market at acceptable conditions at all times – even during general financial crises.

**Leverage factor remains at 3.5.** We manage our debt based on performance indicators, among other things. One of the key figures is the ratio of net debt to EBITDA, which is referred to as the 'leverage factor.' This key performance indicator is of more informational value than total liabilities as it reflects the company's earnings power and, in turn, its ability to service the debt. As expected, our leverage factor in 2013 was 3.5, the same level as in the two preceding years. However, we aim to return it to a maximum of 3.0 over the medium term.

**Cost of debt drops marginally.** In 2013, our cost of debt was 5.0%. It was calculated for average debt outstanding such as bonds, commercial paper and bank loans. The cost of debt considers interest-rate swaps concluded with banks, through which we convert fixed interest obligations into flexible ones. In contrast, the €1.75 billion and £0.75 billion hybrid bonds classified as equity pursuant to IFRS were not taken into account. Compared to 2012 (5.1%), the cost of debt decreased slightly. This was primarily due to the extremely low-interest refinancing of 2013, whereas the average coupon of the redeemed bonds was higher.

**Balance sheet structure: impairments reduce the equity ratio.** The balance sheet total reported in the 2013 financial statements amounts to €81.1 billion. This was €7.1 billion less than at the end of 2012. On the assets side, non-current assets declined by €5.0 billion in part owing to the impairments recognised for electricity generation facilities and goodwill reported on page 70. The sale of NET4GAS also came to bear. Accounts receivable and other assets were down €2.6 billion and inventories declined by €0.8 billion, whereas cash and cash equivalents were up €1.2 billion and marketable securities rose by €0.2 billion. On the liabilities side, accounts payable decreased by €3.4 billion, whereas provisions grew by €0.7 billion. Equity was €4.4 billion down on the level recorded a year earlier, largely due to the aforementioned impairments and the dividend payment for fiscal 2012. The equity ratio, which reflects the share of the balance sheet total accounted for by equity, stood at 15.0%, 3.7 percentage points lower than in 2012.

Balance sheet structure <sup>1</sup>	31 Dec 2013		31 Dec 2012	
	€ million	%	€ million	%
<b>Assets</b>				
Non-current assets	56,743	70.0	63,338	71.8
Intangible assets	13,198	16.3	16,017	18.2
Property, plant and equipment	33,305	41.1	36,006	40.8
Current assets	24,376	30.0	24,840	28.2
Receivables and other assets <sup>2</sup>	15,320	18.9	16,436	18.6
<b>Total</b>	<b>81,119</b>	<b>100.0</b>	<b>88,178</b>	<b>100.0</b>
<b>Equity and liabilities</b>				
Equity	12,137	15.0	16,489	18.7
Non-current liabilities	47,103	58.0	47,445	53.8
Provisions	27,119	33.4	27,991	31.7
Financial liabilities	16,539	20.4	15,417	17.5
Current liabilities	21,879	27.0	24,244	27.5
Other liabilities <sup>3</sup>	13,341	16.4	14,904	16.9
<b>Total</b>	<b>81,119</b>	<b>100.0</b>	<b>88,178</b>	<b>100.0</b>

<sup>1</sup> Prior-year figures adjusted due to the first-time application of the revised version of IAS 19.

<sup>2</sup> Including financial accounts receivable, trade accounts receivable and income tax refund claims.

<sup>3</sup> Including trade accounts payable and income tax liabilities.

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

As the management holding company of the RWE Group, RWE AG handles central management tasks and obtains the funds for the subsidiaries' business operations. Its assets and income largely depend on the economic success of the Group companies. The significant deterioration of earnings in the conventional electricity generation business was also reflected in the financial statements of RWE AG. Its net profit was only about half the figure recorded in the previous year.

**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 Verlagsgesellschaft mbH, Cologne, Germany, which publishes them in the Federal Gazette. They can be ordered directly from RWE and are also available on the internet at [www.rwe.com/ir](http://www.rwe.com/ir).

Balance sheet of RWE AG (abridged)	31 Dec 2013	31 Dec 2012
€ million		
<b>Non-current assets</b>		
Financial assets	39,837	42,440
<b>Current assets</b>		
Accounts receivable from affiliated companies	4,869	9,039
Other accounts receivable and other assets	863	587
Marketable securities and cash and cash equivalents	3,014	1,755
Deferred tax assets	2,204	2,221
<b>Total assets</b>	<b>50,787</b>	<b>56,042</b>
Equity	9,533	10,058
Provisions	4,280	5,037
Accounts payable to affiliated companies	30,194	33,439
Other liabilities	6,780	7,508
<b>Total equity and liabilities</b>	<b>50,787</b>	<b>56,042</b>

Income statement of RWE AG (abridged)	2013	2012
€ million		
Net income from financial assets	1,570	3,259
Net interest	-1,218	-1,219
Other income and expenses	450	-52
<b>Profit from ordinary activities</b>	<b>802</b>	<b>1,988</b>
Taxes on income	-98	-635
<b>Net profit</b>	<b>704</b>	<b>1,353</b>
Retained earnings	-	1
Allocation to retained earnings	-89	-125
<b>Distributable profit</b>	<b>615</b>	<b>1,229</b>

**Assets.** RWE AG had €50.8 billion in total assets as of 31 December 2013, down €5.3 billion compared to the preceding year. The main reason for this was the dissolution of a financing company, which caused RWE AG's financial assets and liabilities to drop. In addition, some Group companies redeemed loans, which had been granted to them by the holding company. This increased cash and cash equivalents while allowing for financial liabilities to be reduced. As of the cut-off date for the financial statements, the equity ratio was 18.8% as opposed to 17.9% a year earlier.

**Financial position.** The Group's financing is a corporate task handled by RWE AG, which obtains funds from banks or on the money or capital markets. When issuing bonds, it usually uses the services of its subsidiary RWE Finance B.V., which conducts issuances backed by RWE AG. A detailed presentation of the financial position and financing activity in the year under review has been made on page 75 et seqq.

**Earnings position.** RWE AG achieved a profit from ordinary activities of €802 million compared to €1,988 million in the prior year. The significant decline is due to net income from financial assets, which amounted to €1,570 million, roughly half as much as in 2012. This was in part owed to the deterioration in earnings in the conventional generation business, which was reflected in impairments and the

accrual of provisions for restructuring and impending losses. Furthermore, foreign subsidiaries paid lower dividends to RWE AG. In addition, the financial statements for the previous year included one-off income from the release of provisions at controlled companies. Conversely, RWE AG's net interest was essentially unchanged, totalling –€1,218 million. In contrast, the balance of other income and expenses improved considerably, from –€52 million to €450 million. Among other things, the release of provisions came to bear.

Like the profit from ordinary activities, the tax expense also decreased significantly, dropping by €537 million to €98 million.

**Appropriation of distributable profit.** The Supervisory Board and the Executive Board of RWE AG will propose to the Annual General Meeting on 16 April 2014 that a dividend of €1 per share be paid for fiscal 2013.

**Corporate Governance Declaration in accordance with Sec. 289a of the German Commercial Code.** On 14 February 2014, the Executive Board of RWE AG issued a corporate governance statement in accordance with Sec. 289a of the German Commercial Code and published it on the internet at [www.rwe.com/corporate-governance-declaration-sec-289a-HGB](http://www.rwe.com/corporate-governance-declaration-sec-289a-HGB).

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## 1.9 DISCLOSURE RELATING TO GERMAN TAKEOVER LAW

**The following disclosure is in accordance with Sec. 315, Para. 4 and Sec. 289, Para. 4 of the German Commercial Code as well as with Sec. 176, Para. 1, Sentence 1 of the German Stock Corporation Act. The information relates to issues that may play a role in the event of a change of control of the company and pertains to executive board authorisations to change a company's capital structure. All of the rules applicable in the event of a takeover or merger meet the standards generally accepted by German listed companies.**

**Composition of the subscribed capital.** RWE AG's subscribed capital consists of 575,745,499 no-par-value common shares in the name of the bearer and 39,000,000 no-par-value preferred shares in the name of the bearer without voting rights. They account for 93.66% and 6.34% 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 consistent 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 the voting rights.** As of 31 December 2013, one holding in RWE AG exceeded 10% of the voting rights. It was held by RWEB GmbH, which is headquartered in Dortmund. In compliance with Sec. 21, Para. 1 of the German Securities Trading Act, the company informed us that it held 16.15% of RWE AG's voting stock as of 25 September 2013. The voting rights of RWEB GmbH are allocable to RWB GmbH & Co. KG, which is also headquartered in Dortmund.

**Appointment and dismissal of Executive Board members/ amendments to the Articles of Incorporation.** Executive Board members are appointed and dismissed in accordance with Sec. 84 et seq. of the German Stock Corporation Act in connection with Sec. 31 of the German Co-Determination Act. Amendments to the Articles of Incorporation are made pursuant to Sec. 179 et seqq. of the German Stock Corporation Act in connection with Art. 16, Para. 6 of the Articles of Incorporation of RWE AG. According to Art. 16, Para. 6 of the Articles of Incorporation, unless

otherwise required by law or in the Articles of Incorporation, the Annual General Meeting shall adopt all resolutions with a simple majority of the votes cast; if a majority of the capital stock represented is required, the simple majority shall suffice. The legal right to determine a majority of the capital required to amend the Articles of Incorporation that differs from the majority required by law was thus exercised. Pursuant to Art. 10, Para. 9 of the Articles of Incorporation, the Supervisory Board is authorised to pass resolutions to amend the Articles of Incorporation that only concern the wording without changing the content.

**Executive Board authorisation for the issuance of option and convertible bonds.** Pursuant to the resolution passed by the Annual General Meeting on 22 April 2009, the Executive Board is authorised to issue option or convertible bonds until 21 April 2014. The bonds' combined nominal value is limited to €6 billion. The shareholders' subscription rights can be excluded if the bonds are issued at a price in line with the market. In addition, new shares for which subscription rights have been waived may not account for more than 10% of the share capital when the authorisation enters into force or when it is exercised. The 10% limit is calculated taking into account other cash capital measures under exclusion of subscription rights, such as the €133,991,677.44 cash capital increase from authorised capital conducted in December 2011. Therefore, the authorisation to conduct cash capital measures waiving subscription rights has largely been exercised. The Executive Board may also exclude the shareholders' subscription rights in order to prevent the number of shares allocated from the subscription resulting in fractional amounts (fractions of shares). Furthermore, the subscription rights of holders of convertible or option bonds already issued may be excluded. They may be granted subscription rights commensurate to the rights to which they would be entitled as shareholders on conversion of the bond or on exercise of the option. Pursuant to Art. 4, Paras. 3a and 3b of the Articles of Incorporation, €143,975,680 in conditional capital, divided among 56,240,500 common shares in the name of the bearer, may be used to exercise conversion or option 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. This also applies to our bonds. The following rule applies to non-subordinated paper: 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. RWE has the right to cancel its subordinated hybrid bonds within the defined change of control period. If the hybrid bonds are not redeemed and RWE's credit rating falls below investment-grade status within the change of control period, the annual compensation payable on the hybrid bonds increases by 500 basis points. RWE AG's €4 billion syndicated credit line also has a change of control clause including the following main provisions: in the event of a change of control or majority at RWE, further 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 €645 million loan we were granted by the European Investment Bank (EIB) in October 2011 and a £350 million loan to which the EIB committed in September 2013, which we have not yet drawn on, have a similar provision. Both of the contracts with the EIB stipulate that the continuation of the loans be negotiated within a 30-day time limit. If the talks fail, the EIB has the right to cancel the loans.

**Effects of a change of control on Executive Board and executive compensation.** Members of the Executive Board of RWE AG have a special right of termination in the event of a change of control. On exercise of this right, they receive a one-off payment covering the contract's agreed term, which shall correspond to at least twice and no more than three times their annual contractual compensation. This is in line with the requirements of the version of the German Corporate Governance Code which has been in force since 2008.

Furthermore, in the event of a change of control, retained Executive Board bonuses are prematurely valued and possibly paid. This is done on the basis of the average bonus malus factor of the three preceding years. This is what determines whether retained bonuses are paid out and the amount of the payout.

The RWE 2010 performance share plan (Beat 2010) for the Executive Board and executives of RWE AG and of affiliated companies includes a provision for a change of control. In such events, all holders of performance shares receive a compensatory payment. It is determined by multiplying the price paid for RWE shares as part of the takeover by the final number of performance shares as of the date of the takeover offer, in line with the corresponding plan conditions.

In the event of a change of control, the Mid-Term Incentive Plan (MTIP) planned for the Executive Board and executives of RWE AG and subordinated affiliated companies, which envisages performance-linked compensation in line with the leverage factor achieved by 31 December 2016 (see page 124), can lead to a compensation payment to its participants before the end of its term. This payment is based on the leverage factor forecast for 31 December 2016 at the time of the change of control. The detailed contractual conditions had not been established by the editorial deadline for this report.

Detailed information on Executive Board and executive compensation can be found on page 114 et seqq. of this report.

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## 1.10 INNOVATION

**How can the grid remain stable despite fluctuating amounts of wind and solar power? Are there ways of saving energy in homes that no-one has thought about yet? How can the greenhouse gas carbon dioxide be turned into a valuable commodity? These are questions to which we provide answers, thanks to our research and development activities. Our work goes beyond just developing new technologies, as we also improve existing processes. Many of our more than 200 projects primarily serve one goal: help to make the transformation of the energy sector in our home market, Germany, a success.**

**Research and development for a reliable and environmentally friendly supply of energy.** Our research and development (R&D) work aims to engineer solutions for an environmentally friendly, reliable and affordable supply of energy, in order to safeguard our competitiveness over the long term. To this end, we cover all stages of the value chain in the energy sector, from the extraction of raw materials, electricity generation, network operation and storage through to energy use. Most of our R&D activities involve co-operating with external partners in the plant engineering sector, the chemical industry and research institutions. This is why the financial spend on our projects clearly exceeds our R&D costs, which totalled €151 million in 2013 (previous year: €150 million). About 430 of our employees were solely or partially dedicated to R&D activities. Some 200 R&D projects with an average duration of four years were on our agenda in 2013. Presenting all of them would exceed the scope of this report. Therefore, we have limited ourselves to a selection of major projects. Please refer to our commentary at [www.rwe.com/innovation](http://www.rwe.com/innovation) for further information.

**Small, but effective: the ‘Smart Operator’ network control box.** In the energy world of yesterday, electricity was produced almost exclusively by large power stations and the role played by homes was limited to that of consumer. Nowadays, an increasing number of households generate their own electricity and feed surplus amounts into the grid. This requires greater co-ordination, in particular by operators of medium and low-voltage networks. ‘Intelligent’ balancing mechanisms must be created using new technologies, in order to prevent the grid from becoming imbalanced. A whole series of RWE projects addresses this topic, one of which involves connecting approximately 250 households in communities in Rhineland-Palatinate and Bavaria to a state-of-the-art low-voltage grid for two years. The ‘intelligence’ is

provided by a control unit, which is smaller than a shoe box: the ‘Smart Operator.’ It is packed with powerful electronics, enabling it to monitor the network’s condition and optimise electricity flows, for example by automatically controlling the operation of household appliances, heat pumps as well as electricity and hot water tanks. The partners working on this project are the Technical University of Aachen, the software development company PSI AG and several mechanical engineering companies. Last year, nearly all participating households were equipped with the necessary communication and control devices. The next step involves testing the Smart Operator. In addition, we intend to install further controllable devices such as battery storage units and heat pumps, in order to measure their contribution to stabilising grid conditions.

**Intelligent energy use field trial successfully completed in Mülheim.** People often take electricity for granted and hardly think when consuming it. This mentality will probably change fundamentally in the future when passive consumers become active players on the energy market. For 700 homes in Mülheim an der Ruhr, the future has already begun: they participated in a field trial for the use of innovative energy services, which was conducted by RWE Deutschland and completed in March 2013. The households were able to monitor price developments on the electricity market and their own consumption on PCs, enabling them to identify ways to use energy more cost-effectively. In addition, some participants received intelligent household appliances: washing machines, tumble driers and dishwashers which automatically start a preset programme when electricity is particularly cheap. As well as demonstrating that all of this is technically possible, the trial proved that customers change their consumption patterns if tariffs motivate them to do so.



**Solar power storage unit by RWE: home solution for transforming the energy market.**

Anyone who runs a solar panel will be familiar with the problem: most of the electricity is generated when one's own consumption is the lowest, i.e. during the day, when one is out of the house. This is when most of the solar power is fed into the grid, which is becoming less and less attractive as a result of declining feed-in tariffs. In contrast, electricity must be sourced from the grid during the night, when solar panels are not operational. To remedy this, we launched an innovative system for the distributed storage of solar power named 'RWE HomePower solar' in the spring of 2013. It enables users of the system to use their solar panels to cover their own needs to a far greater extent. In addition to allowing our customers to save money, it stabilises the grid because it reduces fluctuating feed-ins of solar power.

**A glimpse at future living.** On 18 July 2013, we inaugurated the 'RWE Energy House of the Future' in Bottrop, Germany. The house is part of the 'Innovation City Ruhr – Model City Bottrop' initiative which involves a number of projects designed to demonstrate how urban development can combine goals such as climate protection while maintaining a city's attractiveness as a business location. The RWE Energy House of the Future is a converted detached house built in the 1960s. With it, we demonstrate that more energy can be produced than needed in a residential building by using new technologies in combination with existing products such as 'RWE SmartHome' in an innovative manner. We reduced energy consumption by 90%. We now use the house to test the practical feasibility of the solutions implemented in it, among other things.

**Partial transformation of the Hungarian energy market.**

Distributed energy supply for home use is also the subject of a project in Hungary. On 2 October 2013, RWE and the country's President Dr. János Áder inaugurated an energy farm, which supplies a therapeutic riding and learning centre in Fót with electricity and heat from renewable sources. The basis for this is the combined use of solar collectors, wind and micro-water turbines, a battery storage unit, a heat pump and an energy management system. The project was implemented in co-operation with the International Child Aid Service as well as partners from the fields of industry and science.

**RWE constructs subterranean cable based on modern superconductor technology.**

In Essen, where RWE AG has its headquarters, we are laying the world's longest underground cable based on modern superconductor technology. The groundbreaking ceremony took place at the beginning of April 2013. We use materials that are capable of transmitting electricity at very low temperatures of about -200 degrees Celsius nearly loss-free. This enables the transmission of large amounts of electricity at low voltage – and saves space. The advantage for the municipalities is that valuable plots of inner city land that would otherwise be needed to operate networks can be used for other purposes. Named 'AmpaCity,' the project is supported by the German Ministry of Economics and Energy. Our partners are the cable manufacturer Nexans Deutschland and the Karlsruhe Institute of Technology (KIT). As the first set of tests at the end of 2013 delivered positive results, we plan to commission the cable in 2014.

**Climate protection still a focus: progress in CO<sub>2</sub> scrubbing.**

In the past decades, we have continuously improved the efficiency of our power plants by making use of new technologies and methods. More efficient means generating the same amount of electricity with less fuel and, when fossil fuel is used, with much lower carbon dioxide (CO<sub>2</sub>) emissions. However, despite these advances in efficiency, the generation of electricity from coal is still a source of substantial emissions. Consequently, for several years, we have been working on ways to prevent carbon dioxide from being released into the atmosphere. This involves isolating and then capturing the gas, a method which has been performed on sulphur dioxide successfully for decades.

One promising approach is known as CO<sub>2</sub> scrubbing. This technique binds most of the carbon dioxide within a chemical solution and then removes it from the flue gas. We intend to use this method in our lignite-based generation in particular. Since 2009, we have been testing it in a pilot plant at our Niederaussem power station near Cologne. Our partners are BASF and Linde. In one of the first phases of the project, we significantly improved the efficiency of the technique by using newly developed solvents. We will be able to make further progress by cleaning the flue gas even more through the elimination of pollutants such as sulphur dioxide before isolating the carbon dioxide. In cooperation with ANDRITZ Energy & Environment, we developed a

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powerful flue gas desulphurisation unit, which is being used at Niederaussem. We are currently subjecting it to a long-term trial together with a carbon capture pilot plant. The combined use of the two units allows for the flue gas to be purified only once before CO<sub>2</sub> scrubbing, namely during the flue gas desulphurisation step. An added bonus is the fact that even more sulphur dioxide and dust is filtered out compared to conventional techniques.

#### **CO<sub>2</sub> – from greenhouse gas to valuable commodity.**

Capturing carbon dioxide is only the first step. In addition, the gas must be kept from the atmosphere permanently. One way to accomplish this is to store the gas, for example in rock formations deep under the surface of the earth, but there is a lack of acceptance for this in Germany. Therefore, we are taking another step forward: in times of increasingly scarce resources, we are investigating how to turn a greenhouse gas into a valuable commodity. In 2013, three projects, all using the carbon dioxide captured at Niederaussem, were dedicated to achieving this.

As a part of the first undertaking, named 'Dream Production,' we joined forces with Bayer and the Technical University of Aachen to look into ways to manufacture high-quality plastics from the carbon dioxide we captured. Dream Production has shown that the carbon dioxide captured from the flue gas of the Niederaussem power station is pure enough to be used for this purpose.

We also proved that this carbon dioxide can be reacted with hydrogen to form synthesis gas in our second project called 'CO<sub>2</sub>RECT.' This synthesis gas can be used by the chemical industry as a raw material in various ways. We implemented CO<sub>2</sub>RECT in collaboration with Siemens, Bayer and several universities and research institutions. The special feature is that the required hydrogen is obtained by electrolysis, enabling its production to be flexibly adapted to the availability of electricity from renewables. Both Dream Production and CO<sub>2</sub>RECT were completed in 2013.

In our third project, 'Power-to-Gas,' we use carbon dioxide and hydrogen to obtain methane, the main component of natural gas. Reacting the two substances to make them bond and form methane requires special catalysts. Through the project, we proved that catalysts that are already commercially available can be used to produce methane from carbon dioxide obtained in lignite-fired power stations. Endurance tests are being run in order to determine whether such catalysts are suitable for long-term use.

#### **Reduced costs and less noise: new approaches to installing offshore wind turbines.**

A further objective of our research and development work is the cost-effective and environmentally friendly expansion of renewable energy. In this respect, we focus especially on the construction of offshore wind farms. In July 2010, we started participating in the Offshore Wind Accelerator (OWA) initiative, where the UK Carbon Trust has pooled the expertise of nine leading energy companies. We are implementing several projects within the scope of OWA. Our most recent undertaking, which we launched in 2013, aims to anchor wind turbines to the seabed at reduced costs. The use of foundations made of tubular steel (monopile design) is widespread. These are usually driven into the seabed using heavy pile driving equipment. In the 'Vibro' project, we are testing an alternative method, which supports this process with vibrations and makes it more cost-effective. Furthermore, it reduces underwater noise, which can significantly impact the sensitive hearing of dolphins and harbour porpoises.

**RWE recognised for innovation.** The current innovation index of the European School of Management and Technology (ESMT) ranks RWE third among Europe's 16 largest energy utilities. This was announced by the ESMT in February 2014. The index measures the innovativeness of companies. We have our wide range of R&D work to thank for our good position. Through our projects, we cover all the fields of research classified as important by the ESMT. Our activities in the fields of smart grids, electric cars and energy services were highlighted in particular. The judges also rewarded us for our large number of patent applications.

## 1.11 DEVELOPMENT OF RISKS AND OPPORTUNITIES

**The last few years have shown how quickly the framework conditions in the energy sector can change. Political intervention makes it difficult to establish business models and plan investments. Changes in wholesale electricity and fuel prices can also significantly affect our earnings. Therefore, professional risk management is indispensable for utilities like RWE. 'Professional' means that we record, assess and control risks systematically. But it also means that we identify opportunities – and seize them.**

### **Organisation of risk management in the RWE Group.**

Overall responsibility for the groupwide risk management system sits with the Executive Board of RWE AG. It establishes the rules and minimum standards, defines the caps for the aggregated market and credit risks and takes decisions on individual transactions that can result in substantial risks.

Our Risk Management Committee is in charge of monitoring and refining the risk management system. It is composed of the heads of the following RWE AG departments, which are accountable for the entire Group: Commodity Management (until the end of 2013), Controlling, Finance, Human and Executive Resource Management, Accounting & Taxes, Legal & Compliance, Audit as well as Corporate Development & Strategy. A representative of the Group Risk Department, which we established as of 1 January 2014, recently joined the Committee. It is chaired by the Head of Group Controlling. This department is assigned to the finance mandate.

The Group Controlling Department and – starting in 2014 – the new Group Risk Department, which report to the Risk Management Committee, bear responsibility for the control, steering and co-ordination of the risk management system. They regularly report on the Group's risk situation to both the Committee and the Executive Board of RWE AG.

In addition, a number of additional organisational units have been entrusted with corporate risk management tasks: commodity hedging strategies deviating from general performance targets are approved by the Commodity

Management Committee. The framework for this is determined by the Executive Board. In the year under review, the Committee consisted of the Executive Board member in charge of commercial management, the Chief Financial Officer, the Head of Commodity Management, the Head of Group Controlling and representatives of the Board of Directors of RWE Supply & Trading. In the future, it will be composed solely of the Head of Group Risk and the Board of Directors of RWE Supply & Trading.

The CFO of RWE AG monitors commodity risks. In fulfilling this task, he is assisted by the CFOs and managing directors in charge of finance of our major Group companies.

Until the end of 2013, the Group Risk Controlling Unit, which belongs to the Group Controlling Department, established groupwide performance targets for risk measurement, tracked commodity risks and reported on this to the Executive Board of RWE AG. The control of the RWE Group's credit risks was handled by the Group Credit Risk Unit, which also belonged to the Group Controlling Department. From 2014 onwards, these tasks will also be fulfilled by the newly created Group Risk Department. By using dual controls, we ensure that major risks are closely monitored and that guidelines are implemented uniformly throughout the Group.

Financial risks at RWE AG are monitored by the Financial Controlling Unit. The tasks of this unit, which belongs to the Group Finance Department, also include reporting on currency, interest and liquidity risks.

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The strategic guidelines for the management of our financial assets (including the funds of RWE Pensionstreuhand e.V. and RWE Pensionsfonds AG) are determined by RWE AG's Asset Management Committee. It weighs the earnings prospects and risks against each other, selects suitable asset classes (bonds, stocks, etc.) and decides on the allocation of the company's funds to them. The members of the Asset Management Committee are the CFO of RWE AG, the Head of Group Finance and the CFOs of the following Group companies: RWE Dea, RWE Power, RWE npower, enviaM, Süwag Energie and Lechwerke.

The monitoring of risks associated with financial reporting is handled by RWE AG's Group Accounting & Tax Department (until the end of 2013: Group Accounting). It reports directly to the CFO and uses an accounting-related internal control system, which is described on page 98 et seq.

The Group Compliance Unit, which is assigned to the Group Legal & Compliance Department, monitors compliance with RWE's Code of Conduct, paying special attention to the avoidance of 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 Audit Committee.

Under the expert management of the aforementioned areas, our Group companies ensure that the risk management guidelines are implemented throughout the Group.



**Risk management as a continuous process.** Risk management is an integral and continuous part of our operating workflow. Risks and opportunities, defined as negative or positive deviations from target figures, are identified and classified early on. We evaluate risks according to their probability of occurrence and damage potential and aggregate them at the Group company or Group level. Our analysis covers the three-year horizon of our medium-term planning and may extend beyond that for material strategic risks. Risks that share the same cause are aggregated to one position. The damage potential is put in relation to the operating result and equity of the business unit concerned and the Group as a whole.

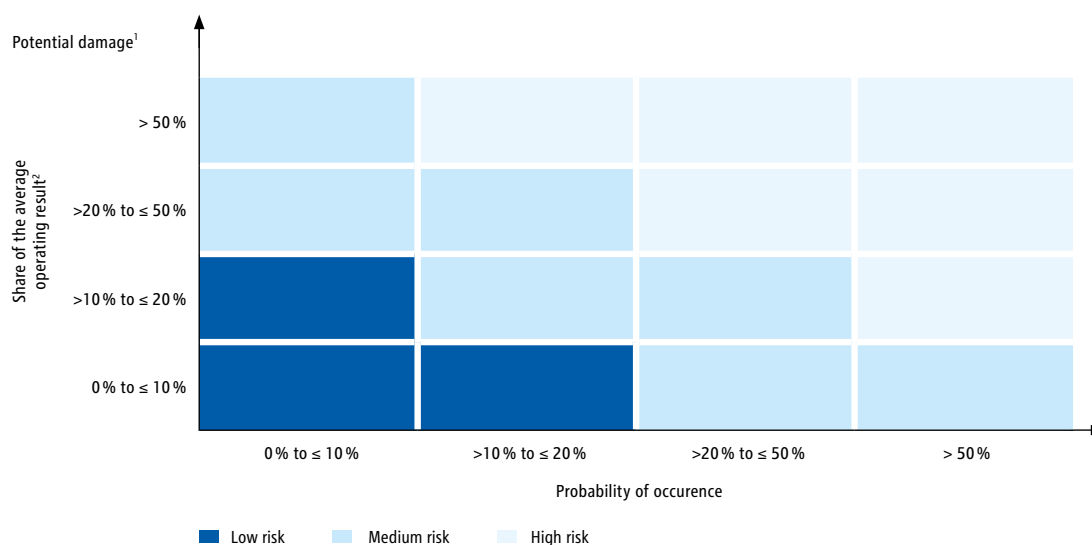
We analyse our earnings risks using a matrix, in which the risks' probability of occurrence and potential net damage are represented. From this, we can derive whether there is a need for action and the scope of such action. In this context, we have three risk classes: low, medium and high risks. All risks are constantly monitored. Medium and high risks are mitigated by taking operational measures. In addition to the

earnings risks recorded in the matrix, indebtedness and liquidity risks are also covered by our risk management system. These risks are described in more detail on page 98.

The company's management and supervisory committees are updated on our risks and opportunities several times a year. This is always preceded by a groupwide bottom-up analysis. Our reporting obligations for companies accounted for using the equity method are limited. We record their risks at least once a year as part of our medium-term planning. The Executive Board of RWE AG is immediately informed of unforeseen material changes to the risk situation.

Our Group Audit Department conducts regular appraisals of the quality and functionality of our risk management system, the most recent of which took place in December 2013/ January 2014. In functional respects, it reports to the entire Executive Board and for disciplinary matters, it is assigned to the Group CFO. Our Group Audit Department is certified to the Quality Management in Internal Auditing Standard recommended by the German Internal Audit Association.

RWE risk matrix



<sup>1</sup> Related to the year in which the maximum damage may occur.

<sup>2</sup> Derived from the medium-term planning for 2014 to 2016.

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## Overall assessment of the risk and opportunity situation by executive management.

The development of our business is significantly affected by energy policy. For example, the subsidisation of renewable energy in Germany has resulted in the rapid rise in the number of wind turbines and solar panels. This has put wholesale electricity prices under substantial pressure and pushed conventional power plants out of the market, both in Germany and in neighbouring markets such as the Netherlands. Declining margins, especially of gas-fired power stations, have already caused us to recognise considerable impairments. Should market conditions continue to deteriorate, we will be at risk of having to perform further write-downs.

A lot depends on the future course of energy policy in Germany and the requirements imposed by Brussels. As set out on page 44 et seq., the EU is developing binding guidelines for reforms in the energy sector, which are currently on the agendas of many countries. Such structural reforms also present opportunities. For example, the introduction of capacity markets open to all technologies may safeguard the profitable operation of conventional power plants, and therefore also the reliability of electricity supplies. Efforts to make the promotion of renewable energy more market-oriented would also benefit us, if this reduced disadvantageous distortions of competition.

Apart from the regulatory framework, market-driven changes can also have significant effects on our earnings. For example, the decline in German electricity prices is in part due to the drop in hard coal quotations, as the marginal costs of hard coal power stations significantly affect pricing on the electricity market. There is a danger that the slump

on the hard coal market may persist as well as a chance that quotations may rise. Unfavourable price developments also imposed substantial burdens on gas procurement. However, the losses incurred were partially offset and the risk of further burdens was reduced considerably thanks to the successful arbitration proceedings with Gazprom and renegotiations with other suppliers (see page 93). Macroeconomic developments can also have a strong impact on the energy sector and RWE's earnings. For example, if the Eurozone's sovereign debt crisis were to escalate, a significant decline in demand for electricity and gas in our markets may be the result. In contrast, opportunities may arise if the weak economy picks up again.

Against the backdrop of the difficult framework conditions in the energy sector and the existing risks, we have taken extensive measures to strengthen RWE's earnings and financial clout. We intend to make a substantial, lasting contribution to earnings with our current efficiency-enhancement programme. As set out on page 72, we have already achieved major success in this area. In addition, we are stabilising our financial strength through divestments and reductions in capital expenditure. We have made good progress here as well. There is a chance that our measures may be more effective than anticipated. For example, efficiency improvements may exceed budgeted figures. However, there is also a danger that we may fail to achieve our goals, for instance because necessary restructuring measures cannot be implemented to the extent expected.

Despite the developments described above and other imponderables, there are no identifiable risks that jeopardise the continued operation of RWE AG or the RWE Group.

RWE's earnings risks	Classification of the highest individual risk
<b>Market risks</b>	
Risks arising from the volatility of commodity prices	Medium
Revision of the price conditions of the gas procurement contract with Gazprom	Medium
<b>Framework risks</b>	
Regulatory and political risks	Medium
CO <sub>2</sub> emissions	Low
Other legal and arbitration risks	Low
<b>Operational risks</b>	
Continuity of business activities/risks associated with corporate strategy	Medium
Information technology	Low
Human resources	Low
<b>Financial market and credit risks</b>	
Financial risks	Low
Creditworthiness of business partners	Low
<b>Other risks</b>	Low

As of 31 December 2013.

**RWE's earnings risks.** As illustrated in the above overview, our material earnings-related risks and opportunities can be divided into five categories. It also shows how we classify them by degree. We currently accord the highest importance to market price, regulatory and certain operational risks. Below, we comment on the aforementioned risks as well as on the associated opportunities. In addition, we explain the measures we take to limit the danger of negative developments.

#### Market risks:

- **Risks and opportunities arising from the volatility of commodity prices.** The development of prices on commodity markets greatly influences our earnings, especially in electricity generation. For example, further decreases in electricity prices may lead to a decline in margins and reduce the value of our power plants. In the past two fiscal years, we have already had to recognise

substantial impairments due to decreased margins in the electricity generation business. This has reduced the risk of further impairments. Furthermore, wholesale electricity prices and generation margins may develop in RWE's favour again. We assess the price risks to which we are exposed on the procurement and supply markets taking account of current forward prices and expected price volatility. Commodity and price risks faced by generation and supply companies are managed through hedging rules established by RWE AG. We limit the exposure of our power stations to such risks by selling most of our electricity early on, via forward contracts, and hedging the price of the required fuel and CO<sub>2</sub> emission allowances. We also make use of forward markets to limit price risks in RWE Dea's upstream business and in RWE Supply & Trading's gas midstream business.

RWE Supply & Trading plays a central role when it comes to managing commodity price risks. This is the company in which we pool our commodity transaction expertise as well as the associated risks. RWE Supply & Trading is the RWE Group's interface to the world's wholesale markets for electricity and energy commodities. The company markets large portions of the Group's generation position and purchases the fossil fuels and CO<sub>2</sub> certificates needed to produce electricity. Its role as internal transaction partner makes it easier for us to limit the earnings risks for the generation and supply businesses stemming from price swings on energy markets. RWE Supply & Trading also uses commodity derivatives to minimise risk in the procurement and supply businesses. However, the company's trading transactions are not exclusively orientated towards reducing risks. To a strictly limited extent, trades are also concluded in order to take advantage of changes in prices on energy markets.

The RWE Group's risk management system for energy trading is firmly aligned with best practice as applied to the trading transactions of banks. Transactions are concluded with third parties only if credit risks are within approved limits. Groupwide guidelines provide structures

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and processes for the treatment of commodity price risks and associated credit risks. The commodity positions in our subsidiaries are constantly monitored, and findings are reported to the responsible committees. Furthermore, the Executive Board of RWE AG receives detailed updates on our consolidated commodity risk positions on a quarterly basis. The Group companies inform RWE AG about their positions, which consolidates them. This procedure is not followed for market risks arising in connection with the trades conducted by RWE Supply & Trading for its own account. Such risks are monitored daily and stated separately.

The upper risk limits in the energy trading business are set by the Executive Board of RWE AG. In this context, the Value at Risk (VaR) is of central significance. It quantifies the potential loss resulting from a risk position that will not be exceeded with a predetermined probability and within a predetermined time period. In principle, the VaR figures within the RWE Group are based on a confidence interval of 95 % and a holding period of one day. This means that, with a probability of 95 %, the maximum daily loss will not exceed the VaR. The central risk controlling parameter for commodity positions is the Global VaR that relates to the trading business of RWE Supply & Trading and may not exceed €40 million. In fiscal 2013, it averaged €8 million (previous year: €6 million), and the daily maximum was €14 million (previous year: €13 million). In addition, we have set limits for each trading desk. Furthermore, we develop extreme scenarios and factor them into stress tests, determine the influence they can have on our liquidity and earnings, and take countermeasures whenever the risks are too high.

We also apply the VaR concept to measure commodity price risks to which we are exposed outside the trading business. To this end, we identify the absolute change in the Group's operating result caused by changes in commodity prices which will not be exceeded with a given

probability. First, our Group companies determine their commodity risk positions and report them to RWE AG, where the overall risk for the Group on the basis of the individual risks is calculated. The overall risk mainly stems from German electricity generation, the upstream business and the portion of our gas purchases that depends on oil prices. With a confidence level of 95 %, changes in commodity prices will have a maximum positive or negative effect on our operating result in 2014 of about €330 million. The cut-off date for determining this figure was 30 November 2013.

- **Revision of price conditions in the gas procurement contract with Gazprom.** We source gas on liquid wholesale gas markets such as the NCG (Germany), TTF (Netherlands) and the NBP (United Kingdom) as well as based on long-term purchase agreements, particularly in Germany and the Czech Republic. These contracts used to be linked to the price of oil. However, gas prices on the trading markets have been decoupled from those of contracts linked to the price of oil since 2009, temporarily falling significantly below them. As a result, some of the gas we bought was much more expensive than on the market. To obtain purchase conditions reflecting the development of the market, we entered into contractually agreed renegotiations with our gas suppliers. As a result, nearly all of the contracts were converted to wholesale gas price indexation or terminated prematurely by mutual consent. The last and largest contract was the one with Gazprom, which was adapted per an arbitral ruling handed down in June 2013. As set out on page 50, the influence of oil prices was diminished, but it was not eliminated. Therefore, the contract still causes us to incur losses. In consequence, in May 2013 we initiated another price revision with Gazprom. There is a danger that the result of our revision will lag behind our expectations, but there is also a chance that we will be able to obtain conditions that are more favourable than anticipated.



#### Framework risks:

- Regulatory and political risks and opportunities.** As a utility, we plan our capital expenditure for periods extending over decades, making us especially affected by changes in political framework conditions. Extensive reforms of the energy sector are currently on the agendas of numerous European countries and the European Union. We have provided in-depth information on the political plan that are most important to us on page 44 et seqq. One of the main objectives is to make the promotion of renewable energy more cost-effective and bring it more in line with the market. In light of the recent considerable drop in the profitability of conventional power stations, policymakers are increasingly addressing the security of supply. Reforms to this end, such as the introduction of a capacity market in Germany, may provide us with an opportunity, as this would establish the prerequisites for the profitable operation of the conventional power plants required to ensure a reliable supply of electricity. The governing coalition between the Christian Democrats/Christian Social Union and the Social Democrats formed after the German Lower House elections in September 2013 has committed to creating a capacity mechanism in the medium term (see page 46). The coalition is also seeking to bring the promotion of renewable energy more in line with the market and make it more cost-effective. We also welcome this. However, certain projects may impose additional burdens on us, for instance the plan to apply the apportionment under the German Renewable Energy Act to own electricity consumption.

We are exposed to substantial regulatory risks especially in the field of nuclear energy, the framework conditions of which have deteriorated significantly in Germany. Through the 13<sup>th</sup> amendment to the German Nuclear Energy Act, which became effective at the beginning of August 2011, the former government nullified the lifetime extension for German nuclear power plants, which had been introduced in 2010, requiring the immediate shutdown of eight of the country's 17 reactors. Staggered decommissioning

dates were established for the remaining units. We believe the 13<sup>th</sup> amendment to the German Nuclear Energy Act is unconstitutional because the operators of the reactors affected will not be compensated and the decommissioning dates were established without sound justification. Therefore, in February and August 2012, we filed constitutional complaints. Prior to this, in April 2011, we had brought lawsuits before the Hessian Administrative Court of Justice in Kassel against the nuclear moratorium imposed on Biblis A and B from March to June 2011. In February 2013, the Court ruled that the decommissioning orders were illegal. Pursuant to a decision reached by the German Administrative Court in December 2013, the ruling is legally enforceable. We are now preparing civil remedies for damages (see page 53).

The introduction of a nuclear fuel tax as of 1 January 2011 also imposed substantial burdens on our German nuclear power stations. We filed a suit with the competent fiscal courts as the legality of the levy is questionable. In January 2013, the Hamburg Fiscal Court referred the point of the constitutionality of the nuclear fuel tax to the German Constitutional Court for a ruling. Moreover, in December 2013 the Hamburg Fiscal Court decided to refer the same matter in parallel proceedings to the European Court of Justice. In view of the aforementioned decisions, we are optimistic about the enforcement of the tax being suspended until a ruling on its legality has been handed down, which we do not expect to be made until after 2014.

We are also exposed to earnings risks by the search for a site for a final storage facility for highly radioactive waste. The German Site Selection Act, which entered into force at the end of July 2013, will make the search much more expensive (see page 46). The costs of the selection process will be borne by the nuclear power plant operators. We have accrued provisions for the expected additional burdens. However, it cannot be ruled out that political resistance renders the selection of a location difficult, causing further delays and burdens.

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Energy markets outside of Germany have also been subject to increases in regulatory intervention. The difficult budgetary situation numerous European countries are facing plays a role. It may cause the governments to impose further burdens on the economy. As demonstrated in Spain and Hungary, this particularly affects companies that are bound to their locations, such as energy utilities. In the dialogue we maintain with policymakers, we take the position that unstable framework conditions and the introduction of additional burdens reduce the utilities' ability and willingness to make necessary investments in energy infrastructure. Nevertheless, political short-sightedness may result in additional regulatory intervention to our detriment.

Political risks outside of Europe exist predominantly in RWE Dea's upstream business. We are following the political upheaval in North Africa very closely, as RWE Dea is conducting several large-scale projects in this region. We already produce oil and gas in Egypt. As in all non-OECD countries, we have hedged capital expenditure there against political risks largely through federal guarantees and will also do this for future projects.

In the present political environment, we are exposed to risks associated with approvals when building and operating production facilities. This particularly affects our opencast mines, power stations and wind farms. If their operation is interrupted or curtailed, this can result in significant production and earnings shortfalls. Furthermore, there is a danger of new-build projects either receiving late or no approval, or of granted approvals being withdrawn. Depending on the construction progress made and the contractual obligations to suppliers, this can have a significant negative financial impact. For example, the hard coal-fired power station at Eemshaven in the Netherlands, which is scheduled to go online this year, is exposed to this type of risk. We take precautionary measures against this by preparing our applications for approval with great care and ensuring that approval processes are handled competently.

In parts of our energy business, we are also exposed to risks in relation to competition law. In March 2013, the

German Federal Cartel Office instigated proceedings against several district heat suppliers, including an RWE company. The authority suspects abusive pricing, but we believe our tariffs are appropriate. Furthermore, the Cartel Office announced that it will be keeping competition on the market for electricity for heating purposes under close scrutiny.

Further risks arise from the regulation of energy trading transactions, which has been tightened significantly by two EU directives. The Regulation on Wholesale Energy Market Integrity and Transparency (REMIT) entered into force in December 2011, with the aim of preventing insider trading and market manipulation in electricity and gas trading. It obliges market participants to publish insider information. Furthermore, they must now register themselves and their wholesale transactions. In addition to REMIT, the European Market Infrastructure Regulation (EMIR), an EU directive which entered into force in August 2012, also has a substantial effect on the trading business. Companies which conclude a considerable number of speculative trades have to settle certain derivative transactions via clearing points, pledging more financial collateral than previously. Moreover, all transactions have to be entered into a transaction register. It is too early to determine the degree to which we are affected by REMIT and EMIR. We expect a significant increase in reporting and transaction costs in energy trading.

The incentive-based regulation of electricity and gas networks in Germany also harbours earnings risks. The second five-year regulatory period began on 1 January 2014 for electricity network operators and on 1 January 2013 for gas network operators. We are yet to receive notifications on the revenue caps imposed by the regulatory authorities on our network companies. There is a risk of the upper limits being too low, failing to reflect the actual development of costs. However, this also opens up the opportunity for our future network earnings to exceed expectations if the revenue caps are appropriate and our efficiency measures are successful. Initial signals from the regulatory authorities indicate that the regulatory restrictions will be in line with our expectations.

- **CO<sub>2</sub> emissions.** Lignite and hard coal power plants account for a significant proportion of our electricity generation portfolio. Our specific carbon dioxide emissions are therefore far above the sector average. By 2020, we aim to reduce our CO<sub>2</sub> emissions to 0.62 metric tons per megawatt hour of electricity generated compared to 0.76 metric tons in 2013, partly through the expansion of renewable energy and the use of modern conventional power plants. By taking technical and financial measures, we have reduced our CO<sub>2</sub> risk for the third emissions trading period, which ends in 2020, to such a degree that an increase in the price of emission allowances is not expected to have a material effect on our earnings. However, there is a danger that individual EU member states may find the European Emissions Trading System (ETS) insufficient and impose additional burdens on companies through domestic regulations. In the meantime, however, the EU Commission has submitted a Climate and Energy Package with which it intends to improve the effectiveness of the ETS after 2020 (see page 45). If the measures proposed by the package are implemented, the probability of national solo attempts should drop considerably.
- **Other legal and arbitration procedures.** 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, Group companies are directly involved in various procedures with public authorities or are at least affected by their results. We have accrued provisions for potential losses resulting from pending proceedings before ordinary courts and arbitration courts. However, the claims asserted against us exceed the provisions considerably in some cases. Taking account of the legal assessments we have obtained, we believe that such claims are unfounded, but we cannot be sure that we will prevail.

Some conciliation proceedings in connection with the legal restructuring of companies are still pending. The object of the proceedings is to examine the appropriateness of the cash compensation we offered outside shareholders. We are of the opinion that it was appropriate. The compensation payments were calculated

by independent experts and reviewed by auditors. If, based on a legally enforceable decision, it is determined that the cash compensation was too low, we will pay the difference to all affected shareholders, including those who are not directly involved in the conciliation proceedings.

#### Operational risks:

- **Continuity of business activities/risks and opportunities associated with corporate strategy.** We operate technologically complex and interconnected production plants in all parts of our value chain. Uninsured damage to our lignite mining equipment, production facilities, power plant components and networks can occur. There is an increasing risk of outages in our power plants as their components age. In addition, the construction of new plants can be delayed due to accidents, faulty materials, late deliveries or time-consuming approval procedures. As far as possible, we mitigate these risks through diligent plant and project management. Our network business is exposed to the risk of facilities being damaged by force majeure such as severe weather conditions. We limit these risks through high safety standards as well as regular inspection, maintenance and servicing work. If economically viable, we take out insurance policies.

We constantly work on improving the profitability of our organisation and operating processes. We are currently implementing the efficiency-enhancement programme which we launched in 2012 and which should have an impact of at least €1.5 billion on the operating result from 2016 onwards. In 2013, we made more progress than expected. We also believe that we may exceed our targets in the future. However, we may also fail to achieve our goals, if for example, planned restructuring proves impossible to implement or can only be implemented slowly.

Capital expenditure on property, plant and equipment, acquisitions and divestments may give rise to major risks or opportunities as they have a long-term effect on our portfolio. Income achieved from projects involving capital expenditure on property, plant and equipment and intangible assets may fall short of expectations.

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Furthermore, prices paid for acquisitions may prove to be too high in hindsight. Impairments may have to be recognised for such cases. Planned asset disposals (e.g. RWE Dea) are in danger of not being implemented if offers do not meet our price expectations. In addition, they are exposed to indemnity and warranty risks. RWE has specific accountability provisions and approval processes in place to prepare and implement decisions concerning capital expenditure on property, plant and equipment as well as acquisitions and divestments. Closely monitoring both our markets and competitors helps us record and assess strategic risks and opportunities early on.

- **Information technology.** Our business processes are supported by efficient data processing systems. Nevertheless, we cannot fully rule out a lack of availability of IT infrastructure or a breach in the security of our data. We mitigate these risks by applying high security standards as well as raising user awareness and limiting access privileges. In addition, we regularly invest in hardware and software upgrades. Our IT is largely based on common market standards. Its operations are run in modern data centres. We have established a mandatory groupwide process for managing risks associated with engineering IT solutions.
- **Human resources.** Competition for the best talent is fierce for companies like RWE. To secure and strengthen our position in this area, when recruiting staff, we highlight RWE's attractiveness as an employer. In addition, throughout the Group, we strive to retain talent from within our own ranks over the long term. In addition to performance-based compensation and progressive employee benefits, we put a great deal of effort into the varied prospects employees are offered throughout the RWE Group: points of entry through trainee programmes, cross-disciplinary career paths, assignments in various European Group companies as well as attractive continued education and advanced training offerings. We limit risks relating to staff fluctuation through replacement arrangements and early succession planning.

## Financial market and credit risks:

- **Financial risks and opportunities.** The volatility of market interest and foreign exchange rates as well as share prices can also have a significant effect on our earnings. Due to our international presence, we attach significant importance to currency risk management. Furthermore, energy commodities such as coal and oil are traded in US dollars. Group companies are generally obliged to limit their currency risks via RWE AG. The parent company determines the net financial position for each currency and hedges it if necessary. The VaR concept is one of the tools used to measure and limit risk. In 2013, the average VaR for RWE AG's foreign currency position was less than €1 million, as in the preceding year.

We differentiate between several categories of interest rate risks. On the one hand, rises in interest rates can lead to reductions in the price of securities held by RWE. This primarily relates to fixed-interest bonds. On the other hand, interest rate increases also cause our financing costs to rise. The VaR for the securities price risk of our capital investments in 2013 averaged €5 million, just as high as in the preceding year. We measure the sensitivity of the interest expense with respect to rises in market interest rates using the Cash Flow at Risk. We apply a confidence level of 95% and a holding period of one year. In 2013, the average Cash Flow at Risk was €8 million, compared to €14 million in the previous year.

The securities we hold in our portfolio include shares. The VaR for the risk associated with changes in share prices averaged €7 million for the year (prior year: €9 million).

Risks and opportunities from changes in the price of securities are controlled through professional fund management. The Group's financial transactions are recorded centrally using special software and are monitored by RWE AG. This enables us to balance risks across individual companies. Range of action, responsibilities and controls are set out in internal guidelines to which our Group companies are obliged to adhere when concluding financial transactions.

- **Creditworthiness of business partners.** Our business relations with key accounts, suppliers and trading partners expose us to credit risks. We track the creditworthiness of our transaction partners closely. We assess their credit standing based on internal ratings, both before and during the business relationship. Third-party information is also considered, e.g. assessments by rating agencies. Groupwide standards are applied when measuring and managing credit risks. Sales 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. If necessary, we request cash collateral or bank guarantees. Credit risks and the exhaustion of the limits in the trading business are measured daily.

As a rule, over-the-counter energy trading transactions are concluded on the basis of framework agreements, e.g. those prescribed by the European Federation of Energy Traders (EFET). In addition, we agree on collateral. For financial derivatives, we make use of the German master agreement or the master agreement of the International Swaps and Derivatives Association (ISDA).

**Other earnings risks:** This class includes reputation risks and risks associated with non-compliance and criminal offences committed by employees of the Group. However, based on our assessment, relative to the aforementioned risks, these earnings risks are fairly low.

**Indebtedness/liquidity risk:** In 2013, we redeemed the RWE Group's net debt by €2.3 billion to €30.7 billion, and we want to reduce it even further. There is a danger that our cash outflows and inflows may develop less favourably than planned. Deviations of this kind may be experienced by our cash flows from operating activities, capital expenditure and proceeds from divestments. In addition, the collateral required to back our trading transactions could increase if our credit rating were lowered. Moreover, transactions that

do not have a direct effect on cash may influence our indebtedness. For example, changes in the market interest rate level can also affect the net present value of non-current provisions in RWE's consolidated financial statements. If discount rates must be lowered, provisions are increased, and vice-versa. We classify our indebtedness risk as medium.

In contrast, we classify our liquidity risk as low. It consists of the danger of our liquidity reserves no longer being sufficient to meet our financial obligations in a timely manner. Such obligations result above all from our financial liabilities, which we must service. Furthermore, we must put up collateral if trading contracts marked to market result in a loss. We have strong cash flows from operating activities, substantial cash and cash equivalents, unused credit lines and further financial latitude thanks to our Commercial Paper and Debt Issuance Programmes. Our prudent planning ensures that we are liquid at all times. Among other things, we make use of a groupwide notification system, which records the Group companies' short, medium and long-term need for financial resources.

**Report on the accounting-related internal control system: statements in accordance with Sec. 315, Para. 2, No. 5 and Sec. 289, Para. 5 of the German Commercial Code.**

Financial reporting risks arise from 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 sources of error and limit the resulting risks. It covers the financial reporting of the entire RWE Group. This enables us to ensure with sufficient certainty that the parent company and consolidated financial statements are prepared in compliance with statutory regulations.

The design of the accounting-related ICS largely mirrors the organisation of our accounting and financial reporting process. One of the main features of this process is the control over the Group and its operating units. The basis

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is provided by the target parameters determined by the Executive Board of RWE AG. Building on them and our expectations of the operating business trend, we develop our medium-term plan once a year. It includes the figures budgeted for the following fiscal year as well as the figures planned for subsequent years. We prepare forecasts in line with the budget for financial years underway. The Executive Board of RWE AG and the management boards of its major subsidiaries convene once a quarter in order to evaluate the interim and annual financial statements and update the forecasts.

Accounting is mostly organised locally. Occasionally, this task is performed by Group companies for their subsidiaries. Certain processing tasks such as payroll accounting are pooled at internal service providers like RWE Service or are at least subject to uniform groupwide quality standards. A shared service centre is being built in Cracow, Poland, to handle processes related to accounting transactions. As the holding company, RWE AG performs central accounting tasks. These include consolidation, the accounting treatment of provisions for pensions in Germany, and goodwill impairment tests. RWE AG is also in charge of tasks relating to the management and monitoring of financial instruments, money transactions, cash investments and tax group accounting. External service providers are commissioned in certain cases.

The CEOs and CFOs or the managing directors of major subsidiaries as well as certain RWE AG department heads must take an internal balance sheet oath for external half and full-year reporting. In addition, the members of the Executive Board of RWE AG take an external half and full-year balance sheet oath and sign the responsibility

statement. Thereby, they confirm that the prescribed accounting standards have been adhered to and that the figures give a true and fair view of the net assets, financial position and results of operations.

We prepare our financial statements using a groupwide reporting system that we also use to prepare the budgets and forecasts. All fully consolidated subsidiaries use this system. It forms the basis for a standardised data reporting process within the Group. The financial accounting systems are largely maintained by RWE IT.

We identify risks in financial reporting at the divisional level on the basis of quantitative, qualitative and process-related criteria. The foundations of the ICS are our generally binding guidelines and ethical principles, which are also set out in RWE's Code of Conduct. Building on this, the minimum requirements for the major processing steps ensure the integrity of data collection and management. The risks of individual balance sheet items resulting from subjective discretion or complex transactions are recorded in a groupwide risk and control matrix. Once a year, we prove that the necessary controls have actually been implemented and carried out properly. This is done by external auditors, or the management in charge of performing the controls.

When in session, the Audit Committee of the Supervisory Board regularly concerns itself with the effectiveness of the accounting-related ICS. Once a year, representatives of RWE AG's finance function present to the Committee on the risks of financial reporting. They also explain which control measures were taken and how the proper implementation of the controls was verified.

## 1.12 OUTLOOK

**The difficult market conditions for our conventional power stations will also clearly leave their mark on the consolidated financial statements for fiscal 2014. We do not expect any positive special items such as the effect of the gas price revision with Gazprom. Therefore, despite our current efficiency-enhancement programme, this year's operating result will be far below the 2013 level; we expect a figure of between €4.5 billion and €4.9 billion. We expect recurrent net income, to which we orientate our dividend proposal, to be within a range of €1.3 billion to €1.5 billion. These figures do not take account of the planned sale of RWE Dea, but we hope to reach a contractual arrangement for the divestment over the course of the year.**

**Experts predict slight economic upturn.** According to initial forecasts, global economic output in 2014 will be around 3% higher year on year. Measures required to consolidate state budgets in the Eurozone will probably continue to curtail growth. The gross domestic product (GDP) of the currency union may rise by 1%, following a decline in 2013. Measured against this, the prospects of the German economy are above average: the German Council of Economic Experts is of the opinion that economic output may rise by 1.6% in 2014. Stimulus is expected to come in particular from the strong employment situation and the increase in disposable income. Current economic outlooks have GDP growing by up to 1% in the Netherlands, about 1% in Belgium and as much as 2% in the United Kingdom. In relation to our markets in Central Eastern Europe, experts anticipate growth of 3% in Poland, 2% in the Czech Republic and up to 2% in Hungary.

**No revitalisation of energy consumption in sight in Western Europe.** If the economy develops as described above, demand for electricity in Germany should roughly be the same as in 2013. The stimulating effect of economic growth will probably be contrasted by reduced consumption resulting from progress made in energy efficiency. Our forecast for the United Kingdom and the Netherlands is similar. We expect electricity usage in our key markets in Central Eastern Europe to rise marginally: Poland may post the strongest growth, of up to 2%, followed by Hungary and the Czech Republic, each with about 1%.

As regards gas, the economy's stimulating effect on consumption may well be weakened by measures to save energy, especially in the United Kingdom. Gas usage in electricity generation is not expected to provide noteworthy stimulus in view of the stable, high level of gas quotations and the low price of coal and CO<sub>2</sub> emission allowances. As by and large temperatures in Europe were below the ten-year average in 2013, normal weather conditions would curtail consumption. Against this backdrop, gas usage in most RWE markets can be expected to stagnate or decline marginally.

**Moderate changes in commodity prices.** Current developments on forward markets do not indicate a significant change in the price of energy commodities which are of relevance to us. At the end of the year, the 2014 forward for a barrel of Brent crude was quoted at US\$109 on the London oil market. This matches the level of spot prices in 2013. The development of the 2014 forwards for hard coal, gas and electricity is shown on page 39 et seqq. Here, there are no signs of an upturn either, despite the marginal improvement in the economic outlook. In European trading of CO<sub>2</sub> emission allowances, only structural reforms may trigger long-term price stimulus.

However, the development of commodity prices will not have a significant effect on our earnings in the current fiscal year. We have already sold almost all of our electricity generation for 2014 and secured the prices of the required fuel and emission allowances. The average price we have realised for electricity produced by our German lignite-fired and nuclear power stations is lower than in the previous year (€51 per MWh). We also limited the price risk exposure of our oil and gas production through forward sales, albeit to a much lesser extent than for electricity.

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### **Conventional electricity generation still faces huge challenges.**

The price trends on forward markets for electricity and fuel do not indicate an improvement in the earnings prospects of the conventional electricity generation business in the years ahead. If implemented, the German government's plan to create a capacity mechanism in the medium term (see page 46) will not have its intended effect before the second half of this decade. The design of this mechanism has been left entirely open. Therefore, we anticipate that the margins of our conventional power plants will remain under pressure. However, we benefit from the fact that we sell forward most of our electricity generation by up to three years. We sold this year's production and some of our 2015 generation when prices were substantially above the current market level. However, this advantage will be reduced year after year.

We have already taken extensive measures to reduce costs and improve efficiency in order to limit these earnings shortfalls. We are implementing an efficiency-enhancement programme launched in 2012, which is designed to have a recurrent impact of at least €1.5 billion on the operating result. The savings are expected to take their full effect on earnings as early as 2016, a year ahead of schedule. A large portion of the measures concerns our generation business. In addition, we decided to take several gas-fired power stations, which cannot cover their fixed operating costs, offline and mothball them (see page 53). Further plants are being assessed. If we find that their continued operation is unprofitable despite efficiency-enhancement measures, we will also shut them down.

**2014 revenue in the order of last year's level.** We expect external revenue in the current fiscal year to be in the order of €54 billion. This would match the level achieved in 2013. RWE Dea, which is up for sale, has been considered in the outlook on a 12-month basis. In view of rising oil and gas production volumes, its revenue may be higher than in 2013. In addition, we expect revenue in the German and UK supply businesses to rise, as higher upfront costs will result in price adjustments. For example, RWE npower raised residential electricity and gas tariffs in December 2013. However, a normalisation of weather conditions would curtail gas sales volumes. Furthermore, we anticipate that electricity revenue recorded by RWE Supply & Trading will decline.

### **2014 operating result: expected range of €4.5 billion to €4.9 billion.**

We anticipate that EBITDA for the 2014 fiscal year will be between €7.6 billion and €8.1 billion. The operating result is expected to range from €4.5 billion to €4.9 billion. Recurrent net income should total between €1.3 billion and €1.5 billion. RWE Dea has also been included in these figures for the full year. Earnings contributed by the Trading/Gas Midstream Division will be significantly down on the figure recorded in 2013, which included the large compensation payment received from Gazprom. In addition, margins in conventional electricity generation will continue to shrink. However, we expect efficiency-enhancing measures to have a positive effect.



Outlook for fiscal 2014 <sup>1</sup>	2013 actual € million	2014
External revenue	54,070	In the order of €54 billion
EBITDA	8,762	€7.6–8.1 billion
Operating result	5,881	€4.5–4.9 billion
Conventional Power Generation	1,383	Significantly below previous year
Supply/Distribution Networks Germany	1,626	Moderately above previous year
Supply Netherlands/Belgium	278	Significantly below previous year
Supply United Kingdom	290	Moderately below previous year
Central Eastern and South Eastern Europe	1,032	Significantly below previous year
Renewables	196	Moderately above previous year
Upstream Gas & Oil	521	Significantly above previous year
Trading/Gas Midstream	831	Significantly below previous year
Recurrent net income	2,314	€1.3–1.5 billion

<sup>1</sup> Qualifiers such as 'in the order of,' 'moderately,' and 'significantly' indicate percentage deviations from the previous year's figures.

We expect earnings at the divisional level to develop as follows:

- **Conventional Power Generation:** This division's operating result will decline significantly. We have already sold most of this year's electricity generation. Overall, the margins we realised were smaller than in 2013. In addition, expenses incurred to maintain our power stations will probably rise compared to last year, when very few plant revisions were undertaken. We expect efficiency-enhancement measures to have a positive impact on earnings. Furthermore, certain burdens experienced last year, for example the increase in provisions for impending losses from a loss-making electricity contract, will not recur this year.
- **Supply/Distribution Networks Germany:** Here, we expect to end the year with an operating result which is moderately higher than in 2013. We anticipate that earnings will be stable in the distribution network business and that the contribution made by our supply activities will grow. Our efficiency-enhancement programme will be the key success factor.
- **Supply Netherlands/Belgium:** Although Essent also benefits from efficiency measures, its operating result will significantly decline. The main reason is that there was a substantial release of provisions in 2013 and we do not expect a similar exceptional effect in 2014. In addition, gas supply margins may well come under increased pressure due to fierce competition. Furthermore, if weather conditions normalise, we will not benefit from the revitalisation of demand caused by the cold weather in 2013.
- **Supply United Kingdom:** We expect competition in the retail business to become tougher in the United Kingdom as well. Together with a tighter regulatory environment, this will probably cause earnings recorded by RWE npower to decrease moderately. Another reason is the sale of two supply companies to Telecom Plus mentioned on page 51: as a result, we will no longer serve 770,000 customers directly. Instead, we will serve them indirectly based on a supply agreement with Telecom Plus, which will result in reduced margins. Our expenditure on energy savings in households, which we are obliged to promote through the government programme ECO, will be lower than in 2013. However, we will pass on the relief to our residential customers by lowering tariffs as of 28 February 2014. We expect efficiency-enhancing measures to have a positive effect on earnings.
- **Central Eastern and South Eastern Europe:** The earnings level posted by this division will be significantly down year on year, primarily due to the sale of NET4GAS in August 2013. Last year, the Czech long-distance gas network operator contributed €171 million to the operating result. However, this division will probably close the financial year down on fiscal 2013 even without this deconsolidation effect. One of the reasons is that certain transactions used

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to hedge currency risks, which had a positive impact on the operating result in 2013, are now stated as part of the non-operating result. In the Czech Republic, we expect margins in the gas storage and gas supply businesses to shrink. Earnings achieved by our Hungarian lignite-based electricity generator Mátra are likely to drop, as the electricity prices realisable by the country's power plant operators have also declined substantially.

- **Renewables:** Thanks to efficiency enhancements and new generation capacity, RWE Innogy's earnings will improve, albeit not as much as originally assumed. Instead of achieving a level of over €300 million as forecast in March last year for 2014, the operating result posted by this company will only be moderately higher year on year. One reason are the delays in building our two large-scale offshore wind farms Gwynt y Môr (576 MW) and Nordsee Ost (295 MW), which are scheduled to be completed by the end of 2014 and the spring of 2015, respectively. In addition, conditions for generating renewable energy in Spain have worsened and wholesale electricity prices are below expectations. Furthermore, our German biomass activities no longer contribute to RWE Innogy's operating result because they have been transferred to the Supply/Distribution Networks Germany Division.
- **Upstream Gas & Oil:** We anticipate that the operating result posted by RWE Dea will rise significantly, to between €600 million and €650 million. The decisive factor is the strong increase in gas and oil production. In 2014, we want to achieve a production volume of at least 40 million barrels of oil equivalent (2013: 30.6 million barrels), driven by increases in output from the new gas fields Breagh, Clipper South and Disouq. In addition, we plan to start production at the Norwegian oil field Knarr in the second half of the year. Our exploration costs will probably be lower than in 2013. However, the average price we realise for our oil may well be below the level achieved in 2013.

- **Trading/Gas Midstream:** This division generated an unusually strong operating result due to the large compensation payments received from Gazprom in 2013. We will be significantly below it in the year underway. As set out on page 50, the gas procurement agreement with Gazprom still imposes burdens on us despite the successful arbitration proceedings. Furthermore, we anticipate that margins in the gas storage business will shrink. However, we are optimistic about being able to exceed last year's result in the energy trading business.

**Dividend payout ratio of 40% to 50% planned.** Our dividend proposal for the current fiscal year will be in line with a payout ratio of 40% to 50%. The basis for calculating the dividend is recurrent net income. As mentioned earlier, recurrent net income is expected to total between €1.3 billion and €1.5 billion.

**Headcount down year on year.** We expect our workforce to further decline in 2014. As part of our efficiency-enhancement programme, there will be redundancies in nearly all our divisions, in our IT and service companies and at RWE AG.

**€4.5 billion earmarked for capital expenditure on property, plant and equipment in 2014.** Our capital expenditure on property, plant and equipment and intangible assets from 2014 to 2016 will total about €11 billion. This sum includes the €3 billion we expect to spend during the three-year period on our upstream subsidiary RWE Dea, which is up for sale. A similar amount has been set aside for the maintenance and expansion of our electricity and gas networks. Approximately €1 billion in capital expenditure has been earmarked for the expansion of electricity generation from renewables. Here, we will focus on the construction of onshore and offshore wind farms. In addition, in 2014 we intend to complete the two dual-block hard coal-fired power plants at Hamm (1,528 MW) and Eemshaven (1,554 MW), which would bring our new-build power plant programme to an end. This year, capital invested in property, plant and equipment and intangible assets (including RWE Dea) is expected to total about €4.5 billion, on a par with the level recorded in 2013.

**Net debt in the order of last year's level.** We aim to fully finance our capital expenditure and dividend payments with cash flows from operating activities from 2015 onwards. However, we will probably not achieve this goal in the current year. By the end of 2014, our net debt should roughly match last year's level (€30.7 billion). This figure also does not consider the effects of the potential sale of RWE Dea. In addition, we assume that interest rates will remain stable, which would also cause the discount rates for non-current provisions to be flat. Based on our forecasts for net debt and EBITDA, the ratio of these two parameters, i.e. the leverage factor, will be significantly higher than in 2013 (3.5). However, our goal is to return it below our self-imposed upper limit of 3.0 over the medium term.

**Unfavourable market for gas-fired power stations slows reduction in CO<sub>2</sub> emissions.** We want to reduce the carbon dioxide emissions of our power plants to 0.62 metric tons per MWh of electricity by 2020. To this end, we place significant emphasis on the expansion of renewable energy. Furthermore, the average efficiency of our power stations will continue to increase, thereby reducing specific emissions. We set the stage for this with our new-build power plant programme, which is scheduled to be completed in 2014. Six of the nine stations included in the programme are state-of-the-art gas-fired power plants. However, the programme cannot yet make the envisaged contribution to reducing emissions due to the unfavourable market conditions for this type of generation, which is based on a relatively low emission technology. This situation will probably not change in 2014. Therefore, we do not expect our emissions factor to decline significantly compared to 2013 (0.76 metric tons per MWh). However, we anticipate that the share of our electricity generation accounted for by older hard coal-fired power stations will decrease moderately due to capacity reductions. This should have a small positive effect.