



Corporate Responsibility Report 2018

Table of contents

About the Corporate Responsibility Report	3	Environment	51
CEO Statement	4	Strategic management using the Environmental Management System	52
Portrait of Munich Re	5	Higher resource efficiency and falling carbon emissions	54
Corporate governance	6	Society	57
Creating value with global responsibility	7	Shared-value approach defines our commitment	58
High compliance standards maintain integrity	12	Commitment to people and the environment	59
Core business	19	Key figures	63
Corporate responsibility in insurance business	20	GRI Content Index	69
Corporate responsibility in investment	26	SRI ratings & indices	72
Solution-oriented responses to climate change	30	Principles for Responsible Investment (PRI)	73
Using digitalisation responsibly	36	Independent auditor's limited assurance report	74
Increasing risk awareness in society	40	Contact and imprint	76
Employees	44		
Target-oriented management of HR topics	45		
Attractive programmes for employees	46		
Promoting diversity and equal opportunities	48		

About the Corporate Responsibility Report

> GRI 102-45; 102-50; 102-52; 102-53; 102-54

Our business model is based on responsible corporate governance that reconciles economic, environmental and social requirements. To this end, we rely on transparency and dialogue with our stakeholders. We also establish global partnerships for sustainable development. In our Corporate Responsibility (CR) Report, we describe the ways in which we embrace corporate responsibility in our day-to-day operations.

Our annual Corporate Responsibility Report also provides a review of our business fields of primary insurance and reinsurance as well as asset management with respect to the objectives we have defined, the measures we realised in the past year and the successes we have achieved.

The measures and activities presented focus mainly on the period from 1 January 2018 to 31 March 2019; the key figures relate to the 2018 financial year (ending 31 December 2018). Our Corporate Responsibility Report has been available online in English and German since 24 May 2019.

Further reporting

Munich Re's [annual report](#) provides our investors with detailed information on our corporate governance, management and financial matters.

In addition, our [combined non-financial statement](#) in accordance with Sections 289b(3) and 315b(3) of the German Commercial Code (HGB) meets the standards of the European Union's Corporate Social Responsibility (CSR) Directive. Ultimately, our CR Report serves as a link to the standard financial reporting without itself containing any financial aspects.

Selected topics - Qualitative and quantitative reporting

To ensure that the corporate responsibility report gives a comprehensive picture of our performance, the topics and content have been chosen according to their significance to our business operations and the interests of our stakeholders as well as their impact on efficiency, economic and social factors.

Verified indicators

The carbon footprint from our business operations is the key indicator for measuring and assessing our environmental performance. We calculate carbon emissions on a yearly basis from our consumption of energy, paper and water, our business travel and generation of waste. This calculation takes a standardised form and is of a high quality. Since 2015, an external audit company confirmed that the entire Munich Re (Group) has met its objectives for selected quantitative environmental data (see [audit report 2018](#) and [audit reports](#) of the recent years 2015 to 2017).

Our voluntary commitments

The voluntary commitments such as our acceptance of the UN Global Compact, the Principles for Sustainable Insurance (PSI) and the Principles for Responsible Investment (PRI) – form the framework of our corporate responsibility strategy.

GRI Standards and Global Compact "Communication on Progress" Report

This report has been prepared in accordance with GRI standards ("core" option). The GRI indicators have been compiled in a separate GRI disclosure. In addition, the Corporate Responsibility Report and the GRI disclosure also constitute our annual Communication on Progress Report for the UN Global Compact.



Signatory of:



Ladies and Gentlemen,

> GRI 102-14

For us, acting responsibly means creating added value – both for our Group and for society as a whole. This principle is strongly reflected in our shared-value approach, which forms the basis for our corporate responsibility strategy. Part of this involves systematically integrating sustainability criteria – environmental, social and governance (ESG) aspects – when creating value in our core business. We have also adopted a Group-wide Code of Conduct for responsible and sustainable decision-making in line with the ten principles of the United Nations Global Compact.

Thanks to our comprehensive risk expertise, we are able to work continuously on solutions that reduce people's risk and alleviate losses when they do occur. In the dialogue with our stakeholders we aim for transparency, primarily focusing on the action areas of climate change, raising risk awareness, and digitalisation.

Climate change is undoubtedly one of the biggest challenges facing mankind today and requires decisive action as a matter of great urgency. We are committed to the target agreed at the Paris Climate Conference of limiting global warming to less than 2°C and have undertaken to make our own, independent contribution to climate protection. In so doing, we believe the greatest potential in tackling the effects of climate change can be gained by driving forward new technologies to achieve a low-carbon economy – in power generation, transportation, energy storage and industrial production. We offer insurance solutions that enable us to shoulder part of the burden of these frequently technology-specific risks. This also involves a good deal of pioneer-

ing work on our part: after being the first company to launch photovoltaic insurance in 2009, Munich Re recently achieved another global first by introducing an insurance to cover battery performance.

Furthermore, Munich Re does not invest in either shares or bonds of companies that generate more than 30% of their revenue from coal – the fossil fuel responsible for the bulk of CO₂ emissions. In single-risk business, where we know all the risks we insure, we no longer cover any new coal-fired power stations or coal mines in industrialised countries. There may be few exceptions in developing countries.

Munich Re is also driving forward CO₂ reductions in its business operations, and has consequently been carbon-neutral since 2015. Overall, since 2009, we have been able to reduce our Group-wide carbon footprint by 44% per employee.

We want to identify emerging risks at an early stage and assess them from every possible perspective. This enables the creation, often in cooperation with supranational organisations and development banks, of innovative risk transfer solutions that strengthen resilience and benefit society in the countries concerned. One example of this is the Pandemic Emergency Financing Facility (PEF), which can quickly channel first-relief surge funding to developing countries facing a major disease outbreak with pandemic potential. In 2018, the PEF made its first-ever payment to help bridge a funding gap for Ebola countermeasures in the Democratic Republic of the Congo.

The third action area, digitalisation, opens up a whole range of business opportunities: thanks to digitalisation, we are able to deepen our knowledge, strengthen our existing business and – frequently in cooperation with partners – create new opportunities, for example regarding the internet of things. A key component in all of this is



to develop and expand the digital expertise of our employees. Consequently, all staff in reinsurance are able to take advantage of our Digital School qualification programme and its ever-growing range of training opportunities. We are also investigating the possible applications of artificial intelligence. Munich Re attaches great importance to the responsible use of this technology, for example through the development of standards for evaluating algorithms. In order to promote the training and networking of data scientists in Germany, Munich Re was also involved in setting up the German Data Science Society.

All these examples show that Munich Re is ready and able to meet its responsibilities. We do so both at Group level and at individual employee level, with over 41,000 staff assuming a wide variety of different roles. In our Corporate Responsibility Report, we outline how we live up to our responsibilities and detail the projects we have driven forward in the last year to help achieve this.

I hope you find the information in this report both interesting and informative. Best regards,

A handwritten signature in blue ink, appearing to read "Joachim Wenning".

Joachim Wenning

Portrait of Munich Re

> GRI 102-1, 102-2, 102-3, 102-4, 102-5, 102-6, 102-7, 102-9

Risk management is our strength

Munich Reinsurance Company (or Munich Re) is a stock corporation with its registered office in Munich, Germany. Our business model is based on the combination of primary insurance and reinsurance

€2,275m

Munich Re (Group) profit 2018

under one roof. We take on risks worldwide of every type and complexity. Munich Re stands for exceptional solution-based expertise, consistent risk management and financial stability. We attach great importance to maintaining close and trusting relations with our clients. In the 2018 financial year, the Group achieved a profit of €2,275 m on premium income of €49.1bn. It operates in all lines of insurance and, with more than 41,400 employees, is represented on every continent and in over 100 countries.

Reinsurance offers innovative solutions for complex risks

With premium income of €31.3bn from reinsurance alone, Munich Re is one of the world's leading reinsurers. We offer a full range of products, from traditional reinsurance to innovative solutions for risk assumption. Especially when clients require solutions for complex risks, Munich Re is a much sought-after business partner. The unique global and local knowledge of our 12,000 or so staff in reinsurance is one of our most important resources for ensuring the success of the Group. Our client service regularly receives top ratings.

Primary insurance under the ERGO brand

Munich Re bundles most of its primary insurance activities in the ERGO Group, and also in the services offered by DAS, DKV, ERGO Direkt and ERV. Worldwide, the ERGO Group is represented in over 30 countries and concentrates on Europe and Asia. ERGO offers a comprehensive range of insurance and pension provision products and services. ERGO Versicherung AG is one of Germany's largest providers of property and legal protection insurance. As a specialist in capital market-oriented insurance, ERGO Vorsorge Lebensversicherung AG is shaping change in the area of private provision and biometric risk products. Some 40,000 people work for the Group, either as salaried employees or as full-time self-employed sales representatives. In 2018, ERGO posted premium income of €17.8bn.



MEAG manages global assets

The Group's worldwide assets of €216.9bn are managed by MEAG. The quality of our asset management proved its worth during the global financial crisis, which Munich Re weathered with continued financial strength.

€216.9bn

assets managed by MEAG for Munich Re (Group)

MEAG also offers its expertise to private and institutional clients. The volume of assets managed for third parties amounts to €15.5bn.

01_Corporate governance



Corporate governance

Creating value with global responsibility

> GRI 103; 102-11; 102-16

Munich Re adopts a forward-looking, prudent and responsible approach to handling risks. For over 135 years, Munich Re has created long-term value by assuming a diverse range of risks around the world. We are convinced that this business concept will continue to be successful in the future through sustainable action. Responsible corporate governance that reconciles economic, environmental and social requirements forms the basis to this approach. In this context, we rely on dialogue with our stakeholders and the establishment of global partnerships for sustainable development.

The following are the cornerstones of our corporate responsibility (CR) strategy:

- adopting a shared value approach
- focusing on four fields of action
- meeting voluntary commitments
- achieving our sustainability targets
- engaging in dialogue with our stakeholders

Our shared value approach aims to achieve added value for society as well as for our Group. We address social challenges, making the best use of our strengths

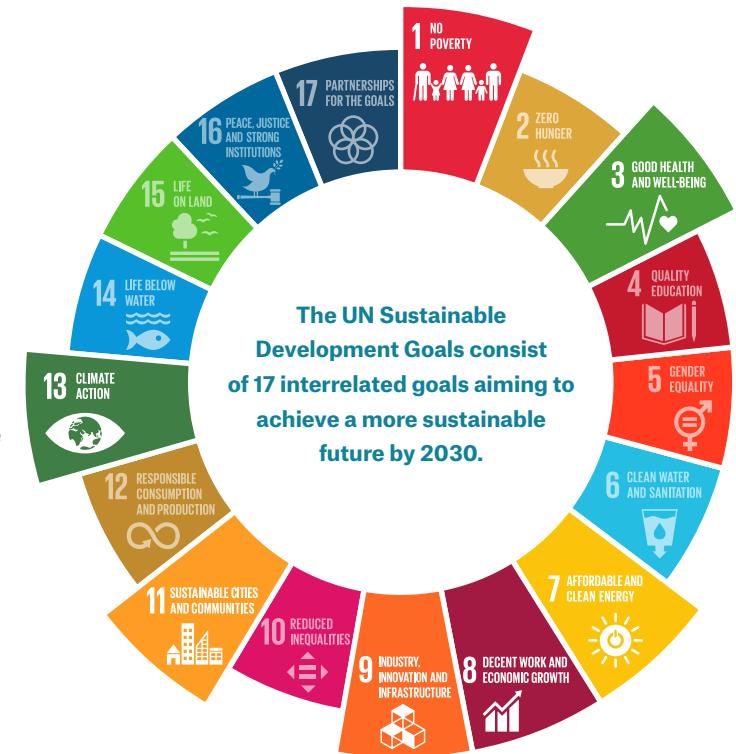
and abilities and sharing knowledge with our stakeholders. Our risk expertise thus allows us to develop new perspectives and sustainable solutions.

The strategic focus is on four fields of action:

- We proactively consider environmental, social and responsible corporate governance (ESG) aspects along the entire value chain in our core business activities.
- As an employer, we attach the greatest importance to treating our staff in a responsible and respectful way. We create attractive framework conditions to promote their personal and professional development.
- We practise active environmental management at our sites, and are carbon-neutral Group-wide.
- From a sense of social responsibility, we support a large number of initiatives and projects that are close to our core business and promote social cohesion.

Voluntary commitments, such as the UN Global Compact (UNGC), the Principles for Responsible Investment (PRI) and the Principles for Sustainable Insurance (PSI) of the UNEP FI represent a key element of our CR strategy. By recognising these guidelines and through our membership in the initiatives, we are documenting our understanding of corporate responsibility. At the beginning of our report you can find an overview of Munich Re's [voluntary commitments](#).

Through our risk expertise, our sustainable solutions and our actions as a responsible employer, we are contributing in particular to the achievement of the following seven UN Sustainable Development Goals (SDGs):



Targets and measures anchored in roadmap

We work continuously to refine and implement our corporate responsibilities. Thus, we have set ourselves the following targets, which we wish to achieve within a clearly defined time frame with the help of specific measures.

Topic	Target and measure	Progress in 2018
Sustainable corporate governance Prerequisite for sustainable business practice is to ensure a fair and trusting relationship with our stakeholders. By meeting high ethical and social standards, we avoid conflict situations and protect the reputation of the Company and the Group.	Continuous review of our corporate governance on the basis of legal compliance, developments, best practices	<ul style="list-style-type: none"> - Implementation of the requirements of the General Data Protection Regulation (GDPR) - In 2018, no material data protection event as defined in the Solvency II Group Compliance Policy occurred anywhere in our Group worldwide, nor were any material proceedings instituted for breaches of data protection rules
	Performance of a materiality analysis in 2018 Focus on material topics for our sustainability activities	<ul style="list-style-type: none"> - Review of sustainability topics of importance for the Company with regard to their materiality to stakeholder and business relevance and materiality for Munich Re - Assessment of economic, ecological and social impacts of Munich Re with regard to these issues
	Provide a framework for action for staff: Revision of the Munich Re (Group) Code of Conduct in 2018 and implementation in the Group	<ul style="list-style-type: none"> - Revised Munich Re Group-wide Code of Conduct adopted and implemented - Introduction of new, mandatory learning programmes on the Code of Conduct for all staff in our reinsurance business
	Meeting our voluntary commitments with the design of the sustainable procurement process Target for 2019: Further integration into the procurement process of human rights considerations in the supply chain	<ul style="list-style-type: none"> - Compliance with UNGC criteria was anchored in approx. 80% of our framework agreements in reinsurance business



Topic	Target and measure	Progress in 2018
Core business The focus of our corporate responsibility is on the assumption and diversification of risks in primary insurance and reinsurance, and also in investment. With regard to sustainability, our activities focus on the identified material topics	Sustainability in insurance and investment: Refinement of Munich Re's Group-wide client strategy	<ul style="list-style-type: none"> - New underwriting guideline on carbon risks: No insurance cover for new coal-fired power plants or new coal mines; Divestment of stock and corporate bonds (where more than 30% of turnover is from coal mining or coal-based power generation)
	Sustainability in insurance and investment: Target for 2019: Review of the current governance structure with the aim of refining the management of ESG risks	
	Sustainability in insurance: Advising and supporting underwriters on the integration of ESG criteria	<ul style="list-style-type: none"> - Assistance with binding decisions within 48 hours on accepting or rejecting risks referred to the Reputational Risk Committee because they involve a potential reputational risk.
	Sustainability in insurance: PSI project: Development of industry standards to integrate ESG aspects in core business in line with the Principles for Sustainable Insurance Target for 2019: Participation in the public consultation process, ongoing implementation of the results	<ul style="list-style-type: none"> - Participation in PSI's ESG standards project - Presentation of the standards in February 2019
	Sustainability in investment: Advancing the systematic integration of ESG criteria into asset management	<ul style="list-style-type: none"> - Development of the investment process for equity and bonds: consistent ESG integration, i.e. assessment of the ESG performance alongside the financial analysis - Integration of MSCI ESG research in the investment process for liquid assets; Revision of our Responsible Investment Guideline (RIG) - In 2018, our sustainability ratio for all forms of investment was >80%; In the most recent PRI assessment in 2018, Munich Re achieved the top rating of "A+" in the Strategy and Governance category. The median rating was "A" among the relevant peer group of asset owners
	Sustainability in investment: Expansion of climate-friendly investment in infrastructure projects such as solar parks and wind farms Long-term objective: Expansion to €2.8bn	<ul style="list-style-type: none"> - Purchase of a wind farm in Sweden with an overall output of 79 megawatts producing 230 gigawatt hours - Purchase of a solar park in southern Spain with an overall output of 175 megawatts producing 300 gigawatt hours - At the end of 2018, the invested capital in renewables amounted to some €1.6bn



Topic	Target and measure	Progress in 2018	Topic	Target and measure	Progress in 2018
	Digitalisation: Development of a strategy on the ethical aspects of Artificial Intelligence (AI)	- Under the guiding principle of "Responsible Artificial Intelligence", Munich Re is currently devising a strategy based on the five "ethics guidelines for trustworthy AI" drawn up by an expert group at the EU Commission			
Staff Highly qualified and top-performing managers and staff are the cornerstones of our business success.	Promotion of diversity as a strategic success factor for Munich Re (Group): Increase in the proportion of women in management positions in Germany to at least 25% by 2020	- Proportion of women in management positions at Munich Re (Group) in Germany increased to 25.8% (from 23.6% in 2017); Proportion worldwide increased to 35.7% (from 33.5% in 2017)	Environmental and climate protection at our locations As a large organisation with more than 41,000 employees, we have a responsibility for environmental protection and have involved ourselves in areas that we can influence in tangible and positive ways.	Implementation of the environmental and climate protection strategy 2020 with the following targets:	- Carbon savings target of 35% exceeded; 44% reduction in carbon emissions (2017 minus 39%)
 5 GENDER EQUALITY  8 DECENT WORK AND ECONOMIC GROWTH	Gradual expansion of continuous learning programmes	- Training programme expanded further: - Range of courses: professional training, courses on method competencies and social skills, management topics, compliance regulations, health and safety training and language courses - Courses in various learning formats: Classroom training, e-learning, webinars, individual courses for groups and individuals	 7 AFFORDABLE AND CLEAN ENERGY  13 CLIMATE ACTION	- 35% reduction in carbon emissions by 2020 (base year 2009) - Maintain carbon neutrality across the Group - Group-wide verification of environmental data, certification of selected units' environmental and energy management systems, and - 100% renewable energy for the Group by 2020	- Group-wide approx. 86% of required electricity procured from renewable energy sources - Since 2015, all the business activities of Munich Re (Group) have been carbon-neutral; - Annual Group-wide external verification of environmental data; 38% of staff employed at ISO 14001-certified locations (2018)
	Targeted, needs-based training for all staff, particularly on the subject of digitalisation	- Launch of the "Digital School", offering digital training options in the fields of agile methods, data analytics, design thinking, digital leadership and technologies, and working in the digital age. - Special training programme established in the reinsurance division for specialists in the field of cyber security (Cyber Expert Pool). 11 cyber experts trained as underwriters.	Society As a responsible business, we are committed to public welfare and cohesion within our society. We promote projects that allow us to both contribute and expand on our risk expertise. In this way, we can increase the effectiveness of individual initiatives and motivate our employees to take part.	Continuation of Munich Re and ERGO's Group-wide project "Tackling climate change together" – in collaboration with Climate-KIC and SOLARKIOSK (2017–2019)	- Cooperation with Climate-KIC: - in 2018, 7 start-ups were accepted for the programme and funded for between 6 and 12 months - Continuation of the partnership with SOLARKIOSK
	Identification and development of staff with leadership potential	- Development programmes "Group Management Platform" for top management in the Group, "Hydrogen" in the reinsurance group, and "MEAG Young Managers" at MEAG - At ERGO, development of a new global talent programme (digital transformation). In the reinsurance group at the Munich location, we were able to fill approximately 90% of management positions in 2018 from our own ranks	 1 NO POVERTY  3 GOOD HEALTH AND WELL-BEING  7 AFFORDABLE AND CLEAN ENERGY  11 SUSTAINABLE CITIES AND COMMUNITIES	Review and implementation of a Group-wide guideline on donations, sponsorships, memberships and partnerships, with the aim of streamlining processes and focusing increasingly on measures of relevance for our social involvement	- Successful introduction of the Group-wide guideline
				Development of a concept for social impact measurement and implementation (2018–2019)	- Concept development complete, trial implementation for individual projects

Important impulses from stakeholder dialogue

> GRI 102-40; 102-42; 102-43

Munich Re has always valued an open and ongoing dialogue with its stakeholders. This has allowed us to identify at an early stage the topics that are material for us now and in the future from our partners' perspective. At regular intervals, we analyse the outcomes from the stakeholder dialogue, and incorporate them into our CR strategy.

Clients:

We want to serve our clients in all fields of business as a reliable and solution-oriented business partner. We regularly evaluate their satisfaction with our services in the form of analyses and surveys – tailored to the different client structure in insurance and reinsurance. Further information about the topic of client satisfaction can be found in the section [Customer satisfaction](#). Our client managers in reinsurance also engage in regular exchange with clients on potential needs, trends and challenges, at trade fairs, events and client training seminars. We maintain contact with insurance customers via the ERGO Customer Workshop.

Employees:

We conduct an ongoing exchange with our employees worldwide. We encourage a culture of feedback and transparent communication across a wide range of platforms, such as our intranet, Yammer and other dialogue forums. Events such as town hall meetings, strategy talks with members of the Board of Management and management conferences promote exchange across all levels of management.

Shareholders, analysts and investors:

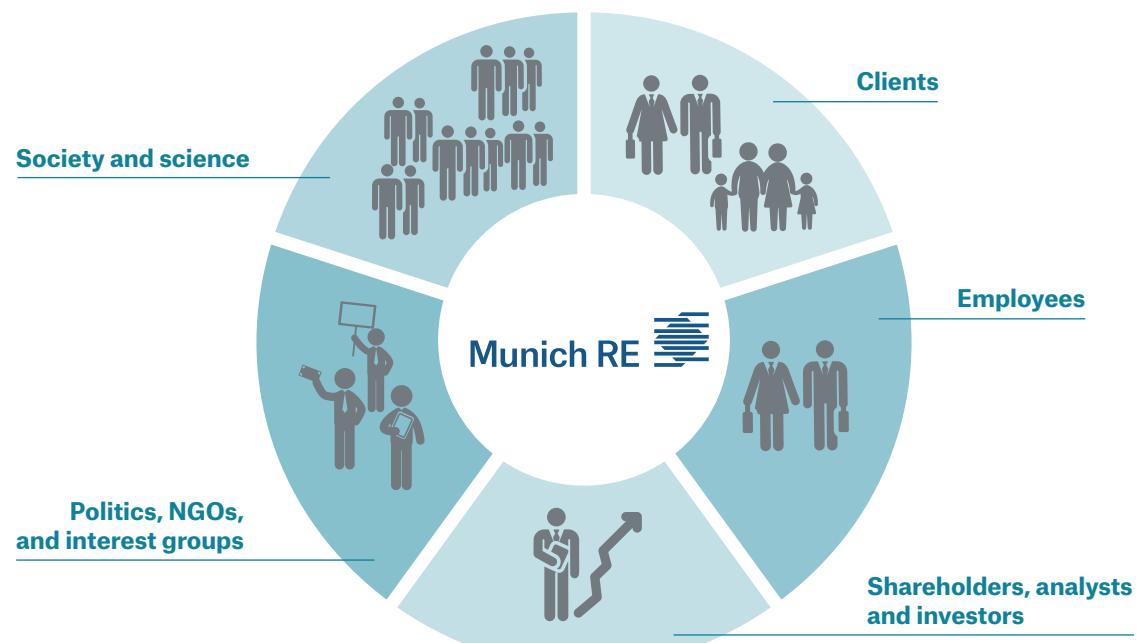
Professional communication with players in the financial markets features regular dialogue and proactive provision of information by Munich Re. Through frequent personal investor calls and at (SRI) roadshows – in addition to scheduled investor and analyst events – we provide key detailed information on the general opportunities and risks attached to our business. We also specifically inform these groups about our sustainability activities and industry trends.

Politics, NGOs, interest groups:

At both national and international level, we are in close contact with interest groups, NGOs, UN institutions and public authorities. We are also an active member of many insurance industry initiatives and associations.

Society and science:

Our experts are engaged in ongoing dialogue with scientists, associations and organisations around the world, and are involved in a large number of national and international research and development projects such as Global Earthquake Model (GEM), GeoHazards International (GHI), the Global Climate Forum (GCF) and the Munich Climate Insurance Initiative (MCII).



Key topics updated

> GRI 102-44; 102-46; 102-47; 102-49

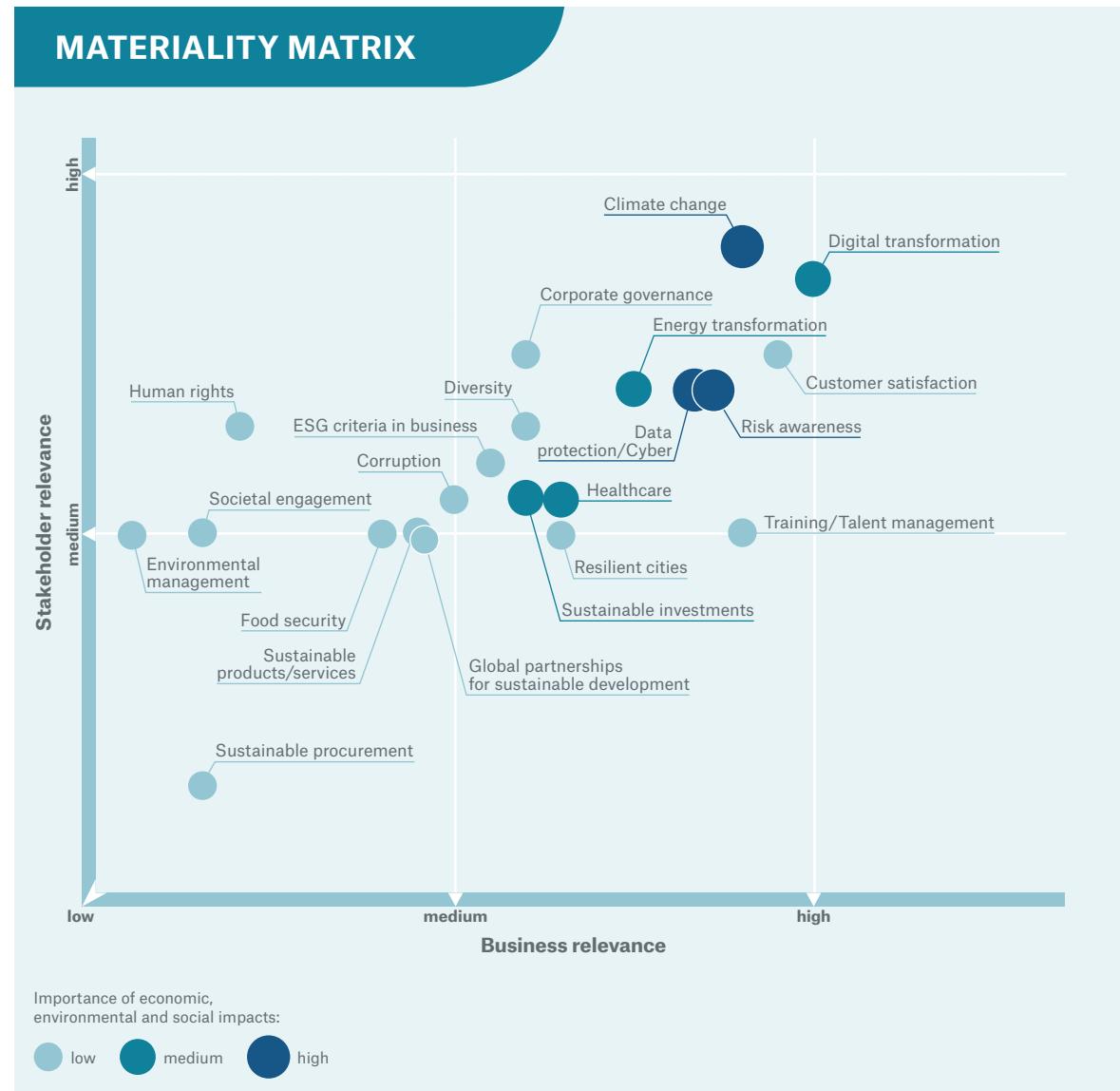
For the Munich Re CR strategy, we select topics that are most material.

We assess the topics in terms of three different dimensions:

- the business perspective;
 - the stakeholder perspective;
 - the impact of our business activities on the three sustainability dimensions of environment, society and economy.

In 2018, we reviewed and reassessed these topics in terms of their materiality for Munich Re. In this instance, a shortlist was drawn up. It included topics from the previous materiality analysis, from voluntary commitments, the outcomes from the stakeholder dialogue, external standards such as SDGs, GRI, PRI, PSI, and industry trends. In a second step, we held interviews with internal experts from all the relevant divisions and corporate functions. The results were then validated by the Sustainability unit and summarised in a final assessment.

The materiality matrix on the right shows the topics that are material for us:



Climate change, risk awareness and prevention, along with data protection and cyber security remain high-priority topics. The topics of digital transformation and energy transition were added to the category with the highest level of materiality. The five top topics are closely related to our core business. An additional strategic focus is put on the topics of healthcare, client focus and satisfaction, sustainable investment, training and talent development.

Group-wide management of CR topics

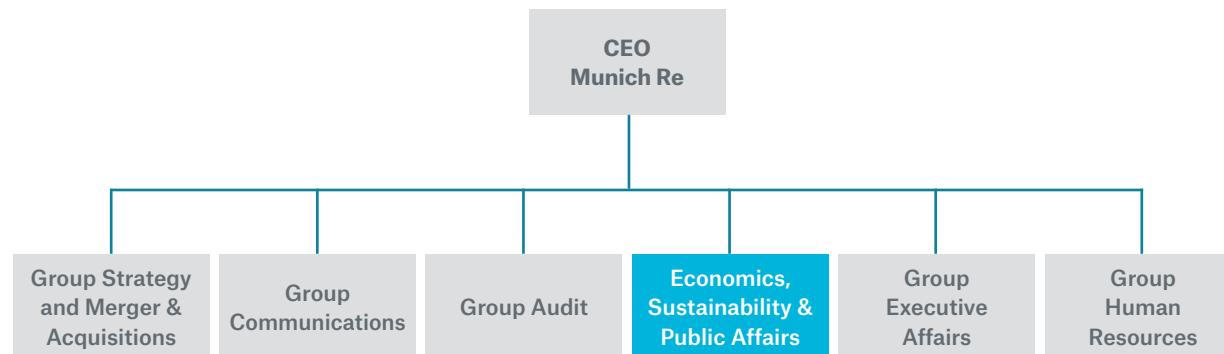
> GRI 103; 102-18

Munich Re has clearly regulated organisational accountability for corporate responsibility aspects. For example, guideline-setting competence for developing and implementing the Group-wide CR strategy lies with the Central Division Economics, Sustainability

and Public Affairs (ESP), which reports directly to the Chairman of the Board of Management. Fundamental strategic decisions on CR topics are taken by the Board of Management, or in one of its committees (Strategy Committee, Group Committee for Investment, Group Committee for Risk).

Once a year, Munich Re's Group Investment Committee and Group Risk Committee inform the Supervisory Board about material sustainability topics on the basis of the [combined non-financial statement](#).

The Group Corporate Responsibility Committee (GCRC) is responsible for managing business-sensitive topics. The committee comprises representatives from the insurance and reinsurance fields of business, the Sustainability unit and other relevant Group functions.



High compliance standards maintain integrity

> GRI 103

Code of Conduct: Commitment to compliant conduct

> GRI 102-16

Responsible corporate governance is only possible on the basis of impeccable ethical and legal conduct. We therefore combat any kind of corruption, respect human rights, and ensure that our strict compliance standards are met along the entire value chain. To ensure compliant conduct, we have created Group-wide guidelines and minimum compliance requirements. Their implementation is checked and ensured with the help of appropriate information and documentation systems.

Our [Code of Conduct](#), which was revised in 2018, forms the basis for our responsible conduct, along with additional commitments, and sets out our understanding of the relevant values. The rules it contains are binding for all subsidiaries and staff of Munich Re (Group) and, together with other policies, guidelines and work instructions, set the limits of our activities. All staff are obliged to familiarise themselves with the contents of the Code of Conduct. At regular intervals, employees must demonstrate their knowledge of the Code of Conduct by undertaking a mandatory self-test. A new learning programme for this was drawn up in 2018.

The Code of Conduct obliges staff to act in a manner that is responsible, transparent and trustworthy. They must disclose any conflicts of interest to allow these to be professionally and fairly resolved. Staff may not accept or offer financial incentives. The compliance culture, with which we protect the reputation of Munich Re and follow our business objectives, is of special importance. Our managers bear a particular responsibility for ensuring compliance with our legal standards, embodying our core values, and thereby creating a recognisable compliance culture.

The Code of Conduct also covers money laundering aspects. The companies affected by the German Money Laundering Act have taken appropriate organisational precautions and appointed money laundering officers and deputies. The ERGO money laundering guideline also regulates fundamental requirements to prevent money laundering and the financing of terrorism.

In 2013, ERGO was one of the first companies to sign the Code of Conduct for the sale of insurance products, issued by the German Insurance Association (GDV). The code requires measures to prohibit corruption and the offering or acceptance of bribes. External auditors have regularly confirmed, most recently in 2017, that such measures have been implemented effectively at ERGO. In addition, ERGO has adopted its own [Code of Conduct](#) for its independent sales force.

Respecting human rights at all times in all places

> GRI 102-12; 412-2

We regard the protection of human rights as a particular obligation. For this reason, the Munich Re Board of Management has formulated its own position on the subject of [human rights](#). Munich Re (Group) is committed to respecting human rights in line with internationally accepted human rights principles* and the United Nations Guiding Principles on Business and Human Rights. We strive to prevent or mitigate any possible adverse human rights impacts that could arise from our business activities. In order to identify such impacts in a systematic way, we have defined the following four dimensions: employees, procurement, insurance and reinsurance business, and asset management. For each of these dimensions, we have introduced a set of policies, governance instruments and internal position papers to guide our decision-making and ensure responsible business conduct.

We illustrate at regular intervals how Munich Re (Group) meets its responsibilities for human rights. In this context, we use our CR Report, which simultaneously serves as an annual progress report for the UN Global Compact, as well as the [statement on compliance with the UK Modern Slavery Act](#) and the reports on the Principles for Sustainable Insurance (PSI) and the Principles for Responsible Investment (PRI). You can find further information in the [Annex](#).



Our aim is to continuously improve human rights-related processes. To this end, we are extending our risk screening and we inform our staff and business partners at regular intervals about this topic area. The dialogue with our stakeholders provides us with important, additional impetus.

* Including the International Bill of Human Rights (incl. the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights) and the International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work.

The following list provides an overview of the most relevant commitments and instruments we have in place to ensure our compliance with human rights due-diligence requirements:

Commitments

- UN Global Compact (UNGC)
- Principles for Sustainable Insurance (PSI)
- Principles for Responsible Investment (PRI)
- Diversity Charter

Codes and policies

- Code of Conduct
- Group-wide Procurement Principles
- Responsible Investment Guideline
- Diversity Policy

Governance instruments

- Group Corporate Responsibility Committee
- Reputational Risk Committee
- Whistleblowing portal

All staff receive mandatory training on the Code of Conduct and associated human rights aspects. You can find further information on the observance of human rights by Munich Re in our [Human Rights Factsheet](#).

Sustainable focus for procurement

> GRI 412-3

Our responsible corporate governance extends far beyond our core business, and also influences all of our

procurement activities. As a global organisation, Munich Re procures many different goods and services throughout the world. The

~78%

of our framework agreements include UNGC criteria

benchmark in our procurement decisions is best total value in terms of the criteria quality, time and cost. Environmental and social aspects and good management practices also play a crucial role.

Munich Re has set out the applicable regulations and operational principles in its procurement principles, which are authoritative for all purchasing processes. They include various award criteria, supplier requirements, principles relating to human rights, labour standards, the environment and anti-corruption, as well as the objectives for partnerships. More detailed information on the [procurement principles](#), which are applicable Group-wide, can be found on our website.

We obligate our suppliers to recognise the UN Global Compact. In 2018, compliance with UNGC criteria was anchored in approximately 78% of our framework agreements.

Good corporate governance creates trust

> GRI 102-11; 102-16; 102-18

Responsible and sustainable management at Munich Re is ensured by means of corporate governance, compliance systems, anti-fraud management and sustainable risk management. As a global organisation, we are subject to a large number of national and international legal systems, standards and corporate governance regulations. Within Munich Re, our Code of Conduct obligates the management and staff to behave in a way that is ethically and legally beyond reproach.

At the same time, corporate and Board of Management objectives that are aligned with sustainability and financial considerations ensure that business decisions are always made on the basis of long-term meaningfulness and value preservation.



For us, good corporate governance means the Board of Management and Supervisory Board working efficiently together, a spirit of trusting cooperation existing between the two bodies and with the staff, and an effective organisational structure. These help to secure the confidence of investors, clients, employees and the general public in our corporate activities.

Pursuant to Munich Reinsurance Company's Articles of Association, the Supervisory Board has 20 members. Half of these comprise representatives of the stakeholders, and half selected representatives of Group employees within the European Economic Area. The Supervisory Board is of the opinion that all 20 of its members may be regarded as independent within the meaning of Section 5.4.2 of the German Corporate Governance Code. The Supervisory Board's Nomination

Committee selects candidates for the shareholder representatives based on a defined set of criteria. One of the functions of the Supervisory Board is to ensure diversity in the selection of candidates. At the end of the reporting year 2018, 45% of the Supervisory Board seats were held by women. This surpassed the Supervisory Board's target (30% ratio of women).

There are detailed regulations on the handling of share transactions and shareholdings of members of the Board of Management and Supervisory Board. Purchases and sales must be notified immediately if they reach or exceed €5,000 in the space of a calendar year. Further information on the structure and duties of [corporate governance](#) of Munich Re can be found on our website.

Compliance ensures integrity in all actions

Compliance with applicable laws and internal rules and principles is binding for all Munich Re (Group) staff. To ensure compliant conduct, we have created Group-wide guidelines, minimum compliance requirements and suitable information and documentation systems as measures for prevention and monitoring. We have assigned responsibility for this to the Group Compliance and Legal unit.

Munich Re has established a Group-wide Compliance Management System (CMS). Its task is to ensure compliant conduct at all levels of the Munich Re (Group) organisation, as well as compliance with standards. The CMS is also the methodical framework for the structured implementation of early warning, risk control, consulting and supervision functions.

It comprises seven elements, which are summarised in the graphic below. These form the basis for combating corruption at Munich Re, which takes a risk-based approach. All processes and structures are aimed at fully clarifying any violations, and at sanctioning and putting an end to breaches of rules. All additional information on the [CMS](#) can be found on our website.



Munich Re (Group) has a Group-wide system for reporting violations of rules and regulations. This system enables the Group Chief Compliance Officer to

promptly report to the Board of Management. Staff members can report infringements and violations to Group Compliance, their direct supervisor, or to Group Audit. In addition, all staff and external whistleblowers can contact an external, independent ombudsman, or make use of the [whistleblowing portal](#). Violations can also be reported anonymously.

Training and advice on compliance topics

> GRI 205-2

We offer a wide range of advice, communication and training for staff in connection with the topic of compliance, all tailored to each particular target group. These are intended to enhance sensitivity to compliance topics, strengthen the compliance culture within Munich Re (Group) and create greater security in the handling of risks. There are regular anti-corruption training courses for staff who have direct contact with clients and business partners. Our governance training events for directors and officers improves their understanding of compliance, and strengthens cooperation with the governance functions in the Group.

Training on the following topic areas is compulsory in the reinsurance group:

- Anti-corruption measures
- Data protection (GDPR)
- Insider trading law
- Code of Conduct

Zero tolerance of corruption or white-collar crime

Bribery and white-collar crime can cause significant financial losses and damage to a company's reputation. Munich Re is resolutely countering this risk with an effective system for combating white-collar crime and corruption. Our [Code of Conduct](#), which is binding Group-wide, sets minimum standards that all Group companies must comply with. The measures include explicit specifications for employee conduct when handling transactions. Clearly defined processes and responsibilities, effective controls and target-group-oriented training also enhance staff awareness of their responsibilities to combat economic wrongdoing. If employees notice something untoward, or their suspicion is aroused, they can contact their line managers, Group Compliance or Group Audit.

Specially trained staff members conduct appropriate investigations if there is a concrete suspicion of fraudulent activity. Depending on the individual case, if a violation is proven, action is taken based on labour, criminal and/or civil law.

Through our approach, we ensure that Munich Re also meets legal regulations in other countries that the Group is obliged to comply with as a result of its international activities. These include, for example, the Foreign Corrupt Practices Act (FCPA) in the USA, and the Bribery Act in the United Kingdom.

Meeting data-protection and information security requirements

> GRI 103

Due to the nature of its business, Munich Re handles a large volume of data. Protecting this data is important, especially given the fact that increasing digitalisation means that many business processes include personal information. Munich Re's reputation, and the trust of our business partners, are based on our compliance with data protection rules. For this reason, Munich Re has implemented data-protection management systems in each of its fields of business. Each system takes into account the particularities of the respective field, and includes rules, processes and measures to systematically monitor and control how personal data is handled. The goal is to ensure a high standard of data protection across the Group, and to avoid fines.

The main rules for Munich Re are contained in the Code of Conduct and in various data protection and information security norms, which are specific to each field of business and mandatory for all staff. The norms are based mainly on the EU General Data Protection Regulation (GDPR) for Group companies domiciled in the EU/EEA. The Group-wide guideline on information security and business continuity management – the [IS&BCM Policy](#) sets binding targets, minimum requirements, responsibilities, processes and reporting procedures for the protection of information and for ensuring business continuity. Binding corporate rules at all locations worldwide are intended to ensure an appropriate level of data protection for our intra-Group communications with companies in the reinsurance group that are domiciled outside the EU/EEA.



A key task in the reporting year 2018 was implementing the provisions of the GDPR, which became directly applicable in all EU member states in May 2018. Among other initiatives, the respective fields of business began launching projects in 2017 aimed at adapting their IT applications to the new standards. In addition, Munich Reinsurance Company, ERGO and MEAG each adopted their own data protection policies for activities in the EU/EEA. The goal for each field of business is to adopt binding rules that ensure a uniform level of data protection across all organisational areas.

Since 2018, Munich Reinsurance Company's Data Protection Officer has also been acting as Group Data Protection Officer for the companies in the reinsurance field of business within the EU/EEA. The only exception is our UK subsidiaries, which, in light of Brexit, have already appointed a data protection officer of their own. Among other tasks, the Group Data Protection Officer aims to ensure uniform compliance with the guidelines across the EU/EEA, monitors the legality of IT-supported data processing, advises the respective companies on their duties under the applicable rules, answers staff questions about data protection, and acts as a first point of contact in communications with the supervisory authorities. He or she reports at least once a year to Munich Reinsurance Company's Board of Management about material data protection issues and improvements to the data protection management system. MEAG and ERGO have each appointed their own Data Protection Officers, who have corresponding responsibilities and obligations.

In light of its accountability, Munich Re developed an in-house IT tool in 2017/2018 to ensure compliance with data protection rules: the Compliance Web is designed to use a defined process to automatically submit every IT-supported processing of personal data directly to IT Security and the Data Protection Officer, among others. This allows every new or amended processing task to be documented, checked for compliance with the legal norms, and regularly monitored. The tool also allows us to identify and track, with the help of a privacy impact assessment (PIA),

processes that entail a high risk to a person's rights or freedoms. The tool is currently already being used by Munich Reinsurance Company and is to be introduced at ERGO in the course of 2019. It is planned to introduce Compliance Web throughout the Group in due course.

In 2018, all staff at Munich Reinsurance Company and ERGO were trained using an e-learning course to ensure that they handled personal data carefully and in compliance with the provisions of the GDPR. In addition, mandatory classroom seminars have been introduced, with content targeted at the respective divisions. All staff at MEAG are required to undergo classroom training on data protection and information security once a year. And from 2019, MEAG will also be offering an e-learning course.

In 2018, no material data protection event as defined in the Solvency II Group Compliance Policy occurred anywhere in our Group worldwide, nor were any material proceedings instituted for breaches of data protection rules. Additional information can be found with our [Privacy Statement](#).

Transparency and legal conformity in all tax matters

Munich Re endeavours to be a law-abiding and transparent taxpayer at national and international level. As such, we enjoy the trust of authorities and the public with regard to our tax reliability and credibility.

In the field of taxation, the Group Tax department has overall responsibility for Munich Reinsurance Company, MEAG and other German subsidiaries in the reinsurance group. This responsibility extends to Group-wide guidelines on tax strategy, tax calculation and transfer prices. The CFO in the relevant location is responsible for local tax matters at foreign subsidiaries or branch offices.

Our staff must comply with the applicable rules to meet our tax obligations. It is their duty to develop problem awareness for tax risks, and to familiarise themselves with tax subjects in their respective work areas.

In Munich, Munich Reinsurance Company has a certified tax compliance management system in place. This builds on a credible tax compliance culture, sets targets and establishes programmes as part of a continuous improvement process. The key elements of the Group-wide tax compliance policy can be found on our website under [Tax Transparency Report](#). Our tax expenditure by region can be found in the section on [financial indicators](#).

Responsible approach to lobbying

> GRI 103; 102-13

In the interests of our clients, employees and shareholders, we participate in the political decision-making process. We actively participate in a number of industry organisations, including the German Insurance Association (GDV), the Geneva Association, the European Insurance Chief Finance Officers (CFO) Forum, the Chief Risk Officers (CRO) Forum, the Reinsurance Advisory Board (RAB) of Insurance Europe, and the Pan-European Insurance Forum (PEIF). The Public Affairs department (ESP1.3) in the Central Division Economics, Sustainability and Public Affairs is responsible for lobbying governments, national and supranational authorities, associations and other organisations on behalf of Munich Re (Group).

In 2018, our main areas of focus were the following topics and activities:

Digitalisation:

We support the digital agenda of the German Federal Government and the European Commission. Our focus is on the creation of standardised framework conditions and legal security in Europe. A further objective is to facilitate the development of innovative products and services and exploit the benefits of digitalisation. Further information can be found in the chapter on [↳ digitalisation](#).

Global Insurance Capital Standard (ICS):

The creation of a global capital standard for insurance companies poses a major challenge for companies and supervisory authorities. We are therefore participating in discussions on the development of the ICS and assisting with quantitative tests.

Sustainable finance:

We are engaged in the design of the EU action plan for sustainable finance by participating in consultations on legislative procedures and in surveys by the supervisory authorities.

Climate change:

We support the resolutions of the Paris climate protection agreement. We factor into our business processes climate effects at risk measurement, business development and asset management levels. We also participate in public and private initiatives to develop and market innovative insurance solutions for climate risks.

Regulation of system risks:

Munich Re has been identified as not being a global systemically important insurer (G-SII). However, we are following the discussions on the methodical development towards an activity-based approach, and are participating in consultations on this topic.

Munich Re places particular importance on transparency in all lobbying activities. As well as the information in the CR Report, we provide details to the [□ transparency register](#) of the European Parliament and the European Commission on focal points, memberships and the cost of our lobbying activities. Further information can be found [↳ key figures section](#).

Political involvement

> GRI 415-1

Munich Re (Group) supports the democratic political process and, to this end, donates to the following German political parties: Bündnis90/Die Grünen, CDU, CSU, FDP and SPD. These parties each receive an identical donation with no conditions attached. Munich Re and ERGO each pay for one half of the expenditure. The donations are transferred exclusively to the parties' federal headquarters. In addition to the above donations, membership fees are paid to organisations closely affiliated with the parties. Further information can be found in the [↳ key figures section](#).



Copyright © Thomas Trutschel / photothek.net

Independent journalism

Munich Re respects the principle of journalistic independence and favours a strict separation between journalism and public relations work. We therefore comply with the guideline on dealing with journalists issued by the German Public Relations Association (DPRG) and the statutes of the German Council for Public Relations (DRPR). More detailed information is available on [□ our website](#).

02_Core business



Sustainable approach to core business

The focus of our corporate responsibility is on our core business – the assumption and diversification of risks in primary insurance and reinsurance, and also in investment. We know that we can only achieve long-term economic success through responsible action. That is why the objective of sustainable economic value creation is anchored in the core principles of our corporate strategy. In our core business, we achieve the greatest possible impact for our Group and for society by taking into account environmental, social and governance aspects (ESG).

We have highlighted our commitment to responsible action by signing the Principles for Sustainable Insurance (PSI) and the Principles for Responsible Investment (PRI). These two voluntary commitments go well beyond what is required by law or by supervisory regulations.

Our actions are guided by the key topics we have identified for the primary insurance and reinsurance fields of business, and also for investment, as part of the [2018 materiality analysis](#). As well as client focus and the integration of ESG aspects into our business, we attach special importance to responsible products,

services and sustainable investment. Further key topics in our core business include climate change, digitalisation and risk awareness, something that is found in all our activities as a cross-cutting issue.

For our core business, we have set ourselves a series of targets focusing on sustainability. Our aim is the consistent integration of ESG criteria into all processes at Munich Re in the fields of both insurance and investment. A further focus is on refining our climate strategy and on anchoring ethical standards that are essential to ensuring we handle artificial intelligence in a responsible manner. Further information on our objectives and the progress achieved in 2018 can be found in the target table in the [Corporate governance](#) section and in the individual topic areas in this section.

Corporate responsibility in insurance business

> GRI 103; 203-1; 203-2

Our business is the assumption and diversification of risks in primary insurance and reinsurance. We possess strong leverage for sustainable action by linking economic success with added value for society. In insurance business, we principally achieve this through a strong client focus, the integration of ESG aspects, and by offering responsible products and services.

Excerpt from our Code of Conduct

As a Group, we aim to ...

- ... make a positive contribution to the environment and society with our conduct;
- ... observe ESG principles on sustainable economic development;
- ... fund projects and work with partners worldwide to support solutions to social challenges.

As a member of staff, this means that ...

- ... I consider ESG aspects in my work;
- ... I consult the respective bodies when our reputation is at risk;
- ... my decisions at work actively support our environmental and climate goals.

ESG criteria integrated into processes and products

We systematically take ESG aspects into account in our insurance business. This applies both to our internal underwriting processes and our products and services.

Many industries and projects can have a major impact on the environment and local communities. If adequate consideration is not given to such consequences, the underwriting risk may increase. The systematic integration of ESG aspects enables us to identify these risks and to minimise them in cooperation with our

clients. We also make use of collaboration with other partners, institutions and non-governmental organisations (NGOs).

This approach is relevant for our business in three different ways:

1. We can identify ESG-related risks faster, thereby adding an additional dimension to our risk management. This also helps us avoid any reputational risks for the Group.
2. We enhance our business partners' risk awareness on sustainability issues.
3. By uncovering ESG risks, we develop new business opportunities and coverage concepts, which we then translate into sustainable solutions.

The integration of ESG aspects into core business was first included in the three-year targets for members of the Board of Management in 2012. Since 2018, ESG criteria have been factored into a newly designed remuneration system, into both, the annual and medium-term bonuses for members of the Board of Management. More detailed information can be found in our [□ Remuneration report](#).

Risk-based management established Group-wide

Strategic decisions on the implementation of ESG aspects are generally made in the Board of Management committees. The Group Corporate Responsibility Committee (GCRC), directed by the Sustainability unit, was established in 2012 in order to identify sensitive business topics.

Transactions involving reputational risks are submitted to the Reputational Risk Committee (RRC) for each field of business. These committees analyse and assess specific reputational issues and ESG risks relating to individual transactions, and make recommendations on accepting or rejecting a particular risk. An assessment by the Sustainability unit is mandatory. In 2018, 50% of the cases submitted to the RRC were approved with no conditions attached. Roughly 35% of enquiries were approved with conditions attached, and 15% were declined. In the Internal Risk Report, we regularly detail any significant reputational risks for Munich Re.

Further information on the approach of the RRC can be found in the [□ combined non-financial statement](#) for Munich Re (Group).

Our aim for 2019 is to review the current governance structure with the purpose of refining the management of ESG risks.

In 2012, we incorporated the Munich Re (Group) commitment to the Principles for Sustainable Insurance (PSI) into the preamble to our internal Group-wide risk management manual. This is the reference for the corresponding manuals for the different business fields, and is generally a mandatory reference for all underwriting guidelines in the Group. We report annually on our [□ progress with the integration of the PSI principles](#).

In addition, we have identified twelve generally valid ESG aspects that are taken into account in our insurance business and investment transactions.

ESG aspects for corporate responsibility in (re)insurance and investment

Environment

- Natural resources and biodiversity
- Pollution
- Greenhouse gas emissions

Society

- Political environment and public perception
- Human rights
- Working conditions
- Cultural heritage
- Resettlement of people
- Health and safety of the community

Governance

- Responsible and careful planning and assessment
- Compliance
- Consultation and transparency

In addition we have identified seven sensitive topics or sectors. Binding guidelines or best practice recommendations were drawn up for these topics, which are applicable for reinsurance, primary insurance and investment. Questionnaires specially tailored to the

topics were integrated into an ESG tool, which helps our underwriters systematically take ESG aspects into account when performing risk assessments. Members of staff who underwrite business worldwide can also refer to an ESG country rating that gives them a quick overview of key indicators

Regarding the coal sector, Munich Re decided in 2018 to stop insuring as individual risks new constructions of coal-fired power plants or coal mines in industrialised countries, and in the bulk of emerging markets as well. There may be a small number of exceptions in countries where a substantial portion of the population (more than 10%) has no access to electricity. These are reviewed on a case-by-case basis. You can find more detailed information on this in the [Climate Change](#) section.

Furthermore, at ERGO, ESG aspects have been taken into account since 2014 as standard components in the product development process for private clients.

Sensitive issues: Munich Re positions and measures	
	Banned weapons: Policy on cluster munition and land mines
	Coal: Policy on coal business underwriting and investments
	Arctic drilling: Guidelines, risks to be referred to Arctic Drilling Panel
	Oil sand: Position paper including specific questions on ESG aspects
	Fracking: Position paper including specific questions on ESG aspects
	Mining: Position paper including specific questions on ESG aspects
	Investments in farmland: Mandatory ESG check for investments



Commitment to the PSI initiative

Munich Re actively assisted in designing a PSI initiative which, in February 2019, presented for the first time a compilation of best practice examples to assess sustainability risks in non-life insurance. The proposed ESG standards are the result of several years of collaboration with leading insurers and key stakeholders at global level. This highlights a systematic approach that insurers can take for ESG risks. Our aim is to continually refine the assessment of ESG risks, while at the same time incorporating the standards developed by the [PSI initiative](#).

Training courses and networks secure competency transfer

The individual business units at Munich Re each have responsibility for the risks they write, with regard to both underwriting and ESG aspects. We offer targeted training programmes to qualify our staff and develop their competence in relation to ESG aspects. These are tailored to the individual business activities and regions, include training on the practical implementation of our underwriting guidelines, and provide information on current sustainability topics.

The training course are intended for managers, underwriters, client managers, business analysts and trainees in the divisional units. The training formats are also open to all other interested staff members and have become an integral part of our client seminars. More than 600 staff members worldwide have already been sensitised to ESG aspects in this way. Our aim is to continually improve our training formats, for example through the establishment of e-learning programmes.

In the field of reinsurance, we have also developed a network of coordinators in the business units. Staff members function as multipliers, actively sharing their knowledge of ESG integration within their own department, for risk assessment, in client discussions and in exchanges with other divisions.

Developing marketable solutions from ESG risks

Our core business constantly faces new kinds of risks and global challenges. We develop innovative solution concepts for ESG risks, while opening up new business opportunities. In keeping with our shared-value approach, we generate benefits for our Group and for society as a whole. In our latest [materiality analysis](#), we have identified climate change, digitalisation and risk awareness as focus topics. Here we present a selection of solutions and activities in connection with additional topics.

Inclusive insurance protects livelihoods

Munich Re and the [Munich Re Foundation](#), along with primary insurers and other institutions and international NGOs, are supporting the development of inclusive insurance solutions. These must be adapted to the needs of low-income social groups in emerging and developing countries. Only then can they protect people from losing their livelihood.

An example from India shows how inclusive insurance solutions work in practice: Around 80% of crop losses in the country are weather-related, but less than a quarter of farmers have insurance against this risk. In 2010, on behalf of the Indian government, [HDFC ERGO General Insurance Company](#) was the first private insurance company to introduce weather insurance for crop losses. In 2018, gross premiums equivalent to €270m were written and 3.7 million farmers insured.

**>3.7 million
people**

covered by inclusive insurance products

DKV Seguros offers further examples of simplified access to insurance solutions. For example, even people over the age of 69 can have access to its insurance products. Also the private health insurance Famedic offered by DKV Seguros does not consider factors such as the age and health of its customer groups when pricing premiums, and also offers large discounts for families.

Insurance against crop losses

It is not just in developing countries that small farmers and their crops face the threat of destruction from weather-related events. In the future, climate change will bring greater fluctuation in crop yields in general. At the same time, global demand for agricultural commodities will continue to rise. Besides financial reinsurance and traditional reinsurance, an increasing number of alternative risk-transfer products are establishing themselves in the agricultural sector as efficient risk management tools. Our main focus here is [to cover peak risks from natural disasters](#).

As part of a public-private partnership, Munich Re also offers [crop-failure insurance solutions](#) for the agricultural sector, crop insurers and the public sector. Further information on these solutions can be found on the [Munich Re website](#).

Reducing the financial risks from infectious diseases

Munich Re has joined forces with the World Bank, the World Health Organization and other financial sector companies to create the first insurance solution to fight dangerous epidemics and pandemics in developing countries. The [Pandemic Emergency Financing Facility \(PEF\)](#) creates a mechanism to quickly channel first-relief surge funding to developing countries facing a major disease outbreak with the potential of

US\$12m

in 2018 for Ebola countermeasures



developing into a pandemic. The insurance component of the PEF will provide maximum coverage of US\$425m for an initial period of three years. In the event of an epidemic or pandemic, it allows funds to be promptly used to combat and contain an outbreak and the associated financial risks. In 2018, the PEF made its first-ever financial commitment, approving a grant of US\$12m to bridge the funding gap for Ebola countermeasures in the Democratic Republic of the Congo. Munich Re is pushing for an extension of the mechanism to cover the period after 2020.

Innovative risk transfer solutions

The International Committee of the Red Cross (ICRC), with substantial assistance from Capital Partners, a Munich Re division specialising in alternative risk transfer solutions, has developed the first **Humanitarian Impact Bond (HIB)**. Munich Re also invested in this initiative. With the help of the HIB, the ICRC can fund the operation of rehabilitation centres in Central Africa. Depending on how successfully these centres operate, the governments that subsidise the humanitarian activities there reimburse the investor for what they have paid in, along with an additional return.

Provide companies with effective protection against environmental damage

European environmental law increasingly holds polluters responsible for causing damage to flora, fauna, bodies of water and soil. In the event of a loss, immense clean-up costs can threaten the very survival of a company. Since 2009 ERGO's **Eco insurance** has been a component of our public liability insurance. Comprehensive expert consultancy and appropriate prevention measures also help to prevent losses.

Customer satisfaction is key to success

> GRI 103; 417-1

Maintaining a close and trusting relationship with our clients is of crucial importance for the success of our insurance business. For that reason, we want to understand our clients' needs and develop the best solutions for them in a process of dialogue.

In reinsurance, we manage this dialogue and service on the basis of clients' needs and clients' income potential. The process includes an analysis of the markets and major players, and the implementation of individual reinsurance solutions for our clients. The client managers are supported by a central sales unit, which ensures transparency in relation to the Group-wide product and service landscape.

Munich Re conducts regular global surveys of all of its reinsurance clients. The response rate is around 30%. The survey looks at the Net Promoter Score (NPS) and client satisfaction in connection with various aspects of the business relationship. To supplement the centrally managed survey, the operational units obtain regular feedback from the clients.

Client satisfaction in 2018 was at a high level. We managed to improve the Net Promoter Score by 13% in comparison with the previous year's result. Clients also rate Munich Re's service quality higher than the best-in-class competitor.

In order to maintain our lead over the competition, and to allow us to respond proactively to suggested improvements from our clients, we offer a comprehensive training programme for all staff members who have direct client contact. The aim is to develop an understanding of the clients' strategies and requirements, so that we can work out solutions together.

We additionally promote direct exchange with our clients through the ADVANCE programme for high-potential leadership talents from selected clients. In 2018, Munich Re gave this – its top-talent programme – a new strategic focus, centred on finding solutions to future challenges in the insurance industry, and on the joint development of forward-looking business ideas.

In the field of primary insurance, ERGO demonstrates its strong client focus with clear communication, high-quality consulting, transparent and easily accessible products, and numerous opportunities to give feedback.

ERGO also offers different dialogue formats in order to obtain personal feedback and new client input. As participants in the **ERGO client workshop** or as a member of the **ERGO client advisory council** clients can help ERGO with criticisms and suggestions, and contribute to the design of its range of services.



»Advance's new orientation will help us to identify clients' needs directly. By working together with them on solutions to future challenges, we will strengthen trust and bind clients even more closely to Munich Re.«

_Torsten Jeworrek, CEO of reinsurance operations for Munich Re

To make access to products and services as easy as possible for clients, ERGO is continually expanding its digital offerings, for example through its digital subsidiary **nexible**, or with a range of products that can be purchased simply via voice dialogue.

Particular emphasis is placed on easy-to-understand products in order to offer clients a high level of transparency on the services ERGO offers. To this end, with the help of external experts, ERGO has developed its own comprehensibility standards, and fully revised its contract documents and product information.



Corporate responsibility in investment

> GRI 103; 201-2; 203-1; 203-2

Because our business model as an insurer has a long-term focus, sustainability criteria in investment play a key, strategic role. Since as an insurance company, we must invest our clients' money sensibly and profitably, we are subject to strict security and return requirements. For our investments, just as with our insurance business, we consider it essential to consider ESG aspects and to offer responsible products and services.

Management of our investments is based on three pillars:

1. Systematic integration of ESG criteria
2. Investment focus topics (for example renewable energies) and
3. Defined exclusion criteria

Apart from financial perspectives, we also give systematic consideration to ESG criteria in our investments. This helps us identify further risks and opportunities by going beyond the standard financial analysis. We are convinced that the integration of ESG criteria leads to better investment decisions in the long term.

The Principles for Responsible Investment (PRI) provide a framework for sustainable action in the field of investment. In order to ensure that we adhere to our sustainable investment approach, we established a binding Group-wide Responsible Investment Guideline (RIG), which covers all requirements regarding PRI and ESG that concern Munich Re (Group) asset management, especially on the subject of exclusion criteria for investments.



Strategic decisions for sustainable investments are made in the Board of Management's Strategy Committee or the Group Investment Committee (GIC). Since March 2019, the new Chief Investment Officer (CIO) is responsible for the whole Asset Management of Munich Re (Group).

While the Asset Liability Management (ALM) unit manages the investments of the reinsurance group, ERGO's Strategic Asset Allocation (SAA) performs this function for ERGO investments. Munich Re's investments are largely bundled under the umbrella

of MEAG, our internal asset management arm. This allows the Group's investments to be managed in conformity with uniform policies and principles. MEAG currently manages a global portfolio worth more than €250bn (incl. third party business and participations of the Group).

Responsible Investment Guideline (RIG):

The RIG is applicable to Munich Re, including its reinsurance and primary insurance branches worldwide. It applies to the complete investment portfolio, whether managed by MEAG, any other third party or the Company itself. The RIG includes the following regulations:

- [1] At least 80% of the investments of each business field in shares, corporate, government or covered bonds, real estate and alternative investments should be placed in assets included in one of the established sustainability indices or which meet other accepted sustainability criteria. [...]
- [2] Munich Re does not invest in companies that produce, trade in or transport banned weapons if such production, trade or transport is material for the respective company. [...]
- [3] Trading and holding investments in food-related commodities (e.g. grains and oilseeds, livestock, dairy, etc.) and related derivatives is not allowed. [...]

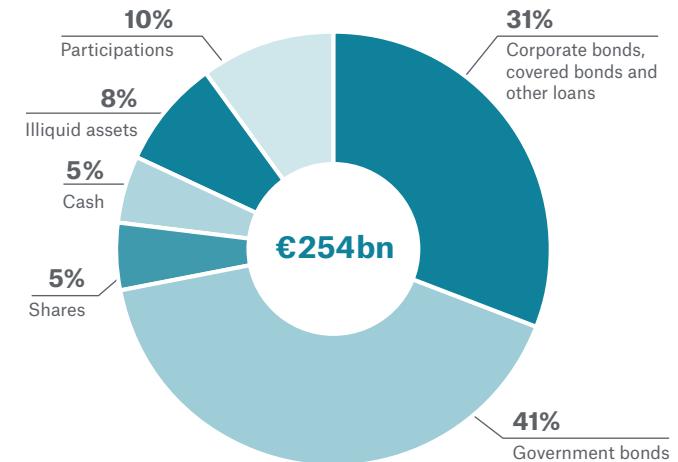
At Group level, a team consisting of members from the units Sustainability, ALM, ERGO SAA and MEAG strategically refines the approach to socially responsible investment (SRI) in line with PRI requirements. You can find further information on PRI and their implementation by Munich Re in the [Annex](#).

- [4] Investments in equities or bonds of companies that derive more than 30% of their revenues from the mining of coal or the generation of electricity from coal are not permitted.
- [5] The Group Corporate Responsibility Committee (GCRC) evaluates and prioritises sensitive issues for Munich Re (Group). There are position papers in place for the following sensitive issues: oil sands, fracking and mining. All these position papers include specific questionnaires regarding ESG aspects. For Arctic drilling there is a position paper and guideline in place. [...]
- [6] The position paper and guideline on investment in farmland are to be taken into account as part of the due diligence on investment decisions in relation to farmland. This applies both to investments in funds and to direct investments for the purpose of leasing and/or farming.
- [7] Investments in government bonds and bonds of government-related institutions of countries assessed in a certain category according to the MSCI ESG rating are not permitted.

Sustainability criteria firmly anchored in the investment process

Our aim is to invest the bulk of our assets sustainably. The target achievement is measured on the basis of internal sustainability reporting (sustainability ratio). In 2018, the required sustainability quota was fulfilled in accordance to the RIG. The systematic integration of ESG criteria is an elementary component of our investment strategy. Individually defined ESG criteria are incorporated into the selection process for all classes of assets. In 2018, new processes were introduced for the areas of equity, bonds (credit and government) and private equity. Our portfolio managers and credit analysts at all MEAG locations have received comprehensive training on ESG criteria. An overview of the individual investment segments and their focus on sustainability is provided below. The infographic further illustrates the MEAG investment process for shares and corporate bonds.

MEAG asset classes (31.12.2018)



Liquid assets:**Shares, corporate bonds and covered bonds:**

- New process since 2018: Our portfolio managers now make systematic use of **MSCI ESG analyses**, in addition to financial data, in order to evaluate the return/risk profile of various investments.

Government bonds:

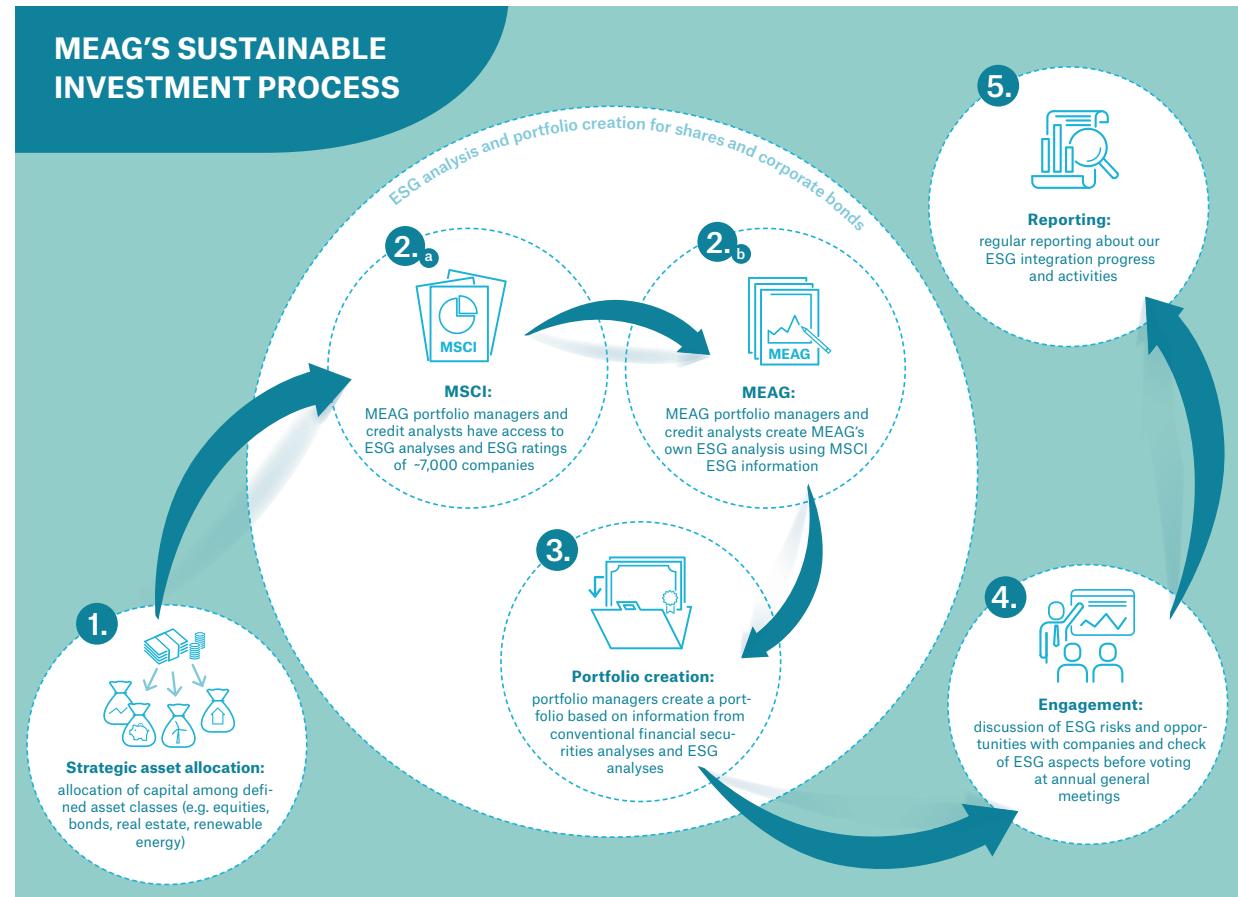
- New process since 2018: Our portfolio managers now also use **country ratings from MSCI** for their analysis. In cases where countries fail to satisfy our criteria, MEAG refrains from investing in their government bonds or the bonds of quasi-governmental organisations.

Illiquid assets:**Real estate:**

- We consider sustainability aspects for the purchase, construction as well as for the renovation of real estate. We observe our ESG criteria when performing **due diligence** for new investments. These steps range from examining the geographic properties of the site, the construction materials and the technical facilities used, through to considering social aspects of investment projects. With work on existing properties, requirements for energy efficiency and the choice of suitable construction materials, partners and proven technologies apply. MEAG encourages its tenants to use its buildings in a sustainable way and has produced an [information brochure](#) on the subject.

Infrastructure and renewable energies:

- In view of the extremely long investment period, we carefully examine all risks associated with these investments. We have defined specific ESG criteria



for this investment category, which form part of **due diligence**. In addition we examine meteorological and climate-related factors (such as solar irradiation with solar installations, or wind force with onshore wind farms), as well as political parameters such as the relevant national energy policy.

Agriculture and forestry:

- As well as the financial aspects, the investment process considers important factors in the **due diligence** phase that are needed to meet the aims of the investment. These include ESG criteria.

Private equity:

- Since 2018, we have considered under due diligence for private equity investments whether ESG criteria or an appropriate Responsible Investment Guideline should apply for the target fund.

Cash:

- New process since 2018: Our portfolio managers are now using **MSCI ESG analyses** in addition to finance data to evaluate the return/risk profile for different investments.

Participations (subsidiaries):

- **Corporate Governance** principles are implemented Group-wide.

In addition to the selection process, our portfolio managers incorporate ESG issues into our shareholder policies and practices. This is reflected, for example, in the [MEAG voting policy](#).

Our investments: Focus on renewable energies

Through our investments, we want to promote the use of future technologies to avoid greenhouse gas emissions. Therefore MEAG invests, on behalf of Munich Re, in infrastructure projects around the world such as solar power plants and wind farms. Invested capital (equity and debt) in renewable energies was approx. €1.6bn (2017: €1bn) and should be steadily increased over the next few years to €2.8bn.

These investments help to mitigate climate change. For example, in 2018 our installations generated approximately 2.3 million megawatt hours of green electricity, supplying power to around 590,000 households, thereby avoiding some 800,000 tonnes of CO₂ equivalents. The purchase of a solar park in Southern Spain with an



overall output of 175 megawatts at the end of 2018 will significantly reduce greenhouse gas emissions over the next few years (by the equivalent of roughly 87,000 t CO₂), and also supply an additional 93,000 households with clean electricity.

In total, Munich Re has invested around 1% of its assets under management (€2.5bn) in renewable energies and green bonds. We continue to rely heavily on regional and segment-specific diversification of these investments in order to spread the technical and political risks within the portfolio.

Sustainable focus for MEAG investment fund

MEAG offers its private and institutional clients sustainable investment products. The equity fund **MEAG Nachhaltigkeit** invests throughout the world, primarily in companies with responsible management practices. Producers of tobacco and alcoholic beverages, and arms manufacturers are excluded, as are companies in the gambling industry. **MEAG FairReturn** invests mainly in bonds and shares from European issuers

who act sustainably. Issuers are selected on the basis of their environmentally friendly and socially responsible track record, as well as good corporate governance and financial performance. Companies from contentious business fields are not considered. The fund **MEAG EM Rent Nachhaltigkeit** chiefly invests in bonds from governments and companies in emerging and developing countries with stable growth and sustainable policies. Once again, companies from contentious business fields are not considered. The volume of these products is approximately €1bn.

The new **MEAG Infrastructure Debt Fund** also offers institutional investors targeted investments in infrastructure projects, for example in renewable energies, transport, or social infrastructure. The first round of financing raised over €200m. The overall target is a volume of €500m. The first specific debt project was already implemented in January 2019.



Columbia Square, Washington, LEED gold certificate



Solution-oriented responses to climate change

> GRI 103; 201-2; 203-1; 203-2

Anthropogenic climate change is already a reality today, this is an established fact. In global terms, 2018 was one of the four warmest years ever. The mean temperature of land and sea surfaces was almost 1°C above the level for the pre-industrial period. Nine of the ten warmest years have occurred since 2005.

Science is providing ever clearer evidence that climate change is influencing weather-related natural disasters, although to differing degrees according to the region and type of hazard.

Researchers believe that it is highly likely that climate change is influencing severe thunderstorms with hail in North America and Europe, and that it is also related to the increase in storms with extreme precipitation. Also in the case of wildfires in California and heatwaves in general, climate change due to anthropogenic influences is seen as the most plausible explanation.

However, the latest scientific knowledge indicates that single loss events cannot be attributed to climate change alone. Instead, an analysis of the long-term trends in meteorological data is needed, along with a precise analysis of any potential changes in risk characteristics.

The consequences of climate change directly affect the insurance industry. Extreme weather events result in substantial damage to buildings and infrastructure, as well as causing significant crop losses in agriculture. People are killed and injured, particularly in regions where risk prevention is still in its infancy.

Climate change is undoubtedly one of the biggest challenges facing mankind. Already today, decisive action is an absolute necessity to limit global warming to less than 2°C. Munich Re is also committed to achieving this goal set by the Conference of the Parties (COP) on Climate Change in Paris, and undertakes to make its own, independent contribution to combating climate change.

As well as risk-reducing insurance solutions geared towards loss prevention and adaptation to climate change, we perceive our greatest leverage lies in helping new climate-friendly technologies to break through. We assume this role as an enabler in the fields of electricity generation, transport, energy storage and industrial production. We see significant promise in the conversion of energy from renewable sources, energy sources such as hydrogen or methane, in fuel cell technology, and in offshore wind farms.

Our own climate strategy determines our action

As (re)insurers, we analyse all aspects of climate change, from the physical and regulatory consequences to the associated changes in technology. We are best possible equipped to meet these and other future challenges thanks to our long-established expertise in the assessment of climate risks.

The management of the risks and opportunities arising from climate change is an integral component of Munich Re's strategy, and all material and strategic

issues relating to it are handled at Board of Management level. At Munich Re, Dr. Torsten Jeworrek, Reinsurance CEO, is responsible for all insurance-specific matters relating to climate change. He is assisted by expert teams from the following units: Climate & Public Sector Business Development, Corporate Underwriting and Green Tech Solutions.

Our strategic approach covers both business-related activities and corporate responsibility measures. It is made up of the following five modules:

Risk evaluation creates transparency

For us, recording and assessing the impact of climate change on the frequency and intensity of natural disasters is of key strategic importance. We can only develop and implement viable risk transfer solutions for our clients if we have a good understanding of the associated effects on our business. Natural disasters are among the loss scenarios with the biggest loss potential. They are also among the strongest drivers for risk capital allocation. Accordingly, we need to know

Climate strategy Munich Re (Group)

Business-related activities

Risk evaluation

Recording and evaluation of the impact of climate change on the frequency and intensity of natural hazards.

Risk-transfer solution

Realisation of business growth areas as a leading provider of risk-transfer solutions for renewable energies and other products aimed at adapting to and mitigating climate change.

Asset management

Supporting the expansion of renewable energies and infrastructure projects by pursuing a sustainable investment strategy.

Corporate responsibility

Carbon neutrality strategy

Munich: 2009
Reinsurance worldwide: 2012
Munich Re (Group): 2015

Involvement in climate initiatives

e.g. Munich Climate Insurance Initiative (MCII),
InsuResilience



»Here at Munich Re, we want to help establish new climate-friendly technologies.«

_Joachim Wenning, CEO Munich Re

precisely where and why risks are changing, and what preventive and adaptation measures are needed to protect people and property.



In the financial services and insurance sector, Munich Re is a pioneer in analysing the consequences of climate change. In the 1970s, we already began to investigate the causes behind increasingly costly losses from weather-related natural catastrophes. Today, we are part of a comprehensive scientific network that gives us access to the latest findings on natural disasters and climate change. Among other things, our many years'

experience, in conjunction with this network, has produced new tools for digital analysis and solutions that improve the insurability of natural hazards. The findings from these analyses are consolidated on an ongoing basis and translated into key recommendations for action for Munich Re.

We also adopt a particular approach to research. We collect loss data ourselves and participate in research projects that are needed for a comprehensive risk analysis. On this basis, for example, simulation models are built that allow our underwriters to carry out **risk assessments** for complex, very large risks. We use both in-house developments and recognised third-party models for these.

In addition, we analyse publications on climate change and regularly participate in research projects with scientific institutes. By way of example, we are currently taking part in an investigation into severe thunderstorms in Europe that includes analyses of past changes in the risk from hail and tornadoes throughout Europe, and maps future changes in these risks using various climate models.

Munich Re is also supporting another research project which uses models to investigate the extent to which specific severe weather events have become a more likely phenomenon since pre-industrial times as a result of climate change. The aim of this research is to enable preventive and adaptation measures to be applied in a more targeted manner to protect people and property.

As part of the risk assessment, we examine the recommendations of the international **Task Force on Climate-related Financial Disclosures (TCFD)**. These go far beyond simply climate reporting. They

also expedite the holistic integration of risks and opportunities from climate change and the low-emission economy into the corporate value chain. At the same time, they represent a strategic approach to highlighting climate risks and developing new business opportunities. As part of the United Nations Finance Initiative (UNEP FI), Munich Re is participating with 17 leading insurance companies in a pilot project to implement the TCFD recommendations. The objective is the development of modern risk assessment tools and industry-wide standards. The tools and indicators to be developed use the latest generation of scenario analyses to assess climate-related risks for tangible assets and investment.

Risk transfer solutions offer concrete assistance and promote innovative technologies

Adaptation to climate change

As a (re)insurer, Munich Re assumes a portion of the financial burden of those affected by natural disasters, allowing them to return to their daily lives more quickly after a loss event. Particularly in emerging and developing countries, a higher insurance density allows the economic shocks that follow disasters to be cushioned more effectively, while at the same time supporting sustainable economic growth. Many of these countries are strongly affected both by natural disasters and the consequences of climate change.

Generally speaking, there is an urgent need for greater protection and adaptation to the consequences of natural disasters due to climate change in order to mitigate the humanitarian and financial impact. We aim to play a preventive role and to improve adaptation measures for the consequences of climate change that are already unavoidable today.

Wildfires in California: Extreme billion-dollar losses such as those in 2017 and 2018 will remain events that do not occur every year. Yet overall, the hazard level and the risk of losses have increased significantly. Measures that are needed to build resiliency and avoid losses include development concepts that avoid fire-hazard areas, improving fire resistance of buildings, and the removal of dry, combustible brushwood.

Risks from floods can be reduced by installing flood protection on rivers, or through stricter building standards. For example in Germany, since the Elbe flooding in 2002, investment in dams and flood compensation schemes has prevented higher losses from floods. Additional effective preventive measures include avoiding development in hazardous areas, and taking precautions such as designing especially storm-resistant buildings and waterproof cellars.

We want to make the benefits of insurance more evident for all stakeholders, for example for governments, supranational organisations such as development banks, and primary insurers. To this end, we are involved in the [!\[\]\(6ba58ed5429ffd926516910ee2ae6e36_img.jpg\) Insurance Development Forum](#). We are a member of the IDF Steering Committee at Board of Management level, and participate in working groups developing pilot projects to protect against natural disasters in several emerging and developing countries, for example as part of public-private partnerships. These could be a solution to help spread insurance covers more widely in individual countries or transnationally in the form of regional risk pools.

Covers with parametric triggers are one example of an innovative risk transfer solution. In this instance, following a natural disaster of a specific strength – measured in terms of wind speed or volume of rain – payment is made immediately without damage needing to be



proven in detail. This mechanism is particularly suited to financing emergency assistance, or for ensuring the fiscal stability of the countries affected. These risk transfer solutions are usually developed in the form of a public-private partnership – offered in conjunction with supranational development banks or governments – and implemented in cooperation with private insurance companies.

The **Caribbean Catastrophe Risk Insurance Facility (CCRIF)**, of which Haiti is a member, illustrates how an insurance pool of this kind operates in practice. When

the island state was hit by Hurricane Matthew in 2016, the CCRIF paid out US\$ 23.4m to the Haitian government within just a few days. Despite this covered only a small portion of the damage, the payment allowed emergency measures to be taken promptly, while international aid campaigns were still in the preparation phase. There are also similar programmes in place for Africa, Pacific island states, and in 25 provinces of the Philippines.

Active climate protection by promoting climate-friendly technologies

We need a new approach worldwide to limit global warming, whether in terms of power generation based on renewable energies, in transport, energy storage, or industrial production. Munich Re seeks to aid the breakthrough of these climate-friendly and sustainable technologies. Insurance solutions protecting against specific risks, thereby enhancing the appeal of the technologies for investors and strengthening their financing viability, are one component in this context.

Munich Re has specialist technical expertise in this area and many years' experience in renewable energies and energy efficiency.

We frequently play a pioneering role in the market, for example, by offering new types of insurance cover. One example of this is a performance guarantee for 25 years for manufacturers of photovoltaic modules. This gives our clients added security for the quality of their products, and relieves the module manufacturer of the need to make provision for any warranty claims.



Also in the field of renewable energies, our **Wind Energy Yield** Cover solution insures the availability and performance of turbines, as well as the wind output.

At global level, we are also the first insurer to offer a **□ performance cover for battery storage**, thus enabling battery manufacturers to offer their customers long-term performance guarantees. The product covers the repair costs and replacement value of battery modules that exceed a specific cost threshold. Our additional offerings include performance guarantee covers for fuel cells, LED lighting technology and bio-energy plants.

Our Green Tech Solutions team, which was specially established to develop innovative solutions, operates as a business enabler, offering investors, project developers, plant manufacturers and start-ups a wide range of ways to succeed on the market. Further information on **□ Green Tech Solutions** can be found on our website.

In a further innovative approach, we have developed a solution to promote investment in renewable energies in Africa. As part of the UN initiative, **Sustainable Energy for All (SE4ALL)**, which targets the sub-Saharan region, Munich Re developed the risk transfer solution African Energy Guarantee Facility (AEGF) in collaboration with the European Investment Bank (EIB) and two primary insurers. This offers protection against political risks in order to facilitate private investment in the use of renewable energies. As a sustainable (re)insurance pool, the AEGF has a structure involving risk transfer tranches, which can be assumed by insurers and private financial institutions. AEGF offers insurance capacity of US\$1.4bn for political risks for a total of 25 African countries. You can find further information on the **□ AEGF** website.

We underpin the approach of promoting new technologies and, wherever possible, replacing climate-damaging technologies, with our Group-wide position on coal as an energy source. We have anchored this position in our Responsible Investment Guideline as well as in our underwriting guidelines. It stipulates that, in single risk business, Munich Re will no longer insure new coal-fired power plants or new coal mines in industrialised countries, or in the majority of emerging markets. There may be a small number of exceptions in countries where a substantial portion of the population (more than 10%) has no access to electricity. In such countries, cases are analysed on the basis of clear criteria. These include a country's dependency on coal, the natural endowment of renewable energy sources, the climate strategy of the company or country in question, and the technical standards applied. Since September 2018, Munich Re does not invest in either shares or bonds of companies that generate more than 30% of their revenue from coal.

Asset management makes the most of climate protection potential

We manage our investments on the basis of three pillars: systematic integration of ESG criteria, defined exclusion criteria, and particular investment focus areas, for example on renewable energies and green bonds. In particular, expanding investments in renewable energy and infrastructure projects contributes to climate change adaptation and mitigation. The volume of capital invested in renewable energies such as solar parks and wind farms totalled €1.6bn at the end of 2018. Our long-term target is to increase this figure to €2.8bn. Further information on this topic can be found in the [CR in Investment](#) section.

€1.6bn

investment in renewable energies by 2018

Climate neutrality in Munich Re (Group) business operations

We exploit the potential of our own business processes to ensure climate-friendly action. As part of our Group-wide environmental and climate protection strategy, we have set binding targets for reducing CO₂ emissions by 35% by 2020 (basis year 2009). Business operations throughout our Group have been carbon-neutral since 2015. There is more detailed information on our environmental management system and further activities in the section on [Environment](#).

Our commitment to protection against climate risks

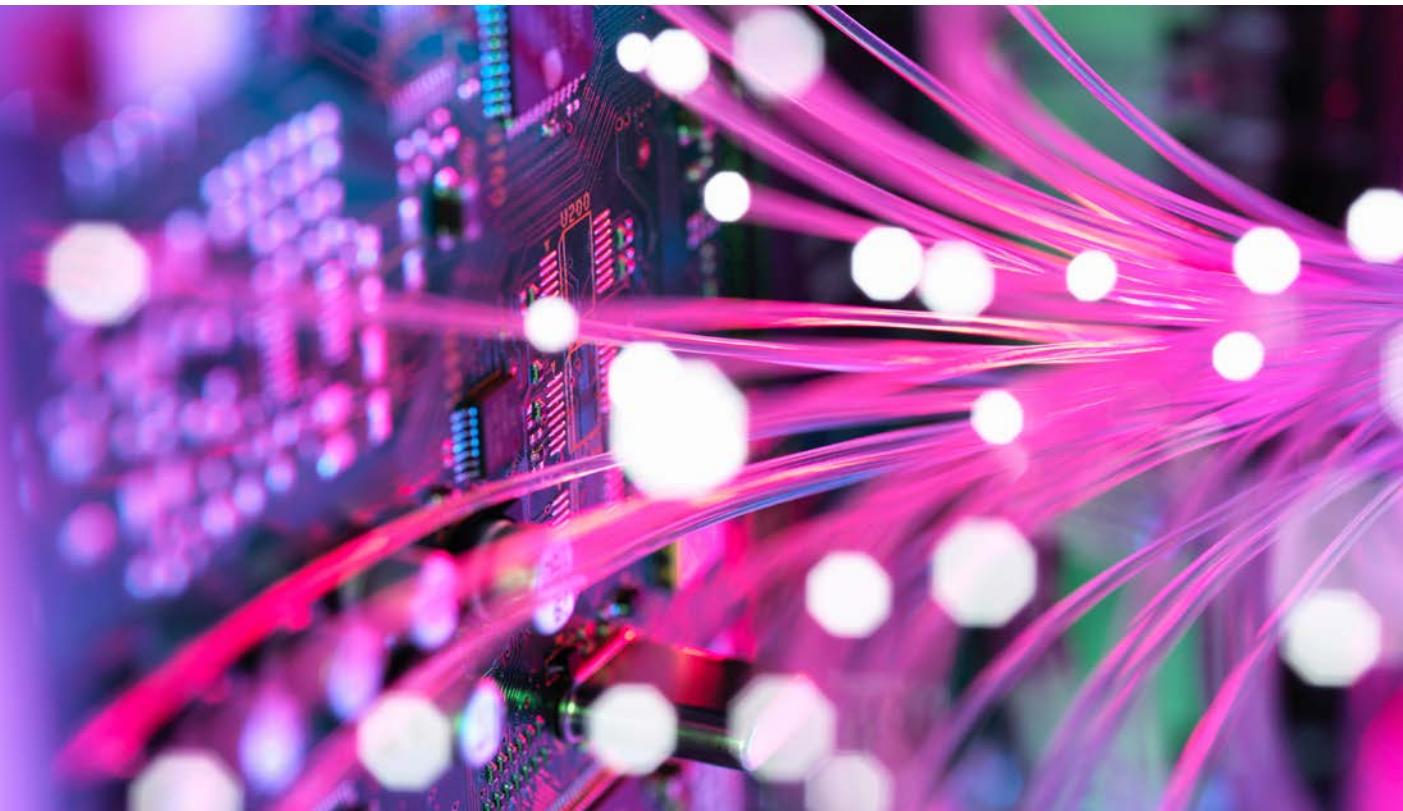
For many years, Munich Re has played an active role in a range of national and international climate protection organisations, such as the United Nations Environmental Programme and the Global Climate Forum. We wish to contribute our expertise as a valuable partner for political decision-makers, organisations and other enterprises.

Particularly in emerging and developing countries, it is essential to promote adaptation to climate change in the form of insurance-related risk management mechanisms. Munich Re supports the [InsuResilience initiative](#). Founded in 2015 by the G7 countries, this initiative aims to enable an additional 400 million people in developing and emerging countries to access insurance products covering weather and climate risks by 2020. The initiative is primarily financed by industrialised countries. However, at the same time, as part of the InsuResilience Global Partnership, it relies on the active involvement of the G20 and V20 countries, as well as close cooperation with civil society, insurers and the scientific community.

The [Munich Climate Insurance Initiative \(MCII\)](#) was founded back in 2005, following an initiative by Munich Re and representatives from the World Bank, NGOs and academia. Since then, MCII has participated in the global climate negotiations (COPs), providing suggestions on risk management. MCII has also provided technical support in the discussions on dealing with losses from climate change under the UNFCCC Loss and Damage programme and the Warsaw International Mechanism.

As the focus of the project [Tackling Climate Change Together](#) by Munich Re and ERGO we subsidise the work of cleantech pioneers. Our involvement here mainly relates to two projects: a start-up accelerator programme in partnership with Climate-KIC, and cooperation with the company SOLARKIOSK. Further information on this cooperation can be found in the section [Society](#).

Together with our partner, Climate-KIC, the largest public-private climate initiative in the EU, we are promoting climate-friendly technologies at a very early stage. The accelerator programme is aimed at cleantech start-ups whose technologies and business models offer responses to climate change. Munich Re and ERGO select start-ups, which will be supported for six to eighteen months. The promotion takes the form of financing, but also involves consulting from experts, who support the companies as mentors. Depending on the level of development of the start-up, sponsorship can last from the initial idea through to market maturity and beyond. Further information on this is available on the [project website](#).



Using digitalisation responsibly

> GRI 103; 203-1; 203-2

Digitalisation is entering many aspects of our lives both in business and in private. Computerisation and networking continue to expand in the fields of production, transport, science, administration and the home environment. This is creating extensive opportunities: processes are becoming infinitely reproducible,

more exact, safer and more cost-effective overall. Many innovations have therefore become possible now.

For the insurance industry too, digitalisation is key to a successful future. In order to meet the changing needs of its client base, the insurance industry has to invest in hardware and technology, such as the IoT, data analytics and artificial intelligence (AI). For that reason, digitalisation is already an integral part of the [Munich Re business strategy](#). In the context of the digital transfor-

mation, we have defined data protection and cyber security, along with responsible implementation of AI, as key aspects of corporate responsibility.

High priority given to data protection and cyber security

For us, it is crucially important to protect the personal data of our employees and clients, the information of our business and sales partners, and our own company secrets. We want to be seen as a competent and trustworthy business partner. We have also anchored this principle in our [Code of Conduct](#). Detailed information on this topic can be found in the section [Corporate governance](#).

Responsible handling of artificial intelligence and big data

Artificial intelligence and big data will play a central role in the insurance industry in future, whether in product design, underwriting, claims management, or in internal accounting processes. Liability issues are changing through the use of AI in insured products and services, for example with autonomous driving or in the field of medicine. The use of AI instruments in Industry 4.0 and cyber technologies also allows us to implement holistic risk management solutions for our clients.

Ethical principles are essential when using new data-based algorithms in order to protect the rights of our clients. Munich Re is conscious of its responsibilities with the use of AI-based systems and processes, and is responding accordingly. Under the guiding principle of "Responsible Artificial Intelligence", Munich Re is currently devising a strategy based on the four "ethics guidelines for trustworthy AI" drawn up by an EU Commission expert group, which we helped develop.

Principles of "ethics guidelines for trustworthy AI"

- Respect for human autonomy
- Prevention of harm
- Fairness
- Explicability

From these principles, Munich Re has derived a definition of the requirements for responsible use of AI in its own activities. The focus is on:

Needs-oriented solutions

We only want to use AI in the sectors that promise us added value for our clients or our employees.

In this context, we rely on targeted applications with a clear connection to insurance, such as:

- a risk assessment that is shorter and simpler for the applicant;
- prompt claim review and payment;
- insurability of new kinds of risk.

When developing AI applications, we consider social and economic aspects. At the same time, we continue to be guided by the legal, social and cultural standards in all the countries we operate in.

Non-discrimination

When developing algorithms, we pay close attention to preventing any form of discrimination. We attach great importance to ensuring that our algorithms do not adopt or amplify existing forms of discrimination that are frequently found in historical data. We also check that our data base, to the best possible extent, covers all relevant groups of persons, for example in terms of age, gender, nationality and ethnicity.

Prevention of unacceptable effects

We monitor the impact of the decisions made by AI algorithms to prevent undesirable effects being created or aggravated. By way of example: AI algorithms could be used in healthcare, which might have repercussions for treatment and insurance cover. In our view, it is unacceptable if a higher risk for a serious illness results for the person concerned due to decisions made by an AI algorithm.

Data governance

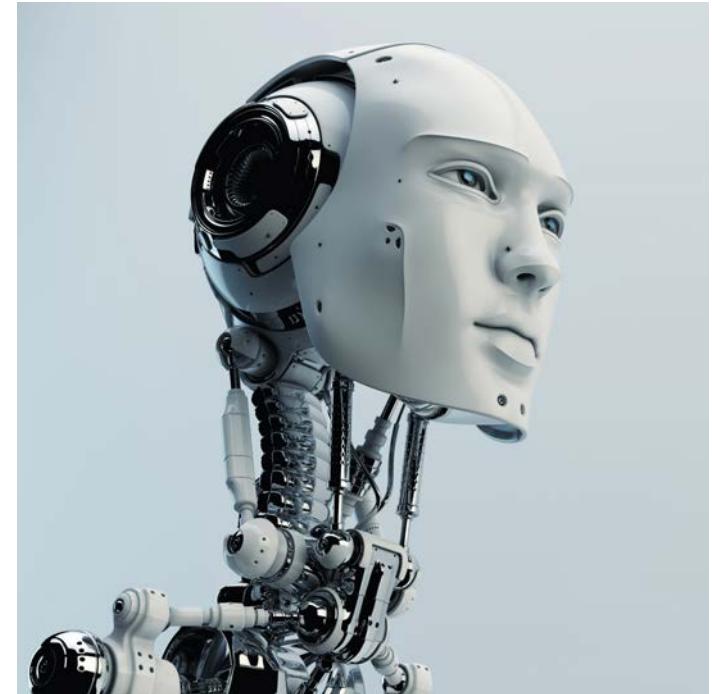
The persons affected must have full control of their data, and be in a position to decide independently on their use. Consumers should always have the choice on whether or not to provide personal data for a service or a third party.

We implement these requirements in the following concepts:**AI governance**

A central component is compliance with the applicable laws and internal Group rules and principles, irrespective of the technology used. In conformity with existing rules on human decision-making, there must be an appropriate balance between the degree of autonomy and regulation of AI systems on the one hand, and the associated risks on the other. Our AI governance also provides for clear responsibilities when dealing with artificial intelligence.

Technical robustness

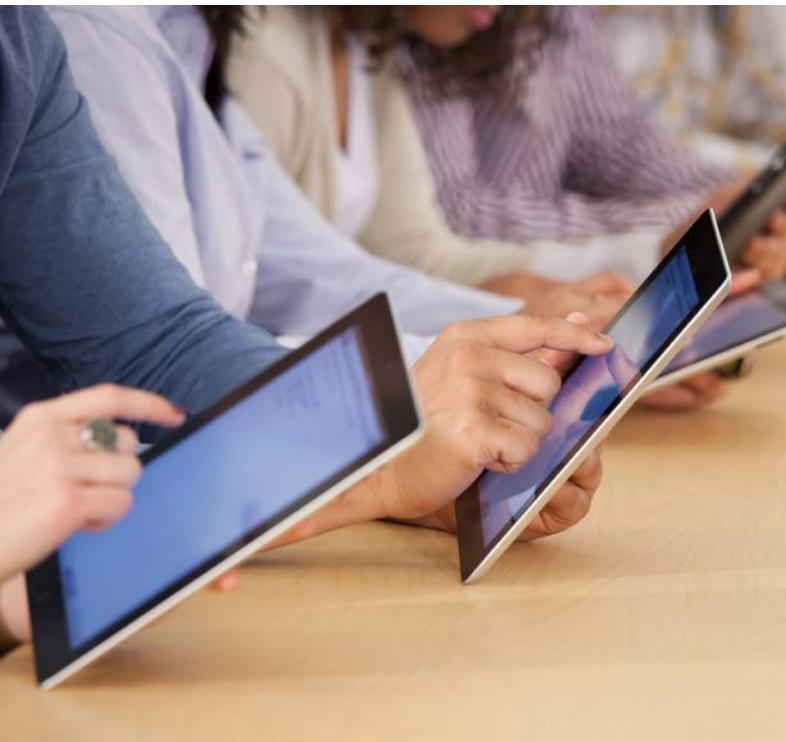
We ensure technical robustness when developing our systems. In this way, we ensure that AI operates within secure boundaries even in the event of malfunctions.



In this context, malfunctions include unforeseen events and manipulative attacks that interfere with the AI system from outside.

Transparency

We attach great importance to ensuring the greatest possible transparency of our algorithms. Cooperation with scientific and research institutes give us access to the latest processes that make the behaviour of AI systems comprehensible.



Training of our developers and employees

Digital technology is transforming the workplace – especially at companies that are highly data- and knowledge-driven, such as Munich Re. We believe this makes it all the more important for us to provide target-group-specific basic and further training for our developers, users and managers. In this way, we want to ensure that our AI-based systems always meet

the relevant standards, and that our employees are in a position to use such systems in a responsible way. In addition to this, together with other partners from the fields of business and science, Munich Re has founded a non-profit association to promote data science in Germany, the [German Data Science Society \(GDS e.V.\)](#). The common objective is the training, networking and fostering of data scientists in Germany as a business and research location.

In the course of digitalisation, the volume of available data has increased significantly. This has paved the way for innovative business models and numerous new fields of application, such as AI-based loss identification and the analysis of sensor data. At the same time, the field of application for data analysis is becoming increasingly complex, requiring ongoing training of experts, along with a cross-sector transfer of knowledge. This is the only way to compete successfully against global competitors in one of the key fields of application for digitalisation.

In 2018, a comprehensive digital training programme was developed for all employees in the form of the ["Digital School"](#) in the reinsurance business field. The objective is to ensure that each employee has at least a basic knowledge of the digital technologies and trends that affect us.

Social impact of AI – promote exchange, protect against risks

AI will have multiple repercussions on society that are impossible to predict today. For that reason, ethical guidelines for dealing with AI can only be achieved in dialogue with politicians and scientists. Our AI experts

are members of several bodies, such as the Microsoft expert committee on AI, where they exchange information with other companies and draw up guidelines for dealing responsibly with the technology. Munich Re has become a shareholder in the [German Research Centre for Artificial Intelligence \(DFKI\)](#). This move will strengthen cooperation between the world's leading representatives from the fields of industry, science and politics. Not only will the partnership help us develop the best processes for our clients, it will also make the latest level of knowledge available to our employees and further advance research in this field.

Many social problems can be solved with AI, for example in the fields of medicine and mobility. We want to take on the role of enabler for these AI technologies by assuming the residual risks from AI decisions. However, an important precondition for insurability is that specific standards are met in terms of quality, stability, non-discrimination, transparency and comprehensibility. For that reason, together with partners such as the DFKI and appliedAI, we wish to define standards for the evaluation of the various AI algorithms.

Digitalisation for the good of society

In line with our shared-value approach, we want to use digitalisation and artificial intelligence for the good of society. We demonstrated how this could work through our involvement in the Social Impact Datathon 2018, which was held to support the fight against global hunger. The aim was to use AI to identify and effectively manage malnutrition risks. The event format was jointly organised by Munich Re, World Food Programme, Microsoft, and our subsidiary Social Impact Partners (SIP).

The focus was the work on the Child Growth Monitor app, which is based on intelligent algorithms and data management systems. The Monitor is just one of the mobile apps developed by World Food Programme. It allows body measurements to be carried out quickly and precisely on children in famine regions. Statistics such as size and weight can be calculated by converting image data into 3D point clouds. This allows conclusions to be drawn about the supply situation in famine areas, and can determine whether or not aid projects

succeed. Munich Re is supporting the Child Growth Monitor with data expertise, its many years of experience with risk transfer schemes, and with innovative financing models. Further information, including a film, are available at [□ Social Impact DataThon 2018](#).

The Munich Re Foundation is also active in the field of digitalisation and organised a series of lectures in 2018 on the subject [□ “Digital. Innovative. Fair? - The future is already here”](#). Social changes in the context

of digitalisation were discussed by representatives from science, business and the media. The aim of the series of events was to sensitise both members of staff and the public to the topic.



**“Responsible AI” – Interview
with Dr. Andreas Nawroth,
Head of AI, Munich Re**

Why responsible AI?

Responsible AI is important to ensure we retain the trust and acceptance of employees, clients and society. It can also ensure competitive advantages for us over market participants who do not comply with specific standards. AI without standards in connection with processes can result in additional risks due to misjudgements. As a leading global reinsurer, however, it is precisely our responsibility to assess risks, to reduce them as much as possible, and to make the residual risk insurable.

What do we want to achieve?

We want to facilitate the breakthrough of AI technologies and help manage social challenges. The question is who will bear the residual risks associated with an AI-based decision – and this is where insurance enters the frame. Specific standards are

needed for insurability, for example with regard to quality and transparency. We will work with our partners on standards for evaluating the different algorithms. Our ultimate objective is to achieve opinion leadership for responsible AI.

What are the biggest challenges?

While many AI processes can improve the quality of predictions, the reasons for a particular prediction are not always immediately apparent. Munich Re and the research institutes involved are making every effort to render decisions transparent. At the same time, the development of algorithms for artificial intelligence is moving at an incredible pace. Therefore it will be crucial to continuously adapt and enhance standards as well as guidelines whilst including contributions of internal and external stakeholders.



Increasing risk awareness in society

> GRI 103; 203-1; 203-2

By making risks insurable, we empower people to cope with existing and future challenges. We want to identify emerging risks at an early stage and assess them from every possible perspective. In this way, we can enhance the risk awareness of our partners in

both the private and public sector. This is a key cross-cutting issue for us, and one that affects every aspect of our core business.

The insurance industry can help to make societies more resilient in the face of disasters. Particularly in the world's regions that are at risk of poverty, improving risk management and resilience is a critical element

in mitigating the impact of humanitarian disasters and facilitating sustainable economic growth.

Below, we give some examples of the ways in which we endeavour to enhance risk awareness in these fields of action:

- Mitigating the risks from natural disasters
- Collaboration with partners to strengthen resilience

Global commitment to risk prevention in relation to natural disasters

Mitigating the consequences of natural disasters is one of the major challenges for the insurance industry. The rise in weather extremes is increasing the risk of being affected by a disaster in many regions around the world. In emerging and developing regions, this frequently results in costs that the countries concerned are barely able to finance. But in highly developed markets, natural disasters frequently cause devastation. Our special expertise in assessing natural perils helps enhance risk awareness in the affected regions. We help to create a better understanding of the positive effects of loss prevention and insurance. To this end, we develop sustainable risk transfer solutions with partners from science, business and politics.

Munich Re is also involved in a wide range of prevention and adaptation measures aimed at protecting people in exposed regions. For example, we are active as a founding member and participant in the **Australian Business Roundtable for Disaster Resilience and Safer Communities (ABR)**. Australia is highly prone to natural disasters, including devastating floods,

cyclones and bushfires. The ABR was founded to promote the development of a sustainable and nationally coordinated approach to managing natural disasters. Most of the members of the initiative are leading companies or aid organisations. The Munich Re website contains further information on our involvement in the [□ ABR](#).



Flooding in Brisbane, Queensland, Australia

In the USA, Munich Reinsurance America Inc. and the American Modern Insurance Group support the **Institute for Business and Home Safety (IBHS)**. This institute researches the influence of storms on residential and commercial buildings with a view to reducing losses for millions of people, and investigates effective measures to reduce the impact of natural disasters and other causes of loss. An important element in the partnership is an online application for construction in accordance with IBHS standards. In this way, by adopting simple measures, owners can better protect their homes and commercial buildings against storm damage.

To enhance risk awareness of landslides after monsoon rainfall in India, and to develop suitable prevention measures, we are supporting a project initiated by **Geo-Hazards International (GHI)**. Further information on this subject can be found in the section on [↳ Society](#).

Risk assessment tools publicly accessible

Munich Re's [□ NATHAN \(Natural Hazards Assessment Network\) Risk Suite](#) helps our clients and partners assess the risks from natural hazards around the world, from location-based individual risks through to entire risk portfolios. Since April 2017, NATHAN has been equipped with additional functions and risk assessment innovations. The platform connects geospatial mapping and big data analytics, and allows complex analyses to be carried out in almost real time. This enables users to analyse extensive volumes of data. For example, entire treaty portfolios with hundreds of thousands of risk locations can be assessed with exceptionally high granularity. The demo version NATHAN Light can be used without obligation and free of charge.



Other Munich Re information services include NatCat-SERVICE, which, with approximately 40,000 data sets, is the world's most extensive database of natural disasters. Approximately 1,000 events are recorded

~40,000
data sets in our **NatCatSERVICE**

and analysed every year. The information is used to document the scale and intensity of individual natural catastrophes around the world and is then incorporated into the analysis of risks and trends. Since 2017, this information has been available for download from the Munich Re website. In addition, clients and interested parties have the option of using the NatCatSERVICE online tool to carry out data analysis to meet their individual needs. Further information on [NatCat-SERVICE](#) is available online.

Additional transparency comes from the [Global Earthquake Model \(GEM\)](#) and the publication of the first digital global earthquake-risk map. The aim is not just to map earthquake hazards worldwide. A risk model can also be drawn up for each country, incorporating data on the economy and the exposed building stock. This allows estimates to be made of loss potentials and the benefits of mitigation measures. The GEM emerged in 2007 from an initiative between researchers and the OECD, with Munich Re as the only company and founding sponsor. It operates on an open-source basis, so that user models, for example those of governments, public authorities, organisations, researchers and insurers, can be specifically modified.

Strengthening the resilience of cities

More than 50% of the world's population today lives in urban centres. By 2050, the figure is expected to rise to 80%. Many cities are situated in exposed regions, and losses here are often exceptionally high, especially after natural disasters. It is therefore particularly important to increase the resilience of major cities.

This has been a key issue for Munich Re for many years. We assist cities with a range of solutions that improve risk management with the help of innovative financing concepts. One such example is the [Urban Air](#)

[Pollution Impact Bond](#), which Munich Re offers to assist city authorities with air-improvement measures and environmental protection. This solution protects against both the financial risks and the performance risks of these measures. We work with our partner, Hawa Dawa, which provides extensive, reliable data on air quality. Using this data, the environmental impact of specific measures can be evaluated. This data-based solution has already been implemented in various European cities, and meets the relevant legal standards.



The Urban Air Pollution Impact Bond provides financial compensation if air quality targets are not achieved, despite the implementation of previously defined measures. This gives cities greater financial planning security, allowing them to focus more closely on new measures to improve air quality. With the Urban Air Pollution Impact Bond, investors can also participate in efficient ways to enhance resilience.

Munich Re has committed itself to additional initiatives to strengthen the resilience of cities. For example, we support the Resilient Cities annual conference, which is organised by the global city network, ICLEI – Local Governments for Sustainability. At this event, we provide information based on current projects about the close connection between the world of insurance and resilient, sustainable cities. At the ICLEI World Congress 2018 in Montreal, a round table was organised with representatives from the insurance industry and the mayors of various cities and communities. The agenda included the presentation of the [Insurance Development Goals for Cities](#), which were developed in line with the eleventh Sustainable Development Goal, "Sustainable cities and communities", with a large measure of support from Munich Re.

Strengthening resilience against epidemics

Munich Re and its subsidiary Social Impact Partners have supported the organisation **The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM)** since 2014, developing a comprehensive risk assessment and providing recommendations on ways to reduce risk. In 2018, it was agreed that this cooperation would continue for a further three years. Munich Re provides risk management and insurance expertise to help GFATM identify and effectively manage risks through appropriate solutions.

The current phase of the project is focusing on enhancing the effectiveness of the fight against epidemics. The operational risks of the GFATM are also to be analysed with the aim of ensuring prompt responses to disasters or losses. Social Impact Partners will support the GFATM, for example by developing insurance guide-

lines. The intention is to develop a multi-dimensional concept to increase resilience to risks by 2020, and ultimately to provide greater resources to fight AIDS, tuberculosis and malaria. You can find more information on the [Social Impact Partners](#) website.

03_Employees



Responsible employer

> GRI 103

Highly qualified, efficient managers and employees are the foundation of our corporate success. As a global financial services provider, we depend on their expertise, dedication and commitment to innovation. Continuous training and talent development play a key role in this context. The recruitment, development and retention of experts and managers is one of the two core objectives of our human resources policy. At the same time, we promote diversity and equal opportunities as strategic factors for the success of Munich Re (Group).

For our more than 41,000 employees, we create attractive working conditions that offer personal development opportunities, strengthen independence and reward individual performance. We attach particular importance to a corporate culture based on responsible and respectful interaction with each other. Promoting the well-being of the employees and a healthy balance between family and work is a substantial component of all our activities as an employer.

Respect and esteem in our Code of Conduct:

"We expect all members of staff to observe every individual's personal dignity, privacy and personality rights. We do not tolerate discrimination (on grounds of disability, age, gender, ethnic origin, nationality, sexual identity, political opinion, race, religion, beliefs or similar), sexual or other personal harassment, or insulting behaviour. We also do not tolerate socially inappropriate behaviour, intimidation or violence, or the threat of such."

Responsible leadership

Our managers' culture of leadership and their duty as role models are an essential part of our compliance culture. We expect our managers to take responsibility for their staff members and reaching our business goals with integrity. Their own conduct should reflect what they expect from their staff.

As a Group, we aim to ...

- ... promote diversity in our Group, and conduct ourselves accordingly, both within the Group and in public;
- ... have our managers act as role models for their colleagues and employees.

As a member of staff, this means that ...

- ... support a culture in which ethically irreproachable conduct is recognised, valued and embodied by all;
- ... treat my colleagues and business partners with fairness and respect."

Target-oriented management of HR topics

> GRI 103

A Group-wide framework of overarching regulations ensures a coordinated approach at Group level to the following topics:

- Support for senior management
- Management development
- Diversity and equal opportunities
- Executive staff remuneration

The strategic responsibility for HR policies and Group-wide methods and standards lies with the Board of Management and the Group Human Resources Department (Group HR). Responsibility for implementation lies with the HR managers and the Board members responsible for human resources in their respective business fields. Strategic and organisational matters are coordinated by the Group HR Committee.

Our targets in the Employees area of action:

- Specific needs-based further training of all employees, in particular in the area of digitalisation;
- The identification and development of leadership potential – where possible from within the Group itself;
- An increase of women in managerial positions in Germany to at least 25% by the end of 2020;
- The promotion of diversity as a strategic Munich Re (Group) success factor;
- The gradual expansion of health promotion programmes.



The following sections provide information on the many different measures we use to meet our own specifications. You can find additional information and examples for primary insurance, reinsurance and MEAG in the respective career portals of [Munich Re](#), [ERGO](#) and [MEAG](#).

EXPLORE: Trainee programme for young management professionals

With its global reinsurance trainee programme and the International Group Trainee Programme [EXPLORE](#), which has been running since 2016, Munich Re systematically promotes its young high potentials and opens up a wide range of career entry opportunities for university graduates. The target group is highly talented young academics with excellent Master's or PhD degrees from top international universities in the subjects of economics, law, maths and engineering. In the course of the two-year programme, each trainee is employed at eight different stations in the Group, two of them abroad. The participants work in all the Group's business fields during their training phases at Munich Re (reinsurance), ERGO and

MEAG. In addition to on-the-job training, courses and seminars on management topics, the focus is on personal development measures and work on strategic projects. The first programme conducted from 2016 to 2018 had ten participants from five nations: six of whom were women and four were men. All the trainees found positions at Munich Re (Group) immediately after the programme ended. In October 2018, ten new EXPLORE participants from seven different countries began the programme: this time five women and five men.

In the global reinsurance trainee programme that ended on 31 December 2018, we trained 23 graduate career entrants in different locations, each with a key focus on a particular business function, such as in the core area of underwriting.

Attractive programmes for employees

Training and development for experts and managers

> GRI 404-2

Management

We prepare our high potentials for management positions at home and abroad. Our development programmes "Group Management Platform" for the Group's senior management staff, [Hydrogen](#) for reinsurance and "MEAG Young Manager" in our investment arm are designed for this purpose. At ERGO, a new global talent programme was developed in 2018 with the aim of driving digitalisation in cooperation

with a leading business school. The [programme](#) focuses on innovation and leadership in the digital world and on ensuring the employees are qualified for the future.

In 2018, we were able to fill approximately 90% of the management positions in reinsurance at the Munich headquarters with internal candidates. This shows that our HR development programmes are effective. In combination with long-term succession planning for current senior management, we ensure that the quality of our managers remains high. At the same time, we strengthen the technical and intercultural competences of our employees by means of staff rotation within the Group.

Staff training

Our employees can take advantage of a wide range of target-group-oriented training measures. This includes technical training, methodology and social competence courses, management topics, IT competences, compliance regulations, occupational health and safety

trainings as well as language courses. The courses take place in a variety of formats: on-site classes, e-learning, webinars, group and individual training. In addition, change processes within Munich Re are monitored and supported comprehensively and professionally.

3.1
**training days
per employee in 2018
(2017: 3.0)**

Regular employee interviews play a particularly important role for the success of training and development measures. All employees discuss their personal training requirements once a year with their supervisor. Thus 100% of the employees of Munich Re (Group) receive a regular assessment of their work performance and, consequently, renewed motivation for their career development.

**Staff training priority topic –
Digitalisation**

Digitalisation is of high-level strategic relevance for Munich Re. Our innovation strategy sets down clearly defined key topics for digital transformation. This includes such things as the use of large and new data volumes, as well as the application of new analytic methods. It is particularly important that our employees are in command of the tools and work methods required for our professional tasks and areas of operation.

The introduction of the “Digital School” in September 2018 in the reinsurance field of business offers comprehensive digital training to all employees. Our goal is to provide every employee with at least basic knowledge of the digital technologies and trends that are affecting us. The school offers digital-literacy training, such as in the fields of agile methods, data analytics, design thinking, digital leadership and technologies and working in the digital age. The employees demonstrate a keen interest in the courses. In the first four months, this programme was already accessed more than 5,000 times.

In the primary insurance field of business, ERGO has set up the transformation@ergo programme. Three action fields (Competence Management, Change Management and Training) were identified, with the goal of preserving and reinforcing the employability of the workforce. The programme offers training in the key competences of digital transformation (social, agile, innovation, technology, analytical, resilience) that addresses such topics as management styles in times of digital change, the consequences and opportunities of digital change, or the skills and qualifications required for the digital work environment.

Furthermore, the Cyber Expert Pool launched in 2018 in the reinsurance field of business established a special training programme for cyber security experts. The programme is aimed at qualifying candidates with suitable professional experience in cyber security to work in cyber underwriting. In 2018, eleven cyber experts were already successfully trained as underwriters in different locations.



»With the Digital School, we want to make our employees fit for the future. In this way, we are creating new impulses for work and leadership in the digital era.«

_Doris Höpke, Member of the Board of Management

The training days availed of by our employees and our expenses for the training measures are listed in the [Key figures section](#). You can find more information on our [Website](#).

Recruiting young professionals

Demographic change is a challenge, also for Munich Re. In addition to the programmes for the development of technical experts and managers, Munich Re cooperates with several universities in Germany and abroad. This is aimed at establishing contact with students and graduates at an early stage to facilitate recruitment. The presence of Munich Re on social media and trade fairs with insurance focus is a further component of the strategy to provide a first-hand impression of Munich Re as an employer and recruit young academics with high potential.

Promoting diversity and equal opportunities

> GRI 405-1

The different mindsets, cultures and values of our staff are key to the success of Munich Re and the achievement of our strategic corporate goals. For this reason, we want to continue promoting diversity and equal opportunities in the Group.

The Group HR Department manages the subject of diversity and equal opportunities at Group level by means of key data. The divisions take their own measures in accordance with the respective challenges they face.



Our Group-wide [Diversity Policy](#) sets down the most important principles in this action field and forms the basis for overarching and comprehensive diversity management. The criteria of gender, age and internationality are decisive for our activities.

We are working determinedly to increase the proportion of women in management positions. The measures we are taking to achieve this goal include the following:

- (Cross-)mentoring programmes for women
- Training courses for female management staff, advisory services

- Formation of women's networks (Munich Re "EFEU"; Munich Re of America "Employee Resource Groups"; MEAG "WIN@MEAG")
- Identification of high-potential female employees through the performance management process, talent discussion with gender sensitisation
- Strong commitment to the promotion of women through a special internal company agreement (Munich Re Munich): Right to workplace reintegration in the same position with part-time hours following parental or home care leave of up to 12 months when returning to at least a 21-hour contract (or 80% of full-time hours for staff members in key functions and senior executives)

The proportion of women in management positions in Germany rose to 25.8% in 2018 (from 23.6% in 2017), while the proportion of women worldwide increased to 35.7% (2017: 33.5%).

35.7%

proportion of women in management positions at Munich Re (Group)

For the diversity criterion "Age", the focus is on our health promotion and lifelong learning provision, which is accompanied by a flexible working-hours model and an employee assistance programme.

We aim to achieve "internationality" with well-balanced teams and assignments to key functions. At the same time, we promote the development of international expertise by transferring employees to temporary positions all around the world, and through development programmes. As a result, 76% of the participants in the 2018 "Hydrogen" reinsurance talent programme hailed from international backgrounds. In November 2018, ERGO hosted the "Synergiewerkstatt International Diversity" (International Diversity Synergy Workshop), aimed at setting new accents for the further development of diversity and equal opportunities.

Furthermore, since 2012, Munich Re has also been a signatory of the ["Charta der Vielfalt"](#) (diversity charter) employer initiative. Further information on other measures, successes and participation in various initiatives can be found on the respective websites of [Munich Re](#), [ERGO](#) and [MEAG](#).

Improving work-life balance

Work-life balance is of particular significance for many employees in certain situations in their lives. For this reason, we have set up internal company agreements for individual locations and divisions allowing a better balance between private and professional life. In addition, Munich Re also provides concrete assistance to families. Among other things, in Germany the Group offers services such as childcare in affiliated nursery facilities, an allowance in the case of privately organised childcare, parent-child office spaces, family services, holiday care services and support in caring for family members.

Munich Re (Group) offers its employees a wide range of models for flexibility in terms of time and location in their jobs. Our Flexible Working concept is exemplary in the German reinsurance sector. Bonuses, for example, can be converted into leave time in the form of short sabbaticals to allow employees to benefit from longer periods away from work. Longer sabbaticals are also possible. In consultation with their line managers, the specific working days and working hours per week can be flexibly defined. These models are digitally supported, thus making it possible to work en route or at home. A dedicated committee has assumed the task of discussing the further development of the Flexible Working concept and making recommendations for its improvement.

For us it is very important to retain our employees after parental leave. With training courses, ERGO's parenting network, and flexible working hours models for parents, we aim to make it easier to return to work following a break from professional life. For its family-oriented HR policy at its German locations, ERGO has been awarded the ["audit berufundfamilie®"](#) certificate four times already since 2002.

Further information on family-friendly offers can be found on the respective websites of [Munich Re](#), [ERGO](#) and [MEAG](#).

Transparent regulation of remuneration and pension schemes

> GRI 102-41

Performance-related salaries and additional attractive benefits are important components of a fair and motivating corporate culture at Munich Re. As in other areas of our HR policy, the topic of remuneration is regulated in such frameworks as the Group-wide Munich Re remuneration policy. In addition to a basic salary, employees also receive performance-based remuneration. This is supplemented by bonuses and extra payments such as the annual Company result bonus, which is granted once a year to all staff members from the Board of Management to pay-scale employees on the basis of the same key figure if the corresponding Group objectives are achieved.

Munich Re offers numerous additional voluntary benefits on top of the basic salary. Our company pension scheme, in particular, plays a major role. It comprises a company pension, additional pension commitments for non-pay-scale employees and managerial staff, and the offer to convert salary components into pension benefits.

Munich Re (reinsurance group) and ERGO are also members of the [German insurance employers' association](#) and consequently bound to the respective collective bargaining agreements. 96% of our staff is subject to collective bargaining agreements.

Munich Re complies with all the statutory requirements for employee co-determination.

Healthcare promotion for our employees

Munich Re (Group) support for employee healthcare by far exceeds the statutory requirements. At its Munich site, for example, not only are medical care, preventative measures, sports and relaxation programmes offered, but also individual measures for the reintegration of employees following a longer illness-related break from work, and healthcare counselling services.

At ☐ ERGO Deutschland, five company doctors and a social worker help in acute cases, and are also available to the employees for consultation in all issues regarding health. This includes prophylactic examinations, vaccinations, first-aid care and advice on addiction and dealing with stress. ☐ "ERGO sports" is one of the most comprehensive company sports programmes in Germany.

To promote the mental well-being of our employees, we also offer expert counselling at several locations in Germany to help employee deal with difficulties at work or at home. In addition, the reinsurance group in Munich cooperates with the Fürstenberg Institute to offer an Employee Assistance Programme (EAP).

Munich Re attaches particular importance to the improvement of the working conditions for disabled persons. The most important measures include short distances from the garage to the workplace, special-needs-friendly and requirement-based workplace design and equipment, not to mention safe and comfortable lifts. DKV Seguros and ERGO Hestia specifically focus on recruiting disabled employees for suitable positions to promote their long-term integration into the labour market.



The voluntary recognition of the principles set down in the UN Global Compact and their enshrinement in our Code of Conduct underscore our commitment to practising a corporate culture characterised by respect and mutual appreciation.

Responsible employer while reducing complexity

Just how seriously we take our role as responsible employers was in evidence last year with the implementation of our voluntary redundancy programme in reinsurance. Alongside measures to promote digitalisation, the programme was part of a drive to reduce complexity in our Group and achieve operating cost

savings of around €200 m in the reinsurance field of business by 2020. The voluntary programme enabled us to reduce our workforce by around 350 full-time jobs at our Munich site. Staff were offered a very attractive severance package and advice from an external consulting agency on career options and the financial implications of the package on their income, tax and pensions. The programme was implemented in complete agreement between management and staff.

All employee key data can be found in the table starting on page 67.

04_Environment



Environmental and climate protection at our sites

> GRI 103

The environmental impact of our activities is limited, since Munich Re does not have an energy- and resource-intensive business model. However, as a large organisation with more than 41,000 employees, we have responsibilities for environmental protection and have involved ourselves in areas that we can influence in practical and positive ways. We have identified the topics of corporate environmental protection and carbon neutrality from the current materiality analysis. In determining our goals and activities, we are focusing on reducing energy consumption and the associated carbon emissions, ensuring that business travel is as environmentally friendly as possible, and achieving a higher level of material and resource efficiency for our processes by generating less waste and using sustainable materials. In parallel with these activities, we are sensitising our staff to behaving in an environmentally compatible way.

Strategic management using the Environmental Management System

> GRI 103

Munich Re (Group) has been coordinating activities at all sites since 2012 using a standardised, mandatory environmental management system (EMS) that

meets the requirements of the international standard DIN ISO 14001. The EMS is based on the Group's environmental guidelines and on selected key performance indicators (KPIs) that we use to assess our carbon footprint. It also defines the processes

required and organisational responsibilities. In 2018, 83% of Group employees were working at sites that have been integrated into the EMS. In addition, 38% of Group employees work at companies that are externally certified to DIN ISO 14001.

Environmental guidelines Munich Re (Group)

Taking responsibility

Needless to say, we comply with national and international environmental regulations and other binding obligations, and meet our voluntary commitments to environmental protection. We are committed to the Principles of the United Nations Global Compact, the voluntary commitments of the Principles for Sustainable Insurance (PSI) and the Principles for Responsible Investment (PRI). We also take account of environmental and climate protection in intra-Group commitments (Code of Conduct, procurement guidelines, company car guidelines).

Regular assessment and continuous improvement of our environmental performance

Our environmental management ensures the control and further development of our environmental measures with the aim of continually improving environmental protection as well as our environmental performance, and preventing or reducing environmental impacts.

The effects of our business activities are a key indicator for the assessment of our environmental

performance. We calculate carbon emissions on an annual basis in a high-quality standardised format. Our aim is to steadily reduce emissions from energy consumption, as well as from business travel, paper, water and waste. We also take account of environmental criteria when procuring products and services, and meet UN Global Compact criteria when selecting and engaging our service providers.

Promoting staff environmental awareness

We promote environmental awareness and responsibility among all our staff and motivate them to engage in active environmental protection and continually improve our environmental performance. We create transparency and support staff initiatives and measures.

Communicating with stakeholders

We communicate openly and regularly inform our stakeholders about our environmental activities and environmental performance. We seek dialogue, raise awareness and share our knowledge of environmental and climate protection, thereby promoting a general culture of environmental protection.

The full Board of Management, represented by the Chairman, Joachim Wenning, is responsible for the Group-wide strategy for environmental and climate protection, and for all measures in the field of environmental protection.

The function of Group Environmental Manager is embedded in the central division Economics, Sustainability & Public Affairs. The Group Environmental Manager controls implementation of the strategy and the EMS, and coordinates the collection of

-44%

*CO₂ per employee
since 2009*

data. Local environmental managers at the individual sites are responsible for meeting the environmental targets and realising the programmes associated with them. Their areas of responsibility specifically include preparing and implementing carbon reduction plans at the sites, and collecting the relevant environmental data.

They are also the direct contacts for employees for all corporate environmental issues, and also act as advisers to local management. They promote an active exchange of information within the EMS network on best practices, and manage communication on environment and climate protection topics. At present, local environmental managers at twelve sites within the Reinsurance Division, 22 sites in the ERGO Group, and at one MEAG site all report to the Group Environmental Manager.

In 2018, the environmental managers met for an exchange of information as part of the Green Week at the Munich Re of America site in Princeton. The focus here was on initiatives to reduce carbon emissions, a review of strategy and goal achievement, and the planning of joint activities, such as the Earth Day event.

86%

*Green electricity
Group-wide in 2018*

We adopted the carbon footprint from our business activities as the key indicator for assessing our environmental record. We calculate carbon emissions on a yearly basis from our consumption of energy, paper and water, business travel, and generation of waste. This is done in a standardised form in conformity with internationally recognised methods and conversion factors, such as the GHG Protocol. An external auditing company confirmed that we met the standards for the environmental indicators throughout the Group in 2018.



We want to be measured against the implementation of our environmental and climate protection strategy, and orientate ourselves towards the following objectives formulated in 2015, which we want to achieve by 2020:

- A reduction in carbon emissions of 35% compared to the base year of 2009 (measured in kg of carbon emissions per employee)
- Permanent carbon neutrality, taking into account compensation projects
- Full conversion of electricity procurement to renewable energy sources Group-wide
- An increase in the percentage of environmentally friendly consumables procured (e.g. paper, catering) and the procurement of environmentally friendly vehicles
- Enhancement of employee motivation to behave in an environmentally friendly way
- Regular certification of environmental and energy management systems at selected sites
- Annual, Group-wide verification of environmental data

With the help of our Environmental Management System and the commitment of our employees, we are well on course to achieving our objectives: we man-

aged to improve on virtually all the indicators. We already achieved our carbon reduction target of 35% in 2017 (39% less carbon

emissions). In 2018, a 44% carbon reduction was achieved. In the year under review, we procured approx. 86% of our electricity requirements Group-wide from renewable energy sources. A key factor for environmental improvements was the use of eco-friendly vehicles, since in accordance with the standards, this has a direct and positive impact on a particular site's carbon footprint.

Higher resource efficiency and falling carbon emissions

> GRI 103

For the purpose of reducing our carbon emissions, we have focused on measures that offer maximum leverage. These include increasing energy efficiency in the operation of our buildings, substituting fossil energy sources with renewable energy, and using environmentally friendly consumables.

Energy-related modernisation of building technology

Munich

Projects implemented included the modernisation of cooling technology systems at the Munich site, which allowed significant savings in terms of energy consumption and carbon emissions. The energy efficiency of the cooling unit was almost doubled. This allows an annual saving of approx. 160 tonnes of carbon per year. Through this project, Munich Re has also made an active contribution to its commitments under the Klimapakt Münchner Wirtschaft (Munich business climate pact). Under this initiative, companies like Munich Re voluntarily committed themselves to jointly reducing carbon emissions by at least 40,000 tonnes.



Hamburg

In terms of energy efficiency, the Hamburg site's focus was on the comprehensive introduction of LED technology. More than 12,000 lights were replaced over an area of 29,000 square metres, allowing approximately 1,200,000 kWh in electricity savings per year.

103,000 t

CO₂ offsetted for 2018

Düsseldorf

The Düsseldorf site has its own cogeneration plants. Particularly for the operation of the two computer centres, this technology makes both economic and environmental sense. The heat produced as a by-product of the electricity generation is used for heating in winter, and in summer to cool the premises using a specialised absorption technology. The plants meet three quarters of the electricity requirements and 90% of ERGO's heating requirements in Düsseldorf.

Cologne

At ERGO in Cologne, the sanitary, heating, ventilation, cooling and re-cooling systems have been completely replaced over the last few years, including the installation of fully updated measuring and control equipment. As in Düsseldorf, the Cologne site has its own cogeneration plant. Since the start of the modernisation, carbon emissions have been reduced by around 70% and energy consumption by some 40%.

We would like to give our employees an understanding of environmental and climate protection issues, and are counting on engaging in direct communication and providing on-site information to do so. A perfect example is the building-services tours given by ERGO, where employees are given unusual insights into the inner workings of building equipment systems and key modernisation projects. In Hamburg, participants were given a tour of the building services and control centre, which houses nine impressive large air-conditioning systems. In Düsseldorf, employees were able to visit the cogeneration plants.



Preference for sustainable consumables (in catering)

Disposable coffee cups have a negative impact on our environment. Production of the cups used in Germany produces around 110,000 tonnes of carbon emissions each year, and requires some 22,000 tonnes of petroleum, as well as paper from 43,000 trees.

ERGO wanted to turn back this tide and, for employee catering at the Düsseldorf site, has been imposing a surcharge of 20 cents for each of these disposable cups since March 2018. Its target was to halve the number of cups used by the end of the year. The campaign was a great success: from April to June 2018, just 28,954 disposable coffee cups were sold – around 80% less than in the same period in 2017. Through their involvement, employees have avoided 2,735 kg of carbon emissions and reduced the amount of waste at the same time. A decisive factor was offering ERGO-branded reusable cups, more than 2,000 of which have already been sold.

At the Munich site, as part of Earth Week in September 2018, menus with a focus on climate-friendly ingredients were offered in the dining rooms operated by our service provider.

Sustainability is also a consideration with the snacks offered in conference rooms. For example, plastic drinking straws were replaced with paper ones in 2018. In many cafes, vending machines, kitchenettes and meeting points, we have also substituted the paper cups used until now with glassware and cups made from ceramic materials.

Environmental and social standards with carbon compensation

Since 2015, Munich Re (Group) has been committed to maintaining carbon neutrality in our business operations. We compensate unavoidable carbon emissions by purchasing carbon certificates. We follow strict requirements when selecting offsetting projects. For example, at least one of the project must meet the Gold Standard and be implemented in one of the world's least developed countries. In addition to

avoiding carbon emissions, we also place a special emphasis on maintaining social standards. We primarily support projects that promote health, facilitate education, develop local infrastructure, avoid deforestation and maintain biodiversity. To achieve carbon neutrality for the 2018 financial year, we obtained carbon certificates from the following projects:

- [□ Wind farms in the Shandong region in China](#)
- [□ Efficient cooking stoves in Uganda](#)

Munich Re is a partner in the Alliance for Development and Climate

In the run-up to the international climate conference in Katowice, the German Federal Ministry for Economic Cooperation and Development launched the Alliance for Development and Climate. The initiative's aim is to promote voluntary involvement in climate protection activities. It is intended to assist companies and organisations

in reducing their emissions wherever possible and to compensate for the remainder by supporting effective climate protection projects in emerging and developing countries. These focus, for example, on developing renewable energy systems and on afforestation and forest protection.

Munich Re is part of a group of around 200 partners made up of companies, public authorities and civil society organisations.



You can find all the key indicators for our environmental performance in the table from page 64 onwards.

05_Society

Societal responsibility

> GRI 103

As a responsible business, we are committed to public welfare and cohesion within our society. We promote projects that allow us to both contribute and expand on our risk expertise. In this way, we can increase the effectiveness of individual initiatives and motivate our employees to take part.

When it comes to our social commitment, we focus on three significant global challenges: combating climate change and its consequences, improved access to healthcare, and increasing risk awareness.

Shared-value approach defines our commitment

> GRI 103

Our [↳ corporate responsibility strategy](#) forms the basis of our societal commitment, which we have geared to the shared-value approach. This lets us create added value, both for society and for our business. Our action fields are based on the issues for which we can provide our expertise and risk competencies, allowing us to have the biggest societal impact possible. Furthermore, we promote social and cultural projects at our sites and provide support for aid and reconstruction following disaster situations. Our employees make a

significant contribution through corporate volunteering projects – something that we, as a business, actively promote.

Our societal commitment is regulated by a Group-wide [□ guideline on donations, sponsoring, memberships and social cooperation](#). The guideline sets out the criteria for donations to organisations, remits for making decisions, and the authorisation process. It was extensively revised in 2018 and implemented at Group level. Our [□ Code of Conduct](#) also makes reference to these criteria. Each site selects its own projects and allocates its own resources. A standardised, Group-wide reporting system for corporate responsibility expenditure was established back in 2009. This system ensures transparency for our stakeholders and documents how the guideline is implemented. To accompany this, in 2018 a concept for measuring the impact of our societal commitment was developed.

Our goals and measures for 2019

- Continuation of Munich Re and ERGO's Group-wide project "Tackling Climate Change Together" (TCCT)
- Group-wide roll-out of the concept for measuring the impact of our societal commitment
- Continuation of new collaborations in social impact projects, in line with the criteria set out in the guideline



Commitment to people and the environment

> GRI 103

Our activities focus on three action areas: climate change, health, and risk awareness. In this context, our sites have a significant amount of freedom when it comes to choosing projects. The projects presented below are examples of our Group-wide commitment to tackling these three action areas.

Responding to climate change

Our engagement to climate protection is concentrated in the [□ Tackling Climate Change Together \(TCCT\)](#) initiative.

Promoting solar energy in Africa

Generating solar energy locally: We are working together with our partner, SOLARKIOSK, to allow people to use renewable energy in places where they would not otherwise have direct access to electricity. E-HUBBs – kiosks that are fitted with photovoltaic modules – generate environmentally friendly power in remote regions that do not have reliable access to electricity. Munich Re and ERGO are funding the setting up and operation of five E-HUBBs in Kenya. The solar energy generated, allows residents to charge their mobile phones and use the internet. The E-HUBBs can also store electricity, meaning that electric lighting is still available after the sunset. Alongside local consumer products, the E-HUBBs sell solar-powered equipment such as lamps, chargers and solar home systems to meet the basic energy needs of private



households. One E-HUBB can create up to five jobs and attracts small businesses wishing to establish themselves near the kiosk, as they can also be supplied with electricity. Approximately 15,000 to 20,000 local people live in the area surrounding a single E-HUBB. In the first year alone, the five E-HUBBs in Kenya generated approximately 11,000 kWh of green energy.

80 savings groups with Plan International in Migori County, Kenya

Alongside the installation of E-HUBBs, Munich Re and ERGO also support the work of the NGO Plan International in Kenya. The focus of this activity is to help people in rural areas gain access to better sustainable livelihoods. Throughout 2018, a total of 80 savings groups received financing at five kiosk locations in Migori County, Kenya. Particular attention is given to

women and girls, who are often disadvantaged when it comes to the distribution of income, yet prefer to invest in the future of their families.

The aim of the savings groups is to improve the purchasing power of their members, and to enable access to goods and services. The savings groups are also intended to motivate the members of the community to tackle crucial societal issues, such as gender equality and improved child protection. In addition, the members of the savings groups are trained in the use of renewable energy and solar products. In particular, this training highlights the social, economic and health-related benefits that this technology brings. As the solar-powered E-HUBBs also provide electric light after night falls, they can also be used as a protected space for night-time gatherings.



Promoting start-ups and cleantech solutions

Climate-KIC (Knowledge & Innovation Community) is the European Union's largest public-private climate initiative. It includes a successful accelerator for cleantech start-ups. The initiative supports young businesses that are developing climate protection solutions. A total of seven start-ups were [supported by Munich Re](#) in 2018, both financially and through mentoring by our own experts.

Climathon in Vienna

The aim of the Climathon, which took place in Vienna in October 2018, was to develop climate protection solutions for cities. Under the name "Climathon", Climate-KIC organises climate protection hackathons worldwide. At events such as these, participants are given a deadline by which they must develop prototypes for solving certain challenges. Munich Re and ERGO support the campaign by providing expertise and by serving as sponsors. In Vienna, some 70 participants formed small teams to take part in the [24-hour Climathon](#), focusing on a range of challenges on topics including renewable energy and mobility that were set for them by Munich Re and ERGO, among others.

**24 hours,
70 participants,
one goal**

Increasing risk awareness among the population and promoting risk prevention

Protecting against weather-related landslides

A high level of risk awareness can prevent damage and minimise danger for the population. For this reason, Munich Re supports the non-profit organisation **Geo-Hazards International (GHI)** in drawing up geological safety recommendations. This means that populations in exposed locations, such as in India, are protected against dangerous landslides thanks to information and training that is provided to them. Every year in India, monsoon rains trigger thousands of such incidents. In August 2018, the Munnar region in the state of Kerala was particularly affected. GHI is working together with local government agencies on a range of different measures. An example is identifying both quick and long-term ways to protect people from landslides. Additionally improvement of the common methods of construction in hilly areas and change of underlying policies can protect people from further landslides. Along with other sources, the basis for this work is the Landslide Safety Action Plan that GHI developed together with Munich Re from 2012 to 2016 in Aizawl. It was held up as an example by the Indian National Disaster Management Authority for other regions to follow.

Resilient infrastructure

Munich Re also supports the organisation **Save the Children** in its risk prevention project for schoolchildren and their families in the slums of Delhi, India. Delhi is severely affected by natural disasters and the risks that these bring. Particularly in the slums, urban

development coupled with socio-economic factors create complex risks for the people who live there. Save the Children is working in collaboration with education authorities on comprehensive plans to ensure safety in schools. The aim is to strengthen emergency preparedness and to avert the dangers associated with natural disasters, climate change and everyday occurrences. This will enable to improve the resilience of 80 school communities. The project also focuses on the children's personal and home environments. Additional security measures are being implemented and training sessions held in 25 Delhi slums in order to protect children from dangers outside of school. The project reaches approximately 32,000 schoolchildren and 500 teachers in 80 schools, as well as 125,000 community members in the slums.



Better access to healthcare

The **Global Fund** is supporting the global fight against AIDS, tuberculosis and malaria. Since 2016, Munich Re has funded a four-year project that works to fight tuberculosis in Indonesia. The objective is to reduce the mortality rate and break the chain of infection. Quick tests that can detect bacterial resistance play a key role here, as does strengthening healthcare systems.

Munich Reinsurance America, Inc., is a partner of the not-for-profit organisation **Eden Autism Services** which carries out important research in the field of autism and provides support for autistic children and adults. As a main sponsor, the company promotes the annual Eden Autism 5k and Fun Run/Walk, an event in which many of our employees participate.

DKV Seguros demonstrates its commitment to corporate responsibility as a founding member of the **Cuidam** programme, which provides healthcare for needy children worldwide. Children from Africa, South America, Asia and Eastern Europe who previously had no access to medical care can receive treatment there. Since 2004, this programme improved the health of more than 280 children in a sustainable way. The average cost per case is around €15,000.

Rapid disaster relief for people in need

For many years, Munich Re has provided financial support for emergency aid measures and reconstruction projects following natural disasters. Again, we work closely with the aid organisation Save the Children to provide this support. Munich Re gave its first donation to Save the Children's aid measures in 2018, following catastrophic flooding in Laos and India and the tsunami in Indonesia. Munich Re will continue working with Save the Children in 2019, now as part of a formal partnership.



During the 2018 reporting year, Munich Re supported among other the following projects in connection with disaster relief:

- Aid measures by Save the Children following the catastrophic flooding in Laos. Around 1,160 people, including 530 children, were given hygiene products and baby food, for example.
- Aid for survivors of the tsunami in Indonesia. With our support, the Save the Children teams were able to provide 800 children with school supplies, 800 women with hygiene products and 400 homes with household provisions.
- Support for the population affected by flooding in India. Save the Children was able to provide



Copyright © Save the Children

800 children with school supplies and 500 homes with household provisions.

- Aid for those affected by monsoons in Bangladesh. With our support, around 5,000 people in the Cox's Bazar displacement camp were supplied with hygiene and household provisions by the German Red Cross.

A wide range of activities at our sites

We show our commitment to numerous social, cultural and ecological projects at our different sites also by corporate volunteering. Many of the initiatives are the result of ideas from our employees and are driven by them.

ERGO's corporate volunteering programme, for instance, offers employees the opportunity to work on various projects for a day. In 2018, ERGO volunteers tended organic city gardens or provided support to an organisation for disabled people by working in an accessible garden. For several years, ERGO employees in Latvia have had a tradition of planting pine

trees with their families. Since this initiative began, 27,000 trees have been planted.

Munich Re Munich supports its employees' voluntary work on behalf of the Schinzler Foundation, meaning it also contributes to the time given to the Foundation by its employees. As a result, when employees use their own annual leave for volunteering, they can receive up to two extra days of holiday per year. More information can be found on the [Schinzler Foundation](#) website.

>9,000

hours' volunteer work
in 2018

All key data in the Society section can be found in the table beginning on page 64.

Foundations take on responsibility worldwide

The corporate responsibility of the Munich Re (Group) is supplemented and complemented effectively by the work of five different foundations:

The [Munich Re Foundation - From Knowledge to Action](#)

Munich Re (Group) concerns itself with facing the great challenges of the world today: population growth, globalisation, diminishing resources, environmental pollution and climate change. The Munich Re Foundation aims to identify risks, work to counteract them and help overcome them. Potential has been unlocked for sustained development in global change. As critical thinkers and reliable partners, the Foundation can stake a claim to finding long-term solutions. The objective is to prepare people for risk and to improve their living conditions.

By holding regular forums on societal challenges, the Foundation aims to address issues that are currently being faced. The topic for 2018 was "Digital. Innovative. Fair?" and looked at the impact of digitalisation and globalisation. In 2019, the guiding theme is "Poor rich world", with a focus on the global distribution of wealth. For 14 years, together with the Microinsurance Network (MIN), the Munich Re Foundation has organised the world's largest conference related to inclusive insurance ("Micro-insurance"). Over 400 experts from around

60 countries discuss how insurance solutions can succeed for impoverished people in developing countries and emerging nations. An additional point of focus is disaster prevention. The Munich Re Foundation promotes the implementation and use of warning systems that are tailored to the needs of the people at risk, and also sponsors water generation projects in arid regions or when disasters occur. It is also the Foundation's mission to share its expertise on climate change, sustainability, justice, ecological changes, social vulnerability and the resilience with schoolchildren and young students.

The [Dr. Hans-Jürgen Schinzler Foundation](#) is dedicated to promoting volunteering work carried out by Munich Re employees, particularly as part of the "Social Days" scheme.

The [ERGO Youth & Future Foundation](#) helps disadvantaged young people to successfully shape their own future careers.

The [DKV Seguros "Integralia" Foundation](#) promotes the social and professional integration of people with physical disabilities in Spain.

The [ERGO Hestia "Integralia" Foundation](#) makes it easier for people with disabilities in Poland to take their first step onto the career ladder and aims to encourage other employers to do the same.

06_Key figures, Indices, Annex



Financial indicators

Our financial key figures (IFRS) can be found on our [Corporate website](#).

Taxes on income by region

Region	Unit	Taxes on income 2018
Germany	€m	213
United Kingdom	€m	53
Europe (rest)	€m	122
USA	€m	114
Canada	€m	47
Asia	€m	20
Other	€m	7
Total	€m	576

Environmental indicators

A key component of our Group-wide environmental and climate protection strategy is the continuous reduction of our consumption of resources and the resulting CO₂ emissions.

In our reporting on our consumption of resources and CO₂ emissions, we focus on the main direct impacts of our business operations on the environment and climate. These are the consumption of paper, energy and water, the waste we produce and the number of business trips made. The resulting CO₂ emissions are measured and externally quality assured. The continuous reduction in these emissions is the main indicator of success for our environmental performance and is targeted throughout the Group.

To calculate the Group-wide carbon savings targets, from 2009 to 2015 (-10%, kg of CO₂ per employee), we used the conversion factors of the Greenhouse Gas Protocol (GHGP) and the Association for Environmental Management and Sustainability in Financial Institutions (VfU) – from 2011 in each case. Green electricity was not included in the accounting, thereby ensuring that the quantitative values remained comparable over the target period. In 2015, a new environmental and climate protection strategy was approved by the Board of Management and the CO₂ savings target was expanded – from 2009 to 2020 we want to achieve Group-wide CO₂ savings (kg per employee) of 35%. The figures from 2016 to 2018 are only comparable to a limited extent with the 2015 figures. This is because different conversion factors were used for the calculation of carbon emissions, and due to differences in the calculation of carbon emissions from renewable energy. From 2016, the Group's carbon emissions will be calculated using the latest conversion factors from the GHG Protocol and the VfU. The GHG Protocol will be used for the conversion of Scope 1 emissions (direct energy), for electricity falling under Scope 2 emissions (indirect energy), and for the "short- and long-haul flights" components of the "business trips" element of Scope 3 emissions. The Group-wide share of electricity from regenerative sources of 86%** in 2018 (2017: 78%) is calculated with 0 emissions. A market-based approach is used to calculate the Scope 2 emissions resulting from electricity consumption, taking into account the fact that a share of 86%** was derived from regenerative energy sources and calculated as emission-free. For the remaining electricity consumption, country-specific conversion factors were used that were derived from the average local power mix for the conversion to carbon emissions. The VfU conversion factors are taken as the basis for calculating the Scope 2 emissions "district heating" and the Scope 3

emissions from paper, water and waste, as well as the "company vehicles, taxis, hire cars, train journeys" components of the "business trips" element. Business trips with company cars are calculated with individual factors for the fleet in question, assuming they are available.

Sources of CO₂ emissions:

- Scope 1: Direct emissions from primary energy consumption (natural gas, heating oil, emergency diesel power, fuel for company cars);
- Scope 2: Indirect emissions from procured energy (electricity, district heating and district cooling);
- Scope 3: Other indirect emissions (business trips, consumption of paper, water and waste).

** Selected quantitative environmental indicators are verified Group-wide by an external auditing company.

General information	Unit	2018	2017	2016	2009 (base year)
Munich Re (Group) employees as at 31.12.2018	Number of employees	41,410	42,410	43,428	47,249
Proportion of employees captured by the data collection	% employee	83**	83	83	84
Proportion of employees who were verified by a third party	% employee	100**	100	100	no data
Proportion of employees captured by an environmental system certified to ISO 14001	% employee	38**	38	38(*)	no data
Gross premiums written Munich Re (Group)	€bn	49.1	49.1	48.9	41.4
CO ₂ savings per employee since 2009	% per employee (kg CO ₂)	44	39	40	
CO ₂ intensity	Metric tonnes (t) CO ₂ /€m gross premiums written - Munich Re (Group)	2.10	2.31	2.5	5.25

(*) The indicator "Proportion of employees captured by an environmental system certified to ISO 14001" from the reporting year 2016 was adjusted slightly in this period. This is primarily due to improved data quality.

Carbon emissions	Unit	2018**	2017	2016	2009 (base year)
Total CO ₂ emissions ¹	Metric tonnes (t)	103,024	113,278	122,147	217,315
	Metric tonnes (t) per employee	2.49	2.67	2.81	4.4
Direct CO ₂ emissions - Scope 1	Metric tonnes (t)	45,730	47,880	47,761	65,932
	Metric tonnes (t) per employee	1.10	1.13	1.1	1.4
Indirect CO ₂ emissions market-based - Scope 2 ¹	Metric tonnes (t)	31,713	39,834	47,362	117,476
	Metric tonnes (t) per employee	0.77	0.94	1.09	2.49
Indirect CO ₂ emissions location-based - Scope 2	Metric tonnes (t)	68,237	79,426	83,390	
	Metric tonnes (t) per employee	1.65	1.87	1.92	
Other indirect CO ₂ emissions (water, waste, paper, travel) - Scope 3	Metric tonnes (t)	25,581	25,563	27,023	33,352
	Metric tonnes (t) per employee	0.62	0.60	0.62	0.71

Energy	Unit	2018	2017	2016	2009 (base year)
Total energy consumption	MWh	383,101**	408,334	408,940	543,365
	MWh/employee	9.25**	9.63	9.42	11.50
Total consumption of direct energy (e.g. oil, gas, diesel, petrol)	MWh	165,385**	170,440	164,575	195,291
	MWh/employee	3.99**	4.02	3.79	4.13
Consumption of indirect energy (electricity, district heating, district cooling)	MWh	217,714**	237,893	244,365	348,885
	MWh/employee	5.26**	5.61	5.63	7.38
Percentage of total electricity consumption from green electricity	Share in %	86**	78	70	28
Carbon emissions from energy ¹ (Scope 1 and Scope 2)	Metric tonnes (t) per employee	1.87**	2.07	2.19	3.88
Energy intensity	MWh/€m gross premiums written	7.80	8.32	8.36	13.14

¹ Green electricity is considered for the first time in 2016.

Paper	Unit	2018	2017	2016	2009 (base year)
Paper consumption	Metric tonnes (t)	1,200**	1,214	1,344	2,366
	Metric tonnes (t) per employee	0.03**	0.03	0.03	0.05
Recycled paper	Share in %	20	35	38	17
CO ₂ emissions from paper	Metric tonnes (t)	1,415**	1,433	1,586	2,839
	Metric tonnes (t) per employee	0.03**	0.03	0.04	0.06
Paper intensity	Metric tonnes (t)/€m gross premiums written	0.02	0.02	0.03	0.06
Water	Unit	2018	2017	2016	2009 (base year)
Water consumption	Cubic metres (m ³)	658,217**	676,510	737,865	859,181
	Cubic metre (m ³) per employee	16**	16	17	18.2
CO ₂ emissions from water	Metric tonnes (t)	460**	473	516	639
	Metric tonnes (t) per employee	0.011**	0.011	0.012	0.014
Water intensity	Cubic metres (m ³)/€m gross premiums written	13.4	13.8	15.1	20.7

Waste	Unit	2018	2017	2016	2009 (base year)
Waste	Metric tonnes (t)	15,064**	11,592	12,972	14,054
	Metric tonnes (t) per employee	0.36**	0.27	0.30	0.30
Waste for incineration (hazardous)	Metric tonnes (t)	5	21	36	26.1
Waste for incineration (non-hazardous)	Metric tonnes (t)	2,065	2,601	2,755	2,472
Recycled waste (hazardous)	Metric tonnes (t)	55	81	95	24.8
Recycled waste (non-hazardous)	Metric tonnes (t)	10,351	6,299	7,337	8,796
Organic waste	Metric tonnes (t)	11,526	7,530	8,677	9,852
Waste to landfill (hazardous)	Metric tonnes (t)	0	0	0	13.4
Waste to landfill (non-hazardous)	Metric tonnes (t)	803	1,071	1,001	1,176
CO ₂ emissions from waste	Metric tonnes (t)	2,783**	2,771	3,152	2,895
	Metric tonnes (t) per employee	0.07**	0.07	0.07	0.06
Waste intensity	Metric tonnes (t)/€m gross premiums written	0.31	0.24	0.27	0.34
Business trips	Unit	2018	2017	2016	2009 (base year)
Business trips	Kilometres (km)	291,670,161**	296,208,905	311,075,398	350,167,683
	Kilometres (km) per employee	7,043**	6,984	7,163	7,411
Air travel	Kilometres (km)	177,945,204**	175,985,436	182,146,431	189,257,132
Road or rail travel ²	Kilometres (km)	113,724,957**	120,223,469	128,928,967	160,910,551
CO ₂ emissions from business travel	Metric tonnes (t)	33,111**	34,186	36,144	53,195
	Metric tonnes (t) per employee	0.8**	0.81	0.83	1.13
Business travel intensity	Kilometres (km)/€m gross premiums written	5,940	6,033	6,361	8,453

Regional distribution of energy consumption, Germany	Unit	2018	2017	2016	2009 (base year)
Direct CO ₂ emissions – Scope 1	Metric tonnes (t)	25,908	27,059	27,167	42,889
Indirect CO ₂ emissions – Scope 2 ¹	Metric tonnes (t)	3,696	7,328	7,806	59,011
Other indirect CO ₂ emissions – Scope 3	Metric tonnes (t)	10,166	10,318	10,894	14,668
Regional distribution of energy consumption, rest of the world (excluding Germany)	Unit	2018	2017	2016	2009 (base year)
Direct CO ₂ emissions – Scope 1	Metric tonnes (t)	19,822	20,822	20,595	23,043
Indirect CO ₂ emissions – Scope 2 ¹	Metric tonnes (t)	28,017	32,506	39,556	58,465
Other indirect CO ₂ emissions – Scope 3	Metric tonnes (t)	15,415	15,245	16,129	18,684
Energy consumption by type	Unit	2018	2017	2016	2009 (base year)
Liquid fuel	MWh	742	956	890	573
Gas	MWh	164,644	169,484	163,685	194,718
Thereof natural gas for cogeneration	MWh	138,300	140,332	132,857	65,715
On-site energy generation	MWh	111,055	114,369	132,416	0
Total electricity consumption	MWh	133,518	142,372	149,967	236,939
Electricity consumption from renewable sources	MWh	114,825	115,730	105,569	66,343
District cooling	MWh	9,481	10,888	11,417	12,998
District heating	MWh	74,448	84,633	82,982	98,136

¹ Green electricity is considered for the first time in 2016.² The figures for the years 2017 and 2016 were adjusted because of an internal change to the sub-categories for business trips.

Staff indicators

		2018	2017	2016
Staff	(abs.)	41,410	42,410	43,428
Employees by field of business				
Reinsurance	29.8%	28.6%	27.9%	
Primary insurance	70.2%	71.4%	66.2%	
Asset management	—³	— ³	— ³	
Munich Health	—⁸	— ⁸	5.9%	
Group staff by region				
Germany	46.3%	47.1%	48.5%	
Rest of Europe	37.7%	37.5%	35.9%	
North America	12.4%	12.1%	12.1%	
Asia and Australasia	2.5%	2.4%	2.5%	
Africa and Middle East	0.6%	0.6%	0.6%	
Latin America	0.4%	0.4%	0.4%	
Percentage of female employees				
Female employees	53.9%	54.5%	54.0%	
Women in management	35.7%	33.5%	32.6%	
Group staff by age				
20 or younger	0.3%	0.3%	0.2%	
21-25	3.9%	3.5%	3.5%	
26-30	8.8%	9.2%	9.7%	
31-35	13.3%	13.7%	13.5%	
36-40	14.1%	14.0%	14.1%	
41-45	14.0%	14.0%	14.7%	
46-50	16.0%	16.7%	16.9%	
51-55	15.4%	15.1%	14.4%	
56-60	10.1%	9.5%	9.1%	
over 60	4.1%	4.0%	3.9%	
No. of staff by type of employment contract				
Permanent employment	94.6%	93.4%	95.8%	
Temporary employment ⁴	5.4%	6.6%	4.2%	

		2018	2017	2016
Salaried employees				
Full-time (abs.) – female	15,016	15,280	15,558	
Part-time (abs.) – female	6,355	6,679	7,007	
Total (abs.) – female	21,371	21,959	22,565	
Full-time (abs.) – male	17,721	18,031	18,767	
Part-time (abs.) – male	1,190	1,179	1,190	
Total (abs.) – male	18,911	19,210	19,957	
Full-time (abs.)	32,737	33,311	34,325	
Part-time (abs.)	7,545	7,858	8,197	
Total (abs.)	40,282	41,169	42,522	
Sick leave⁴		4.8%	4.7%	4.2%
Staff turnover				
Turnover rate		11.7%	15.1%	11.9%
Voluntary fluctuation		5.1%	5.7%	4.3%
Lay-offs (abs.)		453	744	591
Open positions filled by internal candidates		32.6%⁴	17.1% ⁶	30.0% ⁴
Length of service				
Years (Ø)		13.3	13.0	13.1
Further training				
Further training costs per employee (€)		930⁶	944 ⁶	917 ⁵
No. of days' training per staff member (Ø)		3.1⁴	3.0 ⁵	3.0 ⁴
Employees receiving regular performance and career development reviews		100.0%	100.0%	100.0%
Employees covered by collective bargaining agreements		96%⁷	96% ⁷	96% ⁷
Pay ratio⁸		24	23	

³ Since 2014, the figure for asset management has been distributed across the business fields.

⁴ Coverage Munich Re (Group): ≥ 95%

⁵ Coverage Munich Re (Group): ≥ 70%.

⁶ Coverage Munich Re (Group): ≥ 50%.

⁷ Coverage: Munich Re (Group) Germany ~50% of Munich Re (Group).

⁸ Munich Health integration in early 2017: Allocation of the business units to the field of business reinsurance and to the field of business primary insurance

⁹ Pay ratios from Annual Report 2018.

In 2018, the ratio of the target overall direct remuneration of the Chairman of the Board of Management to the average target overall direct remuneration of all Company employees (excluding the Board of Management) was 38. The ratio of the average target overall direct remuneration of all members of the Board of Management to the average target overall direct remuneration of all employees (excluding the Board of Management) was 24.

Social impact (SI) indicators

	2018	2017	2016	2015
Coverage for reporting	99.3%	99.8%	99.6%	95.3%
Total SI expenses	8,397,389 €	8,771,058 €	7,738,945 €	10,390,192 €
Share of pre-tax profit	0.23%	0.7%	0.23%	0.29%

Details of social impact expenses in 2018 in euro

	2018	2017
Activities at our locations ¹⁰	2,094,066	2,118,201
Social impact projects contributing to the three global challenges ¹⁰	3,043,696	3,077,110
1. Combating the effects of climate change		
2. Improving access to healthcare		
3. Enhancing risk awareness		
Disaster relief ¹⁰	147,250	98,509
Donations in kind, sponsorships in kind	71,021	24,761
Political donations	173,100	170,500
Corporate volunteering	796,701	862,997
ERGO foundations	506,562	683,977
Munich Re foundations	1,564,992	1,735,002
Regional classification ¹⁰	2018	2017
Germany	2,006,873	1,931,773
Europe (excluding Germany)	971,576	1,122,154
North America	2,055,554	1,935,514
Latin America	8,083	6,125
Australia/New Zealand	168,971	228,941
Africa	54,177	67,646
Asia	19,779	1,694

¹⁰ This amount comprises donations (not including donations in kind or political donations), social sponsorships (not including sponsorships in kind) and corporate responsibility memberships.

Expenses for lobbying in euro – not part of social impact expenses

As part of its lobbying activities, Munich Re (Group) engages in a continuous exchange with a wide range of organisations of which it is a member. The following table shows a selection of the institutions of greatest Group-wide strategic importance that are active across sectors and/or (also) international in scope.

Association/Organisation	2018	2017
Association of German Insurers (GDV)	3,000,000	3,000,000
Geneva Association	160,000	140,000
The European Insurance CFO Forum (CFO Forum)	40,000	90,000
Chief Risk Officer Forum	30,000	30,000
The Insurance Europe Reinsurance Advisory Board (RAB)	15,000	15,000

GRI content index

> GRI 102-55

GRI standard	Reference	Comments/Omission	UNGC principle
GRI 102: General Disclosures 2016			
102-1 Name of the organisation	p. 5		
102-2 Activities, brands, products, and services	p. 5		
102-3 Location of headquarters	p. 5		
102-4 Location of operations	p. 5		
102-5 Ownership and legal form	p. 5		
102-6 Markets served	p. 5		
102-7 Scale of the organisation	p. 5		
102-8 Information on employees and other workers	p. 67		
102-9 Supply chain	p. 5		
102-10 Significant changes to the organisation and its supply chain		No significant changes in the year under review.	
102-11 Precautionary principle or approach	p. 7, p. 14		
102-12 External initiatives	p. 13		
102-13 Membership of associations	p. 18		
102-14 Statement from senior decision-maker	p. 4		
102-16 Values, principles, standards, and norms of behaviour	p. 7, p. 12, p. 14		
102-18 Governance structure	p. 12, p. 14		
102-40 List of stakeholder groups	p. 10		
102-41 Collective bargaining agreements	p. 49, p. 67		
102-42 Identifying and selecting stakeholders	p. 10		

GRI standard	Reference	Comments/Omission	UNGC principle
GRI 102: General Disclosures 2016			
102-43 Approach to stakeholder engagement	p. 10		
102-44 Key topics and concerns raised	p. 11		
102-45 Entities included in the consolidated financial statements	p. 3		
102-46 Defining report content and topic boundaries	p. 11		
102-47 List of material topics	p. 11		
102-48 Restatements of information		Where previously published information needed to be updated, this has been indicated in the relevant places.	
102-49 Changes in reporting	p. 11		
102-50 Reporting period	p. 3		
102-51 Date of most recent report		16 May 2018	
102-52 Reporting cycle	p. 3		
102-53 Contact point for questions regarding the report	p. 3, p. 76		
102-54 Claims of reporting in accordance with the GRI standards	p. 3		
102-55 GRI content index	p. 69		
102-56 External assurance	p. 74		
GRI 201: Economic Performance 2016			
103-1/-2/-3 Management approach	p. 26, p. 30		
201-1 Direct economic value generated and distributed	<input checked="" type="checkbox"/> corporate website p. 69		
201-2 Financial implications and other risks and opportunities due to climate change	p. 26, p. 30		
201-4 Financial assistance received from government		To the best of our knowledge, Munich Re received no financial support from the state.	

GRI standard	Reference	Comments/Omission	UNGC principle	GRI standard	Reference	Comments/Omission	UNGC principle
GRI 203: Indirect Economic Impacts 2016							
103-1/-2/-3 Management approach	p. 20, p. 26, p. 30, p. 36, p. 40			103-1/-2/-3 Management approach	p. 52, p. 54		
203-1 Infrastructure investments and services supported	p. 20, p. 26, p. 30, p. 36, p. 40			305-1 Direct (Scope 1) GHG emissions	p. 64		GC 7, 8
203-2 Significant indirect economic impacts	p. 20, p. 26, p. 30, p. 36, p. 40			305-2 Energy indirect (Scope 2) GHG emissions	p. 64		GC 7, 8
GRI 205: Anti-corruption 2016							
103-1/-2/-3 Management approach	p. 12			305-3 Other indirect (Scope 3) GHG emissions	p. 64		GC 7, 8
205-2 Communication and training about anti-corruption policies and procedures	p. 15		GC 10	305-4 GHG emissions intensity	p. 64		GC 8
205-3 Confirmed incidents of corruption and actions taken		In the period under review, no confirmed incidents of corruption were identified which were material from a Group perspective.	GC 10	305-5 Reduction of GHG emissions	p. 64		GC 8, 9
GRI 206: Anti-competitive behaviour 2016							
103-1/-2/-3 Management approach	p. 12			GRI 305: Emissions 2016			
206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices		No fines were imposed upon Munich Re (Group) in the period under review.		103-1/-2/-3 Management approach	p. 52, p. 54		
GRI 302: Energy 2016							
103-1/-2/-3 Management approach	p. 52, p. 54			306-2 Waste by type and disposal method	p. 64		GC 8
302-1 Energy consumption within the organisation	p. 64		GC 7, 8	GRI 306: Effluents and Waste 2016			
302-2 Energy consumption outside of the organisation	p. 64		GC 8	103-1/-2/-3 Management approach	p. 52, p. 54		
302-3 Energy intensity	p. 64		GC 8	306-2 Waste by type and disposal method	p. 64		GC 8
302-4 Reduction of energy consumption	p. 64		GC 8, 9	GRI 307: Environmental Compliance 2016			
302-5 Reductions in energy requirements of products and services	p. 64		GC 8, 9	307-1 Non-compliance with environmental laws and regulations		No instances of non-compliance were identified in the 2018 financial year.	GC 8
GRI 308: Supplier Environmental Assessment 2016							
103-1/-2/-3 Management approach	p. 12			GRI 308: Supplier Environmental Assessment 2016			
308-1 New suppliers that were screened using environmental criteria				103-1/-2/-3 Management approach	p. 12		
GRI 401: Employment 2016							
103-1/-2/-3 Management approach	p. 45			308-1 New suppliers that were screened using environmental criteria	100%		GC 8
401-1 New employee hires and employee turnover	p. 67			GRI 401: Employment 2016			
GRI 404: Training and Education 2016							
103-1/-2/-3 Management approach	p. 45			103-1/-2/-3 Management approach	p. 45		
404-1 Average hours of training per year per employee	p. 67			404-1 Average hours of training per year per employee	p. 67		GC 6
404-2 Programmes for upgrading employee skills and transition assistance programmes	p. 46			404-2 Programmes for upgrading employee skills and transition assistance programmes	p. 46		
404-3 Percentage of employees receiving regular performance and career development reviews	p. 67			404-3 Percentage of employees receiving regular performance and career development reviews	p. 67		GC 6

GRI standard	Reference	Comments/Omission	UNGC principle	GRI standard	Reference	Comments/Omission	UNGC principle	
GRI 405: Diversity and Equal Opportunity 2016								
103-1/-2/-3 Management approach	p. 45			103-1/-2/-3 Management approach	p. 12			
405-1 Diversity of governance bodies and employees	p. 67, p. 48		GC 6	412-2 Employee training on human rights policies or procedures	p. 13		GC 1	
GRI 406: Non-discrimination 2016								
103-1/-2/-3 Management approach	p. 45			412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	p. 14		GC 2	
406-1 Incidents of discrimination and corrective actions taken		Eight discrimination incidents were investigated at Home Office in the 2018 financial year. Of these, three could not be confirmed, two were partially confirmed and one was confirmed. Appropriate measures were taken on a case-by-case basis. In addition, the training course on the German General Equal Treatment Act (AGG – Allgemeines Gleichbehandlungsgesetz) is being updated on the topic of #metoo to help foster awareness.	GC 6	GRI 412: Human Rights Assessment 2016				
GRI 407: Freedom of Association and Collective Bargaining 2016								
103-1/-2/-3 Management approach	p. 12			103-1/-2/-3 Management approach	p. 12			
407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		To the best of our knowledge, no operating sites or suppliers were identified in the period under review at which the right to freedom of association and collective bargaining could be at risk.	GC 3	414-1 New suppliers that were screened using social criteria		100%	GC 2	
GRI 408: Child labour 2016								
103-1/-2/-3 Management approach	p. 12			GRI 415: Public Policy 2016				
408-1 Operations and suppliers at significant risk for incidents of child labour		To the best of our knowledge, in the period under review no operating sites or suppliers were identified as being at significant risk of incidents of child labour.	GC 5	103-1/-2/-3 Management approach	p. 18			
GRI 409: Forced or Compulsory Labour 2016								
103-1/-2/-3 Management approach	p. 12			415-1 Political contributions	p. 68, p. 18		GC 10	
409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour		To the best of our knowledge, in the period under review no operating sites or suppliers were identified as being at significant risk of incidents of forced or compulsory labour.	GC 4	GRI 417: Marketing and Labelling 2016				
GRI 418: Customer Privacy 2016								
103-1/-2/-3 Management approach				103-1/-2/-3 Management approach	p. 25			
418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data				417-1 Requirements for product and service information and labelling	p. 25			
GRI 419: Socioeconomic Compliance 2016								
103-1/-2/-3 Management approach				417-3 Incidents of non-compliance concerning marketing communications		No incidents relevant to the Group of non-compliance with regulations or voluntary codes of conduct concerning marketing and communications – or of fines, sanctions or warnings – were identified in the period under review.		
419-1 Non-compliance with laws and regulations in the social and economic area				GRI 418: Customer Privacy 2016				
GRI 420: Sustainable Development 2016								
103-1/-2/-3 Management approach				103-1/-2/-3 Management approach	p. 16			
420-1 Sustainable development strategy		To the best of our knowledge, no sustainable development strategy was developed in the period under review.	GC 11	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data		In 2018, no material data-protection event defined in the Solvency II Group Compliance Policy occurred anywhere in our Group worldwide, nor were any material proceedings for breach of data-protection rules initiated.		
GRI 421: Stakeholder Engagement 2016								
103-1/-2/-3 Management approach				GRI 419: Socioeconomic Compliance 2016				
421-1 Stakeholders engaged		To the best of our knowledge, no stakeholders were engaged in the period under review.	GC 12	419-1 Non-compliance with laws and regulations in the social and economic area		No instances of substantial fines or non-monetary sanctions being imposed on Munich Re by state agencies were identified in the period under review.		

SRI ratings & indices

Open and transparent dialogue with our stakeholders in Germany and abroad on our commitment to corporate responsibility and socially responsible investment (SRI) is an essential part of our corporate culture.

The inclusion of Munich Re (Group) in numerous sustainability indices and our good to very good performance in many different SRI ratings are proof that we are on the right track:

- Listed in the Dow Jones Sustainability Indices (Europe and World) since 2001
- Listed in the FTSE4Good Index since 2001
- Listed in the following indices: Euronext Vigeo World 120, Euronext Vigeo Europe 120 and Euronext Vigeo Eurozone 120
- Listed in the Ethibel Sustainability Index (ESI) Excellence Europe and the ESI Excellence Global
- Listed in the following indices: ECPI Global Ethical, ECPI World ESG Equity and ECPI Global Climate Change Equity
- Listed in the STOXX Global ESG Leaders index
- MSCI ESG Rating of "AA"
- Prime status per ISS-oekom rating
- Industry leader in Sustainalytics' industry rating

Updated 31 December 2018

Principles for Responsible Investment – Investing responsibly

At Munich Re, responsible management has uppermost priority, not least with a view to operating profitably. Our asset management therefore follows the United Nations Principles for Responsible Investment (PRI). We helped to draw up these principles and were the first German company to sign them.

A holistic investment strategy aligned with ESG (environmental, social, governance) criteria also has a long-term beneficial effect on risk and return. That is why, on 27 April 2006, we were one of the first signatories to the United Nations Principles for Responsible Investment (PRI), which we played a prominent role in drafting. Behind these principles is the view that investment decisions often take insufficient account of the need for sustainable development and thus the needs of future generations.

Principles and recommendations for action for investment decisions

Six principles are described more closely in a list of 35 recommendations for action. These enable institutional investors to take account of ecological and social aspects, together with topics related to good corporate governance, in their investment decisions. Munich Re is committed to fulfilling the PRI in an appropriate and forward-looking manner.

The following examples show how Munich Re is putting the six UN principles into practice:

No.	Principle	Examples of measures
1	"We will incorporate ESG issues into investment analysis and decision-making processes."	We are pursuing the ESG integration approach in the investment process. This means that we use ESG factors as an additional source of information. This holistic approach leads to better investment decisions and improves the portfolio's risk/return profile.

No.	Principle	Examples of measures
2	"We will be active owners and incorporate ESG issues into our ownership policies and practices."	Before taking part in an Annual General Meeting, MEAG checks the following topic areas to ensure its investors' interests are represented as objectively and comprehensively as possible: - Board of Management and Supervisory Board. - Appointment of the external auditor - Capital measures - Appropriation of profits: - Mergers and acquisitions - Corporate Governance Code and best practice
3	"We will seek appropriate disclosure on ESG issues by the entities in which we invest."	MEAG supports the companies with measures that have a long-term, positive effect on business development or a business model, and will vote against measures that would have a negative impact on the Group. This extends to social, ethical and environment-related targets/aspects of corporate governance. If it is not possible to participate in person, the fund management either nominates a proxy or casts an electronic vote itself using a proxy voting platform. In every case
4	"We will promote acceptance and implementation of the principles within the investment industry."	We communicate our investment criteria openly and address these in dialogue with the companies we work with. Our aim here is to motivate companies to improve their ESG rating or achieve a positive ESG rating for the first time. Munich Re is thereby contributing to companies keeping a closer eye on ESG criteria.
5	"We will work together to enhance our effectiveness in implementing the principles."	We communicate and highlight our principles through publications in the media and by participating in presentations and conferences on sustainability. With individual funds and activities; we show how responsible management can be put into practice: - Investments in infrastructure with a focus on renewable energies - MEAG Nachhaltigkeit - MEAG EM Rent Nachhaltigkeit: - MEAG FairReturn
6	"We will each report on our activities and progress in implementing the principles."	Through its PRI membership, Munich Re contributes to the continued development and propagation of the principles. We are driving forward the exchange of experience with other PRI members in Germany and around the world.
	Reporting activities and progress relevant to PRI	We participate in UNEP's annual PRI Reporting and Assessment Survey. In the Strategy and Governance module of the current Principles for Responsible Investment (PRI) assessment, Munich Re was awarded the highest rating of A+ for 2017. Munich Re and MEAG also answered questions on the "bonds" asset class. A good "B" rating was awarded in all four individual modules pertaining to this asset class. We report on the PRI and our activities relating to it (such as reports and ESG analyst discussions).

Munich Re takes part in ESG ratings and factors the appraisals into corporate decision-making.

Independent Auditor's Limited Assurance Report

> GRI 102-56

The assurance engagement performed by Ernst & Young (EY) relates exclusively to the German version of the Corporate Responsibility Report 2018/2019 of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München. The following text is a translation of the original German Independent Assurance Report.

To Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München, Munich

We have performed a limited assurance engagement on the disclosures marked with the symbol ** in the Corporate Responsibility Report of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München for the reporting period from 1 January 2018 to 31 December 2018 (hereafter the report).

Our engagement exclusively relates to the information marked with the symbol ** in the German PDF version of the report. Our engagement did not include any disclosures for prior years.

Management's responsibility

The legal representatives of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München are responsible for the preparation of the report in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (hereafter "GRI-criteria") and for the selection of the information to be assessed.

This responsibility includes the selection and application of appropriate methods to prepare the report as well as making assumptions and estimates for individual sustainability disclosures, which are reasonable under the circumstances. Furthermore, the legal representatives are responsible for such internal controls that they have considered necessary to enable the preparation of a report that is free from material misstatements, whether due to fraud or error.

Auditor's Statement regarding Independence and Quality

We are independent from the Company in compliance with the German statutory and professional requirements, and have fulfilled our other professional responsibilities in accordance with these requirements.

Our audit firm applies the national statutory regulations and professional pronouncements for quality control, in particular the by-laws regulating the rights and duties of Wirtschaftsprüfer and vereidigte Buchprüfer in the exercise of their profession [Berufssatzung für Wirt-

schaftsprüfer und vereidigte Buchprüfer] as well as the IDW Standard on Quality Control 1: Requirements for Quality Control in audit firms [IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitäts-sicherung in der Wirtschaftsprüferpraxis (IDW QS 1)].

Auditor's Responsibility

Our responsibility is to express a limited assurance conclusion on the information marked with the symbol ** in the report based on the assurance engagement we have performed.

We conducted our limited 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" published by the IAASB. This standard requires that we plan and perform the assurance engagement to obtain a limited assurance about whether the information marked with the symbol ** in the report for the reporting period from 1 January 2018 to 31 December 2018 has been prepared, in all material respects, in accordance with the relevant GRI criteria. We do not, however, issue a separate conclusion for each sustainability disclosure which is marked with the symbol **. 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 auditor's professional judgment.

Within the scope of our assurance engagement, which has been conducted between March and May 2019, we performed amongst others the following assurance and other procedures:

- Inquiries of employees regarding the sustainability strategy, sustainability principles and sustainability management of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München,
- Inquiries of employees responsible for data capture and consolidation of the disclosures marked with the symbol ** as well as the preparation of, to evaluate the sustainability reporting processes, the data capture and compilation methods as well as internal controls to the extent relevant for the limited assurance of the information marked with the symbol **,
- Identification of likely risks of material misstatement in the report, inspection of the relevant documentation of the systems and processes for compiling, analyzing and aggregating sustainability data in the reporting period and testing such documentation on a sample basis,
- Inquiries and inspection of documents on a sample basis relating to the collection and reporting of sustainability data and disclosures at the headquarters of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München and during two site visits at HSB Engineering Insurance, Hartford, USA, and at ERGO, Hamburg,
- Analytical measures at Group level and on the level of selected sites regarding the quality of the reported data,
- Critical review of the draft report to assess plausibility and consistency with the information marked with the symbol **.

Conclusion

Based on our assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the disclosures marked with the symbol ** in the Corporate Responsibility Report of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München for the reporting period from 1 January 2018 to 31 December 2018 have not been prepared, in all material respects, in accordance with the relevant GRI criteria.

Intended Use of the Report

We issue this report on the basis of the engagement agreement with Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München. The assurance engagement has been performed for the purposes of the Company and the report is solely intended to inform the Company as to the results of the assurance engagement and must not be used for purposes other than those intended. The report is not intended to provide third parties with support in making (financial) decisions.

Engagement Terms and Liability

The "General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften [German Public Auditors and Public Audit Firms]" dated 1 January 2017 are applicable to this engagement and also govern our relations with third parties in the context of this engagement (www.de.ey.com/general-engagement-terms). In addition, please refer to the liability provisions contained in no. 9 and to the exclusion of liability towards third parties. We assume no responsibility, liability or other obligations towards third parties

unless we have concluded a written agreement to the contrary with the respective third party or liability cannot effectively be precluded.

We make express reference to the fact that we do not update the assurance report to reflect events or circumstances arising after it was issued unless required to do so by law. It is the sole responsibility of anyone taking note of the result of our assurance engagement summarized in this assurance report to decide whether and in what way this result is useful or suitable for their purposes and to supplement, verify or update it by means of their own review procedures.

Munich, 24 May 2019

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Nicole Richter
Wirtschaftsprüferin
(German Public Auditor)

Annette Johné
Wirtschaftsprüferin
(German Public Auditor)

Munich Re CR Report 2018 – Contact and imprint

> GRI 102-53

Contact

Please do not hesitate to contact our Sustainability team if you have any questions regarding corporate responsibility at Munich Re.

Anja Hirsch, Consultant Sustainability, oversees our Corporate Responsibility Report. Please send your questions and comments to
[□ responsibility@munichre.com](mailto:responsibility@munichre.com)

Anja Hirsch
Consultant Sustainability
Email: responsibility@munichre.com

Renate Bleich
Head of Department Sustainability
Email: responsibility@munichre.com

Imprint

© 2019

Münchener Rückversicherungs-Gesellschaft
Aktiengesellschaft in München
Königinstr. 107
80802 München

Date of publication:
May 2019

Text, Design, Layout:
Scholz & Friends Reputation

Photo credits

AdobeStock, Page: 24, 33, 41, 42, 46, 53, 57
Ergo Versicherungsgruppe, Page: 54
GettyImages, Page: 1, 13, 14, 19, 26, 30, 32, 34, 43, 50, 53, 58, 63
GettyImages/Blend Images, Page: 38, 40
Hero Image, Page 48
istockphoto.com, Page 16
Mauritius Image, Page: 6, 26, 36, 51
Photothek.net, Page 18
Save the Children, Page 61
Shutterstock, Page 37