

OUR RESPONSIBILITY

2017

RWE

Powering. Reliable. Future.

ABOUT THE REPORT

The report entitled “Our Responsibility 2017” is aimed at analysts and investors, non-governmental organisations (NGOs), customers and suppliers, policymakers and government agencies, as well as our employees and the people living in the regions where we do business. It describes the most important social, environmental and economic challenges facing our core business, the conflicting aims that can arise, and the Corporate Responsibility (CR) strategy we have developed in response.

From the business year 2017, companies in Germany geared to the capital market must publish in accordance with the amendment to the German Commercial Code (HGB) dated 18 April 2017 (CSR Directive Implementation Act) a non-financial declaration in the combined review of operations or a separate non-financial group report (NfR) in a different document. RWE AG is meeting this obligation with sections of this report marked in blue. These sections were subject to a limited assurance engagement performed by accountancy firm PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft. The audit was implemented taking into account compliance with the requirements of the German Commercial Code (HGB).

This report is published electronically in pdf format. The professional services firm PricewaterhouseCoopers GmbH performed an engagement audit on the disclosures indicated with  and provided a limited assurance relating to compliance of the disclosures with the requirements of the Global Reporting Initiative (GRI). The limited assurance engagement was carried out in accordance with the auditing principles of the International Standard on Assurance Engagements (ISAE) 3000 (revised), see ► **page 84** for Assurance Report. The CR Report includes an overview of all the important indicators, see ► **page 86**.

Approach

The CR Report of RWE AG is published as a GRI Report and conforms with the GRI Standards (2016) of the Global Reporting Initiative in a selection based on a Materiality Analysis of the topics relevant for our business. In addition, we also report on the materiality of corresponding in-depth topics based on the GRI requirements for the electricity industry, which were formerly applicable as the G4 Electric Utilities Sector Disclosures, and no longer form part of the GRI Standards. The report was prepared in conformity with the GRI Standards in the “core option”. This report “Our

Responsibility 2017” was available for the implementation of the GRI Materiality Disclosure Service. The correct positioning of the “materiality disclosures” (GRI 102-40 to GRI 102-49) was confirmed by the GRI. The report also serves as our progress report for the Global Compact of the United Nations and provides information on the Sustainable Development Goals (SDG) we make a contribution to, see ► **page 89**.

Dates

The period under review is fiscal 2017, which began on 1 January and ended on 31 December. The data provided in this report relate to all affiliated companies of the RWE Group which are included in the consolidated financial statements. Any deviations from this are clearly stated. The financial and market data were taken from the ► **Annual Report 2017 of the RWE Group**. We present financial data denominated in the relevant national currency or have converted these based on the average annual values for 2017 (1 US dollar = €0.88, 1 UK pound sterling = €1.14, 100 Czech crowns = €3.8, 100 Hungarian forints = €0.32, 1 Polish zloty = €0.24). The commercial rounding of certain figures can result in the sum of the rounded figures or percentages deviating from the rounded totals in some cases.

For reference

This report is published in German and English. The Executive Board of RWE AG has approved the report for publication. The editorial deadline was on 26.03.2018. This report continues our policy of annual reporting. The next report will be published in the spring of 2019. When for reasons of simplicity and readability the terms “employees”, “shareholders”, etc. are used to designate persons in this documentation, this naturally refers to all genders throughout.

► RWE Archive CR Reports

Forward-looking statements

This report contains forward-looking statements regarding the future development of the RWE Group and its companies as well as economic and political developments. These statements are assessments that we have made based on information available at the time this report was drawn up. In the event that the underlying assumptions do not materialise or additional developments arise, actual performance may deviate from the performance expected at present. We are therefore unable to assume any responsibility whatsoever for the accuracy of these statements.

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FOREWORD

Dear Readers,

The modern industrial and service society is becoming electric. And a reliable energy supply is getting even more important for the interaction between the increasingly electrified areas of our society. In order to generate the power to drive this society, power plants which safeguard the energy supply will continue to be necessary over the long term while the expansion of renewable energy continues to proceed at a rapid pace.

At the same time, our society is becoming increasingly low carbon. German economic growth has become more uncoupled from the output of greenhouse gas emissions. Over recent years, the emissions from power generation have steadily declined and they will continue to fall with the shutdown of additional conventional power plants in the foreseeable future.

Our society is undergoing a process of change. And only utilities that also change will continue to exist. This transformation is taking place at RWE. Our Group represents security and reliability in energy supply with the unambiguous goal of POWERING. RELIABLE. FUTURE. This goes hand in hand with long-term climate protection. We have therefore defined an ambitious goal for reducing our CO₂ emissions by the year 2030 – a reduction of 40% to 50% in comparison with 2015.

This will enable us to fulfil our own aspiration towards responsible business conduct as a corporate citizen. RWE takes its responsibility for the environment, employees and society seriously. We have been continuously modernising our

power plant portfolio over the past 20 years and enhancing the efficiency of our plants. Furthermore, we have driven forward the expansion of renewable energy, made nature conservation and renaturing lignite opencast mines and grid expansion a top priority, and offered our employees workplaces with enhanced safety that eliminate hazard to the greatest possible extent. This is a hallmark of RWE.

For the first time, a number of sections in this year's Sustainability Report have been marked as being our non-financial group report. It is a new departure that seeks to further increase the transparency and quality of reporting on non-financial aspects. This is in line with the European CSR Directive, the German Implementation Act and our own claim.

As in previous years, this report simultaneously provides our progress report to the UN Global Compact. By signing the Global Compact, we declared our commitment to actively promoting human rights, decent working conditions and environmental protection within our sphere of influence, and taking decisive action against corruption and bribery. This report presents the measures and instruments we take in order to achieve these objectives.

The fact is that we continue to place great emphasis on providing evidence-based and transparent information for our stakeholders – in particular policymakers, investors, customers, local authorities and the general public. This report gives an insight into what we are doing and our future plans.

And we will be delighted if this leads to ongoing dialogue.

Yours,



Rolf Martin Schmitz



GRI Content Index

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GRI 102 General Disclosures

GENERAL DISCLOSURES

ORGANISATIONAL PROFILE

In addition to the information provided below, more information is also available in the section 1.1. STRATEGY AND STRUCTURE in the combined review of operations of the ► **RWE Annual Report 2017, page 18.**



GRI 102-1 Name of the organisation

RWE Aktiengesellschaft

GRI 102-2 Activities, brands, products, and services

RWE AG and its operational segments Lignite & Nuclear, European Power and Energy Trading are indispensable for streamlining the entire energy system and for security of supply in Europe.

We manage our majority shareholding innogy SE with its three divisions Renewable Energies, Grid & Infrastructure and Retail as a fully-consolidated financial investment, see ► **GRI 102-6, page 8.** For information on the products and services of innogy, see the ► **innogy Sustainability Report GRI 102-2, page 10.**

The know-how relating to the extraction and refinement of lignite, electricity generation from gas, coal, nuclear energy and renewable sources, energy trading, distribution and supply of electricity and gas, and the development and provision of innovative energy management solutions demonstrates that the RWE Group is operating at all levels of the supply chain in the energy industry.

GRI 102-3 Location of headquarters

Essen, Germany

GRI 102-4 Location of operations

RWE is an international group which including its subsidiary company innogy is represented at business locations in 24 countries.

The key business operations are distributed across the following countries and regions.

- Germany
- Netherlands, Belgium
- United Kingdom
- Central Eastern and South Eastern Europe (Croatia, Czech Republic, Hungary, Poland, Romania, Slovakia, Turkey)
- Western and Southern Europe (Spain and Italy)

GRI 102-5 Ownership and legal form

At the end of 2017, an estimated 86% of the total of 614.7 million RWE shares (including 39 million non-voting preferred shares) were held by institutional investors, and 14% were held by individuals (including employees). Institutional investors from Germany owned 29% of RWE (previous year: 27%). In other countries on the European continent, this investor group held 14% (previous year: 20%) of RWE's subscribed capital. In North America, the United Kingdom and Ireland, it accounted for a combined 40% (previous

year: 35%). RWE AG's single largest shareholders are RW Holding, in which municipalities have pooled their shares, KEB Holding, which is backed by the City of Dortmund, and the US asset management company BlackRock. Based on their latest voting right notifications, the three companies each held about 5% of the voting rights. At the end of 2016, a large portion of the RWE shares held by municipalities was still pooled in RWEB GmbH, which accounted for 14% of the voting rights. However, this pooling was reversed last year.

The free float of our common shares considered by Deutsche Börse in terms of index weighting was 89% at year-end. Only the shares held by RW Holding and KEB Holding were

deducted. Stakes held by asset management companies like BlackRock are classified by Deutsche Börse as free float as long as they do not exceed 25% of the capital stock.

GRI 102-6 Markets served



We report on our business model and our markets in the review of operations of the Annual Report for the year 2017, see the combined review of operations, section 1.1 STRATEGY AND STRUCTURE.

Lignite & Nuclear

This is where we report our German electricity generation from lignite and nuclear energy as well as lignite mining in the Rhineland. These activities are overseen by RWE Power AG. This segment also includes our 50.9% stake which we are about to sell in the Hungarian company Mátra, which produces lignite and generates electricity from this energy source. It also comprises our interests in the Dutch nuclear power plant operator EPZ (30%) and in Germany-based URANIT (50%), which holds a 33% interest in the uranium enrichment specialist Urenco.

European Power

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

Energy Trading

This segment encompasses the multi-faceted activities of RWE Supply & Trading GmbH, which acts as the commercial centre for the RWE Group. Its core business, energy trading, forms the economic link between the elements of our value chain, the regional markets and the various energy commodities. RWE Supply & Trading GmbH concentrates on trading in electricity, natural gas, coal, oil, CO₂ certificates and biomass. It increasingly conducts these activities outside of Europe, for example in New York, Singapore and Mumbai. The company is also responsible for sourcing the fuel needed

to produce electricity and heat and marketing the electricity generated by RWE power plants. One objective is to limit price risks. On top of that, the segment generates added value by the commercial optimisation of our power plant dispatch. The resulting earnings are reported under the Lignite & Nuclear and European Power segments. RWE Supply & Trading GmbH also markets its expertise to major European customers outside of the RWE Group, offering services ranging from traditional energy supply contracts and comprehensive energy management solutions to complex risk management concepts.

innogy

Our subsidiary innogy SE is responsible for business involving renewable energy, distribution networks and retail. Its strategy is designed to spur structural change in the energy sector.

Renewables: innogy SE plans, builds and operates facilities for the generation of electricity from renewable sources. In terms of generating capacity, the company's strongest presence is currently in Germany and the United Kingdom, followed by Spain, the Netherlands and Poland. In terms of energy sources, the focus is on onshore and offshore wind, as well as hydroelectric power.

Grid & Infrastructure: Networks are the backbone of the energy transition, and their operators can generally earn stable returns. innogy SE manages electricity distribution grids in Germany, Hungary, Poland and Slovakia. Moreover, it is active in the gas distribution grid business in Germany, the Czech Republic and Croatia.

Retail: At the end of last year, innogy SE supplied 15.9 million customers with electricity and around 6.6 million with gas in eleven European markets. Our subsidiary is one of the largest suppliers of electricity and gas in Germany, the Netherlands and the United Kingdom. It has a leading position in at least one of these products in several other European markets.

GRI 102-7 Scale of the organisation



Company size			
	Unit	2017	2016
Workforce	FTE	59,547	58,652
	Headcount ¹	63,545	62,598
Total number of business locations ²	Countries	24	24
External revenue (with natural-gas/electricity tax)	€ billion	44.6	45.8
Equity	€ billion	12.0	8.0
Net debt	€ billion	20.2	22.7
Lignite produced (opencast Rhenish mining area)	million mt	91.3	90.5
External electricity sales volume ³	billion kWh	261.1	264.6
External gas sales volume	billion kWh	254.1	265.1

1 Employees and apprentices

2 Number of countries in which fully consolidated companies and joint operations of the RWE Group have their registered office.

3 For data on electricity generation see ► **Key Sustainability Indicators**, page 86.

Number of residential, industrial, and commercial customers

Our subsidiary innogy SE is able to build on a broad customer base in all its markets. In 2017, the residential and commercial customer segment essentially included a total of 15.9 million electricity customers and 6.6 million gas customers, see the

► **innogy Sustainability Report**, GRI 102-7, page 15.

The size of the customer base in our Energy Trading segment is significantly less. However, even today it generates around 14% of electricity and around 11% of gas sales, see ► **RWE Annual Report 2017**, page 44.

External electricity sales volume	Residential and commercial customers		Industrial and corporate customers		Distributors		Total	
	2017	2016	2017	2016	2017	2016	2017	2016
in billion kWh								
Lignite & Nuclear	0.2	0.2	-	-	12.0	12.5	12.2	12.7
European Power	-	-	2.2	2.4	5.2	5.0	7.4	7.4
Energy Trading	-	-	35.6	30.3	-	-	35.6 ¹	39.3 ¹
innogy SE	50.4	52.3	70.7	73.5	84.8	79.3	205.9	205.1
RWE Group ²	50.6	52.6	108.5	106.2	102.0	96.8	261.1	264.6

1 Including volume effects arising from the sales of self-generated electricity on the wholesale market. If these sales volumes are greater than the purchases sourced from third-party utilities for retail purposes, the difference in sales is taken into account. In the business year 2017, this was not the case. By contrast there was a positive balance of 9.0 billion kWh in 2016.

2 Including lower volumes recorded under "Other consolidation".

External gas sales volume	Residential and commercial customers		Industrial and corporate customers		Distributors		Total	
	2017	2016	2017	2016	2017	2016	2017	2016
in billion kWh								
Energy Trading	-	-	26.8	24.7	0.7	0.3	27.5	25.0
innogy SE	100.6	102.9	67.6	83.1	58.4	54.1	226.6	240.1
RWE Group	100.6	102.9	94.4	107.8	59.1	54.4	254.1	265.1

Further information on the company is also available in the ► **Key Sustainability Indicators**, page 86.

GRI 102-8 Information on employees and other workers

Headcount of employees						
	2017			2016		
	Women	Men	Total	Women	Men	Total
Germany	8,585	29,991	38,576	8,343	29,686	38,029
United Kingdom	3,659	5,098	8,757	3,570	5,011	8,581
Netherlands/Belgium	1,050	2,337	3,387	1,057	2,356	3,413
Central Eastern/South Eastern Europe	4,258	8,360	12,618	4,042	8,340	12,382
Other countries	44	163	207	43	150	193
RWE Group	17,596	45,949	63,545	17,055	45,543	62,598
Part-time employees			5,193			4,841
Full-time employees			58,352			57,757
Permanent contract			59,805			59,121
Fixed-term contract			3,740			3,477

RWE only contracts a small proportion of employees from subcontractors to carry out operational functions on a permanent basis. We contract them for service and service packages, and for construction and assembly work.

GRI 102-9 Supply chain

Key elements of our value chain are the procurement of hard coal, gas and biomass, as well as trading in combustion fuels. Raw materials are traded as standardised products with defined quality attributes on international wholesale markets. These markets are the most important source of procurement. The procurement volume of combustion fuels (hard coal, natural gas and biomass) was around €6.8 billion in 2017.

When purchasing goods, services and plant components for our business operations, RWE is in direct contact with service providers and suppliers. In 2017, the procurement volume of the RWE Group without innogy SE was approximately €1.9 billion. In order to meet the differing requirements relating to procurement, we have adjusted our processes and ensure compliance with our sustainability requirements in the supply chain, see ► **GRI 204, page 36**.



GRI 102-10 Significant changes to the organisation and its supply chain



See ► **GRI 102-6, page 8** for material organisational changes.

GRI 102-11 Precautionary Principle or approach



Identifying, assessing and managing risks at the earliest possible stage are the functions of the Controlling & Risk Management Department at RWE AG. This includes our Group-wide reporting and controlling processes. It also encompasses our guidelines on handling risks, and risk analysis within the scope of strategic, planning and controlling processes. The activities of the Risk Committee and Internal Auditing are also fundamental tenets of this work alongside reporting on the basis of the Act on Control and Transparency of Enterprise (KonTraG).

The Internal Auditing ensures compliance with the RWE Code of Conduct in the course of the audits carried out. The principles of the Code of Conduct are included in the audit criteria. The Chief Compliance Officer reports on this matter regularly to the Executive Board of RWE AG and to the Audit Committee of the Supervisory Board.

For more information on risk management see the
► **RWE Annual Report 2017, page 74.**



We invest regularly in environmental protection. We have divided our expenses by areas of activity.

Environmental protection expenses in € million		
	2017	2016
Air pollution control	203	217
Nature conservation and protection of the landscape	59	164
Water protection	134	176
Waste disposal	253	317
Noise abatement	9	7
Polluted sites, soil contamination	1	2
Climate protection	988	1,060
Total	1,647	1,944

GRI 102-12 External initiatives

UN Global Compact and SDG

Since January 2004, the RWE Group has been a member of the ► „**Global Compact**“ (GC) set up by former General Secretary of the United Nations Kofi Annan. By signing up to the ten principles underlying the Global Compact, RWE made a commitment to human rights and labour standards, promoting environmental protection in its business operations, and preventing corruption. We present the contribution we have made to global implementation of the principles of the Global Compact in an annual Progress Report. We also present our contribution to the Sustainable Development Goals (SDG) adopted by the United Nations in September 2015 in the Appendix to this report on ► **page 89.**

Bettercoal Initiative

Cooperating with other energy companies is absolutely essential in order to be in a position to exert more pressure and achieve sustainable production and transport conditions in the supply chain for hard coal. In 2012, we joined forces with other large purchasers of hard coal to launch the ► **Bettercoal Initiative.** By the end of 2017, 13 of the big European energy companies were already members of Bettercoal. The Dutch ports also joined the initiative as associate members. Bettercoal audits hard-coal production sites throughout the world and makes the results for assessment of its suppliers available to its members, see
► **GRI 204, page 37.**



GRI 102-13 Membership of associations

We are an active member of a large number of different committees and specialist associations as part of our social, environmental and business responsibility. The following memberships are important for RWE AG (in alphabetical order):

- Bettercoal Ltd.
- BDEW German Association of Energy and Water Industries (Bundesverband der Energie- und Wasserwirtschaft e. V.)
- DEBRIV – Federal Lignite Association (Bundesverband Braunkohle)
- DICO – German Institute for Compliance (Deutsches Institut für Compliance e. V.)
- DIIR – German Institute for Internal Auditing (Deutsches Institut für Interne Revision e. V.)
- econsense – Forum for Sustainable Development of the German Economy (Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e. V.)
- EFET – European Federation of Energy Traders
- Energy Netherlands (Energie Nederland)
- Energy UK
- Eurogas
- German-Russian Forum (Deutsch-Russisches Forum e. V.)
- IEA Greenhouse Gas R&D Programme
- IETA (International Emissions Trading Association)
- If.E Innovation Forum for the Energy Transition of IG BCE (Innovationsforum Energiewende If.E der IG BCE)
- Promotion Group for German Industry (Förderkreis der Deutschen Industrie e. V.)
- Sustainable Biomass Program
- VdV – Association of the German Integrated Economy (Verband der Deutschen Verbundwirtschaft e. V.)
- VRB – Association of Raw Materials and Mining (Vereinigung Rohstoffe und Bergbau e. V.)
- World Energy Council, Weltenergierat

For memberships of innogy see

► **GRI 102-13 in the innogy Sustainability Report, page 18.**



STRATEGY

GRI 102-14 Statement from senior decision-maker



See ► Foreword, page 5.

GRI 102-15 Key impacts, risks, and opportunities



A few years ago, the European Union already launched ► **new legislation** with the focus on reporting non-financial aspects of a company and their impacts, risks and opportunities. On 15 November 2013, this regulation came into force and was then transferred into German law. The ► **CSR Directive Implementation Act** came into force on 19 April 2017 and is relevant for the first time in relation to reporting for the year 2017.



The core of the new legislation is the obligation for large companies geared to the capital market to draw up and publish a non-financial declaration in the Management Report or a separate non-financial group report in a different document. The intention of this is to reporting information apart from the financial indicators more clearly about the business model and the associated opportunities and risks. The aim is to publish information that is necessary to understand the business performance, business results, position and impacts of the activity of the company on the environment and society. **RWE has therefore decided to use individual blue sections of the CR Report as modules for the separate non-financial group report and to publish them in the CR Report.** The CR Report of RWE AG is published as a GRI Report and conforms with the GRI Standards of the Global Reporting Initiative (GRI) in a selection based on the Materiality Analysis of the topics relevant for our business. In the non-financial report, we have also used the GRI Standards as a framework for the materiality analysis and the concepts. In addition, we also report on the materiality of corresponding in-depth topics based on the GRI requirements for the electricity industry, which were formerly applicable as the G4 Electric Utilities Sector Disclosures, and no longer form part of the GRI Standards

We have already provided information in the past about the content in relation to the aspects now required under statutory legislation. The selection of the sections for the non-financial group report was carried out in conjunction with the Executive Board and the Supervisory Board, and reflects assessments of stakeholders presented in this section as a whole.

An analysis of material topics for the RWE Group is carried out in preparation for drawing up the CR Report each year. This includes a survey of selected stakeholders. The particularly relevant individual topics were identified in the analysis as encompassing the aspects of environmental concerns, employee concerns, social concerns, protecting human rights, anti-corruption and combatting bribery. innogy prepared a separate materiality analysis on the basis of the specific business model.

First and foremost, key sustainability impacts were identified as the greenhouse gas emissions (GHG) associated with conventional power generation that guarantees a secure energy supply. These currently frame the debate in the public domain and shape the direction of government policy. Other aspects of sustainability impacts are protection of our plants – safe technical operation and protection against cyber-attacks. Another focus is on occupational health and safety. This relates to our own employees and for employees of subcontractors commissioned by us. A great deal of attention is focused on the area of compliance, and the sustainability requirements in the supply chain, in particular in the case of hard coal.

The sections Emissions (greenhouse gas emissions) and Compliance (environment) therefore constitute the contribution to environmental concerns, part of the section on Occupational Health and Safety encompass the aspect of Employee concerns, the section on Procurement deals with a number of areas including the aspect of protecting human rights. Anti-corruption and combatting bribery is addressed in the section of the same name. Social concerns such as dialogue with our local stakeholders or information about relocation and recultivation in the Rhine-Ruhr region are a constituent element of our CR Report but they are less relevant in the perception of stakeholders. We have therefore not included this section in the non-financial group report.

Each year, an analysis of the material topics for the RWE Group without innogy SE is carried out in preparation for drawing up the CR Report, see ► **GRI 102-47, page 24**, including a survey of selected stakeholders. The following particularly relevant individual topics were identified in the



analysis of the aspects of environmental concerns, employee concerns, social concerns, protection of human rights, anti-corruption and combatting bribery. Climate protection and the security of our plants were attributed the highest importance overall:

- **Environment**
 - CO₂ emissions at power plants, contribution to achieving political climate goals, innovative products and services, NO_x and mercury emissions, interventions in the landscape and nature, efficiency of power plants and systems
- **Work**
 - Occupational accidents, healthcare promotion and overcoming stress
- **Society**
 - Protection of infrastructure against cyber-attacks, transparency in political communication, safety and protection of nuclear power plants, new storage technologies, dialogue with critics, regional partnerships and cooperative ventures
- **Human rights**
 - Origin of imported hard coal
- **Anti-corruption**
 - Implementation and monitoring of the RWE Code of Conduct

The topic areas identified in this analysis determine the definition of the focus in this report.

Key sustainability impacts from the RWE Group without innogy SE primarily result from the greenhouse gas emissions associated with conventional power generation to guarantee a secure energy supply. These currently frame the debate in the public domain and shape the direction of government policy. In future, these emissions will be reduced continuously. Important factors driving this process include further expansion of renewable energy, the reformed European emissions trading system and the implementation of our plan to reduce CO₂ emissions, for example by transferring older lignite-fired units to legally-mandated security standby, see further information about this under ► **Shutdown and Decommissioning of Power Plants, page 46**. Our nitrogen oxide and mercury emissions will also decline. Opportunities and risks result from a number of factors including the roll-out of the German Climate Protection Plan 2050 expected in 2018, implementation of the coalition agreements of the

new Federal Government and the new Dutch Government, and Brexit.

Other aspects of sustainability impacts in this area are protection of our plants – safe technical operation and protection against cyber-attacks – decommissioning of nuclear power plants, and high-quality recultivation and reinstatement of opencast mines that are no longer used. In 2017, the Act on Responsibility for Nuclear Disposal ratified by the Federal Government came into force.

Another focus is on occupational health and safety. This relates to our own employees and to employees of sub-contractors commissioned by us. Alongside the issue of occupational accidents, it also covers basic healthcare promotion in the company. Furthermore, a great deal of attention is focused on the area of compliance, and the sustainability requirements in the supply chain, in particular in the case of hard coal and biomass.

The business model and alignment of the RWE Group without innogy SE also present a range of diverse opportunities. We are confident that conventional power generation will continue to be the partner of the energy transition in Europe for many years to come. Our power plant portfolio places us in a good position to support this. We will deploy our power plant portfolio even more flexibly and provide the urgently needed backup capacities for the expansion of renewable energy. We will develop storage facilities as a key module for the energy transition and evaluate the expansion of our storage portfolio on a regular basis. We will also develop new business activities with our know-how in generation and trading business.

We require the acceptance of the society in order to be successful over the long term – starting with government, continuing through associations and employees, and including environmental and consumer organisations. With this end in mind, we are continuously engaging in discussion in the public domain and monitoring the positions of our stakeholders in relation to all issues of sustainability. This is carried out through focused communication with colleagues from the relevant specialist departments and the companies in the various countries where we operate. The key task is to integrate the fundamental concepts of Corporate Responsibility in all our business processes and generate value added from them for the RWE Group.



ETHICS AND INTEGRITY

GRI 102-16 Values, principles, standards, and norms of behaviour

At RWE we are well aware of our role in the community and of our responsibility towards customers and business partners, as well as shareholders and employees. We therefore have clearly defined principles which form the framework for our corporate and community engagement. The focus of our actions is on the common values of trust, passion and performance. They ensure a unified, overarching identity. These values are supplemented by the RWE Code of Conduct and the principles for good conduct defined in the Code. The Code also establishes the benchmark for collaboration

with contractual partners and is intended to give a unified foundation for the contractual relationship.

Responsible management and supervision of the company rank among the cornerstones for long-term success. Our benchmark is provided by the German Corporate Governance Code in the relevant latest version. We fully comply with the recommendations of the code – and this strengthens the trust placed in us by our investors, customers, employees and the general public.

GRI 102-17 Mechanisms for advice and concerns about ethics

Every single employee is encouraged to be proactive in bringing any issues relating to our Code of Conduct and compliance with the code to the attention of their supervisor and/or the responsible compliance officer. The same applies to any indications relating to breaches of the Code of Conduct. Compliance officers are appointed for all divisions and Group companies, and they are always available as points of contact for such matters. They in particular receive information about issues relating to prevention of corruption. Contact details for compliance officers are available on the Intranet.

Notifications of any breaches of the Code of Conduct can be forwarded to supervisors or compliance officers through a range of different channels. It is also possible to contact an independent external ombudsperson by phone or email.

This contact is available for employees and also accepts information from third parties outside the company, for example suppliers or other business partners. Notifications relating to any potential breaches are recorded by the Compliance Department. Each case is reviewed by the Group function responsible, and any remedial measures necessary are initiated in the context of a systematic follow-up process.

Our external ombudsperson has so far recorded all notifications and complaints relating to negative environmental, social and human-rights impacts, and relating to working practices. Assessments cannot currently be provided. In 2017, various options were reviewed for an expanded reporting system. These included the goal of providing informative assessments.

CORPORATE GOVERNANCE

GRI 102-18 Governance structure



The governance of RWE AG as a German joint-stock company listed on the stock exchange is primarily determined by the Stock Corporation Act (Aktiengesetz) and also by the regulations of the ► **German Corporate Governance Code** in its latest current version.

Pursuant to the statutory regulations, RWE is subject to the “dual governance system”. This is characterised by a strict separation of personnel between the Executive Board as a management body and the Supervisory Board as a monitoring body. The Executive Board and the Supervisory Board work closely together in pursuing the interests of the company.

The Executive Board manages the company with the objective of generating sustainable value added under its own responsibility. The principle of overall responsibility applies to their work, and this means that the members of the Executive Board bear joint responsibility for the entire executive management. They develop the corporate strategy and ensure implementation in consultation with the Supervisory Board.

The Supervisory Board advises the Executive Board on managing the company and monitors its activity. It appoints and dismisses members of the Executive Board, passes resolutions on the compensation system for the members of the Executive Board and defines individual compensation packages for each member. The Supervisory Board is involved in all decisions that are fundamentally important for RWE.

The RWE Supervisory Board currently has five permanent committees and the Executive Committee: the Mediation Committee pursuant to Article 27 Section 3 Co-determination Act (MitbestG), the Personnel Affairs Committee, the

Audit Committee, the Nomination Committee and the Strategy Committee. In addition, there is also a special committee “Newco IPO Committee”. This was established at the end of 2015 and was granted powers of decision-making on details of the initial public offering for innogy SE. Decision-making powers were also delegated to the special committee relating to a potential sale of shares in innogy SE by RWE up to a level of 51%. The committees prepare topics and resolutions in advance of meetings of the Supervisory Board. They sometimes also have decision-making powers delegated to them by the Supervisory Board. The chairs of the committees regularly inform the Supervisory Board about the work of the committees. Additional detailed information on the concrete work of the Supervisory Board and its committees is provided in the latest Supervisory Board Report in the ► **RWE Annual Report 2017, page 8 ff.**



A revised version of the German Corporate Governance Code came into force on 24 April 2017. RWE has already essentially met the additional requirements. Nevertheless, we took the changes to the Code as an opportunity to introduce a provision into our Rules of Procedure relating to communication by the Chairman of the Supervisory Board with investors. Furthermore, we refined the competency profile for members of the Supervisory Board establishing that at least six shareholder representatives have to be independent. More detailed information on this can be found in our latest ► **Corporate Governance Report**, which has been published on the Internet at ► www.rwe.com/corporate-governance.



For information on the governance structure of innogy see ► **GRI 102-18 in the innogy Sustainability Report, page 21.**



GRI 102-19 Delegating authority

Powers of attorney are granted by the Executive Board in the form of authorised officers and general agents to the individual departmental and section managers who are

empowered to take decisions independently within their sphere of responsibility, so long as a higher level of authority has not reserved the right to approve certain decisions.

GRI 102-20 Executive-level responsibility for economic, environmental, and social topics

The Executive Board has adopted a portfolio distribution which gives specified members of the Executive Board responsibility for various topics. The current portfolio distribution provides for the following powers of responsibility over economic, environmental and social topics: The Chairman of the Executive Board deals with the group-level responsibilities Corporate Business Development, Corporate Transformation, Group Communications & Energy Policy, Group Strategy, Human Resources, Internal Audit & Compliance, Legal. Since 1 May 2017, the Chief Executive Officer has also held the role of Labour Director. The responsibilities of the Chief Financial Officer include Accounting, Business Services, Controlling & Risk Management, Finance & Credit Risk, Investor Relations, Portfolio Management, Mergers &

Acquisitions, Tax. The Group Executive Board reports to the Supervisory Board of the company as the highest governance body.

The Group-wide implementation and realisation of Corporate Responsibility is coordinated by the Group Corporate Responsibility Department within the Group Communication & Energy Policy Department. The Head of the Group Communication & Energy Policy Department reports directly to the Chief Executive Officer. In 2017, representatives of the RWE AG and the key operating companies came together several times in relation to specific themes in order to swap experiences and to agree activities jointly.

GRI 102-21 Consulting stakeholders on economic, environmental, and social topics

Each shareholder has the right to submit a countermotion with substantiation against the proposals put forward by the Executive Board and/or the Supervisory Board on a specific agenda item at the Annual General Meeting. Shareholders whose shares taken together make up one twentieth of the entire share capital or a proportionate amount of €500,000 can demand that items are placed on the agenda and announced.

The publication of the business results is accompanied by an investors' and analysts' teleconference. In 2017, a Capital Market Day was also held in London. Additionally, managers take part in Group roadshows and participate in conferences. In accordance with the recommendations of the German Corporate Governance Code, the Chairman of the Supervisory Board is regularly available to investors for discussions about matters specifically relating to the Supervisory Board.

GRI 102-22 Composition of the highest governance body and its committees

The Supervisory Board is a non-executive supervisory body. It consists of 20 members, ten of which are elected by the Annual General Meeting pursuant to the provisions of the German Stock Corporation Act (Aktiengesetz). Ten of the members are elected by the employees pursuant to the Co-determination Act (Mitbestimmungsgesetz) dated 4 May 1976 (MitbestG). In accordance with the German Stock Corporation Act, the period of office for current members of the Supervisory Board continues until the end of the Annual General Meeting which passes a resolution on the discharge for the actions of the Supervisory Board for the fourth business year after the commencement of the period of office. The periodic new elections for the Supervisory Board are therefore planned for 2021. At the moment, the Supervisory Board of RWE AG includes six women, of which three were elected by the employees. RWE AG therefore complies with the statutory gender quota of 30%.

A presentation of the Executive Board and the Supervisory Board is provided in the description of the governance bodies in the ► **RWE Annual Report 2017, page 185 ff.**

It provides an overview of the number of other important positions or obligations held by the individual persons and the type of the obligations.

In order to ensure a fit and proper composition of the Supervisory Board, the Supervisory Board resolved to draw up a competence profile. As envisaged in the German Stock Corporation Act and in the German Corporate Governance Code, the aim is to make appointments to the Supervisory Board so as to ensure provision of expert monitoring and consultation. The objective is for at least one member of the Supervisory Board to be able to provide expertise for each aspect of the activity of the Supervisory Board. This means that the necessary knowledge and experience is reflected by the Supervisory Board as a whole. Furthermore, the Supervi-



sory Board intends to ensure that it includes members with international experience who come from outside Germany or who have spent a considerable number of years working in other countries. Members of the Supervisory Board are expected to be familiar with the business areas of the RWE Group, the market landscape, the needs of customers and the strategic direction of the company. They should possess all the skills and know-how necessary for their activity as a member of the Supervisory Board including assessment of reports provided by the Executive Board, weighing up business decisions and evaluating the documents associated with the annual financial statements. Alternatively, they

need to be willing to engage in a learning curve to acquire the necessary knowledge and skills. The needs profile also includes special areas of expertise and qualifications that are important for the business activities. This may include e.g. experience from an international activity or management functions in politics and business, know-how in areas of the energy sector, employee co-determination, accounting or auditing, and expertise in the public sector.

You will find more information in the
► **RWE Annual Report 2017, page 8 f.**,
and on our ► **Webpage**.



GRI 102-23 Chair of the highest governance body

Dr Werner Brandt is not simultaneously a member of the Executive Board. He has also not been a member of the Executive Board of RWE AG in the past.

GRI 102-24 Nominating and selecting the highest governance body

As defined in the Rules of Procedure of the Supervisory Board, the Nomination Committee convenes as necessary and proposes suitable candidates to the Supervisory Board as its nominations for election by the Annual General Meeting. When the committee selects the nomination proposals, it takes into account the international operations of the company, potential conflicts of interest, and diversity. There is also a competence and needs profile for members of the Supervisory Board which is intended to ensure a heterogeneous composition of the Supervisory Board, see

► **GRI 102-22, page 17.**

As is also defined in the Rules of Procedure of the Supervisory Board, the Personnel Affairs Committee prepares the groundwork for decisions on personnel by the Supervisory Board. The committee makes decisions on behalf of the Supervisory Board in a number of areas, including the con-

clusion, the amendment and the termination of contracts of employment with the members of the Executive Board. This work does not include the decisions reserved for the Supervisory Board pursuant to Article 87 Section 1 and Section 2 Sentence 1 and Sentence 2 Stock Corporation Act (AktG), although the Personnel Affairs Committee prepares the groundwork for such decisions. Furthermore, the committee regularly gives advice on long-term succession planning for the Executive Board. In this context, the committee takes account of planning for the management of the company and also considers the need for diversity. For purposes of making appointments to the Executive Board, the Supervisory Board has adopted a requirements profile for members of the Executive Board in accordance with the recommendations of the German Corporate Governance Code. This also takes account of the requirements for diversity relating to this governance body.

GRI 102-25 Conflicts of interest

Transparency is a core element of good corporate governance. It is absolutely indispensable in cases where transactions concluded by the Executive Board may lead to conflicts of interest. The Executive Board and the Supervisory Board also addressed the issue of double mandates in the Group. This can arise if a member of the Executive Board of RWE AG and members of the Supervisory Board of RWE AG are also repre-

sented in the Supervisory Board of innogy SE. In the business year 2017, there were no decisions requiring the passing of a resolution which led to actual conflicts of interest. The members of the Executive Board and of the Supervisory Board did not therefore register any conflicts of interest. Furthermore, no contracts were concluded between members of the Supervisory Board and RWE AG.



The memberships in other governance bodies held by members of the Executive Board and Supervisory Board are disclosed transparently in the presentation of governance

bodies in the ► **RWE Annual Report 2017, page 185 ff.** RWE AG has no controlling shareholder. Transactions with related parties are included in financial reporting.



GRI 102-26 Role of highest governance body in setting purpose, values, and strategies

We have created long-term incentives for sustainable corporate governance in which part of the variable compensation

for the Executive Board has been linked to CR indicators, see ► **GRI 102-36, page 20.**



GRI 102-29 Identifying and managing economic, environmental, and social impacts

See ► **GRI 102-31, page 19.**



GRI 102-30 Effectiveness of risk management processes

The Executive Board of RWE AG holds the principal responsibility for our risk management system. The board monitors and manages the overall risk of the Group. The responsibility for applying and developing the risk management system is at the level below the Executive Board with the Controlling & Risk Management of RWE AG. This department regularly

reports to the Executive Board and the Supervisory Board of RWE AG on the risk position of the Group.

The Internal Audit Department regularly reviews the quality and the functional capability of the risk management system.

GRI 102-31 Review of economic, environmental, and social topics

The Executive Board of RWE AG is informed immediately if there are any significant changes to the risk situation. The management and supervisory bodies are informed about the risk situation as part of quarterly reporting.

The entrepreneurial actions of RWE are defined by integrity and compliance with the law. The RWE Code of Conduct sets out the targets and principles for this and forms the basis for the corporate culture. The Compliance Management System focuses in particular on the identification of potential structural risks of corruption. The Compliance Management System for anti-corruption was audited by a professional

services firm in accordance with IDW Audit Standard 980. The efficacy audit was successfully completed at year-end 2013/2014. The Chief Compliance Officer reports at regular intervals to the Executive Board of RWE AG and to the Audit Committee of the Supervisory Board on compliance-relevant issues. This includes in principle all the topic areas of the Code of Conduct and provides consolidated information about this. Every manager with disciplinary responsibility additionally needs to submit an annual report on implementation of the Code of Conduct in his/her area of responsibility. In 2018, a further review of the Compliance Management System is planned by a professional services firm.

GRI 102-32 Highest governance body's role in sustainability reporting

The section of the report marked in blue writing presents the implementation of the non-financial group report required under statutory regulations. It was audited by

the Supervisory Board of RWE AG. The remaining section of the report was checked and approved by the Executive Board of RWE AG.



GRI 102-36 Process for determining remuneration

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

Further details on the compensation policy and criteria for the Executive Board, including disclosures on components of the compensation package, are included in the compensation report in the ► **RWE Annual Report 2017, page 63 ff.** This takes account of all statutory regulations and follows all the recommendations of the German Corporate Governance Code.



STAKEHOLDER ENGAGEMENT

GRI 102-40 List of stakeholder groups



Our company regularly engages in communication in different ways with customers, academics, politicians, representatives of environmental organisations, local government agencies, neighbours around our locations and other citizens.

We also seek contact with players who are otherwise involved in issues relating to the energy industry, as well as the corporate activities of RWE and its impacts on society as a whole.

GRI 102-41 Collective bargaining agreements

99.8% of the employees of the RWE Group work in Europe and are represented by the European Works Council. The RWE and the innogy Social Charters cover 100% of our employees.

Our business partners are required to acknowledge the Code of Conduct and therefore to accept the principles of the United Nations Global Compact, which include the right to collective bargaining.

GRI 102-42 Identifying and selecting stakeholders



Our stakeholders include all persons and organisations we have relationships with and engage in dialogue with. We also regard individuals and entities who seek communication with us, or who are interested in our company, as stakeholders. There is no prior selection process. In order to identify the various aspirations and take account of them in our corporate policy, we are in continuous dialogue with our stakeholders and open to their concerns. Expectations that stake-

holders have of RWE are nuanced and defined by their attitude to energy issues and the extent to which those stakeholders are affected by energy, climate and other topics relevant for the company. The different countries show a varying basic attitude to topics associated with these topics. Their views are informed by a number of factors including the individual national background.

GRI 102-43 Approach to stakeholder engagement



Communication with our stakeholders gives us valuable ideas for the orientation of our corporate activities. Since the energy world is going through a process of change, it is particularly important for us to discuss expectations and projections about the future of energy supply with external stakeholders. At the same time, this dialogue provides us with the opportunity to reflect and convey our company decisions and underlying motivation more effectively.

The dialogue takes place at different levels. We engage in discussions about company activities at local level with neighbouring residents and citizen's initiatives. These conversations might relate to, for example, construction measures and approval proceedings. Local residents frequently

follow our projects and activities with a great deal of interest, perhaps because they are looking for positive effects to give upside impact on the local economy. Alternatively, they may be anxious about negative effects on their own lives and their surrounding environment. We meet these expectations with a transparent information policy, an honest exchange of views and an interest in constructive proposals. At national level, we engage in discussions with our stakeholders in particular on the following issues: our contribution to the energy transition and climate change, the future of the generation mix and the energy market, sustainability in international supply relationships and a responsible approach to our customers and the environment.

GRI 102-44 Key topics and concerns raised



In 2017 as in the previous year, the dominant issue in the context of the dialogue with stakeholders continued to be the contributions that the energy industry can make to achieving the national and international climate change targets, and the role that conventional power generation is able to play in the energy transition, and particularly with respect to security of supply. We engaged in an intensive dialogue at all levels on this issue with a large number of representatives from the political sphere, business, unions and the general public, for example on reform of the European Emissions Trading Scheme or on the future design of the European electricity market. For information on the organisation of the content see ► **GRI 305, page 55** and **GRI 415, page 79**.

the event series "Lake | Countryside | City – Scope for Opportunities in the Rhenish mining area" was continued this year, focusing on the topic "Living Locations of the Future – Resource-efficient living in a rural area".

The Neighbourhood Forum (Nachbarschaftsforum) Niederaußem, which RWE set up at the power plant there, continued to receive a positive reception. The forum offers neighbours, associations and other local stakeholders the opportunity to engage in discussion with RWE about issues related to power generation and power plants with particular reference to the Niederaußem site. In 2017, the forum met twice. The agenda focused on the topic of structural change in the region, perspectives on the use of CO₂ as a material, as well as security of supply and the expansion of renewable energy in the RWE Group.

One example of dialogue was local and regional forums. Interaction in the Rhineland lignite mining area took place at the level of local authorities and at meetings of elected politicians. Alongside issues relating to the energy transition and climate protection, key topics were security of supply, job security and perspectives for the future at the locations. Topics relating to long-term reinstatement were discussed at specialist conferences such as the Specialist Conference on Biodiversity in Recultivation and the water management conference dealing with lakes at opencast sites.

Following a break in 2017, we intend to resume the energy conversation with local stakeholders in 2018 in the context of our Inden opencast mine and extend this forum to other parts of the Rhenish mining area.

Another area of increasing involvement was the innovation region in the Rhenish mining area, which supports the structural change in this area. A representative of RWE Power AG is a Member of the Supervisory Board of the Innovationsregion Rheinisches Revier GmbH. Furthermore, RWE participates in a large number of different projects and initiatives in the areas of opencast mining to shape the region, for example the development company Indeland GmbH. In 2017, we continued the support commitments in favour of the Indeland development company until the end of the year 2021. In December, we established the Special Purpose Association Zweckverband Tagebaufolge(n)landschaft Garzweiler which will promote the structural change regionally.

In 2017, we additionally held regular power plant discussions at our nuclear power locations. The events are used to inform politicians and the media about operations at the location. We also rolled out a Transparency Initiative at all three locations. The objective of this is to create even more transparency in the future for providing information to various regional special-interest groups about licensing procedures currently under way. Openness in relation to planning for decommissioning and the process involved is also part of this approach.

An important part of the structural change in the region is also resource-efficient building. RWE is playing a proactive role in organising this. In accordance with these activities,

We continue to hold regular events at national and European level, for example our RWE Talks. These are also held jointly with innogy SE. In 2017, they took place in Berlin and in Brussels. Members of the Executive Board and Managing Directors reported in this forum on the latest developments in the energy industry and held discussions with a wide range of different special-interest groups. The discussion topics included the new integrated regulations of the EU for the entire value chain of the energy industry and the position of the parties in the year of the election.

Over the course of 2017, representatives of RWE in the United Kingdom engaged in a dialogue on a variety of issues relating to energy and environmental policy with the regulatory authorities and politicians. As in 2016, one of the topics centred on national implementation of the EU Directive on Industrial Emissions and the associated reference document which came into force in the middle of 2017. This elucidates the best available technology for combustion plants (LCP BREF). Discussions were also held with the Federal Ministry for Economic Affairs, Energy and Industrial Strategy and with representatives from academia on a variety of topics including BREXIT, its shape and the potential impacts on the energy industry. A great deal of attention in these discussions was also devoted to topics such as the development of the British capacity market and the future regulation of CO₂. Furthermore, we participated in the government consultation on the exit from generation of electricity from hard coal by the year 2025.

RWE was also in regular contact with a large number of regional and national stakeholders in the Netherlands. These included parliamentarians, politicians, NGOs and academics. In particular, we contributed to the discussion about the ongoing climate protection policy to achieve the climate goals for 2030 and 2050. In this context, we participated in preparing the groundwork for the new national climate and energy agreement, which the new government coalition has launched and which is scheduled to be completed by the end of 2018. In addition, RWE – together with the chemicals industry and other industrial sectors – is involved in the development of a bio-based economy in the Netherlands. RWE is also part of the Zambezi Consortium alongside Avantium, the national forestry authority, AkzoNobel and ChemEurope. The aim is to develop bio-based plastics and use the by-products as efficiently as possible. If the transition to a bio-based economy is to be structured successfully, companies and organisations need to form new value chains and develop new forms of cooperation. To this end, RWE is organising a series of events known as “Energy Fields” to which we invite selected players from the bio-economy. Three events held in the year 2017 concentrated on various aspects of the bio-based economy: Business Case Biorefinery, the Role of the Consumer, and Startup and

Innovation. Furthermore, we held local stakeholder meetings at our power plant locations in Geertruidenberg and Eemshaven. We also organised a meeting with the new intake of elected parliamentarians in order to explain our efforts in the area of sustainability in the hard-coal supply chain and present the work carried out by Bettercoal.

For information on the stakeholder dialogues of innogy SE see ► **GRI 102-43 and GRI 102-44 in the innogy Sustainability Report, page 26 ff.**



Results of surveys on customer satisfaction

We want our customers to remain loyal, to be interested in new products and to recommend our company to other people. Our stated objective is to be accepted by them as a service provider and supplier, and also as a partner who can work with them to create individual solutions. Our usual high level of product quality, fast and streamlined processes, and competitive prices continue to remain our top priorities in this relationship.

An energy dialogue held every year is directed towards retaining loyalty. This has provided us with a great deal of constructive feedback from our customers. Alongside our commodity solutions, we have received a lot of praise for our energy market analyses and the accounting systems, and we have also been able to bring improvement proposals and new ideas to the table. We evaluate these and put them into practice. Our energy dialogue is an excellent platform in order to exchange views with energy experts on the energy market and on the framework of energy policy. The Energy Talks launched last year for the Benelux countries have provided the corresponding counterpart. The next scheduled meeting for 2018 is planned in Antwerp. Communication with our customers relates to the new strategy of RWE Supply & Trading GmbH, innovative areas like Blockchain and the “Green Power Purchase Agreements” through to market analyses.

innogy SE also regularly measures customer loyalty and customer satisfaction. For more information on this see ► **GRI 102-43 and GRI 102-44 in the innogy Sustainability Report, page 26 ff.**



APPROACH TO REPORTING

GRI 102-45 Entities included in the consolidated financial statements



See list in the ► **RWE Annual Report 2017** on pages 153 ff.

GRI 102-46 Defining report content and topic Boundaries

Our management of Corporate Responsibility and reporting take into account the relevant issues that we have determined and evaluated in a Materiality Analysis. This approach corresponds to the current GRI Standards of the Global Reporting Initiative (GRI) which form the basis for this report.

So as to determine the material topics for sustainable corporate governance at RWE, we have focused on the topics that are particularly relevant for our external and internal stakeholders. Our approach initially involved talking to 15 representatives of civic organisations and institutions within the framework of the materiality analysis. They came from organisations in Germany, the United Kingdom and the Netherlands. These stakeholder groups represent the topics and expectations that our group is confronted with. Twelve internal stakeholders were also consulted from those departments at RWE which are likely to make a tangible contribution to our sustainability management.

We used a standardised questionnaire to survey these stakeholders and collect information about aspects relating to environmental concerns, employees' concerns, social

concerns, protection of human rights, and anti-corruption and bribery. Prior to disseminating the questionnaire, we laid the groundwork and allocated a total of 16 topics to these aspects that we had identified from the familiar set of expectations relating to our company that we were aware of and from the GRI Standards and the CR Report from the previous year, see ► **GRI 102-47, page 24**. Our considerations included their individual importance for our business, our stakeholders and the associated impacts. Additional sub-topics were also allocated to all the topics so as to achieve maximally comprehensive coverage of all the relevant issues. These could be supplemented by our internal and external stakeholders. A distinction was also drawn between topics where the biggest potential change was in the company itself and topics that primarily affected our supply chain or our business relationships.

The individual interviews to survey the assessment of our shareholders were carried out by CR process owners in the RWE companies. Feedback we received from our stakeholders focused on the medium to long-term perspectives of RWE.



GRI 102-47 List of material topics



The topics below present the results of our Materiality Analysis carried out in 2017. We draw a distinction in the presentation of the analysis between the value-chain phases in which the key impacts of the topic are generated. RWE is not responsible for process steps and their impacts which involve upstream and downstream activities in our value

chain and therefore take place outside our company. Nevertheless, we are indirectly associated with these stages and we are able to exert an influence on them within the individually defined framework. We can also directly manage the impacts that are caused within our company.

Overview of the material topics and where their impacts are caused:

Material topics	Corresponding GRI topics	Upstream value generation phase	RWE	Consumption phase/ downstream value generation phase
Environmental concerns				
Biodiversity				
Quality of recultivation	GRI 304 – Biodiversity		■	
Interventions in the landscape and nature	GRI 304 – Biodiversity		■	
Origin of the biomass used in power plants	GRI 304 – Biodiversity GRI 308 – Supplier Environmental Assessment	■	■	
Climate protection				
CO ₂ emissions in power plants	GRI 305 – Emissions GRI 417 – Marketing and Labelling		■	■
Contribution to achieving political climate goals	GRI 201 – Economic Performance GRI 305 – Emissions		■	■
Emissions (apart from greenhouse gases)				
NO _x emissions from power plants	GRI 305 – Emissions		■	
Mercury emissions from power plants	GRI 305 – Emissions		■	
Energy Efficiency				
Efficiency of power plants and systems	GRI 302 – Energy		■	
Innovative products and services	Energy efficient products and services, research and development, GRI 302 – Energy		■	■
Water				
Water consumption in power plants and opencast mines	GRI 303 – Water		■	
Lowering of the groundwater table by opencast mining	GRI 303 – Water		■	
Waste				
Nuclear energy intermediate storage and repository	GRI 306 – Effluents and Waste		■	■
Decommissioning of nuclear power plants	GRI 306 – Effluents and Waste, shutdowns and decommissioning of power plants and reinstatement of mining locations		■	
Environmental Management				
Safe operation of power plants and opencast mines	GRI 307 – Environmental Compliance		■	
Environmental protection targets	GRI 307 – Environmental Compliance		■	
Employee concerns				
Occupational Health and Safety				
Occupational accidents	GRI 403 – Occupational Health and Safety	■	■	
Healthcare promotion and overcoming stress	GRI 403 – Occupational Health and Safety		■	
Labour Relations				
Job cuts and reorganisation	GRI 401 – Employment GRI 402 – Labour/Management Relations GRI 404 – Training and Education		■	

Material topics	Corresponding GRI topics	Upstream value generation phase	RWE	Consumption phase/ downstream value generation phase
Diversity				
Avoidance of discrimination	GRI 405 – Diversity and Equal Opportunity		■	
Promotion of diversity	GRI 405 – Diversity and Equal Opportunity		■	
Social concerns				
Catastrophe/Emergency Planning				
Security and protection of nuclear power plants	Catastrophe/Emergency planning and response		■	
Protection of infrastructure against cyber-attacks	Catastrophe/Emergency planning and response		■	
Availability and Reliability				
Making the power plant portfolio more flexible	Availability and reliability		■	
New storage technologies	Availability and reliability		■	
Regional Relationships				
Regional partnerships and cooperations	GRI 203 – Indirect Economic Impacts GRI 413 – Local communities		■	
Dialogue with critics	GRI 102-44 – Key topics and concerns raised by stakeholders	■	■	■
Relationships with Politics				
Transparency in political communication	GRI 415 – Public Policy		■	
Respect for human rights				
Supplier Selection and Assessment				
General respect for human rights in the supply chain	GRI 204 – Procurement GRI 414 – Supplier Social Assessment	■		
Origin of imported hard coal	GRI 204 – Procurement	■	■	
Anti-corruption and combatting bribery				
Anti-corruption, combatting bribery and granting and accepting advantages				
Implementation and monitoring of the Code of Conduct	GRI 205 – Anti-corruption		■	
Code of Conduct in international projects	GRI 205 – Anti-corruption		■	

GRI 102-48 Restatements of information

The business segments will now be shown separately in this report. Disclosures in parts of this report are only made

for RWE without innogy SE. For more information see ► **GRI 102-6, page 8.**



GRI 102-49 Changes in reporting



No material changes, see ► **GRI 102-47, page 24.**



GRI 102-50 Reporting period

Business year 2017: 1 January 2017 – 31 December 2017

GRI 102-51 Date of most recent report

March 2017

GRI 102-52 Reporting cycle

Annually

GRI 102-53 Contact point for questions regarding the report

RWE Aktiengesellschaft
Dr Jens Wiggershaus
Political Affairs, Corporate Responsibility
45128 Essen
Phone +49 201 12-15593
E-mail responsibility@rwe.com

GRI 102-54 Claims of reporting in accordance with the GRI Standards

The report has been prepared in accordance with the GRI Standards “in accordance” – Core option.

GRI 102-55 GRI content index

This report also presented the GRI Content Index. This report was prepared on the basis of our established reporting and our findings from the dialogue with stakeholders. We prepared the report in accordance with the GRI Standards (2016) in order to facilitate a comparison of our services with those of other companies. We also report on far-reaching material topics based on the GRI requirements for the elec-

tricity industry which were formerly valid as the “G4 Electric Utilities Sector Disclosure” but are no longer part of the GRI Standards. The values were not available to us with the necessary differentiation for a number of the disclosures derived from the GRI. We have provided a justification in each case and used disclosures which came closest to the requirements.

GRI 102-56 External assurance

The disclosures marked with  were subject to a limited assurance engagement performed by accountancy firm PriceWaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft. The audit was implemented taking into account

the International Standard on Assurance Engagement (ISAE) 3000 (Revised). For the Independent Practitioner’s Assurance Engagement Report see ► **page 84**.



MATERIAL TOPICS

ECONOMIC TOPICS

GRI 201 ECONOMIC PERFORMANCE

GRI 103 Management Approach (including 103-1, 103-2, 103-3)



Challenges

Our market environment and the demands of society at large are changing with the transition of energy systems in Europe. In Germany, the development of the electricity market is largely dependent on the expansion and rising feed-ins of renewable energy. These reduce the utilisation of conventional power plants, in particular of gas-fired power plants but increasingly also coal-fired power plants. Renewable energy and the development of prices for hard coal and gas together with the general economic development are exerting a significant influence on the wholesale prices that electricity producers are able to achieve in the market. Our revenues are determined by the utilisation and the wholesale prices without us being able to exert any direct influence on these parameters. The result is that the developments described exert a strong impact on our earnings derived from electricity generation. At the same time, the trend towards increasing electrification will cause an impact on our business over the medium to long term. The growing requirement for electricity emanating from additional applications for electricity, for example in the sectors of traffic and heat, will counteract falling consumption resulting from increasingly efficient use of power.

was therefore adjusted. It is based on three pillars: optimisation of the power plant business, utilisation of the potential of the core business, and securing the energy supply for the energy transition. The unambiguous target of POWERING.RELIABLE. FUTURE. indicates that as a supplier of reliable energy provision, we offer secure and affordable energy for economies, companies and most importantly people.

In 2016, RWE created the platform for a new corporate structure with the initial public offering for innogy SE. The new corporate structure has enabled RWE to strengthen its financial position and this will improve our performance and make us more competitive. RWE will continue to optimise its own power plant portfolio in a consolidating market. We are also going to make use of options for the additional construction of de-centralised generation plants such as power plants for customers. However, the focus is also on other generation, and in particular storage and flexibility solutions which open up new opportunities for making profits especially in regulated business and are intended to provide opportunities for increasing the use of electricity. Furthermore, RWE Technology International GmbH (RWE TI) is expanding the offering of independent services as a project management and engineering company to RWE in the areas of mining, thermal power plants, renewable energy and infrastructure.

The art of mastering the transition quickly is now a key competitive advantage. RWE is supporting the required and necessary internal processes of change with various Change Management Programmes. These are coordinated and driven forward by the Corporate Transformation Department, which reports directly to the Chief Executive Officer.

Our central focus here is on anchoring the transformation project within the organisation. Achieving this successfully entails analysing the aspects of strategy, structure and culture. However, our overriding aim is to treat the people who are implementing the transformation and the organisation as a social system. The success of transformation projects stands or falls with the willingness of the employees to support and contribute to the process. Supporting and establishing structural and cultural transformations empowers us to make an important contribution to implementing the strategy of our company.



Existing business models and processes in the energy industry are increasingly losing their profitability and are no longer fit for purpose. They need to be modified by new ideas and in some cases even replaced, see ► **Research and Development**, page 44.

Our intention is to strengthen our competitive position and convince our customers over the long term with innovative, attractive and affordable products, efficiency enhancements in our power plants and adjustments of our power plant portfolio.

The speed of the transition is continually accelerating. The markets we are operating in demand that we undergo a continual process of transformation and development in order to be successful. If we are to meet these requirements in the future, it is important to confront the challenges over the long term with creative, motivated and competent employees.

Organisation and management

RWE has adopted a number of measures so that we are able to remain competitive as one of the biggest European energy utilities operating in the market. Our strategy

Measures and performance measurement

In 2017, we shut down further power plants or transferred them to legally-mandated security standby in order to adapt our power plant portfolio to the market conditions, see **► Shutdown of Power Plants, page 45**. The NEO improvement programme already initiated in previous years has resulted in additional efficiency savings and cost reductions with conventional generation. In order to implement more efficient work processes and shorter decision-making pathways in lignite mining, the Alpha Project launched in 2016 and involving reorganisation of opencast mining will be driven forward.

Alongside the overarching restructuring of the Group and our R&D activities, the motivator of innovations is also driving forward new conceptual and operational approaches within the organisation of RWE. In 2017, measures supporting cultural change included continuation of the following projects:

- The programme New Way of Working (NWoW) represents a new mindset and approach to carrying out work, see **► GRI 401, page 66**. The project is enabling us to strengthen the orientation of our employees on performance and customers, and involve them more closely in

the decision-making processes. At the same time, we are ensuring more efficient cooperation within the entire Group.

- Deliver Breakthrough Performance (DBP) is used to roll out Group-wide projects and a uniform understanding of change and leadership.
- "OHI" (Organisational Health Index) measures the DNA of our organisation and provides insights into the "health" of our company.
- Peer Group@RWE is an "exercise area" for executive employees that allows them to develop management expertise through joined-up peer-to-peer consultation and advice based on case studies. This creates an informal, strong and convincing network throughout RWE.

A large proportion of the value added generated by us flows back into the regions where we are operating, for example in the form of tax, deductions or salaries. We thereby make a contribution to regional development. Our value added statement provides a transparent presentation of how profits are distributed, see **► GRI 201-1, page 31**. We also make donations and promote sponsorship activities in the regions and promote volunteering employee engagement through Companius, see **► GRI 203-2, page 35**.

GRI 201-1 Direct economic value generated and distributed

Distribution of value added by the RWE Group in € million	Total 2017	Total 2016
Total	13,899	5,329
to employees (wages, salaries, social security contributions)	4,704	4,777
to the government (taxes and deductions) ¹	2,892	1,920
to lenders	3,066	4,111
to other shareholders	415	226
Net income	1,900	-5,710
Dividend payment to shareholders ²	922	5

¹ Only the taxes paid are included, not tax expense.

² Dividend proposal of RWE AG for the business year 2017 subject to the adoption of the resolution by the Annual General Meeting to be held on 26 April 2018.

Regional engagement by the RWE Group in € million	Total 2017	Total 2016
Donations	2.2	2.2
Sponsorship	3.9	13.1
Volunteering	1.4	1.8

GRI 201-2 Financial implications and other risks and opportunities due to climate change



Once again, climate protection was one of the key political issues in 2017 and it is also crucial for RWE. Key factors in our business are the ongoing expansion of renewable energy and increasing requirements for our fossil-fuel power plants. Alongside reduced profits and necessary modifications in our power plant portfolio, we perceive entrepreneurial opportunities for us in the area of climate protection, and we intend to exploit them. Our conventional power plant portfolio will guarantee security for the electricity supply with advanced and flexible power plants that compensate for the fluctuating feed-in of renewable energy. Our subsidiary innogy SE will continue to increase power generation from renewable sources and develop and expand the technology for the grid infrastructure. innogy SE offers its residential and commercial, industrial and corporate customers innovative products and services that enable them to benefit from the opportunities presented by the new energy world and use energy more efficiently. As a result, they can generate and market energy themselves. Offers for electromobility are intended to support climate protection in the transport sector and drive forward electrification. innogy SE is also making photovoltaics and the expansion of fibreoptic networks a top priority. Alongside corresponding services, our trading subsidiary RWE Supply & Trading GmbH offers appropriate services for major industrial customers. In addition to pure energy supplies, the company also makes specialist commercial service offerings, such as optimisation and enhanced flexibility for portfolios and plants. RWE Generation SE together with RWE Technology International GmbH constructs highly efficient plants for combined heat and power at international locations and operates them to provide energy supplies for customers. Apart from the services outlined above, RWE Supply & Trading GmbH also markets the electricity produced at these power plants.

Impacts associated with the risk or opportunity

We support ambitious political goals for climate protection, for expanding renewable energy and for improvement of energy efficiency at European level and at the level of the

member states, see ► **GRI 305, page 55**. At the same time, we are addressing the enormous challenges that these objectives present in terms of competitiveness, innovative power and financial strength.

In mid-2017, the recommendations made by the Financial Stability Board of the Task Force on Climate-related Financial Disclosures (TCFD) deployed by the G20 published recommendations for the type and scope of future reporting on climate risks, particularly those resulting from the emission of greenhouse gases. Today, these recommendations are already reflected in reporting standards and ratings we participate in. In future, the issue will be about cross-sector implementation of the recommendation in reports. RWE is contributing to this process.

Financial implications of the risk or opportunity before action is taken

We have already carried out a large range of measures to make our processes even more efficient, our organisation even more effective and our corporate culture more performance-oriented and flexible, see ► **GRI 201, page 30**. Financial risks associated, for example, with general climate protection policy and emissions trading in particular are reflected in our risk management. We reduce these risks in the case of emissions trading by concluding appropriate hedging transactions. When a specified amount of electricity is sold on the futures market, the risk is hedged by purchasing appropriate amounts of combustion fuels and the necessary emissions certificates.

The Executive Board engages with the financial risks and opportunities associated with climate change in the control processes. This also includes the review of other risk mitigation options, for example through portfolio adjustments. However, the quantified results are not disclosed for competitive reasons.



GRI 201-4 Financial assistance received from government

RWE does not receive any financial grants or subsidies from the government for its operating business. Furthermore, we finance all capital expenditure from our own resources. On the other hand, we receive financial assistance from government agencies for projects in research and development (R&D) activities. The EU Transparency Register is one of the sources providing information on R&D projects with EU subsidies.

We also receive agricultural subsidies from the EU for the use of agricultural operational areas. These subsidies are for interim agricultural use in the course of reinstating former opencast mining sites and they last for a limited period of time. In 2017, these amounted to around €331,000.

The state does not hold any shares in RWE.

GRI 203 INDIRECT ECONOMIC IMPACTS

GRI 103 Management Approach (including 103-1, 103-2, 103-3)



Challenges

As an economic player, RWE exerts a significant influence on the economy and society. We want to become a much more credible partner for the energy transition and our aim is to enhance trust in our company both within our regional and local environment, and in society as a whole. RWE makes an important contribution to the regional economy through the secure supply of electricity and gas at all times. The provision of jobs and allocation of orders to local companies constitute additional contributions. We promote social developments through initiatives in social, environmental and cultural spheres, with support for volunteering engagement by RWE employees and through financial assistance.

The energy transition is associated with shifts in energy generation that will lead to the shutdown of plants. We are participating in shaping the structural change so that the transformation can be organised in such a way as to be maximally smooth-running for the affected regions, our employees and for us.

Organisation, management and performance measurement

Allocation of resources in compliance with rules

We want to use the resources available to us effectively and in conformity with our compliance objectives. We have defined rules for the allocation of resources in our Guideline on Donations and Sponsorship which applies throughout the Group. Promotional gifts and resources that are relevant according to our guidelines are documented in each case in a register. These include gifts and resources provided to holders of public office, donations and sponsorship measures, and consultancy and intermediary contracts for the RWE Group without innogy SE and for innogy SE. For information on donations and sponsorship see ►GRI 201-1, page 31.

Promotion of volunteering engagement by our employees

See ►GRI 203-2, page 35.

Promotion of education on energy and engineering issues

“Education with Energy” is the slogan we are using to generate enthusiasm among young people for energy and technological issues. We discuss the energy supply of the future with them in this context. “3MalE – Education with Energy” bundles the education packages of all RWE and innogy companies in Germany. The initiative is intended to help young people research, discover and experience energy. For figures on 3MalE see ►GRI 413-1, page 76.

innogy Foundation for Energy and Community playing a role as a corporate citizen

Since 1 September 2016, the RWE Foundation has been operating in a new form as the innogy Foundation for Energy and Community (innogy Stiftung für Energie und Gesellschaft gGmbH). The innogy Foundation supports projects, collaborations and campaigns that focus on the energy transition in the regional context, digitalisation and education. The foundation regularly provides information transparently in its annual reports about projects, successes and finance.

Supporting structural change in areas with opencast mining

A contribution to a broad spectrum of jobs and training places in other companies can be made in the area of opencast mining by the development of building land and industrial zones. Research institutions and leisure amenities can also be expanded. These developments will contribute to safeguarding the future in the region over the long term. Our objective is to remain a dependable partner for local people and communities after opencast mining comes to an end. We are therefore collaborating with the region to shape the structural change by supporting initiatives which drive forward economic and structural development. These include the Innovation-Region Rhenish Mining Area (Innovationsregion Rheinisches Revier, IRR) and joint ventures between local authorities, such as the Indeland Development Company and the Terra Nova Special-purpose Association. Our contribution ranges from providing specialist and financial assistance, through cooperation on master plans and individual projects, to research into sectors of the future.

For example, RWE is involved in projects to safeguard the Weisweiler energy and industrial site and its immediate surroundings. These measures include expansion of the “IGP Eschweiler” industrial zone, the development of the “Grachtweg” joint local-authority industrial zone and participation in the master planning of the neighbouring local authorities spearheaded by the IRR for downstream industrial use of the land used for the Weisweiler lignite-fired power plant after the Inden opencast mine is no longer viable.

Together with municipalities and administrative districts, RWE has already made available several million m² of industrial land in the mining area over recent years. Following subsequent capital expenditure, new jobs have been created here. In 2017, RWE was continuing these projects and reached several agreements with a number of the local authorities in the mining district. Examples include the agreement with the community of Langerwehe and the Indeland development company to open up a “Business

and Industrial Zone Langerwehe in Indeland” initially covering an area of 9 hectares (ha) and the agreement with the Nörvenich community about developing a business park covering an area of 36 ha.

An important part of structural change in the region is resource-efficient construction. RWE is playing a proactive role in structuring this. In 2017, RWE joined together with development company Indeland to drive forward the Factor X Project. A number of pioneering projects for resource-efficient buildings are currently being realised in Indeland with the construction zones “Seeviertel” (Lake Quarter) in Inden and “Neue Höfe Dürwiß” (New Courtyards Dürwiß) in the town of Eschweiler, as well as the Factor 4 Sample House since 2017. The Factor 4 House is the first property in Germany to reduce its consumption of resources over the entire life cycle of a house by the Factor 4 or 75 percent – from the extraction of resources to demolition and disposal.

GRI 203-1 Infrastructure investments and services supported



As an operator of energy infrastructures, we help to ameliorate fuel poverty in the countries where we are operating – particularly where the government and civil society do not provide enough support. We carry out appropriate activities

in the regions where innogy has operations with residential customers. For more information on this see ► **GRI 203-1 in the innogy Sustainability Report, page 37.**



GRI 203-2 Significant indirect economic impacts

We promote volunteering by our employees and implement our social responsibility under the umbrella of the Group-wide Corporate Volunteering Programme known as Companius (including RWE “Aktiv-vor-Ort” – Active on Site). Targeted formats help us allocate employees to a volunteering role appropriate for them. In 2017, more than 1,450 employees throughout the Group dedicated their time to providing assistance on more than 930 Companius projects (including

RWE Aktiv vor Ort – Active on Site projects). The amount contributed to these projects totalled some €1.4 million during the period under review.

For information on promoting education and on Companius projects in the area of providing aid for refugees see ► **GRI 413-1, page 75.**



GRI 204 PROCUREMENT PRACTICES

GRI 103 Management Approach (including 103-1, 103-2, 103-3)



Challenges

We source a substantial proportion of goods, plant components and services from business partners who like us are based in the European Union and who operate within the robust framework that is in place in the EU. However, we are unable to definitively exclude potentially negative impacts in relation to environmental, employee and social concerns, human rights or prevention of corruption in the upstream value chain.

A key factor relates to compliance with our regulations on occupation health and safety especially when we commission third parties to carry out aspects of the maintenance work on our plants or to handle hazardous substances.

Care also needs to be exercised when procuring fuels and derivatives in trading markets. When anonymous transactions are carried out on trading markets, issues such as money laundering or financing terrorism need to be excluded. The conditions for extraction of the hard coal imported for our power plants are a top priority alongside their impacts on the local population. The sustainability of the biomass we use is also a concern. At the end of November 2016, the European Commission published a proposal for introducing new Europe-wide criteria for biomass within the framework of the Clean Energy Package.

National and international standards are becoming increasingly concrete in relation to the expectations for sustainable supply chain management. The risk of human rights violations in globalised supply chains tends to be low for companies which essentially have their business operations in countries with a reliable statutory and regulatory framework. National action plans are in place internationally for business and human rights or such plans are being prepared. The aim is to implement the UN Guiding Principles on Business and Human Rights supported by the United Nations. In December 2016, an appropriate action plan was adopted by the Federal Cabinet and it is currently being implemented. The Modern Slavery Act in the United Kingdom requires us to do every possible to prevent modern slavery occurring.

Together with our products, we are part of additional complex supply chains. Our customers also demand corresponding standards in their supplier relationships and pass them on to us. This process gradually develops sustainable supply chains which are supported by sector-specific or sector-overarching assessments by third-party providers. Successful participation in assessments like this has meanwhile become a prerequisite for obtaining orders in an array of different sectors.

We have implemented management and controlling systems to meet these challenges. They ensure maximum compliance with statutory legislation and safeguard the standards that we expect from our suppliers. Nevertheless, the challenges we have described mean we are ultimately unable to fully guarantee that all the potential negative impacts can be completely excluded by our efforts. We are therefore continuously working on improvements and cooperating with other companies and organisations in order to address the challenges.

Organisation and management

Code of Conduct as a constituent element of all contractual relationships

The production of goods and the provision of services in our supply chains should take place under comparable conditions to those prevailing in our own company. We expect partners in a business relationship with RWE to accept the principles of our Code of Conduct as a basis for cooperation. This is implemented by incorporating the principles for behaviour included in the RWE Code of Conduct into the contractual relationships. Our principles for behaviour address issues including human rights, labour standards, the environment, anti-corruption, and money laundering.

The procurement conditions are managed centrally by Group Procurement. innogy has its own procurement department which operates in accordance with comparable standards. Group Procurement is assigned organisationally to RWE Power AG and reports to its Chief Financial Officer. The platform for procurement activities is provided by our Group

Procurement Guideline. This defines uniform principles applicable throughout the Group for carrying out procurement. The compliance rules and principles have to be applied and maintained for all procurement transactions alongside the RWE Code of Conduct. We review business relationships with business partners if it becomes known in the public domain that they have breached the principles of the UN Global Compact. We then take appropriate measures that we consider necessary and put them into action. For example, when deploying employees from subcontractors it is important to observe the aspects of labour law pertaining in the individual country of deployment. A risk assessment for specific product groups is used as a basis for the regulations to be observed by suppliers and they are explicitly agreed in separate contractual clauses.

Supplier management is a key building block within the strategic procurement process for Group-wide procurement. One of the objectives of supplier management is to safeguard and improve the supplier service and to identify and manage supplier risks. If there are any problems in relation to the business relationship we involve our suppliers and work together with them to generate improvements. For example, we have implemented an escalation process for incidents in the area of occupational safety in order to develop suppliers. Suppliers can also be quarantined if there is a repeat and depending on the severity of the incident.

Review of trading partners on the wholesale markets

Key elements of our value chain are the procurement of hard coal, gas and biomass, as well as trading in combustion fuels. Raw materials are traded as standardised products with defined quality attributes on international wholesale markets. These markets are the most important source of procurement. Raw materials traded in these markets often change ownership several times after they have been first offered for sale by the producers. Generally, it is only possible for us to identify the immediate upstream owner, while the precise geographical origin of the raw material is not known. There are therefore only direct supplier relationships to a limited extent between RWE and the producers. This means we are only able to exert indirect influence on the production conditions.

Before we enter into any business relationships in the wholesale market, we review all potential trading partners. The review takes place in a standardised and multistage process. We use international databases and information systems in order to see whether there is any potential misconduct. All our trading partners are checked in this way. Since 2014,

we have also had access to the information garnered in the Bettercoal Initiative for the procurement of hard coal.

Promotion of standards in the hard-coal supply chain

In view of the fact that direct supplier relationships are generally lacking, collaborations with other energy companies are absolutely essential. These allow us to exert more pressure in order to meet the requirements for sustainable production and transport conditions. In 2012, we therefore joined forces with other large purchasers of hard coal to launch the Bettercoal Initiative. Bettercoal developed a globally recognised standard for production of hard coal and uses it as a basis for audits. The aim of Bettercoal is to bring about improvements in all the important production countries through cooperation with maximally all local producers. A further objective is to leverage coal production environmental and social standards at acceptable standards throughout the world.

Procurement of certified biomass

Alongside fossil energy sources, RWE will again be refocusing on biomass as a combustion fuel in future. One such fuel relates to wood pellets for use in dedicated biomass power plants. RWE also uses biomass for co-firing plants as a substitute fuel for hard coal. Environmental and socially ethical extraction and production methods also have to be guaranteed in this area in order to establish biomass as a sustainable alternative to fossil fuels. Appropriate rules and regulations are enshrined in the relevant national legislation and these must be complied with. In the Netherlands, these requirements have been defined in law since January 2018. Uniform rules and regulations may follow throughout the EU in future.

Certificates guarantee compliance with sustainability aspects along the entire supply chain for the wood pellets imported by us. We use the new industrial standard of the Sustainable Biomass Programme (SBP) and the existing Green Gold Label (GGL) for all wood pellets procured or traded. We are also Chain-of-Custody certified and pass on certificates that are provided by the Forest Stewardship Council (FSC) and by the Programme for the Endorsement of Forest Certification (PEFC).

A large proportion of the solid biomass used by RWE Generation in future will be wood pellets. These are primarily sourced by RWE Supply & Trading GmbH from international sources. The remaining quantity may be local biomass from the Netherlands.

Measures and performance measurement Code of Conduct as a constituent element of all contractual relations

More than 6,000 suppliers are registered in our supplier portfolio for the procurement in the framework of business and plant operation. Some 260 of these suppliers are strategically relevant. We use an initial appraisal of potential suppliers based on a self-assessment to gather information on matters including environmental protection, occupational safety and compliance. We are in regular and close communication with strategically relevant suppliers.

Our Code of Conduct and hence the principles of the UN Global Compact are explicit constituent elements of individual contracts in direct business relationships.

All the business partners accredited for our trade were reviewed for compliance with our Code of Conduct before engaging in business relationships. In line with the Code, the individual trading processes are based on standard contracts usual in the market.

During the year under review, Group Procurement purchased goods, services and plant components with a volume of around €1.9 billion (2016: €2.0 billion). In 2017, the procurement volume for fuels was some €6.8 billion (2016: €7.6 billion). We regularly monitor the proportion of the purchase volume in which the requirements of our Code of Conduct are a constituent element of the contractual relationship. During the year under review, the corresponding level of coverage was 100%.

Promotion of standards in the hard-coal supply chain

Bettercoal uses a central database to provide its member companies with information about coal producers who have taken part in the Bettercoal improvement process. A binding improvement process follows a self-assessment and an audit. This process focuses on the potentials for improvement that have been identified. Implementation is tracked through repeat audits. The names of the producers which stated their readiness to participate in the Bettercoal improvement process are regularly published on the Bettercoal website. The Bettercoal database holds information from the key potential supply countries for Europe.

Bettercoal pursues a country-based approach with the objective of including the overwhelming majority of producers in the improvement process in the individual countries. Focus

Hard coal by supply countries

Proportion in %	2017	2016
Germany	16.2	19.0
United Kingdom	5.5	15.7
Colombia	8.6	16.8
Poland	0.4	0.8
Russia	44.2	31.0
South Africa	7.5	3.9
USA	13.8	11.2
Other	3.8	1.6

countries are currently Colombia, South Africa and Russia. The objective appears to be attainable for Colombia in 2018.

Representatives of RWE additionally meet up with representatives of coal producers independently of concrete supply relationships and critical civil society in order to identify additional initiatives for generating positive development. For example, at the initiative of the Dutch government, a delegation from South Africa visited the RWE opencast mining facility in the Rhineland mining region in November. A Colombian delegation met energy utilities and representatives of civil society in Germany and the Netherlands. Regular discussions and reporting were continued in the Netherlands on imported hard coal. Talks between business and the local community also took place in response to individual studies in Germany.

Procurement of certified biomass

RWE has collaborated with other energy utilities, pellet suppliers and certification organisations in working out a practical test initiated by the Dutch Sustainability Protocol for Biomass. The latest version of the test protocol was published in the middle of 2017.

In 2017, all the biomass traded by our trading house RWE Supply & Trading GmbH was provided with Sustainable Biomass Programme certificates or comparable certificates such as GGL, FSC or PEFC. The pellets are certified in accordance with differing standards, but in each case they are produced in compliance with at least one standard.

Declarations on the UK Modern Slavery Act

Our Group companies RWE Supply & Trading GmbH and RWE Generation SE also operate in the United Kingdom. They therefore regularly publish a Declaration of Compliance on their national Internet pages.

GRI 204-1 Proportion of spending on local suppliers

In order to promote competition, all capital expenditure projects and procurement procedures are offered in tender documents with appropriately neutral formulations and placed internationally in the market. If local suppliers are competitive due to their local proximity or for other reasons,

they are commissioned. In 2017, the proportion of local suppliers in the order volume was approximately 27.5%. The value in use analysis undergone by our suppliers focuses particularly on criteria of sustainability and occupational safety, and energy efficiency and environmental standards.

GRI 205 ANTI-CORRUPTION

GRI 103 Management Approach (including 103-1, 103-2, 103-3)



Challenges

Compliance with the law and legislation is a duty and is part of the corporate culture at RWE. Any breaches of the law mean that the company can suffer major and severe reputational damage as well as causing serious disadvantages for communities, countries and companies. The topic of anti-corruption is a top priority for us in this context. This is because apart from the risk of reputational impairments for the company, corruption can restrict economic growth, compromise equal opportunities and contribute to an increase in poverty. RWE therefore bases all its activities and business decisions on established internal rules for compliance. The company does not tolerate any corruption or other breaches of the regulations. Compliance requirements are also factored in when making decisions about entering into business relationships with suppliers or business partners and in the allocation of donations and sponsorship.

The energy industry is a sector defined by regulatory decisions, continuous change and projects with high order volumes. This also impacts to a greater or lesser extent on the value chain of RWE. The risks of corruption described above can therefore not be excluded in our supply chain. RWE AG has therefore implemented comprehensive systems for avoidance of corruption within the framework of Compliance Management in order to ensure the best possible compliance with statutory legislation. At this point, we will describe the organisation and measures of RWE Compliance Management without innogy. innogy has its own comparable in-house system and reports on this system in the innogy Sustainability Report.

Organisation and management

Prevention of corruption is a particularly important topic for the Compliance Management System. We want to avoid corruption completely in all our processes. Our prevention strategy relies on raising the awareness of our employees and managers within the company.

Management of the Compliance Management System to prevent corruption at RWE AG, RWE Generation SE, RWE Power AG and RWE Supply & Trading GmbH is carried out by the Chief Compliance Officer of RWE AG. The compliance officers inside and outside Germany ensure uniform implementation of compliance principles for prevention of corruption at RWE AG, RWE Generation SE, RWE Power AG and RWE Supply & Trading. innogy SE also has a Compliance Management System and has its own Chief Compliance Officer.

The RWE Code of Conduct forms the platform for our interpretation of compliance. The Code prohibits any form of corruption and is binding on all our employees. The Code of Conduct is given concrete form by other Group guidelines. Organisational regulations such as the double-checking (four eyes) principle, separation of functions, authorisation concept and licensing regulations provide support for compliance with the guidelines. The appropriateness of the underlying internal controlling system is regularly reviewed by the Internal Audit Department.

The Chief Compliance Officer of RWE AG regularly reports to the Executive Board and the Audit Committee of RWE AG on issues relevant to compliance.

Measures and performance measurement

The CEO writes personally to each manager with a request to report on the implementation of the Code of Conduct in their area of responsibility. This management survey is carried out once a year in order to create transparency in relation to compliance with the Code of Conduct and provide an overview of compliance awareness at RWE. Communication measures during the course of the year such as training

sessions, publications on the Intranet and notices support compliance awareness among employees.

The feedback rate for the management survey provides an indicator for compliance awareness at RWE (without innogy). We strive to generate a feedback rate of 100% and this was achieved last year.

GRI 205-1 Operations assessed for risks related to corruption



The identification and assessment of compliance risks takes place in a two-stage process. This process was launched in 2012 with the central determination of the risk profiles for the Group companies. A second step focused on working out detailed corruption risk scenarios. These were discussed and developed within the framework of risk workshops in the individual Group companies. The compliance officers carried out this detailed analysis across the Group and in 2016 the results generated from the Group perspective were aggregated centrally before the spin-off of innogy was completed.

In 2017, implementation of an update/expansion of the risk scenarios was commenced at RWE for the sphere of corruption and the areas of foreign trade/export control and money laundering. This exercise is scheduled for completion in 2018. Similar measures are also planned at innogy for 2018.

We do not explicitly report on the established risks, since these values are subject to specific confidentiality constraints. They are confidential as it is business-relevant information.

GRI 205-2 Communication and training about anti-corruption policies and procedures



Internal media within the Group inform our employees about behaviour that conforms with compliance guidelines and also highlight potential risks if compliance is breached. Our employees also receive compliance training each year on a web-based training programme with a changing focus topic. Participation in the web-based training programme is obligatory for all employees. Employees without any PC access receive instruction from their supervisors. In addition, the employees also take part in attendance training sessions organised by the Compliance Department. These are calibrated according to the risk of corruption associated with

the relevant activity. The Executive Board is also integrated in this training concept. Following the restructuring of the Group, we aligned the training concept for the RWE companies with even greater risk focus. This programme will be rolled out at RWE in 2018.

We do not explicitly report data broken down into employee category since these values are subject to specific confidentiality constraints. They are confidential as it is business-relevant information.

AVAILABILITY AND RELIABILITY

GRI 103 Management Approach (including 103-1, 103-2, 103-3)



Challenges

Secure supply with electricity at all times is one of the most important enablers for the smooth-running operation of our economy. Power plants make a key contribution to this. Conventional power plants powered by uranium, gas, hard coal or lignite are indispensable even with further expansion of renewable energy. This is because the main growth of renewable energy will take place through wind and photovoltaics, but these energy sources are not always available. Conventional power plants are necessary to provide compensation when their feed-ins fluctuate due to weather conditions or time of day. The expansion and integration of renewable energy and decentralised generating units into the overall system is placing increasing demands on the performance of conventional power plants and the distribution grids.

The long-term development of the requirement for conventional generation and secure power-plant output depends on a number of factors including demand-response development, expansion of renewable energy, and expansion of grids, storage facilities and load management.

Our power plants supply electricity and heat to meet the demand of consumers. At the same time, they help to compensate for the fluctuations in the system and provide the physical equilibrium at all times between feed-in and consumption necessary for a stable electricity supply.

Organisation and management

RWE strives to provide high availability for its power plants particularly at times when their output is urgently required. The availability is controlled by the responsible divisions. The executive boards of RWE Generation SE, RWE Power AG and RWE AG are regularly informed about the availabilities and planned and unplanned shutdowns.

Our aim is to contribute to ensuring that the volatile feed-in from solar and wind power plants can be smoothly integrated in the energy system. We have a broadly-based generating portfolio from gas, hard coal, lignite, nuclear energy

and water available – one of the most flexible and most powerful power plant portfolios in Europe. If – despite all our efforts – a blackout should occur in the electricity grid or in parts of this grid, we also have power generating capacities that are in a position to support reinstatement of the grid system without the need for any external supply of electricity – for example in the Rhenish lignite area, where power plants can be supplied directly from opencast mines with fuels, or with power plants that are able to start using their own energy supply.

Reserves are available if capacity bottlenecks occur in Germany. One of them is the legally-mandated security standby in Germany to which RWE will contribute a total of five lignite-fired units with an output of around 1,500 MW.

The Act on Electricity and Gas Supply provides a binding definition of how a balancing responsible party has to ensure short-term compensation between supply and demand. If there is an imbalance within a balancing zone that can no longer be compensated by the balancing, it may be necessary to make use of control energy. The responsible transmission grid operator tenders for the provision of balancing energy. RWE offers all types of balance outputs from its power plant portfolio and by this contributes to a stable electricity supply.

Alongside stable feed-in of an adequate amount of generating capacity, a powerful electricity grid is necessary to guarantee security of supply. The integration of renewable energy requires expansion of the transmission grid in a north-south direction, as well as newly dimensioned distribution grids and more dynamic load control in order to integrate decentralised renewable generating units. The aim of our subsidiary innogy is to continue keeping grid outage times at a low level in spite of increased technical requirements. The number of minutes per year and customer (SAIDI Index) for which grid outages occur serves as a key performance indicator in the area of security of supply, see ► **Availability and Reliability in the innogy Sustainability Report, page 41.**



Measures and performance measurement

In 2017, RWE was once again able to rely on a broadly-based generation portfolio. This provided a robust mainstay in the German electricity system for covering electricity demand and provision of secure generating capacity. Our thermal power plants made an important contribution to compensating for the fluctuating feed-in from wind and photovoltaic systems by provision of the necessary system services.

For example, the entire capacity of Rhenish lignite-fired power plants can be reduced to less than half its value (to around 4,300 MW) or, by the same token, fired up to full capacity within the space of half an hour. This means that our lignite-fired power plants are now comparable with combined-cycle gas turbine (CCGT) power plants operated with natural gas. In special situations, the capacity of the lignite-fired power plants in the Rhineland mining area can be reduced to 20 percent of the nominal value. It is therefore obvious that lignite is able to provide the necessary capacity to meet requirements of time and need.

On 1 October 2017, we transferred units P & Q of the lignite-fired power plant Frimmersdorf to legally-mandated security standby. This reserve now comprises more than 1 GW of power-plant output to which RWE contributes more than half.

Owing to improved market conditions, a decision was taken in November to bring back into service the still operational steam section of the power-plant unit Gersteinwerk G and

the two topping-gas turbines of the Weisweiler power plant (VGT) and continue operating them for the time being. Reactivation of these generating units provides additional output of 355 MW (Gersteinwerk G) and two times 190 MW (VGT Weisweiler) and hence makes a contribution to security of supply. The high electricity prices on the spot market has meant that it proved possible to deploy all three units again for the first time at the end of 2017.

In 2017, RWE realised a battery storage project with lithium-ion technology at the Herdecke site. The battery storage with three times 2,600 kVA is initially being used for the provision of primary balancing energy. RWE participated in the Quirinus research project aimed at integrating renewable energy into the existing distribution grid. The objective is to secure coordinated feed-in of renewable energy into the distribution grid level supported by "Demand Side Management" of large consumers.

For information on our capacities and our generation see also ► **RWE Annual Report 2017, page 42**. RWE also publishes comprehensive and timely data online about electricity generation in its power plant portfolio at ► www.rwetransparent.com and at www.eex-transparency.com.

For information on grid stability and the System Average Interruption Duration Index (SAIDI) see the ► **innogy Sustainability Report, page 41**.



ENERGY EFFICIENT PRODUCTS AND SERVICES

GRI 103 Management Approach (including 103-1, 103-2, 103-3)



Challenges

The reduction of existing obstacles and the exploitation of additional potential for efficiency and flexibility on the demand side in the energy market is a topic that is the subject of increasingly intensive debate at European and national level. It is becoming the success factor in the energy transition. The intelligent networking of consumers to achieve this aim is gaining increasing importance in this debate. The need for flexibility on the demand side increases with the rising volatility of generation in the market. This is particularly the case in the context of expanding renewable energy. These flexibilities need to be intelligently networked and controlled. A prerequisite for this is identifying consumers in the market who are prepared to adjust their consumption behaviour. In order to achieve this control, they need to structure their energy consumption accordingly, for example by proactively switching off, throttling back or switching on their production machines. We are able to give our customers technical support for this control. The appropriate demand for electricity is taken out of the market in bottleneck situations or as necessary made available to the market in the form of an additional generation offering. When prices are high on the balancing energy market, it may be worthwhile for our customers to market their flexibilities. We therefore help to optimise the electricity costs and performance requirement of the customer. The market for flexibility is a key subject area for RWE. There is potential for growth here, particularly with industrial customers.

Organisation, management and performance measurement

Marketing of flexibilities

RWE Supply & Trading GmbH has a broad product range which can leverage potential flexibilities with industrial and commercial customers in the context of the energy transi-

tion. It offers our industrial customers and distributors price-signal supported load management. This means that a time shift in consumption loads to more favourable market-price phases enables costs for sourcing electricity to be reduced. The model is ideal in particular for companies using equipment and systems with flexible time and power capability in their production processes where the requirement for electricity can be shifted within a day or a week.

Our Flex2Market Model – another example – is ideal for companies which have production flexibilities or emergency power units such as those that are gaining greater importance in computer centres, and which would like to make optimum use of these opportunities. For this purpose, we control and market these flexibilities on the Intra-Day Market or as standard energy in the secondary and minute reserve market. RWE Supply & Trading GmbH also offers an electronic trading platform and automatic trading mechanisms. These are intended for industrial customers and distributors who want to procure part of their energy requirement on the exchange with precise requirements for the day or hour. Furthermore, as a service for our customers, RWE Supply & Trading GmbH takes over direct marketing of power generation from renewable energy that are subsidised under the Renewable Energies Act (EEG).

innogy SE also offers its customers energy-efficient products and services. For these see ► **GRI 302 in the innogy Sustainability Report, page 49**. Furthermore, innogy SE offers products to help retail and commercial customers make energy savings as well as service packages for the management of photovoltaic systems and wind turbines. For more information on this see ► **GRI 302-5 in the innogy Sustainability Report, page 51**.



RESEARCH AND DEVELOPMENT

GRI 103 Management Approach (including 103-1, 103-2, 103-3)

Challenges

RWE is continuously driving forward innovations so that the Group is able to contribute to shaping the energy system of the future. We want to be involved in shaping the transformation to a more climate-friendly electricity supply. Our objective is also to assist in continuing to meet the need for energy reliably, without any outages and at affordable prices. The only effective approach to realising our ambition is generating a continuous stream of innovations that address the challenges of our core business and are directed towards achieving the best possible solutions for the energy system of the future. If there is a lack of innovative capability, there is a risk that it may no longer be possible to secure the profitability of the company to the same extent in the future.

Organisation, management and performance measurement

Continuous research and development

We are working in different research and development programmes, primarily on technology and plant concepts that are directed towards advanced and sustainable application. Here we draw on the competences of our employees and on the expertise offered by our partners at universities, research institutions and industry. A top priority in this area is also promoting the ideas of our employees to achieve this ambition. Our research and development projects are engaged in a wide range of research fields and we are continually registering new patents. In 2017, 550 employees worked full-time or part-time on more than 320 R&D projects and filed applications for patents on 76 inventions. RWE also invests in a Group-wide network of experts who analyse existing fields of technology on a continuous basis, and identify and evaluate new developments.

Increasing flexibility and efficiency at conventional plants

In order to further increase the flexibility of our power plants, we are running a number of research projects to test new materials and procedures for identification and forecasting of material behaviours under changing loads. This will enable us to facilitate even more frequent and faster load changes, more frequent and faster start-ups and shut-downs, and a lower minimum load than today.

Furthermore, we see emission reduction and protection of resources as an ongoing challenge directed towards making our plants even more climate friendly. Examples of this are approaches for efficiency enhancement and advanced development of flue-gas desulphurisation, development of measures for reducing mercury and nitrogen oxide emissions, and the advancement of techniques for capture and use of CO₂. At our Innovation Centre in Niederaußem, we are piloting one of the most efficient CO₂ scrubbers in the world and cooperating with numerous national and international partners in the development of opportunities for using CO₂. For example, over the next three years we will be setting up a pilot system in Niederaußem within the framework of the EU project ALIGN-CCUS for manufacturing less carbon-intensive fuels from CO₂ and hydrogen generated by electrolysis. Other pilot plants are intended to manufacture basic chemicals for the chemicals industry from the same starting materials in the projects OCEAN and LOTER.CO₂M.

Facilitating use of lignite as a material

The utilisation capacity of the lignite-fired power plants will decrease over the medium term as renewable energy expand. This offers the opportunity of using lignite, Germany's most abundant domestic natural resource by volume, for the production of energy sources or basic chemicals. Lignite is ideal for so-called material use because it contains carbon and hydrogen. This means it can be used for the production of basic materials for the manufacture of plastics, paints, adhesives, fuels and numerous other chemical products.



Details on research and development at innogy SE in the ► **innogy Sustainability Report, page 45.**

SHUTDOWN AND DECOMMISSIONING OF POWER PLANTS AND REINSTATEMENT OF OPENCAST MINES

GRI 103 Management Approach (including 103-1, 103-2, 103-3)



Challenges

By 31 December 2022, the last nuclear power plants will have been shut down in Germany. In addition, instruments have been introduced and measures have been adopted to meet CO₂ targets at national level, for details see ► **GRI 305, page 55**. These will impact on our thermal, non-nuclear power plant portfolio. The parties in the new Dutch Government have also stated in their coalition contract that generation of electricity from hard coal should come to an end in the Netherlands by 2030. However, the implementation has not yet been defined. The United Kingdom has also defined an exit from hard-coal power generation by 2025 but the tool has not yet been agreed here either. The decision on legally-mandated security standby has already been taken in Germany. By October 2019, 2.7 GW of lignite-fired power plants in Germany will be transferred to this reserve. Each of these units will be finally shut down four years later, see ► **Availability and Reliability, page 41**. Furthermore, a decline in the amount of electricity generated from coal was announced in the Climate Protection Plan 2050. However, this statement was given without the trajectory so far being anchored in any concrete measures and no dates were specified.

In its coalition agreement, the new German Federal Government has stated that a "Growth, Structural Change and Employment" Commission should be set up. This commission will be tasked with drawing up an action programme by the end of 2018 including additional climate protection measures geared to the emission reduction targets for 2020 and 2030, and a plan for phased reduction and ending of generating electricity from coal in Germany. In 2019, the coalition partners want to pass a law that guarantees attainment of the climate protection targets.

Whether a power plant can be operated profitably in this environment primarily depends on developments in the electricity and fuel markets. Falling electricity margins caused by decreasing electricity prices or increasing fuel and CO₂ prices will exert a negative impact and this may lead to decisions to shut down plants.

Appropriate levels of provision are being set aside for the shutdown and decommissioning of nuclear power plants and the recultivation of opencast mining sites and measures for the water management.

The follow-on costs of phasing out lignite mining in the Rhineland lignite mining area and securing these sites by RWE Power AG was the subject of continual public discussion and this debate was at times acrimonious. The main focus was on the issue of whether the measures for the necessary reinstatement of use were completely recorded by RWE and whether the quantities and costs are being correctly calculated.

Organisation and management

Power plants can be shut down on the one hand for economic or technical reasons. Preparations for decisions on shutdown are managed by the generation divisions. On the other hand, power plants are shut down as a result of statutory or other regulations. Whatever the reason, the relevant country-specific regulations are taken into account and the process is supported by the responsible supervisory authorities.

Hence, the intended shutdown of a power plant in Germany must be notified to the responsible regulatory authority, the Federal Network Agency and the transmission grid operator responsible for the system with a lead time of at least one year. The system relevance of the notification must be reviewed by the grid operator and approved by the Federal Network Agency. Whether the affected power plant is to be shut down permanently or only temporarily, for example during the summer months, is not relevant.

After the last unit at a power plant location has been shut down, RWE aims to achieve a subsequent use for the land used at the site. We work together with the local community affected in advance of the final decommissioning of a power plant to develop a concept for follow-on use of the land previously occupied by the power plant. The decommissioning is carried out to meet the requirements of the follow-on use in accordance with the relevant applicable country-specific standards. The costs of the decommissioning are borne entirely by RWE. Provisions for decommissioning of nuclear power plants, recultivation of opencast sites and the water management measures are established in accordance with our statutory obligations. This is coordinated by the appropriate specialist department of the finance division.

Nuclear energy

The remaining lifetime of the German nuclear power plants is defined in the Nuclear Power Act (Atomgesetz, AtG). The age of the RWE nuclear power plants means that they will be decommissioned gradually by year-end 2022. The individual power plants impacted are Gundremmingen Unit B (as at 31 December 2017), Gundremmingen Unit C (as at 31 December 2021) and the Emsland nuclear power plant (as at 31 December 2022).

In 2017, new legislation was introduced in Germany regulating responsibility for disposal of nuclear waste. After payment of a sum amounting to a total of €24.1 billion by the operators of nuclear power plants into a state-managed disposal fund, the state will take responsibility for processing and financing of intermediate storage and a final repository for radioactive waste. The companies will continue to be responsible for shutdown and decommissioning the power plants and the proper packaging of radioactive waste. RWE is forming provisions to meet these obligations. They are very conservative on an international comparison and take into account a high level of precaution against the risks of cost increases. Additions to the provisions are made while the plants are being operated. The provisions encompass the costs of all stages after operations have finished including shutdown, disposal of the fuel rods and disposal of the radioactive waste from operation through to final decommissioning. Companies are required to provide transparency on costs. The details are defined in the Act on Transparency of Costs relating to Shutdown and Decommissioning of Nuclear Power plants and Packaging of Radioactive Wastes. The appropriateness of the level of the nuclear energy provisions was also confirmed by Warth & Klein Grant Thornton in a stress test expert report commissioned by the Federal Ministry for Economic Affairs and Energy in October 2015. On the basis of previous experience, the costs for the post-operational phase and decommissioning of a nuclear power station fluctuate between €500 million and approximately €1 billion. The final figure depends on the size, age and number of operating hours at the plants.

Lignite

RWE has developed a concrete timetable in context to the requirements defined for us in relation to reducing CO₂ specifically with regard to lignite. This timetable takes account of a step-wise reduction in emissions in-line with a long-term and socially acceptable structural change. This timetable envisages a reduction in CO₂ emissions of 15% by 2020, 40-50% by approximately 2030 and 100% by the middle of the century.

As part of the introduction of legally-mandated security standby in Germany, the transfer of eight lignite-fired units to this reserve was contractually agreed. This relates to the RWE power-plant units Frimmersdorf P & Q (transferred on 1 October 2017), Niederaußem E & F (1 October 2018) and Neurath C (1 October 2019). After each power plant has spent four years in the reserve, these units will be finally shut down. The power plants on security standby are no longer permitted to operate actively in the market. However, they are reserved for the scenario that electricity production including all regular security measures (such as redispatch, control energy, interruptible loads, grid reserve and capacity reserve) are unable to meet the demand.

The provisions in lignite mining to enable reinstatement of use for the land occupied for production are a rolling system in key areas. Recultivation projects and measures relating to the water management are largely already carried out while operations continue so that provisions are constantly being used for this purpose. At the same time, new provisions are formed each year to take account of the ongoing decommissioning. The tasks being adopted from lignite extraction cover a timeframe that extends significantly beyond the discontinuation of lignite mining itself. However, they are without question finite.

Existing contracts and licensing documents are used to determine the expected costs underlying the provisions. Comprehensive empirical values from the past are also available. At the planning stage of the mining operations, the responsible regional state authorities are also already intensively involved. The issues being addressed include those relating to geology and the water management. The mining authorities have a rolling programme of iterative reviews in accordance with statutory regulations in order to assess whether there is a need to provide financial security in addition to the provisions available.

Measures and performance measurement

Nuclear energy

On 30 March 2017, the licences pursuant to Article 7 Section 3 of the Atomic Energy Act (Atomgesetz) governing shutdown and decommissioning of units A and B of the Biblis nuclear power plant were granted by the responsible licensing authority, the Hesse Ministry for Environment, Climate Protection, Agriculture and Consumer Protection (HMUKLV). Work was started on 1 June 2017. In an estimated 15 years, it will have proceeded such that the remaining sections of the buildings will no longer come under the scope of the Atomic Energy Act. In parallel, construction of

a temporary storage facility was commenced at the Biblis site for storage of low and intermediate radioactive waste until final storage in a federal repository. This is scheduled for completion by 2018 and will then be operated by the German state's own intermediate storage company BGZ Gesellschaft für Zwischenlagerung mbH from 2020.

We have also submitted an initial application for dismantling parts of the plant for the Gundremmingen B reactor and we expect approval in the first quarter of 2018. The Mülheim-Kärlich nuclear plant was already taken out of operation in 1988. The decommissioning work is now at an advanced stage and demolition of the cooling tower is scheduled for commencement in spring 2018. At the beginning of 2018, Germany's first trial operation of a demolition robot will be carried out on the cooling-tower shell.

Dismantling the large components is particularly important in the timetable for decommissioning nuclear power plants. Orders were therefore issued for dismantling the steam generators and steam converters to specialist industrial companies for the sites at Mülheim-Kärlich, Lingen (KWL) and Biblis. Plans and regulatory licences are now under way and dismantling is commencing in 2018.

We continuously update stakeholders at all the sites about the individual steps of the ongoing procedure following on from the information initiative "KW Biblis transparent" commenced at the beginning of 2015.

The reallocation of responsibility for disposal of nuclear facilities adopted by the Federal Government involved the transfer of responsibilities for intermediate storage and a final repository for radioactive waste to the state, utilisation of provisions held by the nuclear energy companies and setting up a new fund to finance the disposal of nuclear material. The fund was established with a total of €24.1 billion. On 1 July 2017, RWE paid in its share of €6.8 billion. This was made up of a baseline amount including interest and a risk supplement amounting to some 35.5%.

Hard coal

The two units A & B of the coal-fired power plant Voerde were shut down in March 2017. Preparatory works for decommissioning have commenced and in October RWE purchased the land and buildings at the power plant site from STEAG. RWE is talking to the town of Voerde about future options for making use of the land.

Lignite

On 1 October 2017, the first two units were transferred to legally-mandated security standby with Frimmersdorf P & Q. This means that the two units no longer participate in the electricity market and are only available if called up by the grid operator for bottleneck situations. The last two units at the Frimmersdorf site will then be finally shut down on 30 September 2021 after the 4-year standby period as reserve. Against this background, a planning consultation has already been launched there. This involves the surrounding local authorities and the Rhine District of Neuss. The consultation is addressing the future opportunities for usage of the areas. Ultimately, it will involve developing sustainable and structurally effective post-utilisation facilities for the power-plant location.

In order to promote an objective discussion about the follow-on costs for lignite mining in the Rhineland lignite mining area, RWE commissioned an audit by an independent expert to assess the completeness and appropriateness of the mining-related provisions set aside on 31 December 2016 for lignite activities in the Rhineland lignite mining area. RWE handed over the three expert reports prepared by the auditor to the Arnsberg district council as the responsible supervisory authority in June 2017. The council made the reports public in September 2017. The experts come to the conclusion that the methods used by RWE Power in determining the provisions are valid, the quantity estimates and prices have been defined realistically and the mining-related provisions reported on 31 December 2016 are complete and appropriate. The mining-related provisions are reported in the ► **RWE Annual Report 2017 on page 56.**



ENVIRONMENTAL TOPICS

GRI 302 ENERGY

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)



Challenges

Energy is a valuable resource. Inefficient energy consumption leads to unnecessary burdens for the climate, environment and communities throughout the world. It results in unavoidable additional costs for the company. Complying with statutory legislation and licensing regulations therefore enables us to implement cost-efficient measures for environmental protection and energy efficiency. They are based on a conscious and responsible approach to the environment and the use of energy in our office buildings, vehicle fleets, opencast mining facilities, power plants and refinement operations. This is because the European climate protection targets can only be achieved with higher levels of energy efficiency. As producers of electricity and heat, we are able to make a particular contribution to this by making our power plants more efficient. This allows us to reduce CO₂ emissions per unit of electricity or heat produced. At the same time, we are reducing the consumption of resources, the fuel costs and the expenses involved in CO₂ certificates. For details see ► **innogy Sustainability Report, Availability and Reliability, page 40**. We supply innovative products and services with a high level of efficiency so that our customers can also adopt a responsible approach to energy. For details of innogy products see the ► **innogy Sustainability Report GRI 302-5, page 51**.

The European Energy Efficiency Directive (EED) has been enshrined in national law within our key markets in the EU. This legislation requires all large companies to carry out an energy audit or to introduce an Energy Management System in conformity with ISO 50001 or an Environmental Management System in conformity with EMAS.

Organisation, management and performance measurement

Our energy management is part of the integrated management system, see ► **GRI 307, page 63**.

For information on the offerings to our customers see ► **Energy-efficient products and services, page 43**.

Group-wide coverage with energy-efficiency audits or management systems

We already implemented the Energy Efficiency Directive throughout the Group by the required deadline in 2016 with energy audits or a certified energy management system. In 2007, RWE Generation SE and RWE Power AG had already established an Environmental Management System in conformity with ISO 14001 with the aim of bringing about a sustainable improvement in energy efficiency and environmental protection, and reducing the use and consumption of energy at the German operational facilities. In 2013, the Energy Management System was integrated in conformity with ISO 50001. The two systems have so far been successfully recertified. This process was last carried out in 2016. The level of coverage with certified Energy Management Systems amounted to 82% for the RWE Group in 2017.

Increasing the efficiency of conventional power plants

We will achieve a higher level of efficiency in the production of electricity mainly by continuously modernising our conventional power plant portfolio. We are thereby keeping open the option of building the new "BOAplus" (-BoAplus-) lignite-fired power plant at the Niederaußem site. This would have an efficiency of more than 45% more than portfolio plants with the same capacities overall and significantly lower efficiency. It would replace the same capacities of existing power plants with lower efficiency. As a result, the CO₂ emissions would be reduced by 3 million metric tons of CO₂ each year by comparison with the existing plants. In future, we will achieve more efficiency increases through a number of measures including by shutting down older plants, see ► **Shutdown and decommissioning of power plants and reinstatement of mining areas, page 45**. In addition, there is the option of further use of potential sourced from combined heat and power in our plants and the use of heat derived from electricity to cover own requirements.

Already since 2008, we have been monitoring the overall efficiency of energy use from our conventional plants. On the consumer side of the plant, this includes the primary energy use for power generation and the purchase of electricity from outside sources for own use by the plants.

The production side balances this with generated energy, and steam and heat products for our customers. As a result, continuous monitoring using our advanced operating management systems enables us to implement rapid countermeasures as necessary and maximally high utilisation of the primary energy sources used in all operating statuses of

the plants. Furthermore, analysis of the data yields valuable findings for research and development requirements. This continual improvement is being reviewed annually by our external certifier in energy and environmental management audits.

GRI 302-1 Energy consumption within the organisation



Average generation efficiency of thermal power plants by fuel and region

At 41.5% we kept the average efficiency of our power plants stable compared with 2016 (41.5%). Current market conditions can exert a positive and negative influence here on the mode of operation and hence the efficiency of the power plant portfolio. A renewed increase in the use of gas-fired power plants exerted a positive impact during the year

under review, while lower heat production and increased partial load operation exerted a negative impact.

Energy losses during distribution

Distribution grids are operated by our subsidiary company innogy SE, see the ► **innogy Sustainability Report, Availability and Reliability, page 40.**



Energy consumption within the organisation			
	Unit	2017	2016
Primary energy consumption ¹	million GJ	1,362	1,478
Energy consumption of the sites	TWh	9.4	8.2
Energy consumption of the grids	TWh	7.7	8.6

¹ Fossil fuels used, not including biomass.

Efficiency of energy use of thermal power plants ¹			
in %		2017	2016
Germany			
Lignite		36.9	36.6
Hard coal		38.3	38.1
Gas		61.7	62.7
Waste		46.2	44.0
United Kingdom			
Hard coal		39.7	37.0
Gas		55.6	55.9
Netherlands			
Hard coal		45.4	45.4
Gas		61.9	64.0

¹ Power plants in Hungary and Turkey are not included.

GRI 303 WATER

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)



Challenges

Water is essential for life and it is not available in unlimited quantities. In regions with restricted or endangered water supply – for example as a result of the effects of climate change – manufacturing companies are exposed to the risk of production failures. Furthermore, their water consumption may pose a risk to the supply situation for the environment and indeed the local population. And wherever water is available in abundance, the impacts of production may impair the condition of water bodies and sources. This may also exert negative impacts on the environment and society. The water supply in Germany is one of the best in the world. However, we believe that as an industrial operation with a requirement for water at our plants we have an obligation to take a responsible approach to water. Our operations affect water consumption and the use of water when it is withdrawn from the rivers and surface waters. Naturally, there are also impacts when we discharge wastewater into these waters. We comply with the statutory regulations for these activities.

In areas subject to flooding, heavy rainfall and similar events can put smooth-running operation of our plants at risk. We therefore take appropriate measures in order to minimise risks to security of supply and avoiding or minimising costs.

Organisation, management and performance measurement

A top priority for RWE is ensuring that our use of water exerts minimum impact on natural resources when we supply our thermal power plants with cooling water. Keeping our opencast facilities dry by withdrawal of groundwater is an operational necessity and therefore unavoidable. We attempt to make these interventions in a maximally environmentally friendly way.

Minimising risks associated with water

The Executive Board has appointed specialist coordinators for a wide range of environmental topic areas in order to provide specialist support for the local Environmental Protection Officers and to coordinate their activities. They also advise the divisional managers. In addition, these coordinators cover the protection of rivers and surface waters. A record is kept of the interfaces between RWE activities and water that exert or can exert an impact on rivers and surface waters. The type of impact on the water is also determined. This relates primarily to water withdrawal or discharge of water including the use of water in our power plants. We monitor cooling water intensively as a precautionary measure in order to identify significant populations of legionella bacteria at an early stage and as necessary take countermeasures using approved biocides. We record the impacts of environmental aspects for rivers, surface waters and groundwater on the basis of existing licences, limits and expert reports, and the operating results of the previous year. The relevance of the results is evaluated by the internal specialist departments and a group of experts taken from government agencies, associations and specialists. Analysis of the environmental impacts in relation to the potential level of damage and frequency or probability of occurrence facilitates transparent presentation of the evaluation. We assess measures already introduced for minimising risks and avoiding accidents on this basis. If this action is not adequate, other measures are developed and introduced.

For example, the Ministry of Environment, Agriculture, Nature and Consumer Protection of the state of North Rhine-Westphalia manages the monitoring of compliance with targets defined in the lignite plan for Garzweiler in regard to the water management and the environment, and assessing the impacts of the Garzweiler opencast lignite mine. This includes for example conserving groundwater resources, safeguarding the water supply and preserving the wetlands and surface waters.



Anchoring environmental protection in business processes
See ► GRI 307, page 63.



Group-wide coverage by environmental management
See ► GRI 307, page 64.



Compliance with licensing regulations
See ► GRI 307, page 63.

Protection of rivers and surface waters

We want to contribute to preserving water as a habitat and to maintaining the biotopes dependent on it. Our objective is to avoid negative consequences arising from our interventions in surface waters and ecosystems or – where this is not viable – to minimise such impacts as far as possible. We mitigate unavoidable negative consequences to the maximum extent feasible. We also provide the best possible protection against adverse impacts for aquatic habitats and other ecosystems linked with such habitats. This objective is assisted by discharging water into the groundwater and into rivers and surface waters in a structured process. The statutory limits defined by the authorities are complied with in

discharge. Furthermore, we avoid environmental impacts owing to the use of methods such as recirculation into the power plants, intensification of usage for pumped water from opencast mines, the use of collected rainwater and the reuse of process water.

Protection against flooding

All operating plants are protected against flooding in conformity with statutory regulations. Heavy rainfall in opencast mines can be managed without major damage since water retention systems have been designed to cope with corresponding levels of precipitation.

GRI 303-1 Water withdrawal by source



Water withdrawal by source		
in million m ³	2017	2016
Water		
Cooling water consumption net ¹	259.3	264.5
Water consumption net	262.4	267.7
Water withdrawal		
Groundwater	603	623
Surface water	1,607	1,447
Seawater/brackish water	3,191	4,170
Drinking water	3.1	3.2
Other sources	33.3	31.0
Total water withdrawal	5,435	6,270

¹ Difference between power plant water withdrawals and returns to rivers and other surface waters; excluding power plants with sea cooling

GRI 304 BIODIVERSITY

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)



Challenges

The protection of species and the preservation of habitats is one of the biggest global challenges of the present day. The negative impacts entailed by the extinction of species on humans and nature are immense. This rapid and radical loss of species by displacement and destruction of the habitats they require for existence is caused and accelerated not least by industrial companies. Our activities also result in direct and indirect interventions in ecosystems. Wherever feasible, we therefore avoid or minimise these impacts. This enables us to reduce the shortage of natural resources. As far as possible, we take appropriate nature conservation measures to mitigate unavoidable or irreversible negative consequences. This exerts impacts on our opencast mines, the maintenance of our transmission lines, and the construction and operation of plants for generating renewable energy. At the same time, we also deploy strategic measures to promote species, mainly within the framework of recultivation activities. For more information on biodiversity in the divisions of Renewable Energies and Grid & Infrastructure see ► **innogy Sustainability Report, page 53.**

and to deal with the form of intervention. A concrete survey of the species is carried out using specialist mapping in advance of each intervention or an evidence-based potential analysis is implemented. Concrete species protection measures are then derived from this data. At the same time, special evaluation methods are used to carry out an ecological evaluation of the habitats before and after the intervention. This work yields a mitigation claim based on landscape and environmental parameters and functionally appropriate measures are developed. We also promote biodiversity in the course of reinstating opencast mines by designing and promoting special and diverse habitats and by maintaining them. Likewise, we contribute to this by installing fish ladders at our run-of-river power plants and use technical measures to protect the aquatic animal world at offshore wind farms. These measures contribute to the preservation of species in these habitats. When procuring our biomass, we ensure that it comes from sustainable sources, see ► **GRI 204, page 36.**

Organisation, management and performance measurement

Protecting Biodiversity

Compliance with regulations governing biodiversity is also a prerequisite for meeting the licensing regulations covering our business. The regulations governing biodiversity are defined for our opencast mines in a number of sources including the special operational plans for species protection approved by the mining authorities. We meet these regulations using internal controlling systems and exceed the requirements with more extensive measures. Since 2015, RWE has had a Biodiversity Policy. This guideline establishes the approach of RWE to the protection and promotion of biodiversity as the company carries out its business activities. Biodiversity is also an area covered by environmental management, see ► **GRI 307, page 63.** Our measures are very diverse within this framework. We protect species diversity strategically if natural habitats are disturbed by our activities. The same approach continues as we reinstate substitute habitats or facilitate the repopulation of existing habitats. We also promote biodiversity by rehabilitating mining sites to make them suitable for reuse. The specific protection measures are designed individually to match the requirements of the affected species and types of habitat,

Reinstating habitats

We compensate the use of land for our opencast mining by recultivating the extraction sites. This approach enables us to return rehabilitated areas of land to agriculture and other uses while also creating space for nature conservation where we can strategically foster biological diversity. The objective of recultivation is to reinstate the development potential of the landscape while taking account of the typical conditions of the surrounding environment. Development of Reforestation is a key building block for creating agricultural land. However, structuring new habitats for nature conservation and protecting species is an important element of recultivation. RWE has established a reputation with its approach on recultivation: A diverse landscape made up of forest, extensive lakes, ponds, wetland biotopes, meadows and flower strips, as well as special biotopes exceptionally rich in species came into being at the former extraction sites in the Rhineland lignite mining areas. They offer new habitats to numerous endangered animal and plant species. For information on the effects of recultivation on local communities see ► **GRI 413, page 75.**

The quality of reinstatement of opencast mines is continually being enhanced. A total area of more than 22,000 ha has been recultivated in the Rhineland mining area. Over 8,000 ha of this has been returned to woodlands, forests

and green corridors, and more than 12,000 ha are being used for agricultural purposes. Recultivation in the Rhine-land lignite mining area also encompasses highly diverse and species-rich habitats. Special biotopes make a particularly important contribution here. They are deliberately created on account of their extreme and rare site conditions and they can be regarded as “hot spots” of species diversity. They include habitats with extremely low-nutrient, dry or moist living conditions. As a result of many years of research into recultivation, more than 3,000 animal species and around 1,300 plant species have been identified over the entire recultivation process. Many of these recorded species are very rare and classified as “endangered” or “under threat from extinction” according to the Red Lists in North Rhine-Westphalia.

One example of our species protection measures is provided by the region around the Hambach opencast mining area. The flora and fauna habitat of Steinheide/Lörsfelder Busch/Dickbusch subject to special protection is located in the immediate vicinity of the Hambach opencast mine. The

objective of the recultivation in the wake of lignite opencast mining is to preserve areas of forest and to manage them in accordance with a natural approach.

Deforestation of the Hambach forest for the planned development of the Hambach opencast mine is regrettably unavoidable. The corollary is recultivation defined primarily by reforestation on the Sophienhöhe hill. This has already been in existence for many decades after opencast mining finished at the Hambach mine and around 1,500 ha of forest have already been planted. Furthermore, a total of 1,500 hectares of species protection measures will also be implemented outside the opencast mine for the species living in the wood.

As at many other locations, we also safeguard the habitat for plants and animals in the Inde water meadows, Lake Kasterer and in the Elsbach Valley by recultivation and we have additionally transformed these areas into popular leisure amenities. Today, animal and plant species under threat have a new home there.

GRI 304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

Nature conservation areas are designated on the basis of the German Federal Nature Conservation Act (BNatSchG) and they are the responsibility of various authorities. In the administrative district of Cologne, these areas are managed by the district government as a higher nature conservation authority provided that the areas have not already been designated as the responsibility of the regional districts or municipal city authorities. RWE Power AG and RWE Generation SE are owners or leaseholders of parcels of land throughout Germany. The actual number of these parcels of land and the number of designated conservation areas around our locations is undergoing continuous change. For example, conservation areas are currently located alongside the operating area of our Hambach opencast mine. They

cover an area of some 1,620 hectares. These are distributed over approximately 66 ha of nature conservation area, approximately 1,554 ha of landscape protection area and some 0.56 ha of protected landscape elements. The largest contiguous land area is the recultivated Sophienhöhe Forest covering an area of 1,500 ha. This is located on the overburden dump of the Hambach opencast mine.

Continuous updating for all our parcels of land would take a disproportionately high input of resources. Furthermore, it is by no means certain that the digital data required from the authorities for such an updating process would be sufficiently up to date to provide an accurate determination.

GRI 304-2 Significant impacts of activities, products, and services on biodiversity

The operation of nuclear and conventional power plants and plants for generating electricity from renewable energy and for the production of lignite inevitably result in our impacting on natural ecosystems. Harmful substances are released during the generation of electricity and heat at our power plants or the operation of our opencast mines, and they

could lead to negative impacts on the environment and biodiversity. We are therefore committed to maintaining the purity of air and water and to conserving natural ecosystems. We compensate the use of land for our opencast mining activities by recultivating the extraction sites. For recultivation of opencast mining areas see ►GRI 304, page 52.



The expansion of the grid and the building and operation of plants for generating renewable energy also exert impacts

on biodiversity. For more information on this see ► **innogy Sustainability Report GRI 304, page 53.**



Biodiversity of habitats protected or restored

In 2016, five landscape protection areas located in the Rhine-Erft district were designated under the legislation. They cover the recultivated areas of the former Bergheim, Fortuna and Frimmersdorf opencast mines. These areas were placed under protection in order to preserve, develop and reinstate the efficiency and function of the balance of nature, including protection of biotopes and habitats of certain species of wild animals and plants. The evaluation criteria included diversity, characteristic features and beauty, as well as the special significance of the cultural history of the landscape and its particular significance as a recreational amenity. This conservation success is also due to the quality of our recultivation.

The new conservation zones cover an area of around 3,398 ha. The age of the designated areas of opencast mine mean that we are not aware of any listings as conservation zones originating from before the period of opencast mining activities. The renaturalised post-mining landscape of today is in fact structurally more diverse than was the case before

its use as a mining site. Alongside the quality of our recultivation, this diversity also contributed to the designation of conservation areas.

Ecological comparative analyses provide evidence that bio-coenoses in recultivation have at least an equivalent diversity of species to those in high-value reference habitats located in other areas of North Rhine-Westphalia. The numbers of species in recultivation are frequently above the numbers before opencast mining took place. This applies in particular to mining districts in overwhelmingly agricultural areas. One reason for this large diversity of species is the very diverse habitats and microstructures that are created in the course of agricultural and forestry recultivation, as well as the comparatively low level of fertilisation at the new sites. The biodiversity footprint for recultivation shows that designing a new landscape also provides big opportunities to upgrade the ecological characteristics that extend far beyond the scope of "proper reinstatement of use".

GRI 305 EMISSIONS

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)



Challenges

Greenhouse gas emissions

The electricity and heat generation from the power plant portfolio of RWE is defined by a number of parameters including the use of the fuels lignite, hard coal, gas, uranium and biomass. The use of these fuels with the exception of uranium is connected with the emission of greenhouse gases. The objective is to reduce these emissions to achieve a sustainable alignment of our business model and as a contribution to limiting the consequences of climate change. Our corresponding corporate decisions in this area are significantly influenced and defined by the regulatory and legislative framework.

In December 2015, virtually all the countries in the world joined together in the Paris Climate Agreement (COP 21) to make a commitment to limiting the global rise in temperature to significantly below 2 degrees Celsius compared with the pre-industrial level. The countries made national reduction commitments to achieve this aim. The objective of the European Union is to reduce the emission of greenhouse gases by at least 40% by 2030 compared with the baseline year of 1990. The European Emissions Trading Scheme (EU-ETS) provides the central controlling instrument for this purpose. The system defines an upper limit for emissions that falls each year for individual sectors of the economy such as the energy industry and energy-intensive industries. The tightening of the ETS necessary to achieve the reduction target for 2030 was virtually completed in 2017 and is coming into force as a directive in the first half of 2018. The amount of CO₂ certificates issued is scheduled to fall by 2.2% each year rather than 1.7% from 2021 to 2030. Other measures are supposed to contribute to reducing the current certificate surpluses in the market. In parallel with ETS reform, discussions about the proposals of the EU Commission to achieve the greenhouse gas reduction target for 2030 in the sectors outside emissions trading known as the Effort Sharing Decision will be continued. Overall, greenhouse gas emissions in the non-ETS sectors are projected to fall by 30% by 2030 compared with 2005.

The Netherlands wants to achieve a 49% reduction in their greenhouse gas emissions by 2030. Details of this are to be defined in a new national climate and energy agreement by the end of 2018. Germany would like to achieve a reduction

of at least 40% in its greenhouse gas emissions by as early as 2020. The aim is to have a reduction in these emissions of at least 55% by 2030. The emission reduction in the UK envisages a fall of 34% by 2020 and 57% by 2030, in each case by comparison with 1990.

Alongside the national target, sector-specific reduction targets were also defined in the Climate Protection Plan 2050 in Germany. This includes targets for the energy sector. Achievement of these targets presents particular challenges for electricity generation. This is because the exit from nuclear energy also has to be completed by the end of 2022. This decision was only taken after the national climate protection targets were defined.

Other countries in which we operate have partly defined their own targets – Turkey, for example, has made a voluntary commitment under the Paris Climate Agreement – or countries restrict themselves to the use of EU ETS, for example Hungary.

Investors include the topic of climate protection in their assessment of companies. In their procurement processes, our customers too are increasingly taking into account the sustainability and carbon intensity of the electricity we generate. NGOs and initiatives are continuously stepping up their efforts to promote short-term shutdown of older coal-fired power plants in order to achieve climate targets, both against the background of greenhouse-gas and against that of other emissions.

Central importance for innogy relates less to direct CO₂ emissions and more to the upstream and downstream value chain.

Other emissions

Apart from the emission of greenhouse gases, the electricity and heat generation from the power plant portfolio of RWE also causes other emissions into the air and water bodies. Compliance with limits defined under licensing regulations is necessary for sustainable alignment of our business model. Our corporate decisions are therefore strongly defined by the regulatory and legislative framework that undergoes continuous development.

In addition to CO₂, emissions produced during electricity and heat production in conventional production units include sulphur dioxide (SO₂), nitrogen oxides (NO_x) and dust. Dust and fine-dust emissions are also produced in the course of operating our opencast mining facilities and these can be a burden on the surrounding areas. These materials reduce the quality of the air breathed in and exert a deleterious effect on health. We use air purification measures to avoid risks in these areas.



Noise emissions are of key importance for innogy SE. For more information on this area see in the ► **innogy Sustainability Report GRI 305, page 56 ff.**

Organisation and management

RWE strives to reduce the greenhouse gas emissions produced in the course of electricity production in harmony with the existing and developing European and national climate protection targets and in accordance with the defining regulatory framework, the European Emissions Trading Scheme and the legally-mandated security standby in Germany. In this connection, decisions on shutting down power plants should also be taken into account alongside the increased use of biomass in the Netherlands.

We have defined our target as reducing our CO₂ emissions from electricity generation in Germany, the Netherlands and the UK by 40% to 50% by 2030 in comparison with 2015. This is equivalent to 55 – 65 million mt of CO₂. In concrete terms, we are looking to reduce CO₂ emissions produced as a result of generating electricity from lignite. By 2020, the emissions will fall by approximately 15% as a result of transferring power plants to security standby. Emissions will continue to fall up to 2030 owing to the decline in the number of operational hours in the wake of expanding renewable energy, efficiency enhancements, additional modernisation of our power plant portfolio and by discontinuation of the Inden opencast mine and the associated shutdown of the Weisweiler lignite-fired power plant. The resultant fall of emissions be between 40% and 50%. By the middle of the century, generation of electricity from lignite will finally be discontinued and the associated emissions will cease entirely.

Our fossil-fuel power plants are subject to the European Emissions Trading Scheme (EU-ETS). Reporting on CO₂ emissions from these power plants is made to the national emissions trading offices and these in turn report to the

responsible EU authorities. Rights and obligations of the emitters are regulated in detail at the level of the member states so that additional corporate regulatory standards are obsolete. The European Emissions Trading Directive is one of the regulations applicable for this area at European level. The relevant national regulations based on this directive are applicable in Germany, the Netherlands and the UK.

The CO₂ data relevant for reporting are collected and calculated in the opencast mines and at the relevant power-plant locations. They are then collected and processed in the central departments for licences and environmental protection. The Group Management is integrated in the course of reporting for the audit of the annual financial statements.

The emissions generated by RWE are determined in operational terms by the use of our power plants in association with development in the energy markets. The prices for fuels and CO₂ certificates determine the costs at which power plants are able to offer the electricity they produce on the wholesale market. When and which power plants are used depends on the demand for electricity. More expensive power plants are correspondingly only deployed when there is high demand in the electricity market and they emit correspondingly lower levels of greenhouse gases and other pollutants owing to the lower number of operating hours. In 2017, the favourable fuel prices meant that lignite-fired power plants were used for the most operating hours ahead of hard-coal and gas-fired power plants and after nuclear power plants. The additional expansion of renewable energy, which have priority feed-in in Germany, for example, means that the operational hours and the associated emissions for all coal-fired power plants are continuously declining.

Climate protection and climate protection measures constitute a key element of our corporate strategy. In this connection, the coordination of decision-making and preparing the groundwork for decisions are in the hands of Group Strategy, which integrates all the relevant divisions and reports to the Executive Board of RWE AG.

We also use appropriate risk management to safeguard the financial risks that are associated with emissions trading. Risks are reduced by concluding appropriate hedging transactions. We also sell most of the electricity generated by our power plants in forward transactions and hedge the prices for the fuels and emission allowances required.

Establishing environmental protection in business processes

A responsible approach to natural resources and promotion of the use of environmental technologies is one of the principles governing conduct at RWE and this principle is enshrined in the RWE Code of Conduct. In 2017, the provisions of the RWE Code of Conduct were applicable for the entire RWE Group without innogy SE. See also ► **GRI 307 Compliance (Environment), page 63.** innogy SE has its own identical Code of Conduct.



Group-wide coverage for environmental management
See ► **GRI 307, page 64.**



Compliance with licensing regulations
See ► **GRI 307, page 63.**



Measures and performance measurement

Emissions over the medium and long term at RWE can be influenced by the ongoing development of the power plant portfolio. This relates to modernisation and efficiency enhancement for the existing power plants and the replacement or shutdown of existing power plants, just as much as a change in fuel, for example hard coal to biomass.

Reduction of financial risks

Financial risks associated with emissions trading are reflected in our risk management. We reduce the risks by concluding appropriate hedging transactions. Furthermore, we sell most of the electricity from our power plants in forward transactions and hedge the prices for the fuels and emission allowances required.

Since the beginning of the third trading period of the European Emissions Trading Scheme (EU ETS) on 1 January 2013, operators of plants subject to emissions trading requirements are only able to obtain an allocation of certificates free of charge on application and if there are appropriate circumstances. These certificates are strictly regulated by uniform allocation regulations across the EU and they are limited. We were allocated 1.6 million certificates free of charge for the 132.4 metric tons of CO₂ emitted by RWE in EU countries in 2017. We purchased emission allowances amounting to 129.4 million metric tons or used to a small amount certificates from international climate protection projects that were created under the Kyoto mechanisms Clean Development Mechanism and Joint Implementation.

Reduction of our own CO₂ emissions

We use CO₂ emissions from plants subject to the European Emissions Trading Scheme (EU ETS) as an indicator of the greenhouse gas emissions. We report on emissions from our gas-fired power plant in Turkey together with the EU-ETS emissions in the total CO₂ output for the RWE Group.

Due to the restriction on lignite mining to the lignite stocks available in the licensed opencast mines, the associated CO₂ emissions are limited to the operation of our lignite-fired power plants. The State Government of North Rhine-Westphalia took the key decision about future lignite mining at the Garzweiler II opencast mine in July 2016 and reduced the lignite stocks of Garzweiler II licensed under planning legislation by an estimated one third.

As far as RWE is concerned, emissions can be influenced over the medium and long term by optimising the power plant portfolio. This comprises modernisation and efficiency enhancement for the existing power plants and the replacement or shutdown of existing power plants, just as much as a change in fuel, for example hard coal to biomass in the Netherlands. We carry out systematic reviews and adopt the available options. In the past, we have significantly increased the efficiency of our power plants and expanded the proportion of gas-fired generation.

Since the beginning of April, work has been carried out to facilitate the use of 80% biomass in future as a fuel instead of hard coal at our Dutch Amer 9 power plant. This will reduce the CO₂ emissions from the power plant to the level of a modern combined-cycle gas turbine (CCGT) power plant. A decision was taken in June to co-incinerate up to 15% biomass at the Eemshaven power plant as a substitute fuel for hard coal. RWE is thereby making an important contribution to the sustainability of the energy system in the Netherlands.

The two lignite-fired units Frimmersdorf P & Q were transferred to legally-mandated security standby on 1 October 2017. In 2018 and 2019, a total of three additional units will follow. By 2020, this will enable us to achieve a reduction of around 15% in the emissions caused by generating electricity compared with 2015 by 2020. As early as March 2017, we permanently shut down operation of our two units A & B of the Voerde coal-fired power plant.

Other options for taking action on reducing greenhouse gas emissions are provided by carbon capture and use or storage. Alongside affordability, a prerequisite for rolling out projects involving carbon capture and storage (CCS) would be an appropriate legal framework and creation of acceptance for this technology in the public domain. However, the existing statutory framework conditions and the lack of acceptance mean that implementation of CCS projects in Germany is currently not possible. Nevertheless, RWE is continuing to carry out research into the necessary technology. We are using our CO₂ scrubber in the Coal Innovation Centre at the Niederaußem power plant to work on making CO₂ separation for generating electricity from fossil fuels more efficient than is the case for other industrial processes. innogy is driving forward climate-friendly electricity generation with the expansion of renewable energy.

Reduction of other emissions

Primary and secondary emission reduction measures such as firing technology, dust removal and desulphurisation mean that emissions of mercury, sulphur dioxide (SO₂), nitrogen oxides (NO_x) and dust fall below the statutory limits for these substances in our plants. Although some of the limits have been tightened, no incidents relating to protection against air pollutants, events relevant for spills or limit breaches occurred at our sites that would have led to consequences under administrative law.

As the year progressed, additional capital expenditure was deployed in order to reduce NO_x emissions from the Aberthaw power plant in the United Kingdom. The power plant is now able to make use of a broader range of hard-coal qualities. Combined with capital expenditure in a low-NO_x burner technology in 2015, the NO_x emissions will be reduced by half. The power plant will thereby meet the requirements of the Industrial Emissions Directive (IED) after the Transitional National Plan (TNP) runs out.

In the course of our research activities we are working on advanced developments to reduce the emission of pollutants that are released during the production of electricity and generation of heat at our power plants. This is achieved by installing modern burner technologies for NO_x reduction and optimised separation processes in our power plant portfolio. One example of this is mercury, where the advanced

technologies used today for flue-gas scrubbing already remove up to 90% of this harmful substance when pure coal is used for combustion. At the Coal Innovation Centre in the Rhineland lignite mining area, we are currently working on procedures for capturing mercury. One approach is to add furnace coke to the flue gas. In 2017, a pilot plant was set up for this purpose and commissioned at unit K of the Niederaußem power plant.

Since the 1980s, we have been using flue-gas desulphurisation systems to capture SO₂ from the flue gas. This process involves the SO₂ being scrubbed out with the assistance of a limestone solution. We have been continuously developing this and we are using the process on an industrial scale.

Reduction of air pollutants: dust and noise

Legislation requires opencast mines to be structured and operated so that harmful environmental impacts are avoided if this is possible with the current level of technology. If environmental impacts are unavoidable, they should be kept to a minimum using the latest technology available. We are able to fully comply with these obligations. These environmental impacts connected with the operation of opencast mines are primarily dust and noise pollution. We adopt suitable measures to reduce these emissions in a case by case approach that takes into account the operational conditions and local circumstances. Noise emissions are reduced by the use of low-noise machinery, equipment and installations, encapsulating drive units, establishing facilities behind protective ramparts and walls, and putting planting schemes in place across sound propagation pathways. We take a number of measures to reduce dust emissions (dust precipitation) including treatment of open surfaces to prevent the removal of dust. The action here includes covering with materials that will not be blown away, spraying large areas with water and other methods of binding dust to the surface. Measures were also developed that exert a targeted impact on the creation and dissemination of fine dust. These include cleaning facilities for the lignite conveyor belts and sprinklers on bunker equipment and coal excavators. The individual methods are always carried out in consultation with the supervisory authorities. Furthermore, operations monitoring stations at opencast mines are available 24/7 for any citizens who may have issues, so that short-term remedies can also be implemented if there is an incident of acute noise pollution.

GRI 305-1 Direct (Scope 1) GHG emissions



Emissions balance						
in million metric tons of CO ₂	CO ₂ Emissions		Free allocation of CO ₂ certificates		Shortage of CO ₂ certificates	
	2017	2016	2017	2016	2017	2016
Lignite & Nuclear	88.5	88.6	0.7	0.8	87.8	87.8
European Power ¹ of which:	43.3	59.0	0.6	3.4	41.3	54.4
Germany ²	14.1	24.7	0.6	3.4	13.5	21.3
Netherlands/Belgium	13.8	14.0	-	-	13.8	14.0
United Kingdom	14.0	19.1	-	-	14.0	19.1
innogy	0.6	0.7	0.3	0.3	0.3	0.4
RWE Group	132.4	148.3	1.6	4.5	129.4	142.6

1 Including the CO₂ emissions of our gas-fired power plant in Denizli, Turkey, which in 2017 amounted to 1.4 million metric tons (previous year: 1.2 million metric tons). Since Turkey does not participate in the European Emissions Trading Scheme, we do not need any emissions allowances for these quantities.

2 Including figures for generating capacities of plants which are not owned by RWE but that we can deploy at our discretion on the basis of long-term contracts. In 2017, these power plants emitted 3.1 million metric tons of CO₂ (previous year: 7.1 million metric tons).

in million mt	2017	2016
CO ₂ emissions in compliance with EU ETS	132.4 ¹	148.3
CO ₂ emissions Scope 1 (in compliance with GHG Protocol) ²	135.6	154.0

1 Including figures for generating capacities of plants which are not owned by RWE but that we can deploy at our discretion on the basis of long-term contracts. In 2017, these power plants emitted 3.1 million metric tons of CO₂ (previous year: 7.1 million metric tons).

2 EU ETS quantities plus emissions from power plants which are not subject to EU ETS.

GRI 305-2 Energy indirect (Scope 2) GHG emissions



in million mt	2017	2016
CO ₂ emissions Scope 2 ¹	1.0	1.3

1 Scope 2: indirect CO₂ emissions from the transmission and distribution of electricity purchased from third parties outside the Group in our own grids.

GRI 305-3 Other indirect (Scope 3) GHG emissions



in million mt	2017	2016
CO ₂ emissions Scope 3 ¹	84.0	86.5

1 Scope 3: indirect CO₂ emissions that do not fall under Scope 1 and Scope 2: They are produced through the generation of electricity procured from third parties outside the Group, the production and transmission of the fuels used and the consumption of gas that we have sold to our customers.

GRI 305-4 GHG emissions intensity



in mt/MWh	2017	2016
Specific CO ₂ emissions EU ETS	0.655	0.686
Specific CO ₂ emissions Scope 1	0.670	0.713

GRI 305-5 Reduction of GHG emissions



See ► reduction of our in-house CO₂ emissions in GRI 305, page 57.

GRI 305-6 Emissions of ozone-depleting substances (ODS)

Negligible amounts of ozone-depleting substances, which primarily relate to chlorinated hydrocarbons, are used in

core processes at RWE so that there is no separate recording process for them.

GRI 305-7 Nitrogen oxides (NO_x), sulphur oxides (SO_x), and other significant air emissions



Absolute emissions	Unit	2017	2016
NO _x emissions	thousand mt	84.8	100.7
SO ₂ emissions	thousand mt	39.0	38.9
Particulate matter emissions	mt	2,564	2,680
Specific emissions			
in g/kWh		2017	2016
NO _x emissions		0.40	0.47
SO ₂ emissions		0.18	0.18
Particulate matter emissions		0.01	0.01

GRI 306 EFFLUENTS AND WASTE

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)



Challenges

As an energy generator we do not simply consume raw materials. A responsible approach to resources includes waste management. This enables us to comply with the licensing regulations. Wastewater and waste are avoided as far as possible. Unavoidable waste is disposed of in accordance with the statutory regulations. We ensure that all safety regulations are complied with and relevant precautions are taken.

Organisation, management and performance measurement

Ensuring sustainable waste disposal

Comprehensive waste management ensures that the waste generated is transferred in accordance with the regulations for reuse, recycling, recovery or disposal. Measures are taken in order to meet these requirements, for example waste is collected separately in suitable containers as far as possible and handed over to a specialist disposal company.

The requirements defined in waste legislation have to be taken into account for the disposal of the waste generated in the course of our operations. Owing to the varying composition of waste and the resulting potential for hazard, waste is classified into two categories: hazardous and non-hazardous waste. We also distinguish between recovery and disposal. Waste subsequently undergoes further appropriate treatment. During the project phase, new-build and maintenance of plants, an internal system records and analyses the potential harm caused by waste disposal. Appropriate protective measures are also defined. Disposal information systems are used for organising disposal services. These information systems guarantee compliance with all the applicable statutory and contractual conditions in the disposal of the waste generated.

We treat residual materials and waste from our nuclear power plants which occur while they are being operated as well as when the power plants are decommissioned.

Treatment and disposal is carried out in accordance with the statutory regulations, see ► **Shutdown and decommissioning of power plants and reinstatement of opencast mines, page 45**. Only a small part of the entire mass of the nuclear plants ever comes into contact with radioactive materials when they are operational. The greatest proportion of this material is then cleaned with the assistance of

decontamination measures so that it can be released by the government authorities and then returned to the normal materials cycle. The remaining residue – only around 3% of the total mass of a nuclear power plant – is destined for disposal in a final repository for radioactive waste. This material primarily includes components near the core of the reactor. Until the material has been consigned under statutory regulations to a final repository operated by the government, these waste materials and spent fuel rods will in future be kept at an intermediate storage facility under the responsibility of the German Federal Government.

Power plant residues are produced at our lignite-fired power plants in the form of ash and FGD gypsum. The ash is largely eliminated in residue deposits of RWE Power AG defined in accordance with approved plans. Most of the gypsum produced from the flue-gas desulphurisation (FGD) system is recovered. Ash and gypsum from the coal-fired power plants is mainly forwarded for material recovery. A small amount is disposed of.

Avoid waste

The principle of avoidance, recovery and disposal provides the platform for our waste management. Our top priority is avoidance of waste. This conserves resources and protects our employees and the environment. All organisational units are therefore continually reviewing the possibility of avoidance for the waste that is produced within their area of responsibility. This already happens in the course of the planning and procurement process.

We continuously reduce the quantity of waste as much as possible. One of the ways we do this is by optimising our plants. Nevertheless, a distinction is drawn for the waste actually incurred between reuse, recycling and other uses of waste, for example recovery of energy. Disposal is only permissible if recovery is not technically possible or is not commensurate with commercial requirements.

Process wastewater

Our internal wastewater treatment facilities and their regular monitoring ensure the prevention of potential contaminants. We keep records in compliance with prescribed limits. This process enables us to avoid negative impacts for the natural environment and health.



GRI 306-1 Water discharge by quality and destination

The pollutant concentrations for wastewater discharged from operational facilities are limited by the licensing authorities with specification of monitoring values. These values are defined in the relevant permits under water legislation. Monitoring of these values is carried out by in-house

monitoring systems and in the course of regular in-house and independent monitoring surveys carried out by government agencies. The permissible monitoring values ensure that a good ecological status and a good environmental potential can be achieved for the surface waters.

GRI 306-2 Waste by type and disposal method



Power plant residues from our coal-fired power plants dominate the generation of waste. They are reused in applications such as road and track construction. 100% of the ash from the lignite-fired power plants is eliminated in power-plant residue deposits of RWE Power AG defined in accordance with approved plans. The process of flue-gas

desulphurisation of our coal-fired power plants generates gypsum. Most of this gypsum is passed on for recovery. Other waste is also produced in the course of our operations. This waste is forwarded for reuse, recycling, recovery or disposal.

Waste	Unit	2017	2016
Ash	thousand mt	7,746	8,201
Ash recovery	thousand mt	1,299	1,567
Gypsum	thousand mt	2,052	2,042
Gypsum recovery	thousand mt	1,347	1,105
Radioactive operational waste from nuclear power plants	mt	273.4	267.1
Spent fuel rods	mt	274.2	267.3

GRI 306-3 Significant spills

During the reporting period, no spills of harmful substances relevant for the environment were recorded in the regular internal survey for RWE.

GRI 307 COMPLIANCE (ENVIRONMENTAL)

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)



Challenges

The operation of nuclear and conventional power plants and plants for generating electricity from renewable energy and for the production of lignite inevitably result in our impacting on natural ecosystems and having effects on the environment. Substances are released during the generation of electricity and heat at our power plants or the operation of our opencast mines, and they could lead to negative impacts on the environment. In the regions where we are operating, strict environmental legislation and licensing regulations define the framework for our operating activities. We have to ensure compliance with legislation and avoid the risk of serious negative impacts on ecosystems. Concrete environmental challenges in the fields of energy, emissions, water, biodiversity, and waste and wastewater are presented under the individual topics. We describe challenges in the supply chain under procurement.

Organisation and management

Alongside acting in accordance with the law, rules and procedures, the principles for good conduct defined in the Code of Conduct describe our aspiration for environmental protection as follows: We are committed to a responsible approach to natural resources and promote the use of environmentally friendly technologies. Since 2017, the provisions of the RWE Code of Conduct have been applicable for the entire RWE Group without innogy. innogy has its own identical Code of Conduct.

The Group Guideline on Environmental Management regulates the requirements for a Group-wide management system based on ISO 14001 in order to meet this aspiration. The Chief Environmental Officer of RWE AG bears responsibility for this. The RWE companies appoint environmental process owners in the executive management and corresponding environmental management officers, and review, assess and improve the appropriate environmental management systems. The environmental management officer of RWE AG reports to the Executive Board and Supervisory Board of RWE AG on a quarterly basis. innogy has established its own equivalent Environmental Management System and reports on this in the innogy Sustainability Report.

We assess our environmental performance on a regular basis and use these results to initiate systematic improvements.

A process of continuous improvement and certification enables us to identify and evaluate existing risks systematically and roll out appropriate measures. Comprehensive statutory regulations are already in place for environmental protection in the countries where we are active. Our activities partly extend beyond the obligations arising from legislation or licences for the operation of opencast mines and power plants.

An integrated management system was introduced for RWE Generation SE and RWE Power AG in order to manage our key activities with environmental relevance. Alongside compliance, this encompasses the areas of energy, water, biodiversity, emissions, and wastewater and waste. The structural requirements for the management of occupational health and safety, the environment and energy are largely similar. We therefore deal with them together in an integrated management system for reasons of synergy.

Establishing environmental protection in business processes

In the course of Group-wide environmental protection management, the relevant emission data are surveyed and calculated at the individual sites and then collected and processed in a central department for licences and environmental protection. Integrated compliance reporting to the Executive Board and the Audit Committee of RWE AG provides the framework for the Chief Compliance Officer of RWE to report significant deviations in the context of environmentally relevant events, see ► **GRI 419, page 81**.



Measures and performance measurement

Regular audits in the uncertified companies safeguard compliance with the requirement to set up an environmental management system. In this connection, we also strengthen the environmental awareness of our employees through training courses and other information, and in direct dialogue.

Group-wide coverage for environmental management

In its Group-wide guideline, RWE AG makes a commitment to ensure that all downstream operating companies establish an appropriate environmental management system that essentially corresponds to the requirements of the ISO 14001 international standard.

The percentage coverage by our environmental management system serves as a key performance indicator. The level of coverage for environmental management amounted

to 99% in 2017. However, gaps at RWE AG and RWE Supply & Trading GmbH were identified in 2017 due to the organisational restructuring. Defined measures are intended to close these gaps in 2018. Our objective is to have a level of coverage of 100%. 91% of the environmental management systems in the Group was externally certified. During the reporting year, no environmentally relevant incidents were identified. The level of coverage for environmental management at innogy is 85%. 43% of the environmental management systems were externally certified.

GRI 307-1 Non-compliance with environmental laws and regulations

During the reporting year, no significant monetary and non-monetary sanctions were reported for the environmental area in an internal survey.

GRI 308 SUPPLIER ENVIRONMENTAL ASSESSMENT

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)



For information on the general Management Approach on procurement see ► **GRI 204, page 36.**

Depending on the tendered requirement, environmentally relevant criteria are interrogated from the suppliers in the

course of pre-qualification. Relevant criteria are also used in the tender process and benefit analysis to assess the offers of our suppliers.

GRI 308-1 New suppliers that were screened using environmental criteria

The principles of the United Nations Global Compact are a constituent element of contractual relationships. Additionally, the suitability of suppliers is evaluated during the course of pre-qualification on the basis of the hazard potential. A separate work instruction and a checklist are therefore

used by the purchasing department to establish the suitability of the supplier. In such cases, compliance with the defined criteria can be reviewed in supplier appraisals and used for future tender processes in the framework of the internal appraisal system.

GRI 308-2 Negative environmental impacts in the supply chain and actions taken

We can only report on the number of audited suppliers for goods, services and plant components. The audits carried out in the context of Bettercoal can also be reported, see ► **GRI 204, page 37.** An overview of the producers audited is provided on the ► **Bettercoal website.** We regularly carry

out audits of all suppliers to ensure conformity with potential compliance risks. When procurement is carried out in the wholesale markets, an appraisal is not possible due to an absence of direct supplier relationships.



SOCIAL TOPICS

GRI 401 EMPLOYMENT

Challenges

We are working together with our employees to master the challenges of the energy transition. The growing business pressure being exerted on the RWE Group and the changes occurring in the energy market have also made a cultural change necessary at our company. If we failed to take action here, we would put our future performance at risk. The realignment of our company has not yet been completed. It requires increased flexibility from our employees and opens up the possibility of new functions. We have therefore launched an array of different programmes so that they are in a position to achieve the best possible outcome. We are joining forces with our employees to structure our working culture. This is intended to ensure that we remain competitive and attractive.

Organisation, management and performance measurement

Socially acceptable and responsible restructuring

Our iSWITCH GmbH has already been established in the RWE Group. This platform promotes and supports many colleagues in relaunching their careers with an internal Group-wide job market. Secondments of employees from the iForce enable us to cover temporary personnel bottlenecks. This unit was established so that internal resources could be used instead of external agency staff on a temporary basis. iSWITCH also offers targeted career development and helps staff to achieve further qualifications. It also assists them in taking advantage of short-term (project) activities and accompanying staff on work experience in different segments (divisions) of the Group. The framework conditions are defined in collective bargaining agreements. The offer from iSWITCH is open to colleagues at RWE companies and innogy SE. For more information see ► **innogy Sustainability Report, GRI 401, page 67.**

Several tools are available to measure the success of the internal job market including the number of internal and external applicants for each job. We also record the throughput times within iSWITCH GmbH, alongside the financial result and utilisation of capacity. After a survey was carried out of the registered candidates and applicants, a large number of measures were implemented in relation to many aspects of the handling and management of applications in order to further improve the package on offer.

Establishment of new conceptual and working practices

Our objective is to establish new mindsets and new ways of working within the RWE Group. The programme "New Way of Working" (NWoW) has been designed to achieve this. We are defining new standards for our working practices and promoting the skills of employees. A common working culture is also being developed in the three areas of Operating Excellence, Universal Process Management and Leadership and Alignment. Our intention is to use these and other measures to enhance customer satisfaction and improve the financial results.

The NWoW programme has meanwhile been expanded to ten operational projects in RWE Generation SE, RWE Power AG and RWE Supply & Trading GmbH. Currently 60 experts and 5,000 employees are working within the NWoW context. Other projects are currently in the pipeline or are in the implementation phase.

In addition to these ten projects, other initiatives are running in the area of Management & Alignment with the aim of expanding the skills of managers. If executive managers act as role models for the RWE management profile, they also lay the foundation stone for successful introduction of NWoW at the individual locations.

We measure the success of our NWoW projects particularly by analysing leadership quality and employee and customer satisfaction.

Defining objectives through the Code of Conduct and RWE Social Charter

Our Code of Conduct and the RWE Social Charter were jointly adopted by the European Works Council and the Executive Board in 2010. They define standards for the relationship with our employees and for the conduct between the employees themselves. The RWE Code of Conduct and the innogy code of Conduct apply to all our employees. The Social Charter is valid for all employees of the RWE Group without innogy SE.



GRI 401-1 New employee hires and employee turnover

	Unit	2017	2016
Fluctuation rate	%	8.8	10.1
External hirings	FTE	3,630	3,062

We do not provide further differentiation in the case of data on turnover and new appointments because the benefit is not commensurate with the expenditure involved. We regu-

larly report on the age structure and the breakdown of employees by gender.

GRI 402 LABOUR/MANAGEMENT RELATIONS

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)

Challenges

We want to adopt a responsible approach to essential restructuring measures and implement a socially ethical plan. We want to be perceived as an equal partner in order to avoid dissatisfaction among our employees and to counteract increased turnover. We are therefore continually in discussions with the employee representative bodies in the Group and with the unions. In Germany, the Works Constitution Act (Betriebsverfassungsgesetz, BetrVG) covers the situation at RWE. We base our actions on this legislation.

Organisation, management and performance measurement

Cooperation beyond the statutory regulations in an atmosphere of trust

The Works Constitution Act (Betriebsverfassungsgesetz, BetrVG) regulates the comprehensive information, consultation and co-determination rights of the Works Council.

It states that the Executive Management and the Works Council should cooperate together in an atmosphere of trust. RWE has gone beyond these statutory regulations and in 2010 defined its commitment to open and trusting cooperation in the ► **RWE Social Charta** adopted by the European Works Council and the Executive Board. This charter sets out opportunities for participation in processes of change for employee and union representative bodies. Apart from the Group Works Council and the European Works Council, there are other forms of employee representation across the Group, at company level and at operational level. Specific interest groups, such as spokesperson committees, representative bodies for people with disabilities, and youth and apprentice representations are also included. The framework of reorganising the RWE Group also encompassed the settlement of interests dated 13 May 2016.



GRI 402-1 Minimum notice periods regarding operational changes

We comply with all information disclosure obligations and include employee representatives at an early stage.

GRI 403 OCCUPATIONAL HEALTH AND SAFETY

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)



Challenges

As an industrial company, occupational safety and maintaining health are particularly relevant among the topics that are of concern to our employees. Our employees and the employees of our partner companies often carry out their assignments at workplaces that are subject to special requirements for occupational health and safety. In particular, these include activities in the area of opencast mining, in technical areas at our power plants, and at transmission lines or wind turbines. These areas of application are subject to particular accident risks and health hazards for our employees and the employees of subcontractors. So as to protect them, we are committed to sustainable development of occupational health and safety.

Organisation and management

Our objective is for every employee to be healthy and to remain so. We are committed to using all the available opportunities to aid the recovery of sick employees as quickly as possible. This applies equally to occupational safety, in other words to the avoidance of accidents and to the promotion of health.

Organisation of healthcare management

The functions of healthcare management are situated with the Company Medical Centre and the Department of Health & Safety. The Company Medical Centre bundles the organisation of all the medical and emergency medical resources alongside social counselling service. The services for the RWE Group without innogy SE are provided on the basis of service contracts.

The Health & Safety Department develops and initiates health prevention packages in cooperation with the Company Medical Centre in the context of Occupational Health Management. The personnel carrying out the management function within the Company Medical Centre are separate from the Chief Company Medical Officer. The Chief Company Medical Officer carries out the functions and responsibilities in accordance with the relevant regulations. The Chief Company Medical Officer is also responsible for additional functions, in particular the strategic alignment and management of the entire area. Detailed organisation of healthcare management has been defined within the frame-

work of the Workplace Safety Management System. Since the employees of the Company Medical Centre are part of the organisation of RWE Power AG and have contracts of employment with this company, healthcare management is part of the integrated management system of RWE Power AG.

Organisation of Health & Safety

The functions of occupational safety and Company Health Management (CHM) are carried out by Health & Safety. The Health & Safety Department (H&S) is situated at RWE Power AG and also operates on the basis of a Service Level Agreement for RWE AG, RWE Generation SE and RWE Supply & Trading GmbH. The department is also responsible for H&S reporting in the RWE Group and in this function reports regularly to the Executive Board of RWE AG. A regulated organisational structure ensures that the decentralised occupational safety departments throughout the company are included in H&S reporting. innogy has its own H&S Department that operates on the basis of comparable standards. Reporting here is in the innogy Sustainability Report.

The structural and process organisation of Health & Safety is ensured through acknowledged management systems including international standards and rules. Corresponding regulations will be defined in a guideline valid throughout the Group that is currently at the draft stage. RWE has defined the target of ensuring that all Group companies have certifiable management systems for occupational safety. Currently, certification has been conferred on the management systems for occupational safety in 70% of the companies.

Continuous improvement of occupational safety

The occupational safety management systems cover the relevant management and business functions including the definition of targets, structures and processes, rules and tools relevant to occupational health and safety. The objective is to make the best possible contribution to achieving the corporate goals. The corresponding processes related to Health and Safety are systematically analysed and continuously improved using the Plan Do Check Act cycle. The integrated approach is applied for relevant activities that extend across management systems. These include management reviews, audits, analyses and event notifications.

Measures and performance measurement

Continuous improvement of occupational safety

The measures described here relate to RWE without innogy. innogy carries out its own comparable measures under its own responsibility. Since 2017, the uniform classification of all events and accidents relating to RWE's own employees have been carried out along an accident pyramid with the intention of ensuring development and alignment with international Health & Safety (H&S) standards. In parallel, an assessment of potential has been carried out using a risk matrix. We want to use long-term establishment of a probabilistic approach to assist our employees in achieving better identification and assessment of safety risks.

We focus specifically on investigating events and accidents with a high potential for risk. For this purpose, we deploy an independent, interdisciplinary analysis team in order to determine causes and derive suitable measures. In addition, we also support the subcontractors working for us with analysis and implementation of measures.

Our objective is to treat the employees of subcontractors in the same way at all times as RWE's own employees. We therefore take account of the number of subcontractor accidents in the LTIF rate.

Over the course of the past ten years, RWE has established and expanded a reliable system of Workplace Safety Subcontractor Management (WSSM). Apart from reducing the accidents and work-related stresses for our subcontractors, the focus is on joint development of an H&S culture. In order to achieve this, we support our subcontractors from the tender stage to carrying out the work, as well as in the final phase of continuous improvement. In 2017, we carried out H&S workshops, highlighted specific safety performance and intensified cooperation between the H&S experts at RWE and subcontractors.

In 2017, the Health & Safety Departments of RWE and innogy also developed the "Safety Academy" game. This involves small teams working together and answering questions interactively about Health and Safety. Situations from routine work every day are also trained in action fields.

Continuous improvement of health

Every year, the Company Medical Centre carries out a vaccination programme for all employees. This also includes individual vaccination advice and drawing up a vaccination plan as necessary.

We apply a number of measures including the Work Ability Index (WAI) in order to obtain a more extensive record of employees' performance and their ability to carry out their work. This framework provides them with effective support. The approach is based on our employees' own assessments and indicates the extent to which employees see themselves as being in a position to carry out their work at the present time and in the future. By the end of 2017, a total of some 27,000 questionnaires had been completed by the surveyed employees.

In 2017, the "Development of Occupational Health and Safety Culture" (DOHSC) project was successfully concluded. One of the objectives of the project was to motivate employees to develop behaviour that fosters health and safety, and move the culture further in the direction of a collaborative, team-oriented management style. Some 5,500 managers from RWE Group including innogy SE attended cultural development workshops directed towards this objective. At cross-divisional and non-hierarchical events, instruction was provided in the application of management tools relevant to health and safety. A Development of Occupational Health and Safety Culture tour was created in order to foster a team spirit between managers and employees. The tour empowers managers to discuss issues relating to occupational health and safety together with their team. The employees were informed and integrated through the Intranet. In addition, a DOHSC app was offered to promote health and physical activity and to provide a self-check for evaluating an employee's own motivation. When the project was completed, the sustainability of the DOHSC cultural development was ensured by implementation of DOHSC aspects into Company Health Management and in personnel tools.

The aim of Company Health Management (CHM) is to present our employees with a wide range of offers and needs-based measures to promote their health. Thematic focuses are made up of mental, physical and social health. The area of mental health offers a burgeoning area of action owing to the intensified concentration of work and increased psychological burdens. Against this background, offerings

related to stress competence, resilience and mindfulness are being expanded with the aim of promoting the skills of our employees, mastering crises and providing them with an opportunity for personal development by drawing on their own competences as a platform for development.

Health indicator

A key indicator of health in the workforce is the health-related absenteeism rate. This reflects the periods of absence due to sickness including absence as a result of accidents and due to rest cures. It is calculated as a function of the scheduled working hours for all employees. In 2017,

the health-related absenteeism rate of the RWE Group was 4.8%.

In selected areas, the health-protection indicators relevant to controlling were summarised in a basic indicators portfolio. This portfolio provides the business with an overview of the health scenario in the company. It is broken down into cause and effect indicators. The cause indicators such as development of employee capacities, average age, increased performance rate and Work Ability Index, and other indicators present potential causes for the sickness rate. The effect indicators show the actual periods of absence.

GRI 403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities



The key performance indicator we use for occupational safety is the number of accidents with the loss of at least one day of work for every one million hours worked (Lost Time Incident Frequency, LTI_F). Colleagues at subcontractors are included in this indicator. In the reporting year 2017,

we succeeded in maintaining the number of occupational accidents at a uniformly good level and achieved an LTI_F of 2.29 (2016: 2.1). The LTI_F for RWE without innogy was 2.49 in 2017. We intend to reduce this level to 1.8 by 2018.

Accidents and days of absence in 2017 by division		
	Number of occupational accidents ¹	Number of commuting accidents ²
RWE Generation SE und RWE Power AG ³	123	40
RWE Supply & Trading GmbH	1	1
RWE AG (other)	0	0
innogy Grid & Infrastructure Division	175	111
innogy Renewable Energies Division	20	0
innogy Retail Division	30	9
innogy other (Gastro, interdisciplinary functions, etc.)	10	19
RWE Group	359	180

1 Including employees from subcontractors.

2 Only own employees.

3 up to 2017, integrated reporting was provided on the generation business.

Reporting in accordance with this controlling model is carried out on the basis of operational controlling of occupational health and safety in the operating segments. We do not therefore report by regions but analogous to operational line controlling. The special hazard and stress requirements are therefore taken account of within the segments and international comparability is ensured. Data on the type of injuries, the injury rate, the absentee rate (Lost Day Rate, LDR) and work-related fatalities are surveyed in anonymised form for reasons associated with data protection regulations. These data cannot therefore be reported by gender.

Reporting on occupational diseases and the absentee rate is also not possible for the same reason.

Unfortunately, we had to report a total of three fatal occupational accidents in the business year 2017. At the beginning of January, the truck driver of a subcontractor was buried in loading operations during excavation of earth using a wheel-loader at an innogy construction site for a transformer station and he suffered fatal injuries. At the beginning of February, an employee of a subcontractor was fatally injured at the RWE Visonta opencast mine operated by Mátra Kraft-

werk G.AG. when he stopped his bulldozer in the working range of a bucket wheel. The driver's cab of the bucket wheel was struck and destroyed. In mid-December, an employee of innogy in the Czech Republic received fatal

injuries in a traffic accident during a business trip. Analysis teams were immediately deployed in all cases to clarify the causes of the accidents and appropriate measures were derived.

GRI 403-3 Workers with high incidence or high risk of diseases related to their occupation

Activities of our employees and our subcontractor employees in the area of our power plants and opencast mining facilities, and in the case of innogy SE at transmission lines or wind turbines, are frequently associated with particularly high requirements for occupational health and safety.

However, we believe that all hazards can be avoided by taking preventive action and implementing appropriate protective and safety measures. We organise training sessions and workshops in our regions in order to focus attention on Health and Safety.

GRI 404 TRAINING AND EDUCATION

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)

Challenges

Our company is only as strong as the knowledge of our employees. Lack of training and education would lead to an impairment of the performance of the RWE Group. We will only be able to continue mastering the future challenges presented in the energy business by having professional and dedicated employees and managers. Our aim is therefore to continue recruiting talented young people to work at RWE, promoting our employees, supporting them in their individual development, and furthering their careers on the basis of their individual strengths. We believe that it is important to be perceived as an attractive employer. We continue to give our employees advanced training so that they are always familiar with the latest technical developments.

assistance with making applications and other useful information. We focus our on-site activities on selected universities and fairs in Germany and abroad, as well as offering personal interviews and an intensive exchange of views.

Women continue to be less inclined than men to take up a technical career. We are therefore especially committed to motivating young women to explore technical careers at an early stage. One example is our engagement with the nationwide Girls' Days, which have involved more than 400 participants over many years. These events give school girls an opportunity to find out about careers in technical and IT areas by attending workshops and work experience sessions.

Organisation, management and performance measurement

Recruitment of new employees

We are an important economic factor in the regions where we have operations in the energy sector. So as to ensure that we continue to reinforce this perception of an attractive employer in potential employees, we are proactive in engaging with them. We inform them about the activities and the opportunities for employment and a career at RWE. We use a range of different tools including our Career Portal to provide information to schoolchildren, students, graduates and prospective employees with career experience. The aim is to help them make a start on the career ladder in the world of work at RWE or give them advice on changing jobs, and to get in contact with them. The site also provides them with useful information about RWE as an employer, gives them

Promotion of training

The RWE Group has a long track record of vocational training. We focus primarily on the dual vocational training system in Germany. This involves theoretical instruction being given at vocational colleges alongside on-the-job training in the company. Overall, we offer training at more than 50 locations for in excess of 30 apprenticeship vocations in craft, engineering and commercial occupations, and other areas where we enable young people to undergo a high-quality vocational training. We offer training that extends beyond our own specific needs. We also offer twin-track degree courses with practical, in-service training integrated as part of the package. In addition to carrying out training on its own behalf, RWE also supports external companies with activities for collaborative training ventures, for example by making training capacities available in our training workshops and by carrying out training for small companies.

Every year, more than 600 young people start their training in the RWE Group. This means that they are part of 2,215 apprentices in the Group. 95% of these trainees work at companies in Germany. If you compare the number of German apprentices with the full-time jobs in Germany, the apprentice ratio of the RWE Group was 6.0% in 2017. We offered 41 places in our entry-level qualification "I can do it!" („Ich pack' das!") in 2017. Here we help young people who have not yet found a training place and give them the knowledge to enable them to achieve the necessary level for basic training. We have been providing this one-year programme for the past 13 years and we have helped almost 1,200 participants. In 2017, we achieved a placement rate of 87% into basic training, jobs and advanced measures. This provides evidence of the high-quality engagement by our trainers in the company.

Career training and development

We offer a range of training sessions and courses for developing personal skills and for strengthening personal competences. Support is also provided for acquiring knowledge and skills which lead to further personal development within the Group. We help managers to enable their employees to take advantage of opportunities on a daily basis – opportunities to try out new things, implement projects and collaborate with different people so that they can learn from each other. We are committed to a culture of lifelong learning and to facilitating the best possible development of the current and future skills of our employees. We have defined our approach in our Advanced Training Guide.

GRI 404-2 Programmes for upgrading employee skills and transition assistance programmes

Our employees have access to a broad spectrum of development opportunities. These range from basic IT skills and project management, through specialist topics such as occupational safety and compliance, to management training sessions and performance management. The HR portal of RWE

offers attendance training courses, web-based learning, videos and much more. Certificates are issued for training courses in specific areas. In 2017, more than 20,000 training courses were booked through the HR portal for RWE without innogy.

GRI 405 DIVERSITY AND EQUAL OPPORTUNITY

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)

Challenges

Deep-seated changes like demographic change, skills shortages, migration, changes in values and the individualisation of life concepts mean that our society is becoming more and more diverse. Our objective is to use the diversity of our workforce at RWE as an opportunity for cultural change, to recruit talents and to convince our employees about our merits every day. An open and respectful culture appreciates diversity and this is therefore advantageous for our company and for our employees.

We are a company operating on the international stage where employees from different cultural backgrounds work together. Our stakeholder groups and customers have an international profile. This is why good cooperation and intercultural communication are important for the success of our company.

As a technological company, increasing the proportion of women in the company continues to be a challenge. Furthermore, the demographic change is also an important issue for us. Society is getting older and this entails challenges in the world of work and for our company.

Organisation, management and performance measurement

Establishment of diversity management in the organisation

Our commitment to diversity in the company culture is enshrined in our Social Charter. We make it clear in the charter that we reject any form of discrimination and we require a working environment free of prejudice. Our diversity management plays a key role here.

We interpret diversity management as a long-term management function in order to deploy the right competences at the correct place in the company. The different personalities and capabilities of each individual are a central focus and they are regarded as an opportunity to learn from each other. This gives every employee the opportunity to fully exploit their potential, irrespective of their age, their gender, their origin, but also independently of their beliefs, disability and their sexual orientation.

We engage with age structures and age-appropriate employment in the company, analyse the requirements of different generations and cooperation in mixed-age working teams. We also offer packages for knowledge transfer and workshops.

RWE is committed to providing refugees with vocational qualifications. Since 2015 we have given a total of 211 people many different opportunities for gaining a foothold in the world of work. The focus for our approach is provided by internships (124), work experience sessions (36), entry-level qualifications (28), training places (12), temporary appointments (10) and a twin-track degree course with in-service training (1). Key qualifications, technical understanding and craft skills in automotive, metalwork and electronics are promoted in the context of projects. Attendance at vocational school is generally also part of the package.



For further information on commitment to refugees see

► **GRI 413-1, page 75.**

Our Diversity Week is held at the headquarters in Essen and in many other locations in Germany and abroad. It has demonstrated just how diverse RWE already is. The week also highlights how the activities in the various subsidiary companies contribute to promoting a culture of inclusivity.

We are committed to continuous knowledge exchange on topics related to gender and disability at work and we engage in this exchange in the ENEI network, one of the biggest diversity networks in the English-speaking world. The active members include corporations, ministries and NGOs. The exchange is carried out through workshops and with digital tools in online training sessions and online discussion groups.

The fact that we engage successfully in promoting equal opportunity and diversity in the Group is provided by the "Total Equality" certification received by RWE in 2017.

Equal remuneration for women and men

Men and women at RWE are paid the same for equivalent activities. The compensation is based on the typical activities allocated to the remuneration groups. Gender is not mentioned at all in our compensation guidelines and is irrelevant for remuneration. The amount of pay is therefore dependent on qualifications, the activity being carried out and the experience of the employees.

The employee representatives ensure that equal treatment is maintained in the sphere of pay as in all other areas. The assignment to a tariff or salary group is linked to the job profile and is not dependent on gender.

Appointing more women to management positions

We provide women with strategic support for entering our company structure and climbing up the career ladder. Our objective is to achieve a greater proportion of women in management positions. With this in mind, we have successfully continued our Executive Mentoring Programme for women and our training directed towards preparation for taking up membership on supervisory boards.

The Women's Network at the RWE Group and innogy SE brings more than 450 women at 14 locations together. Group-wide communication on the latest challenges in the energy industry is promoted at annual conferences and working groups, and motivation is provided to enable women to develop their individual career paths. We will continue to support them with more initiatives. This also includes the MINT Women initiative that brings together women in our company who have taken scientific and engineering degrees. The programme strengthens the profile of women in professions where they remain underrepresented. It offers them a knowledge exchange platform and assists them with career development through networking activities. More than 112 women from different hierarchical levels within the Group have taken part in the initiative. We have also launched a Mentoring Programme for women in MINT professions.

The proportion of women in management positions was 15% for the RWE Group without innogy SE at the end of 2017. It was 19% for innogy SE. The percentage was 29% for the first management level below the Executive Board of RWE AG. The percentage was 17% at the second management level below the Executive Board of RWE AG.

At the Supervisory Board meeting held on 23 June 2017, the Supervisory Board passed a resolution defining targets for the compliance period to 30 June 2022 in the form of

target quotas. These amount to 0% for women in the Executive Board. A target quota of 30% was defined for the first management level. The target quota of 20% women in the second management level takes account of the current appointment situation and the difficult conditions in the employment market.

The number of women on the 20-strong Supervisory Board of RWE AG is currently six, of which three are drawn from the employee side. This means that the statutory regulations have been implemented. During the year under review, no women were present on the Executive Board of RWE AG, see  ► **GRI 102-22, page 17.**

Promotion of inclusiveness

In March 2014, the Executive Board of RWE AG adopted the RWE Inclusiveness Action Plan for the German Group companies and resolved to roll it out. RWE uses this plan specifically to promote the inclusion of people with disabilities in all the company's activities. The agreed targets will continue to be implemented in the companies of RWE Group without innogy SE. Their sustainable impact is demonstrated in the constant employment rate for people with disabilities, in the package of internship places for young people with disabilities and the sustainable, barrier-free establishment of workplaces for people whose ability to take part in the workplace is compromised. Our community and social responsibility towards people with disabilities is defined across Europe through the Social Charter and the Charter of Diversity. This commitment is also implemented in a practical way by campaigns to raise awareness and strategic measures in human resource development, training, employment, health

measures and appropriate workplace design and a barrier-free approach. Employee representatives also play a role in structuring and monitoring the implementation of inclusion here. The ratio of employees with disabilities at RWE in Germany was 1.4% in 2017. This means that we did not comply with the statutory quota of 5.0%.

Combining career and family

Combining career and family is a top priority at RWE and the company promotes getting the work-life balance right within the framework of the individual national circumstances and the specific opportunities available in the Group companies. Framework conditions like mobile working and flexible working hours including management positions, and up to 24 months of unpaid special leave all contribute to making it easier to combine career and family. There are additional packages for (prospective) parents including the Lumiland daycare nurseries located close to the company's premises. Employees can now use nursery places in Essen, Dortmund and Cologne. Parent and child offices are also available and a central mediation centre for childminders, nannies, emergency mothers and au pairs is also available – even in situations when private childcare is suddenly not available at short notice.

The spectrum of services is not simply restricted to child-care support. It also includes services for the care of relatives. For example, employees can get advice from an online portal about subjects like patient instructions and long-term care insurance, or they can also obtain expert advice at on-site events. We also provide support for our employees in selecting care services or organising support in the home.

GRI 405-1 Diversity of governance bodies and employees



Proportion of gender in the RWE Group		
in %	2017	2016
Proportion of women in the company	27.7	27.2
Proportion of men in the company	72.3	72.8
Proportion of women in management positions ¹	15.0	14.0

¹ Encompasses the first four management levels. Encompasses RWE AG, RWE Generation SE, RWE Power AG and RWE Supply & Trading GmbH.

Age structure of the RWE Group		
in %	2017	2016
Proportion <20 years	1.8	1.9
Proportion 20-24 years	5.1	5.1
Proportion 25-29 years	8.6	8.5
Proportion 30-34 years	11.0	10.8
Proportion 35-39 years	11.1	10.7
Proportion 40-44 years	11.1	11.3
Proportion 45-49 years	13.7	14.8
Proportion 50-54 years	17.5	18.3
Proportion 55-59 years	15.1	14.4
Proportion ≥ 60 years	5.0	4.3

A survey of data on minorities is subject to the individual national regulatory standards. Differentiation on the basis of gender and age is not therefore possible. For disclosures on the composition of the Executive Board and the Supervisory

Board see ► **RWE Annual Report 2017, page 185 ff.**, and the ► **RWE website**. The career profiles of the Members of the Executive Board and the Supervisory Board can also be found here.



GRI 405-2 Ratio of basic salary and remuneration of women to men

RWE pays women the same salary as men when they are in equivalent positions. The salary is calculated exclusively

on the basis of qualification. The employee representative bodies also monitor equal treatment here.

GRI 413 LOCAL COMMUNITIES

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)

Challenges

Wherever we have operations, our actions exert an impact on local communities. Our power plants and opencast mines offer jobs and therefore support the structure of the individual regions. In some places, this has already been happening for a long time. We temporarily take over very large areas of land for our opencast mines. This is associated with serious changes in the profile of the landscape. Furthermore, employee, supplier and customer traffic associated with our plants also exerts an impact on the neighbourhood. In some cases, these operations may necessitate resettlements of individual villages or parts of local settlements.

Organisation, management and performance measurement

We want to operate in a socially ethical way at our operating locations and be perceived in a positive light. With this in

mind, we enter into dialogue with neighbouring residents and other groups which are impacted by our business operations or whose activities exert an impact on the business activities of RWE. Wherever we have operations, we want to cooperate with the local communities where we are working.

Dialogue with neighbouring residents and other stakeholders affected

We engage in a lot of different stakeholder dialogues to communicate information and to involve neighbouring residents and other groups who are affected by our business activities. This is primarily related to our opencast mines and our power plants. For more information on integrating our stakeholders see ► **GRI 102-43** and ► **GRI 102-44, page 21**.



GRI 413-1 Operations with local community engagement, impact assessments, and development programmes

At all our major locations, we exchange views with the people living in the region. We regularly analyse the needs of communities and the impacts on the environment within the framework of the licensing procedure in Environmental and Social Impact Assessments. A detailed disclosure of the results is not practicable owing to the large number of licensing procedures.

Companius cooperates with its long-standing collaboration partners to develop volunteering projects in order to deliver aid to refugees. Employees throughout the entire RWE Group, from apprentices to the executive management, take part in team and individual projects to help refugees. In 2017, a total of 239 members of staff gave a helping hand.

Our aim with the programme “3male” Education with Energy, is to motivate young people for topics related to energy and engineering. We also discuss the energy supply of the future with them. In 2017, 600 experiment kits were

loaned to 75 schools and 70 nurseries, 14,000 teaching packs were sent to teachers, and 60 members of staff went into schools as energy ambassadors.

GRI 413-2 Operations with significant actual and potential negative impacts on local communities

The operation of opencast mines is unavoidably associated with interventions in the landscape and with the resettlement of local communities. RWE is very much aware of the impacts of these interventions for the region.

Structuring resettlement with a consensus

The important issues associated with resettlement are not simply about fair compensation for the material assets of the people being resettled. Intangible assets like tradition, community and a sense of belonging also play a key role. So that these needs can be met as far as possible, RWE has been committed for decades to the offer of community resettlement with the aim of finding solutions that are ethical and socially compatible. The people being resettled are involved on many levels in the process from the planning stage to implementation. They receive comprehensive support through the relevant government agencies, local authorities, and most importantly from our company. Their requirements also play a central role within the framework of the required licensing procedure. They are involved in selecting the location of the resettlement site and they play a key role in designing the new village. This ensures that the majority of the people being resettled are always involved in the resettlement of the community. Vibrant new settlements can be created in accordance with the ideas of the citizens. They can be provided with appropriate infrastructure where

community life can be continued with familiar social structures and similar cultural life. Socially acceptable resettlement cannot be achieved without this input.

Since the 1940s, more than 40,000 residents have been resettled in a socially acceptable way. So far, 35 new and vibrant localities have been created in this process. In 2017, around 140 properties were acquired in four localities alongside additional agricultural and other parcels of land.

Structuring new landscapes

Extraction of lignite by opencast mining inevitably leads to a temporary impact on the landscape. However, a key attribute for lignite opencast mining in the Rhineland is that simultaneous and sustainable reinstatement of the original use is a constituent element of the operating process. Recultivation is therefore part of opencast operations throughout the entire lifecycle. It takes account of the environmental requirements and the leisure and recreational needs of the local community. Today, forested areas more than 80 years old can be found in recultivated former opencast mining districts, for example in Ville. Moreover, water meadows have recently been created along with areas of fertile agricultural land. For more information on reinstatement of opencast mines see ► **GRI 304, page 52.**



CATASTROPHE/EMERGENCY PLANNING AND RESPONSE

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)

Challenges

As the biggest power producer in Germany, RWE provides electricity as a product. If power were not available, a modern industrial and service society would not be conceivable in its present form. We are therefore a constituent element of the basic services known as critical infrastructure. According to the government's definition, this includes "organisations, institutions and facilities with important consequences for the governmental apparatus. If an electricity outage occurs or supply bottlenecks impact negatively over an extended period of time, public security would be subject to substantial disruption or dramatic consequences would be entailed." We are aware of our macroeconomic responsibility to society as a whole. Security management is therefore a central management function at RWE. A major incident, involving for example a cyber-attack on electricity grids or power plants, can lead to complete supply outages, with extremely negative impacts on public life, pose a threat to health and life in power plants and the surrounding area. Such an incident can also constitute a threat to the economic future of the company. This means that it is necessary to adopt appropriate planning measures and implement relevant training programmes in order to cater for a broad spectrum of potential incidents – including incidents with a low probability of occurrence but entailing substantial impacts. Prevention of incidents like this is the primary goal.

Organisation and management

As an operator of critical infrastructure, reporting pathways to the government agencies involved are defined in legislation. We work together with government agencies to make preparations for the scenarios entailed in an emergency. Exercises simulating emergencies are carried out at local level and these generally take place in cooperation with the authorities operating on the ground there, for example the police and fire service.

In accordance with the Nuclear Safety Officer and Reporting Ordinance (AtSMV), the operators of nuclear facilities in the Federal Republic of Germany must report any notifiable events occurring to the relevant responsible state supervisory authorities. The aim and purpose of the official reporting procedure is to monitor the security status of these plants and to improve the latter using the knowledge obtained from the reported events in the framework of the supervisory procedure.

However, the commitment of the Group extends beyond these statutory requirements. RWE is a member of the German Cyber Security Council (Cyber-Sicherheitsrat Deutschland e.V.), the Alliance for Cyber Security (Allianz für Cybersicherheit) of the Federal Ministry for Security in Information Technology (BSI) and UP KRITIS of the BSI. The latter is the initiative for cooperation between business and the state to protect critical infrastructures in Germany.

Group Security reports directly to the Executive Board of RWE AG. As part of its governance function, RWE defines Group-wide regulations for security. Business Continuity Management (BCM) and crisis management are a constituent element of this governance. An integrated approach also entails establishment of governance for information security and IT security governance within Group Security.

Processes critical for our business are identified in Business Impact Analyses and appropriate measures are taken. BCM plans are developed on the basis of these analyses. They minimise the impacts of outages and provide effective reinstatement. The effectiveness of these plans is reviewed every year.

Measures and performance measurement

Integrated crisis organisation has been established for meeting the challenge of crisis situations. The organisation comprises central and local crisis staffs that introduce counter-measures depending on the individual incident. These crisis staffs are supported by crisis management plans. Starting with the Executive Board, exercises are carried out by the crisis staffs to deal with different scenarios.

In 2017, the focus of the exercises was on cyber security. Emergency exercises were held at RWE AG and RWE Generation SE, RWE Power AG and RWE Technology International. This took the form of a combined cyber and environmental exercise at RWE Generation SE. The focus of the exercise at RWE Technology International was on travel security. Two emergency exercises in the area of nuclear energy were held at the site of the Grundremmingen nuclear power and one emergency exercise was held at the Emsland site. The crisis teams were given special instructions and training sessions (in the form of modular exercises and simulator courses).

The notifiable events occurring at the sites of our nuclear power plants were also reported to the relevant supervisory authority in 2017 in accordance with the regulations of the Nuclear Safety Officer and Reporting Ordinance (AtSMV). The general public was also informed about all notifiable events through press releases. In 2017, a total of eight nuclear power plants were operating for power generation in Germany (Brokdorf, Emsland, Grohnde, Gundremmingen-B, Gundremmingen-C, Isar-2, Neckarwestheim-2, Philippsburg-2). Out of these eight nuclear power plants, three nuclear power plants are operated by RWE Power AG (Emsland, Gundremmingen-B and Gundremmingen-C). A total of six events from these three nuclear power plants

were reported to the responsible supervisory authority. All the events were classified under the reporting category N (Normal), none were allocated to the reporting category E (Express).

Furthermore, all notifiable events were classified in the International Nuclear Event Scale (INES). Classification in accordance with INES is intended to provide the general public with immediate and uniform information about the safety and technical status of events. All six events relevant for RWE were classified as 0 on the INES scale. (none or only very low importance for technical safety).

GRI 414 SUPPLIER SOCIAL ASSESSMENT

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)



See for ► **general Management Approach on procurement GRI 204, page 36.**

Depending on the requirement put out to tender, suppliers are also interrogated on criteria such as compliance with statutory regulations and RWE's internal rules for minimum wage within the scope of pre-qualification. Relevant criteria

are applied when we assess the offers submitted by our suppliers during the course of the tender process and the value in use analysis. The regulations governing the contractual relationship with individual suppliers are explicitly agreed in separate contractual clauses on the basis of a risk assessment for specific product groups.

GRI 414-1 New suppliers that were screened using social criteria

We interpret impacts on society in many different ways. To this end, we have developed a range of different measures in order to ensure that our suppliers act in conformity with social and ethical principles, and in accordance with the law.

An exceptional situation arises when procurement is carried out in the wholesale markets. Here an appraisal is not possible due to an absence of direct supplier relationships, see ► **GRI 204, page 37.**



We are only able to report on human rights in the context of audits carried out by Bettercoal, see ► **GRI 204, page 37.**

Approximately 1,000 suppliers were evaluated for occupational safety where procurement procedures involved hazard potential in a pre-qualification procedure to assess their suitability, see ► **GRI 204, page 37.**



An overview of the producers audited by Bettercoal is provided on the ► **Bettercoal website.** We regularly audit all our suppliers for conformity with potential compliance risks.



GRI 414-2 Negative social impacts in the supply chain and actions taken

The RWE Purchasing Department does not maintain any business relationships with suppliers if there is information in the public domain indicating that they breach the principles

underlying the Global Compact. RWE is committed to implementation of the Global Compact.

Information “in the public domain” relates to all generally accessible sources from which information can be obtained. Press reports containing merely the suspicion of a breach are not sufficient in this case. Rather, we rely on legally admissible or officially confirmed facts. Furthermore, we use published negative lists (World Bank Listing of Ineligible Firms and Non-Responsible Vendors) drawn up by the World Bank based in Washington/USA. When suppliers are in contention for being included on the list of RWE’s suppliers, the background check is carried out by the relevant purchaser before any orders are awarded. In the case of existing suppliers, the review is performed centrally in the vendor accounts section.

We can only report on the number of suppliers of goods, services and plants audited in relation to labour practices and within the scope of audits carried out by Bettercoal, see ► **GRI 204, page 38**. An overview of the producers audited by Bettercoal is available on the ► **Bettercoal website**. We regularly review all suppliers for conformity with potential compliance risks, see ► **GRI 204, page 37**. When procurement is carried out in the wholesale markets, an appraisal is not possible due to an absence of direct supplier relationships.

GRI 415 PUBLIC POLICY

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)



Challenges

A secure supply of electricity at all times is part of public service. As part of this obligation, the operation of power plants is subject to a large number of statutory and downstream regulations in the EU, at national and partly also at regional level. Political decisions leading to changes in existing regulations or implementation of new regulations therefore exert a major influence on our business activity. Additionally, developments outside the EU also exert an indirect influence, for example at international level.

Organisation and management

RWE bases its actions on the applicable legal framework conditions and ensures compliance with the existing regulatory standards. It is equally important that we explain our actions here and inform others about the impact of existing and planned legal and sublegal regulations. We also participate in dialogue at the political and community levels. Communication with our stakeholders provides us with helpful ideas for aligning our entrepreneurial activities. Particularly at the present time when the company is undergoing change, it is important to discuss expectations and assessments for the future of the energy supply with external stakeholders. At the same time, dialogue gives us the opportunity to provide better communication of corporate decisions and the underlying motives. We believe we have an obligation to provide answers for our stakeholders and we want to be a credible partner in the discussion on an equal level. This enables us to meet the expectations of transparency placed on us by society, see ► **GRI 102-43** and **GRI 102-44, page 21 and 22**.

Our conduct in relation to politicians is clearly regulated in the Code of Conduct, see ► **GRI 102-16, page 15**. We state there that dialogue with representatives of government institutions and political parties is indispensable as far as we are concerned. However, we want to avoid giving the appearance of exerting undue influence in these contexts. We have therefore made a commitment to strict neutrality in relation to political parties and we do not make any donations to political organisations, or organisations and foundations which are closely related to political parties. Employees have the opportunity to report breaches of the Code of Conduct through various channels, see ► **GRI 102-17, page 15**.

Measures and performance measurement

The Group Communications & Public Affairs Department at RWE AG coordinates our contacts. The Department Head reports directly to the Chief Executive Officer. RWE maintains two liaison offices in Brussels and Berlin as points of contact. Since 2010, we have been entered in the Transparency Register of the European Union. We publish a number of disclosures there including the costs for our liaison office in Brussels which amounted to € 2 million during the period under review. We would welcome establishment of a Transparency Register in Berlin based on the Brussels model. We have already disclosed voluntarily information about our budget, the number of employees and other information to organisations such as Lobby Control.

In 2017, we had direct contact with politicians, for example through discussion formats in Berlin and Brussels. Topic-related “Power plant Talks” were held at the sites of nuclear power plants. A dialogue with local-authority politicians has been established in the Rhineland lignite area. Furthermore, we communicate indirectly through the associations we belong to, for example the German Association of Energy and Water Industries (BDEW). See also

► **GRI 102-13, page 12.**

In 2017, the main themes in discussions with politicians related to the energy transition and general climate protection policy. The reform of the European Emissions Trading Scheme was a particular focus in the EU, alongside the Winter Package from the EU Commission and the tightening

of emission regulations for power plants (BREF LCP). The focus in Germany was on the Climate Protection Plan 2050, implementation of the recommendations of the “Commission for Reviewing the Finance of Exit from Nuclear Energy” (KFK) and the Grid Charge Modernisation Act (Netzentgelt-modernisierungsgesetz). In the Netherlands, we also engaged in discussions with politicians about implementation of the national energy agreement and the role of co-incineration of biomass as a contribution to the Dutch CO₂ reduction strategy, see ► **GRI 102-43, page 21** and ► **GRI 102-44, page 22**. In the United Kingdom, we engaged in discussions about BREXIT, the British capacity market, implementation of the new European emissions regulations (BREF LCP) and on national climate protection policy.

GRI 415-1 Political contributions



RWE has made a commitment to neutrality in relation to political parties and we do not make any donations to

political parties, or organisations or foundations which are closely related to political parties.

GRI 417 MARKETING AND LABELLING

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)

Challenges

We want to provide the customers numbering more than 22 million with a secure and reliable supply of electricity, gas and heat at all times. It is only possible to reach an informed decision about a product if it is transparently labelled. There are different statutory regulations on labelling in the countries where we supply customers. Particularly detailed regulations on the labelling of electricity are on the statute book in Germany.

Organisation, management and performance measurement

Transparent product labelling

We want to provide all our customers with comprehensive and transparent information about the energy mix of the individual product and the associated environmental impacts. We take into account the statutory regulations and consistently apply the guidelines published by the German Association of Energy and Water Industries (BDEW). These are regarded as the industry gold standard.

GRI 417-1 Requirements for product and service information and labelling

Electricity labelling is an instrument for increasing market transparency in the electricity market. All electricity bills issued by RWE Group including innogy SE throughout Europe include information on the energy mix, CO₂ emissions and radioactive waste in accordance with the

statutory regulations. Furthermore, the data are also published on the Internet pages of RWE Supply & Trading GmbH, for innogy SE corporate customers and for innogy SE residential customers.

GRI 419 COMPLIANCE (SOCIOECONOMIC)

GRI 103 Management Approach 2016 (including 103-1, 103-2, 103-3)

Challenges

Integrity, honesty, acting in accordance with the law and respect for our fellow human beings and the environment form the basis of our entrepreneurial activity. We are subject to laws, regulations and comparable rules and procedures. These conditions and the RWE Code of Conduct form the framework for carrying out our operations. Any breaches may entail significant consequences for the financial result and reputation of RWE. Individual employees may also be personally liable. A top priority for our employees and sub-contractors is that their conduct and actions should be in accordance with the law and ethical principles. We have defined these principles for conduct with binding effect in the RWE Code of Conduct.

Organisation, management and performance measurement

The principles of general compliance and the Compliance Management System are defined by the Chief Compliance Officer of RWE AG for RWE AG, RWE Generation SE, RWE Power AG and RWE Supply & Trading GmbH. An independent Chief Compliance Officer has been appointed for innogy SE. This officer is responsible for the Compliance Management System at innogy SE, see the ► **innogy Sustainability Report GRI 205, page 38**.

The Chief Compliance Officer of RWE AG is supported in complying with his/her functions and responsibilities at the level of RWE AG by Compliance Managers and at the local level by the Compliance Officers of the individual RWE companies. The focus of activity for the content is on prevention of corruption, see ► **GRI 205, page 39**. Alongside this function, measures for export control compliance and prevention of money laundering are developed further and implemented.

The compliance function at RWE AG has taken on a coordinating and consolidating role for other compliance areas defined for RWE such as competition and anti-trust law, company and capital market law, employment law and environmental protection, occupational health and safety, and data protection. The Chief Compliance Officer of RWE AG bundles these compliance areas within integrated compliance reporting to the Executive Board and the Audit Com-

mittee of RWE AG. However, responsibility for operational content always remains with the functions bearing individual responsibility for areas such as legal affairs, employment law and Group data protection. The legal departments of RWE AG, RWE Generation SE, RWE Power AG and RWE Supply & Trading GmbH provide legal advice on issues relating to company law in conjunction with investment administration and joint ventures, in the context of M&A transactions and project finance. The Legal Department is also responsible for dealing with basic issues relating to energy law, legal issues and procedures in regard to merger monitoring, competition and trademark law, and legal support for procurement, property management and the IT Department. All the internal experts in employment law from the affiliated national companies of the RWE Group are in turn bundled within the employment law function. They are responsible for all matters relating to personal and collective legislation. The employment law experts also organise the engagement of external consultants for all the companies in relation to issues of employment law and any associated matters.

Anti-competitive behaviour

It is important for our company to be perceived as trustworthy and transparent. We earn this trust through fair conduct. RWE also keeps within the law and complies with legislation in competitive situations. Our efforts are directed towards ensuring that all our business activities are in accordance with the conditions of fair competition at all times. We also observe statutory requirements and anti-trust regulations for unbundling. Our operations are based on these rules. In this way, we therefore meet our responsibility as a major player in the economy.

In order to prevent anti-trust, anti-competitive behaviour, we raise the awareness of all employees and management to this issue. Our employees receive training at attendance events and online sessions on the requirements relating to conformity with behaviour in accordance with competition legislation. The Executive Board is integrated in this training concept.

We implement neutral grid operation and thereby ensure the billing-wise and legal-wise separation of grid usage from power generation, trade and supply so that we comply with

the unbundling regulations. Group Auditing carries out preventive audits in the Group companies with the aim of checking implementation of our regulations on anti-

competitive behaviour. We take any reports of potential breaches very seriously, we investigate them and we take any measures necessary where appropriate.

GRI 419-1 Non-compliance with laws and regulations in the social and economic area

Our Group-wide survey on fines due to incidents of corruption revealed that no sanctions had been incurred in this area.

APPENDIX

ASSURANCE REPORT

Independent Practitioner's Report on a Limited Assurance Engagement on Non-financial Reporting and Sustainability Information¹

To RWE AG, Essen

We have performed a limited assurance engagement on the sustainability disclosures denoted with  (hereinafter the "Sustainability Information") and the combined separate non-financial report pursuant to §§ (Articles) 289b Abs. (paragraph) 3 and 315b Abs. 3 HGB ("Handelsgesetzbuch": "German Commercial Code") (hereinafter the "Non-financial Report") contained in the sections with blue font of the Sustainability Report "Our Responsibility. Report 2017" of RWE AG, Essen, (hereinafter the "Company") for the period from 1 January 2017 to 31 January 2017 (hereinafter the "Sustainability Report").

Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the Sustainability Information in accordance with the principles stated in the Sustainability Reporting Standards of the Global Reporting Initiative (hereinafter the "GRI-Criteria") and the Non-financial Report in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB and for the selection of the Sustainability Information to be evaluated.

This responsibility of Company's executive directors includes the selection and application of appropriate methods of sustainability reporting and non-financial reporting as well as making assumptions and estimates related to individual non-financial disclosures which are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal control as they have considered necessary to enable the preparation of a Sustainability Report that is free from material misstatement whether due to fraud or error.

Independence and Quality Control of the Audit Firm

We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors ("Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer": "BS WP/vBP") as well as the Standard on Quality Control 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality control for audit firms (IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis – IDW QS 1) – and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Practitioner's Responsibility

Our responsibility is to express a limited assurance conclusion on the Sustainability Information denoted with  and the Non-financial Report contained in the sections with blue font of the Sustainability Report based on the assurance engagement we have performed.

Within the scope of our engagement we did not perform an audit on external sources of information or expert opinions, referred to in the Sustainability Report.

We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This Standard requires that we plan and perform the assurance engagement to allow us to conclude with limited assurance that nothing has come to our attention that causes us to believe that

¹ PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the German version of the Sustainability Report and issued an independent practitioner's report in German language, which is authoritative. The following text is a translation of the independent practitioner's report.

- the Sustainability Information denoted with  in the Company's Sustainability Report for the period from 1 January 2017 to 31 December 2017 has not been prepared, in all material aspects, in accordance with the relevant GRI-Criteria,
- or
- the Non-financial Report contained in the sections with blue font of the Company's Sustainability Report for the period from 1 January 2017 to 31 December 2017 has not been prepared, in all material aspects, in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB.

In a limited assurance engagement the assurance procedures are less in extent than for a reasonable assurance engagement, and therefore a substantially lower level of assurance is obtained. The assurance procedures selected depend on the practitioner's judgment.

Within the scope of our assurance engagement, we performed amongst others the following assurance procedures and further activities:

- Obtaining an understanding of the structure of the sustainability organization and of the stakeholder engagement
- Inquiries of personnel involved in the preparation of the Sustainability Report regarding the preparation process, the internal control system relating to this process and selected disclosures in the Sustainability Report
- Identification of the likely risks of material misstatement of the Sustainability Report
- Analytical evaluation of selected disclosures in the Sustainability Report

- Comparison of selected disclosures with corresponding data in the consolidated financial statements and in the group management report
- Evaluation of the presentation of the information

Assurance Conclusion

Based on the assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that

- the Sustainability Information denoted with  in the Company's Sustainability Report for the period from 1 January 2017 to 31 December 2017 has not been prepared, in all material aspects, in accordance with the relevant GRI-Criteria,
- or
- the Non-financial Report contained in the sections with blue font of the Company's Sustainability Report for the period from 1 January 2017 to 31 December 2017 has not been prepared, in all material aspects, in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB.

Intended Use of the Assurance Report

We issue this report on the basis of the engagement agreed with the Company. The assurance engagement has been performed for purposes of the Company and the report is solely intended to inform the Company about the results of the limited assurance engagement. The report is not intended for any third parties to base any (financial) decision thereon. Our responsibility lies only with the Company. We do not assume any responsibility towards third parties.

Essen, 27 March 2018

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Michael Conrad
Wirtschaftsprüfer
(German public auditor)

ppa. Juliane v. Clausbruch

KEY SUSTAINABILITY INDICATORS



Economic Performance Indicators

Installed capacity

Power generating capacity ¹								
in MW	Gas	Lignite	Hard coal	Nuclear energy	Renewable energy	Pumped water, Other	Total 2017	Total 2016
Lignite & Nuclear	460	11,017	-	2,770	23	27	14,297	15,764
European Power	14,382	-	7,292	-	261	2,792	24,727	26,116
Of which:								
Germany ²	3,867	-	3,675	-	55	2,528	10,125	11,518
United Kingdom	6,662	-	1,560	-	55	264	8,541	8,546
Netherlands/Belgium	3,066	-	2,057	-	151	-	5,274	5,265
Turkey	787	-	-	-	-	-	787	787
innogy SE	234	-	10	-	3,864	137	4,245	4,531
RWE Group	15,076	11,017	7,302	2,770	4,148	2,956	43,269	46,411

1 as at: 31.12.2017

2 Including generating capacities which are not owned by RWE but that we can deploy at our discretion on the basis of long-term contracts. At the end of 2017, these plants taken together generated a net output of 2,986 MW (previous year: 4,373 MW).

Power generation by primary energy source

Power generation	Lignite		Hard coal		Gas		Nuclear energy		Renewable energy		Pumped water, Other		Total	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
in billion kWh														
Lignite & Nuclear	74.2	74.3	-	-	-	-	30.3	30.1	-	-	0.7	0.4	105.2	104.8
European Power	-	-	29.3	44.2	52.9	52.6	-	-	1.1	1.1	2.4	2.6	85.7	100.5
Of which:														
Germany ¹	-	-	13.3	22.4	7.4	6.3	-	-	0.7	0.7	2.4	2.6	23.8	32.0
United Kingdom	-	-	2.6	6.7	32.4	36.2	-	-	0.4	0.4	-	-	35.4	43.3
Netherlands/Belgium	-	-	13.4	15.1	9.3	6.9	-	-	-	-	-	-	22.7	22.0
innogy SE	-	-	0.1	0.1	1.0	0.7	-	-	10.2	10.0	-	-	11.3	10.8
RWE Group	74.2	74.3	29.4	44.3	53.9	53.3	30.3	30.1	11.3	11.1	3.1	3.0	202.2	216.1

1 Including electricity purchases from power plants which are not owned by RWE but that we can deploy at our discretion on the basis of long-term contracts. In 2017, this electricity amounted to 6.3 billion kWh (previous year: 10.6 billion kWh).

Corporate Governance

Corporate Governance	Unit	2017	2016
R&D costs ¹	€ million	182	165
Proportion of women in the company	%	27.7	27.2
Proportion of women in management positions ²	%	15.0	14.0
Share of the RWE Group's revenue earned in countries with a high risk of corruption ³	%	10.5	10.2

1 In accordance with the ► RWE Annual Report page 197.

2 Encompasses the top four management levels; from 2016, only RWE AG, RWE Generation, RWE Power AG, RWE Supply and Trading GmbH.

3 Countries rated lower than 60 on a scale of 0 to 100 in the Corruption Perceptions Index by the anti-corruption organisation Transparency International (TI), with 100 corresponding to the lowest risk of corruption.

Environmental Performance Indicators

Environmental Performance Indicators ¹	Unit	2017	2016
Specific NO _x emissions	g/kWh	0.40	0.47
Specific SO ₂ emissions	g/kWh	0.18	0.18
Specific dust emissions	g/kWh	0.01	0.012
Ash	thousand mt	7,746	8,201
Gypsum	thousand mt	2,052	2,042
Primary energy consumption	million GJ	1,362	1,478
Water consumption ²	m ³ /MWh		1.62
CO ₂ emissions EU ETS ³	million mt	132.4	148.3
CO ₂ emissions Scope 1 ⁴	million mt	135.6	154.0
CO ₂ emissions Scope 2 ⁵	million mt	1.0	1.3
CO ₂ emissions Scope 3 ⁶	million mt	84.0	86.5
Specific CO ₂ emissions EU ETS	mt/MWh	0.655	0.686
Specific CO ₂ emissions Scope 1	mt/MWh	0.670	0.713
Share of the Group's power generation accounted for by renewable energy	%	5.6	5.1

1 All plants were included where RWE is the operator of the plant.

2 Difference between the water consumption of the power plants and returns to rivers and other surface waters up to 2015, excluding power plants with seawater cooling, including cooling-tower losses.

3 Plants which fall under the scope of the European Emissions Trading Scheme (EU ETS) including power plants which are not owned by RWE that we can deploy at our discretion on the basis of long-term agreements. In 2017, these plants emitted 3.1 million metric tons of CO₂ (previous year: 7.1 metric tons).

4 Scope 1: EU ETS amounts plus the emissions from plants which do not fall under the scope of EU ETS.

5 Scope 2: indirect CO₂ emissions from the transmission and distribution of electricity purchased from third parties in our own grids.

6 Scope 3: indirect CO₂ emissions that do not fall under Scope 1 and Scope 2, produced through the generation of electricity procured from third parties, the transmission and distribution of electricity in third-party networks, the production of used combustion fuels, as well as the consumption of gas sold to customers.

Social Performance Indicators

Social Performance Indicators	Unit	2017	2016
Workforce ¹	FTE	59,547	58,652
Fluctuation rate	%	8.8	10.1
Training days per employee (Germany)		3.8	3.8
Health ratio	%	95.2	95.1
Work-related and commuting accidents	LTI _F ²	2.29	2.1
Work-related and commuting accidents without innogy	LTI _F ²	2.49	
Fatal work-related accidents ³		3	7

1 Converted to full-time positions.

2 Lost Time Incident Frequency (sum of all accidents resulting in at least one day of absence for every 1 million hours worked);

Figures from 2012 incl. reports known to us from third-party companies (subcontractors).

3 Incl. employees of partner companies (subcontractors).

PROGRESS REPORT ON THE GLOBAL COMPACT 2017

RWE supports the United Nations Global Compact and wants to make a contribution to the worldwide implementation of its ten principles. These have been adopted word for word in the RWE Code of Conduct. The following chart identifies the guidelines, programmes and management systems (systems) which we have also introduced to support the implementation of the ten principles within our sphere of influ-

ence. The table also highlights the measures that have been taken during the period under review and the specific results obtained (achievements). The implementation of the ten principles also assists us in implementing making the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015 a reality. The table presents the most relevant SDGs for us out of all the 17 goals.

Principle	Systems	Measures	Results	Contribution to SDGs
Principle 1: Support of human rights	Social Charter and minimum standards for restructuring operations carried out for European companies in the RWE Group covering 99.8% of the employees ILO core standards are defined for the Social Charter Supplier Management (p. 36 ff.)	Restructuring with social compensation by working together with employee representatives and unions (p. 67)	Compliance with principles 1–5 assured through national legislation in Europe, cooperation with the unions, and RWE's own principles which apply to all employees of the company	 
Principle 2: Elimination of human rights violations		Assessment and audit of suppliers (p. 37, 78 f.)		
Principle 3: Ensuring freedom of association		Co-founder of the "Better-coal" Initiative, auditing of coal mines, application of information for standardised and multi-stage process for "Counterparty Risk Assessment" of potential suppliers (p. 37 ff.)	Pay and social benefits above the relevant national average	
Principle 4: Abolition of all forms of forced labour				
Principle 5: Abolition of child labour				
Principle 6: Elimination of discrimination	Diversity management (p. 72 f.) Group-wide women's network at RWE Group including innogy SE (p. 73)	Diversity Week presented diversity and activities to promote an inclusive culture (p. 73) Initiative MINT women (p. 73)	Percentage of women in management positions was 15% for RWE Group without innogy SE (p. 73) Percentage of people with severe disabilities was 1.4% for RWE employees in Germany (p. 74) Certification "Total Equality" (p. 73)	

Principle	Systems	Measures	Results	Contribution to SDGs
Principle 7: Precautionary environmental protection	Environmental management (p. 74 f.) Strategy for reducing the CO₂ emission factor (p. 14, 46, 56 f.) Financial risks associated with emissions trading are presented in risk management (p. 32, 56 f.)	Annual audit for setting up environmental management systems in conformity with ISO 14001 (p. 63) Recording the interfaces of activities with water bodies and determining the impacts (p. 50) Since 2015 RWE has a Biodiversity Policy (p. 52)	Level of coverage for environmental management related to the Group: 99%, of which 91% externally certified (p. 64) Level of coverage with certified energy management systems: 82% (p. 48) Reduction of CO₂ emissions to 132.4 million mt CO₂ (p. 59) Reduction of specific emissions of the air pollutants NO_x to 0.40 g/kWh and SO₂ to 0.18 g/kWh (p. 60)	     
Principle 8: Initiatives to promote greater environmental responsibility		Initiative for energy education 3maIE (p. 34, 76)	Offerings for use of flexibilities (p. 43 f.) Energy education packages for children and teenagers (p. 76)	 
Principle 9: Development and diffusion of environmental technologies	Strategy to reduce the CO₂ emission factor (p. 14, 46, 56 f.) Financial risks associated with emissions trading are presented in risk management (p. 32, 56 f.) Research and development (p. 44)	Research on using lignite as a material (p. 44) Research on increasing the flexibility and efficiency of conventional plants (p. 44)	Modernisation of the power plant portfolio (p. 48 f., 56 f.) Expansion of the use of biomass in the Netherlands (p. 56 f.)	
Principle 10: Anti-corruption measures	RWE Code of Conduct and Group guidelines for prevention of corruption and organisational regulations (p. 39) Audited Compliance Management System for anti-corruption in accordance with the IDW Audit Standard (p. 19)	Updating and expansion of corruption risk scenarios (p. 40) Training of the workforce with a web-based training programme and on-site training (p. 40)	New risk-focused training concept for RWE companies will be rolled out at RWE in 2018 (p. 40)	

CONTACT AND IMPRINT

Publisher

RWE Aktiengesellschaft
Huyssenallee 2
45128 Essen
Germany

Contact persons

Dr. Jens Wiggershaus
Dr. Christine Negrini
Dr. Marita Hilgenstock
Political Affairs, Corporate Responsibility
Huyssenallee 2
45128 Essen
Germany
Phone +49 201 12-00
E-mail responsibility@rwe.com

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Tristram Carrington-Windo

Stay in Dialogue.

responsibility@rwe.com

RWE Aktiengesellschaft
Huyssenallee 2
45128 Essen
Germany

www.rwe.com