

MUNICH RE

STRATEGY

RESPONSIBILITY

TOPICS

KEY FIGURES

SERVICE

Corporate Responsibility

01 02 03 04

Welcome to the corporate responsibility portal 2016/2017

Our strategy, measures, solutions and all the indicators related to sustainability



Quick Links

Contact and feedback About the CR portal GRI Content Index and UNGC COP

1



Statement by the CEO

Joachim Wenning on the latest developments and strategic decisions in the field of sustainability.

Statement by the CEO

Current news

30 June 2017

Corporate responsibility portal: Update 2016/17

10 May 2017

Munich Re takes a key role in the International Resilient Cities Congress 2017

29 March 2017

Munich Re still represented on PSI Board

9 February 2017

Munich Re wins awards for its performance in the field of sustainability

8 December 2016

CRO Forum Emerging Risk Initiative publishes position paper on "Water Risks"

News archive



Strategy

The Group-wide corporate responsibility strategy and Munich Re's shared value approach.

Our guiding principles



Stakeholder dialogue and material topics

Involvement of our stakeholders and sustainability topics of relevance for

Stakeholder dialogue and materiality



Responsibility

Responsible corporate governance in our business operations and for the benefit of employees, the environment and society.

Corporate responsibility in our business



Facts and figures

Indicators and reports on sustainability. Environmental indicators **Employee indicators**

Corporate citizenship indicators



Sustainable solutions

An overview of Munich Re's sustainable solutions and services

Sustainable solutions





MUNICH RE STRATEGY RESPONSIBILITY TOPICS **KEY FIGURES** SERVICE

Statement by the CEO Home Strategy

Strategy

Statement by the CEO

Our guiding principles

Our voluntary commitments

Organisational positioning

Objectives, measures and milestones

Stakeholder dialogue and materiality analysis

Strategic topic climate change

Strategic topic health

Strategic topic risk awareness

Ladies and Gentlemen,

For Munich Re, acting responsibly means creating value for people and enterprises, and for our own Group. This shared value approach, upon which Munich Re's corporate responsibility strategy is based, helps ensure that our strengths and abilities can be used optimally. Here, we focus on three topics to which we attach particular significance, even if they are currently at some risk of being ousted from the political agenda. With our resources and risk expertise we aim to contribute to

- mitigating the effects of climate change,
- improving access to healthcare, and
- enhancing risk awareness.

Here is one example: In our involvement with the City Innovation Platform for African Infrastructure Risk and Resilience (CIP AIRR), we play a role in enabling towns and local authorities in Africa to plan and implement infrastructure measures such that they can better withstand natural catastrophes and other negative impacts.

Other projects were also driven forward over the past year – for example, the Eight Billion Lives Fellowship. Together with Impact Hub Munich, we have organised an accelerator programme for social entrepreneurs. This programme supports business ideas that counter the effects of the growing global population.

The Board of Management of Munich Re has explicitly reaffirmed its commitment to the observance of human rights, which is just as integral to our overall strategy as the systematic continuation of our environmental and climate protection strategy. We already achieved carbon neutrality in Munich Re's business operations in 2015.

It goes without saying that Munich Re will in future continue to stand by its voluntary commitment to abide by standards such as the Ten Principles of the United Nations Global Compact, the Principles for Sustainable Insurance and the Principles for

I am convinced that an enterprise can only attain long-term business success by taking into account both economic and sustainability criteria. You can read about the specific steps Munich Re is taking in our latest sustainability report.

Best regards,

Joachim Wenning

GRI: G4-1

Interesting? Share this content on your favourite social media platform.













Dr. Joachim Wenning Chairman of the Board of Management Munich Re

Related topics

Guiding principles



 MUNICH RE
 STRATEGY
 RESPONSIBILITY
 TOPICS
 KEY FIGURES
 SERVICE

 Home
 Strategy
 Our guiding principles
 Strategy
 Our guiding principles

Strategy

Statement by the CEO

Our auidina principles

Our voluntary commitments

Organisational positioning

Objectives, measures and milestones

Stakeholder dialogue and materiality analysis

Strategic topic climate change

Strategic topic health

Strategic topic risk awareness

Our strategy:

Company success

and through

responsibility

Related topics

Our voluntary commitments
Organisational positioning

External links

Sustainable Development Goals

Turning risk into sustainable value

Acting in a responsible manner while at the same time creating added value for the Group and for society is Munich Re's guiding principle. We implement this maxim throughout the Group through our corporate responsibility strategy, which we have geared to the shared-value approach.

What we stand for

As a primary insurer and reinsurer, the professional management of risks is part of our day-to-day business. Not only our clients but also society benefit from our broad knowledge of risks, our experience on all global markets, and the use of the latest insurance techniques to calculate risks. We apply our expertise and practical solutions in order to reduce risks and make it easier for people to start again following major losses. In this way, we create social and economic added value.

What we aim to achieve

We operate in an extremely dynamic global environment in which not only natural catastrophes but also – increasingly – complex new risks can lead to high losses. However, many of these risks cannot yet be calculated and are therefore not insurable. They affect people in their daily lives but also hit entire economies with full force – often in emerging and developing countries that have a low level of resilience. We therefore believe we have a responsibility to identify previously unknown risks early on and calculate their extent in detail. From this we develop insurance solutions that extend the limits of insurability and so create sustainable value for everyone. For example, following disasters, economies recover more quickly in countries with a higher insurance density.

We set the following priorities

We have further developed our Group-wide corporate responsibility strategy and geared it to the shared-value approach. This means that, as part of our business activity, we want to combine economic and social progress in order to meet major global challenges. According to the 2030 Agenda for Sustainable Development, which was adopted in 2015 by all the member states of the United Nations, such global challenges can only be solved by working together. In order to achieve this, the Sustainable Development Goals (SDGs) were developed which take account of the economic, social and ecological dimensions of sustainability. We let ourselves be guided by these SDGs when developing our new strategy. We thus identified for our Group the following three challenges, which are of particular importance for us as a corporate entity, for our clients and for society at large:

- 1. mitigating the effects of climate change
- 2. improving access to healthcare and
- enhancing risk awareness.

We have the relevant skills, resources and risk expertise to develop new solutions and exploit business opportunities. Working closely with recognised partners, we generate added value by bringing in not only financial resources but, in particular, our know-how. To measure the impact of our actions, we have defined appropriate performance criteria for the three dimensions of business, society and employees.

How we go about this

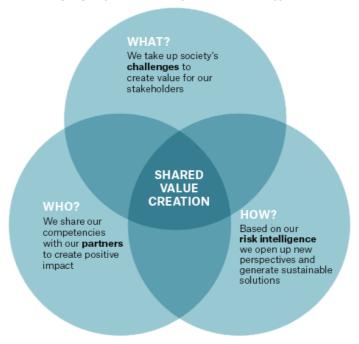
In the area of corporate responsibility, we focus on four fields of action:

 Corporate responsibility in business: We proactively consider environmental, social and governance (ESG) aspects in our insurance business and investment management.

- Environmental management: We have built up a Group-wide environmental management system and our operations have been carbon-neutral since 2015.
- Social impact projects: With our social commitment, we play our part as a responsible Group and place the emphasis on projects that are close to our core
- Reporting and communication: We regularly and transparently report on our activities and successes. We are also in continuous dialogue with our stakeholders, in order to better understand their requirements and needs.

Our voluntary commitments such as the ten principles of the UN Global Compact, the Principles for Responsible Investment and the Principles for Sustainable Insurance form the basis of our actions here.

The following diagram presents our Group-wide shared-value approach



GRI Content Index: G4-23; G4-56; G4 DMA Indirect Economic Impacts; G4 DMA Category Environmenal; G4 DMA Customer Health and Safety













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Strategy Our voluntary commitments

Strategy

Statement by the CEO

Our guiding principles

Our voluntary commitments

Organisational positioning

Objectives, measures and milestones

Stakeholder dialogue and materiality analysis

Strategic topic climate change

Strategic topic health

Strategic topic risk awareness









munichre.com

Code of Conduct (PDF, 467 KB)

Related topics

Organisational positioning CR in investment

External links

UNEP FI United Nations Global Compact Principles for Responsible Investment (PRI) Principles for Sustainable Insurance (PSI)

Our voluntary commitments: The UN Global Compact, PSI and PRI

We demonstrate our understanding of corporate responsibility to the outside world by the acceptance of international guidelines. The commitments we have voluntarily undertaken, 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.

The UN Global Compact

Since 2007, the Munich Re Group has committed to the ten principles of the United Nations Global Compact. These cover the areas of human rights, labour standards, environmental protection and combating corruption. The signatory companies believe they have a responsibility to meet defined minimum standards in these areas. With its Global Compact, the UN intends to make globalisation more social and more environmentally friendly. The annual Communication on Progress (COP) on the implementation of these principles within the Group (Communication on Progress, COP) is integrated into our Corporate Responsibility portal.

Principles for Sustainable Insurance (PSI)

Munich Re has played an active part in developing the Principles for Sustainable Insurance (PSI) of the United Nations Environmental Programme Finance Initiative (UNEP FI). These were introduced and launched at the UN Rio+20 conference in Brazil in June 2012. Munich Re is one of the initial signatories, and is a member of the PSI's Board. At this point in time, more than 90 companies and institutions around the world have signed up to the PSI. Its resolutions include criteria on environmental, social and governance issues (ESG). The criteria help the signatories' clients to operate in a more sustainable way.

Principles for Responsible Investment (PRI)

With the help of a holistic investment strategy oriented towards comprehensive ESG criteria, institutional investors can integrate into their investment decisions ecological and social aspects, along with topics related to good corporate governance. In 2006, we were the first German company to sign the UN Principles for Responsible Investment (PRI), which facilitate these goals. Implementation of the PRI for Munich Re is managed by our asset management arm, MEAG.

GRI Content Index: G4-15; G4-56; G4-HR1













MUNICH RE STRATEGY RESPONSIBILITY TOPICS **KEY FIGURES** SERVICE

Strategy Organisational positioning Home

Strategy

Statement by the CEO

Our guiding principles

Our voluntary commitments

Organisational positioning

Objectives, measures and milestones

Stakeholder dialogue and materiality analysis

Strategic topic climate change

Strategic topic health

Strategic topic risk awareness



Related topics

Strategic guiding principles

Organisational positioning of corporate responsibility

Group-wide corporate responsibility strategy and activities are bundled in the central division "Economics, Sustainability & Public Affairs", which reports directly to the Chairman of the Board of Management.

The central division "Economics, Sustainability & Public Affairs" at Munich Re's head office in Munich performs its tasks at Group level in direct consultation with our primary insurance subsidiary, ERGO. The central division is responsible for establishing guidelines for core activities within our Group-wide corporate responsibility strategy. At ERGO, the topic is based in the Corporate Communications department, and is once again an area of responsibility of the Chairman of the Board of Management.

The Group Corporate Responsibility Committee (GCRC), which spans all business segments, was set up at the beginning of 2013 to steer and coordinate the strategic development of sustainability activities throughout the Group. The Committee is composed of the relevant senior managers in the Group functions Group Compliance, Group Communications, and Corporate Underwriting, and in the business fields ERGO and MEAG. It meets at least four times a year to plan the strategic development of corporate responsibility within the Group. Corporate responsibility guidelines and projects applicable to the entire Group are submitted to the Group Committee for their

In addition to advising the Supervisory Board on financial, operational and strategic topics, Munich Re's Board of Management provides information at least once a year on the current application of the environmental, social and governance (ESG) aspects.



GRI Content Index: G4-34; G4-35; G4-36













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Strategy Objectives, measures and milestones

Strategy

Statement by the CEO

Our guiding principles

Our voluntary commitments

Organisational positioning

Objectives, measures and milestones

Stakeholder dialogue and materiality analysis

Strategic topic climate change

Strategic topic health

Strategic topic risk awareness



Related topics

Voluntary commitments

Download

Objectives and measures 2017 (PDF, 76 KB)

Our objectives and progress

We are working continuously to refine our corporate responsibilities for environment-related, social and governance aspects.

We are concentrating on four fields of action with the aim of putting into practice Groupwide our corporate responsibility strategy, based on the cornerstones of the shared value approach and in order to meet our voluntary commitments, Principles for Sustainable Insurance (PSI), Principles for Responsible Investment (PRI) and United Nations Global Compact:

- We actively embrace environmental and social factors, and aspects of corporate governance (ESG aspects) along the value-added chain in our insurance business operations and investment management.
- We practice active environmental management at our locations, and are carbonneutral Group-wide.
- We meet our responsibilities as a member of society (corporate citizen) through involvement in issues closely related to our core business and that have a positive social impact
- We communicate about our corporate responsibility activities transparently both inside and outside Munich Re.

You can download a detailed catalogue of measures along with our target plans as a PDF file (PDF, 76 KB).

The most important milestones in our corporate responsibility activities between 1973 and today

2016 All guidelines and requirements related to the Principles for Responsible Investment (PRI), and ESG aspects concerning asset management at Munich Re (Group) are summarised in the Responsible Investment

2015 Munich Re (Group) as a whole achieves carbon neutrality.

The Board of Management adopts a new environmental and climate strategy for Munich Re (Group):

- A 35% saving in carbon emissions compared to 2009 is to be achieved Group-wide by 2020.
- Efforts will be made to supply Munich Re (Group) as a whole with electricity from 100% renewable energy sources by 2020.

2013 MEAG presents the ESG country rating system for investment decisions

The Group-wide Corporate Responsibility Committee is established to develop the corporate responsibility strategy.

2012 Principles for Sustainable Insurance (PSI) signed.

The reinsurance group and ERGO Germany achieve carbon neutrality.

2011 Munich Re draws up a new corporate responsibility strategy. It covers the following three core areas: corporate responsibility in business, global environmental management, and global social commitment.

2010 RENT (Renewable Energy and New Technologies), an extensive investment programme for renewable energies and new technologies is launched.

The Group's Munich site achieves carbon neutrality.

2009	Founding of the desert-power initiative Dii GmbH (Desertec Industrial Initiative Planungsgesellschaft).		
	The world's first microinsurance cover against flooding is offered to the inhabitants of Jakarta.		
2008	ERGO decides on a corporate responsibility model and draws up a Code of Conduct.		
2007	Munich Re joins the UN Global Compact.		
	Establishment of the Corporate Climate Centre, intended to bundle all the competencies and activities on the subject within Munich Re (Group).		
	A resolution is adopted to achieve climate-neutrality for the Group's headquarters in Munich by 2009 and for the entire reinsurance group by 2012.		
2006	Corporate responsibility becomes an integral part of Group strategy, and is assigned to the central division Group Development.		
	Commitment to the Principles for Responsible Investment (PRI).		
2005	To mark the Company's 125th anniversary, the Munich Re Foundation is set up to promote education projects in developing countries.		
	Establishment of the Dr. Hans-Jürgen Schinzler Foundation to encourage voluntary involvement by staff members.		
	Launch of the Munich Climate Insurance Initiative (MCII) – a charitable association that strives to bundle insurance expertise in the field of climate change.		
	With the General Investment Guidelines (GIG), Munich Re establishes sustainability criteria for investments that are binding Group-wide.		
2003	Launch of the MEAG Nachhaltigkeit mutual fund.		
	ISO 14001 is adopted as a binding standard for the Munich Re (Group) environmental management system.		
2002	Munich Re declares its intention to comply with the Government Commission's "German Corporate Governance Code".		
2001	Munich Re publishes its first environmental statement.		
	Munich Re is listed in the two most important global sustainability indices, the Dow Jones Sustainability Index and the FTSE4Good.		
2000	Introduction of an environmental management system at the Munich site in accordance with the ISO 14001 standard.		
1999	Munich Re joins the UNEP FI (United Nations Environment Programme Finance Initiative).		
1998	EMAS (Eco-Management and Audit Scheme) certification for Victoria Versicherungs AG, the first for an insurance company in Europe.		
1973	In a publication on flooding, Munich Re warns for the first time about the consequences of climate change.		

GRI Content Index: G4-FS7; G4-FS8











Objectives 2017

Objective	Measure	Deadline	Status 2017
Corporate responsibility in business	Further global roll-out of the environmental, social and gover- nance (ESG) framework with training courses, provision of relevant instruments for ESG assessment in underwriting, client management and asset management. Where necessary, identification of further sensitive topics and expansion of ESG research.	2016-2019	Being implemented
	ESG consultancy in core business and advice on reputational risks (incl. within the framework of the Reputational Risk Committees)	Ongoing, every year	Being implemented
	Supporting the business in developing the shared value approach via joint pilot projects and client consulting	2016-2020	Being implemented
	Development of industry standards in the area of corporate responsibility, as part of our voluntary commitments to the Principles for Sustainable Insurance (PSI), e.g. "ESG in surety bonds"	2015-2017	Intermediate target met (presentation of results at meeting of International Credit Insurance & Surety Association)
Environmental management	Implementation of the environmental and climate protection strategy 2020 with the following goals: - 35% reduction in carbon emissions by 2020 (base year 2009), - Carbon neutrality across the Group, - Group-wide verification of environmental data, certification of selected units' environmental and energy management systems, and - 100% regenerative energy for the Group	2015-2020 by 2020	Being implemented
Social impact projects	Development of a Group-wide lighthouse project to implement the corporate responsibility strategy.	2017-2019	Being implemented
	Incubation and management of social impact projects	2017-2019	Being implemented
	Continuation of the earthquake risk prevention project in northern India in cooperation with GeoHazards International	2012-2014, project phase 2 by 2017	Intermediate targets met, being imple- mented for 2017
Reporting and communication	Implementation of our voluntary commitments - UN Global Compact by Munich Re (Group), - Principles for Sustainable Insurance (PSI) and - Principles for Responsible Investment (PRI) as part of the corporate responsibility strategy and the respective reporting on progress.	Ongoing, every year	Met for 2016 (incl. PRI A+), being implemented for 2017
	Ensuring good performance in selected SRI ratings, and inclusion in relevant sustainability indices.	Ongoing, every year	Met for 2016, being implemented for 2017
	Long-term objectives (2015–2017) of board members contain corporate responsibility elements	2017	Being implemented



MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Strategy Stakeholder dialogue and materiality analysis

Strategy

Statement by the CEO

Our guiding principles

Our voluntary commitments

Organisational positioning

Objectives, measures and milestones

Stakeholder dialogue and materiality analysis

Strategic topic climate change

Strategic topic health

Strategic topic risk awareness



Related topics

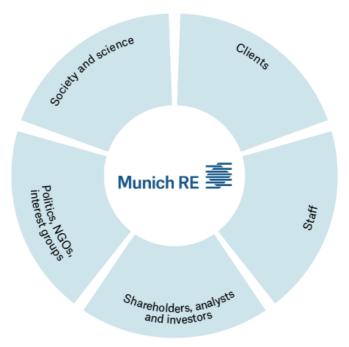
Topic: Climate change Topic: Health care Topic: Risk awareness Memberships and partnerships

SRI indices

Direct contact

Munich Re has always valued an open and ongoing dialogue with its stakeholders. This allows us to identify at an early stage topics and emerging challenges of relevance to Munich Re – both now and in the future – from the perspective of our stakeholders.

The many and varied expectations of our stakeholders provide Munich Re with valuable input. We analyse these accumulated insights on a regular basis and make allowance for them in our strategic topic planning. Our aim is to be able to recognise global changes in the economy and society as well as newly emerging trends as quickly as possible, and meet future challenges at an early stage by providing innovative solutions and risk covers. For this reason, we specifically focus on continuous dialogue with our stakeholders to create added value for everyone involved.



Open and transparent dialogue

Munich Re meets the needs of its stakeholders with openness and transparency. The overview shows the stakeholder groups with which Munich Re engages in dialogue. Click on a group to learn more about our stakeholders' requirements.

Clients

Munich Re's reinsurance, primary insurance and asset management client bases have different structures and characteristics. Our central objective across all fields of business is to be a reliable, solution-oriented partner for our clients. Neutral third parties and specialised market research institutes, such as Flaspöhler for reinsurance, regularly conduct a review of client opinions and comments on our Group. Our client managers also engage in regular exchange with clients on potential needs, trends and challenges. The results are taken into account in our strategic planning. One crucial and contemporary component is client communication on social media. Munich Re

uses Twitter, Facebook, Google+, LinkedIn, XING and YouTube to provide information and invite contacts to exchange information and partake in discussions in forums and special network groups.

Staff

Our employees are our most valuable asset. That is why we engage in continuous exchange with them worldwide and on every level. Regular feedback and open dialogue are the norm across the Group. Alongside a wide range of discussion forums and cross-divisional symposiums, the extensive intranet services at business-field, regional and local levels provide staff with a rich supply of information, supporting employee communication about content. Appropriate and effective topic-related networking among staff is essential to ensure effective work processes.

Shareholders, analysts and investors

Munich Re cultivates an ongoing, intensive dialogue with private and institutional investors, analysts and rating agencies. In addition to holding regular events for investors and analysts, we frequently impart important, detailed information about general risks and opportunities relating to our business operations, and in particular about sustainable investment opportunities, our sustainability initiatives and upcoming trends. This is done through personal meetings, specialist interviews, at (SRI) roadshows, in webinars, Skype calls and via the internet.

Politics, NGOs, interest groups

Through the departments responsible (Corporate Responsibility, Group Legal, Corporate Climate Centre and others) we are in constant contact with a large number of interest groups, NGOs, UN institutions, public administration bodies and the scientific community at national and international level.

Working with a wide range of different political institutions and national governments, Munich Re provides advice on current topics relating to climate change and contributes the expertise of its Corporate Climate Centre. Munich Re is an active member of many insurance industry initiatives and associations. You can find an overview of our memberships and partnerships here: Membership in national and international bodies, initiatives and foundations

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 the Global Earthquake Model (GEM), GeoHazards International (GHI), the Global Climate Forum (GCF) and the Munich Climate Insurance Initiative (MCII). In addition to providing financial resources, Munich Re makes available its comprehensive risk and insurance expertise to the selected experts. You can find an overview of our cooperation with the scientific community here: Membership in national and international bodies, initiatives and foundations

Materiality analysis – Identifying relevant topics for society and for our Group

Our aim is to continually improve our Group-wide corporate responsibility processes and activities. The varying expectations and expert knowledge of our stakeholder groups constitute an important source of information for us. We explore both of these areas in an ongoing dialogue with our stakeholders and with our internal and external CR network, after which we assess the feedback we receive. Every year, we exchange information with a large number of internal (approx. 50) and external (approx. 100) partners. In addition, we regularly assess external publications on global trends, challenges and opportunities (such as the UN Sustainable Development Goals and the World Economic Risk Report). Along with the internal analyses by our experts in the areas of strategy, economic research and risk management, the findings from this assessment are added to our topic collection.

Our expert analyses, dialogue with stakeholders and collaboration with international initiatives allow us to identify topic areas that could be of material importance to us.

We then hold discussions with selected internal experts to determine which new characteristics, trends and other topics from the range identified in the first step are the actual priorities for our business operations (what we call business cases). We are supported in assessing and setting priorities by strategy experts from each field of business, client managers from underwriting, members of the Board of Management, and specialists from our risk management division and cross-business-field committees. On this basis, we decide what will be the areas of focus for our CR strategy for the next few years.

In the final step of validation, we again contact selected external stakeholders (approx. 40) to confirm that the topics identified in the overall process are material. Following an interactive process with all stakeholders, the final outcome is a strategic portfolio of relevant sustainability topics.

The following diagram presents in summarised form the topics that are material for us:

Munich Re cultivates an ongoing, intensive dialogue with private and institutional investors, analysts and rating agencies. In addition to holding regular events for investors and analysts, we frequently impart important, detailed information about general risks and opportunities relating to our business operations, and in particular about sustainable investment opportunities, our sustainability initiatives and upcoming trends. This is done through personal meetings, specialist interviews, at (SRI) roadshows, in webinars, Skype calls and via the internet.



You can find additional information on our current strategic topics on the following pages:

Strategic topic climate change

Strategic topic health care

Strategic topic risk awareness

GRI Content Index: G4-18; G4-19; G4-20; G4-21; G4-23; G4-24; G4-25; G4-26; G4-27; G4-PR5; G4 DMA Product Portfolio













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Strategy Strategic topic climate change

Strategy

Statement by the CEO

Our guiding principles

Our voluntary commitments

Organisational positioning

Objectives, measures and milestones

Stakeholder dialogue and materiality analysis

Strategic topic climate change

Strategic topic health

Strategic topic risk awareness



Climate change - Putting knowledge to use, devising solutions

Increased flooding, heatwaves, droughts and severe storms: for over 40 years, Munich Re has been researching changes in the frequency of weather-related loss events and has made use of this knowledge to better understand weather and climate risks and to develop solutions for them.

The current status of scientific knowledge shows that climate change is happening, and that it can only be mitigated by systematic, targeted CO₂-reduction measures. Our knowledge and our solutions help cushion the effects of climate change and pave the way to a sustainable and low-carbon future.

The impact of climate change

The consequences of climate change are diverse and directly affect the insurance industry. The physical changes, in other words regional changes in weather patterns in terms of frequency and extent, are one of the consequences of great relevance to reinsurance. Extreme weather events result in high material damage to buildings and infrastructure, as well as significant crop losses in agriculture. There are frequent casualties and victims in regions where risk prevention is still in its infancy. The consequences of climate change can also be of a regulatory nature. On the one hand, these are connected with the regulation of carbon emissions and the relevant legislation and, on the other, with liability issues and safety aspects.

How high the cost of climate change turns out to be will depend on the approach that is taken to address it and on which measures are implemented for mitigation and adaptation. Many studies have endeavoured to estimate the cost of climate change, with very different results. For us, it means analysing all the consequences of climate change, both physical and regulatory, as well as the changes in technology.

Our approach: Expertise and research

In the financial services and insurance sector, Munich Re is a pioneer in analysing the consequences of climate change. In the 1970s, as part of geo risk research activities within the Company, Munich Re began to investigate the causes behind increasingly costly losses from weather-related natural catastrophes, and to record the associated losses. Over the years, the complexity of the issues involved became increasingly clear as scientific advances were made. Today, we are part of a comprehensive scientific network that gives us access to the latest findings on natural catastrophes and climate change, and ensures a high level of quality for our analyses. The different findings from these analyses are consolidated on an ongoing basis and translated into relevant recommendations for action for our Group. But they are also incorporated into tools for our clients, such as NATHAN Risk Suite, or the tool NatCatSERVICE, one of the world's most comprehensive databases for analysing and evaluating natural catastrophes.

Our actions: Concrete and forward-looking

Climate change places special demands on us as a Group. In 2008, Munich Re developed a strategic approach that illustrates the subject in its entirety and bundles all of our knowledge and skills. The Corporate Climate Centre was charged with implementation and development of this approach. In this Group-wide network, staff members research the consequences of climate change and work on pioneering concepts and product solutions for adaptation to and mitigation of the consequences of climate change.

At Munich Re, Dr. Torsten Jeworrek, Reinsurance CEO, is responsible for all insurance-specific matters relating to climate change. He is supported in this task by Professor Peter Höppe, Head of Geo Risks Research/Corporate Climate Centre, Ernst

Related topics

Sustainable solutions Topic: climate change Environmental management Memberships and partnerships

munichre.com

Focus topic climate change Opportunities report 2016 (PDF, 40 KB) NATHAN Risk Suite Topics Online: All risks at a glance

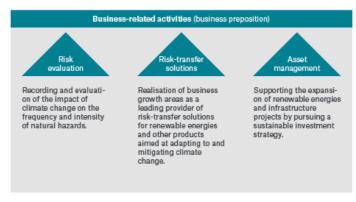
External links

MCII (Munich Climate Insurance Initiative)

Rauch, Head of the Corporate Climate Centre, and by the members of the Board of Management, departmental managers, and staff at the various units involved with products and questions relating to climate change. In these efforts, we are continuously developing solutions for climate protection.

Concrete, forward-looking solutions

Our strategic approach covers both business-related activities and corporate responsibility measures. It comprises the following components:



Climate strategy Munich Re (Group)



Risk evaluation

As a company, we need to understand the business-policy risks arising from climate change and adapt to its consequences. In risk evaluation, we determine the risks from climate change that have a direct impact on our business model. These include the analysis and evaluation of the frequency and intensity of weather-related natural hazards, but also regulatory and technical changes with a direct influence on our insurance business and on our investment management.

Development of risk-transfer solutions

One of our business objectives is to offer solutions. Through developing risk-transfer solutions, we can make an active contribution to climate protection, firstly by cushioning the effects of climate change on natural hazards, and secondly by facilitating the introduction of climate-friendly technologies through our assumption of risks. Examples include the development of innovative insurance solutions in the field of technology (renewable energies, new technologies), as well as coverage concepts in the agriculture sector and protection against weather risks based on parametric triggers. This enables us to develop growth areas for our Group in connection with mitigation and adaptation.

Investment management

As a Group, we invest our capital in a responsible manner, and contribute, for example through investment, to reducing carbon emissions. Changing political and regulatory framework conditions, for example in the energy and carbon markets, are also generating new opportunities in the field of asset management. We have been investing for a number of years in renewable energies, providing private-sector capital to finance infrastructure measures.

Carbon neutrality strategy

We also take a concrete and forward-looking approach in our Group strategy. Munich Re advocates effective and binding rules on carbon emissions not only internationally, but also internally within the Group. Business operations throughout our Group have been carbon-neutral since the end of 2015. This is possible thanks to our internal environmental management system which enables us to continually improve our carbon footprint and emissions balance.

Involvement in climate initiatives

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 as a board member of the Global Climate Forum. We are convinced that, with our expertise, we are a valuable partner for political decision-makers, organisations and companies.

Emerging and developing countries are particularly affected by climate change. At the initiative of Munich Re and representatives from the World Bank, NGOs and the scientific community, the Munich Climate Insurance Initiative (MCII) was established in 2005 as a charitable organisation with a secretariat at the United Nations University in Bonn. The underlying idea was to support adaptation to climate change in developing countries through providing insurance-related risk management mechanisms. Since then, MCII has contributed suggestions on risk management to climate negotiations and 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.

You can find further information under the headings "Topics", "Sustainable solutions", "Facts and figures" as well as on the Munich Re website, in particular under the focus topic "Climate change".

GRI Content Index: G4-20; G4-21; G4-23; G4-EC2; G4-EC8; G4-EN27













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Strategy Strategic topic health

Strategy

Statement by the CEO

Our guiding principles

Our voluntary commitments

Organisational positioning

Objectives, measures and milestones

Stakeholder dialogue and materiality analysis

Strategic topic climate change

Strategic topic health

Strategic topic risk awareness



Related topics

Topic: Health care

Health – Sustainable strategies for the health market

To support and participate in sustainable growth in the health markets, Munich Re operates a wide range of service providers and risk carriers in primary insurance and reinsurance.

The global health market is expanding. In developing and emerging countries, living standards are improving for broad sections of the population, and with them the number of people with health insurance. But this trend is being accompanied by numerous changes. Prosperity alters consumer behaviour, which can have an impact on health. For example, according to the World Health Organization (WHO), four times as many people now suffer from diabetes than in 1980 – the global figure now stands at 422 million.

Lifestyle diseases like diabetes can be treated if they are identified in time. Preventive healthcare also plays a crucial role. Taking regular exercise and eating a healthy diet instead of sitting in front of the television with fast food prevents a whole host of illnesses. It is therefore in Munich Re's interest, and that of primary insurers in particular, to provide health education and targeted support for the prevention, diagnosis and treatment of diseases. Group subsidiaries ERGO and DKV provide sports programmes with personalised support for their policyholders and, as part of a health promotion initiative, show parents how to prevent their children from becoming overweight.

We devise integrated solutions tailored to the individual needs of reinsurance clients in the different markets. Health insurers must process applications promptly and systematically, while at the same time accurately assessing the risks. Munich Re makes use of the NORMRISK Health system in this context. This classifies disease patterns and recommends whether applications should be accepted or declined. The Business Analytics tool also assists these clients: it combines several statistical methods and techniques to allow future illnesses to be predicted. This also includes estimating how health costs will develop, and which facilities will offer the best medical care in the long run.

In addition, Munich Re's centre of medical competence in Munich has specialists working for the Life and Health Division. They study disease patterns, apply their medical, biological and underwriting expertise and calculate insurance risks. This even extends to illnesses that affect less than one in 2,000 people.

A selection of our areas of involvement in the field of health



Eight Billion Lives Fellowship
Together with Impact Hub Munich,
Munich Re has organised an accelerator
programme for social entrepreneurs.
Topics: Eight Billion Lives Fellowship



Rare diseases

Seven percent of the world's population is affected by a rare disease, and this figure is set to increase. What does this mean for the insurance market?

Topics: Rare diseases



Integralia: Everyday life and work for wheelchair users

Since 1999, DKV Seguros has funded a foundation that provides training and employment in normal jobs for severely disabled people. The call centres of the "Fundación Integralia" serve as models for initiatives of this kind.

Topics: Integralia: Everyday life and work for wheelchair users



DKV award for medicine and solidarity 2016

With its award for medicine and solidarity, DKV Seguros promotes voluntary work and initiatives in the fields of medicine, health and well-being. Here are the 2016 award winners.

Topics: DKV award for medicine and solidarity 2016

GRI Content Index: G4-20; G4-21; G4-23













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Strategy Strategic topic risk awareness

Strategy

Statement by the CEO

Our guiding principles

Our voluntary commitments

Organisational positioning

Objectives, measures and milestones

Stakeholder dialogue and materiality analysis

Strategic topic climate change

Strategic topic health

Strategic topic risk awareness



Related topics

Topic: Risk awareness Sustainable solutions

Taking a conscious approach to risk and providing solutions

The risks arising from changing weather patterns and from the increasing frequency and intensity of natural catastrophes are many and varied. Munich Re makes its contribution with a wide range of prevention and adaptation measures aimed at protecting people in exposed regions.

In emerging and developing countries in particular, severe natural catastrophes and the effects of climate change lead to high costs that the countries in question struggle to cover. As an experienced risk carrier, we understand the complex relationships between globally emerging risks.

With our social involvement we promote and enhance risk awareness in affected regions and, in cooperation with partners from science, business and politics, we develop sustainable risk-transfer solutions.

In this way, we promote a paradigm shift from the retroactive financing of claims towards risk prevention. We help countries to deal more effectively with the cost of natural catastrophes in future.

Some areas in which we are involved

Partnership with the Institute for Business and Home Safety (IBHS) – Improved safety and construction standards for buildings in the USA

In the USA, Munich Re America and the American Modern Insurance Group are supporting the Institute for Business and Home Safety (IBHS) in a partnership. Independent experts and scientists use natural disaster and hazard scenarios to verify the safety and building standards of private and commercial buildings. The results of this research are then used to make recommendations for US building standards commissions and regulations. This helps prevent damage and minimises risks of central importance for the general population and insurers.

An online application from Munich Re America providing information on construction in accordance with IBHS standards was one outcome from the cooperation with the IBHS. The objective is to show how private homes and commercial buildings can be made safer by adopting some simple measures.

Australian Business Roundtable – Disaster reduction and safer communities in Australia

Australia is highly prone to natural disasters including devastating floods, cyclones and bushfires. The Australian Business Roundtable for Disaster Resilience and Safer Communities (ABR) was founded to support the development of a more sustainable, coordinated national approach to tackling natural catastrophes.

The Roundtable was formed by the CEOs of the Australian Red Cross, the Insurance Australia Group, the Investa Property Group, Munich Re Australia, Optus and the Westpac Group.

Further information on our involvement in the ABR

Cooperation with GeoHazards International – Natural catastrophe prevention project in India

Munich Re has been cooperating with the GeoHazards International (GHI) organisation since 2012. The cooperation supports the city of Aizawl in northeast India with loss mitigation for earthquakes and landslides. Aizawl was identified as

a city that is particularly at risk due to its mountainous topography, geographical isolation and the structure of its buildings. The project supports and educates authorities and decision-makers in Aizawl. Experts have examined the susceptibility to damage of the buildings and infrastructure, developed various natural catastrophe scenarios from this and derived specific prevention measures for the city. GHI is assisting the city with the implementation of the proposed measures.

Selected solutions and services on the topic of risk awareness

NATHAN Risk Suite - Assessing natural hazards more accurately

Munich Re's NATHAN Risk Suite supports our clients in assessing the risk of natural hazards around the world, from location-based individual risks through to entire risk portfolios - and it is also available for mobile use on a smartphone or tablet. The demo version, NATHAN Light, can be used free of charge and with no obligation in order to gain an initial impression of its wide variety of applications.

NatCatSERVICE - The most comprehensive natural catastrophe loss database in the world

With 39,000 data records, NatCatSERVICE is the world's most comprehensive natural catastrophe loss database. Approximately 1,000 events are recorded and analysed every year. The information obtained 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. NatCatSERVICE has been available to clients and interested parties as an online tool since April 2017.

Further information about NatCatSERVICE

Agro - Crop failure insurance

In the future, there will be increasing fluctuation in crop yields due to the impact of climate change. At the same time, the global demand for agricultural commodities will continue to rise. Munich Re, for example, offers crop insurance solutions for different client groups: for the agricultural sector, crop insurers and for the public sector as part of a public-private partnership (PPP).

Further information on our range of solutions

You can find further information on our material areas in the Topics section. We have compiled an overview of our sustainable solutions here.

GRI Content Index: G4-20; G4-21; G4-23













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Responsibility

Corporate responsibility in business

Responsibility

Corporate responsibility in business

CR in insurance

CR in investment

Sustainable solutions

Munich Re and human rights

Corporate governance

Employees

Environment

Social impact

Foundations



Related topics

Our voluntary commitments
Objectives, measures and
milestones
Stakeholder dialogue and materiality
analysis

External links

UNEP FI
UN Global Compact
Principles for Responsible
Investment
Principles for Sustainable Insurance

Corporate responsibility in 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 are convinced that only through responsible action can we achieve economic success in the long term. The objective of sustainable economic value creation is anchored in the core principles of our corporate strategy. In our core business, by taking into account environmental, social and governance aspects (ESG), we can achieve the maximum effect for our Group and for society.

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 responsibility in insurance business

Group-wide approach, processes, guidelines and tools: How we put our strategy into practice.

More on responsibility in insurance business



Our responsibility in investment

ESG screenings, best-in-class approach, sustainable share funds and investments in infrastructure projects focusing on renewable energies: this is how we integrate ESG into asset management

More on the subject of responsibility in investment



Our sustainable solutions

Innovative coverage concepts that promote the breakthrough of sustainable technologies and push back the frontiers of insurability. For example, our insurance solutions and services are geared towards ensuring a sustainable future.

Munich Re solutions at a glance



Taking up responsibilities on human rights

Taking a holistic view on risks, sharpening awareness and exchanging information with staff members and business partners – our Group-wide approach includes the responsible consideration of human rights.

Munich Re and human rights











MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Responsibility Corporate responsibility in business

CR in insurance

Responsibility

Corporate responsibility in business

CR in insurance

CR in investment

Sustainable solutions

Munich Re and human rights

Corporate governance

Employees

Environment

Social impact

Foundations



Corporate responsibility in insurance business

In our insurance business, we make systematic allowance for environmental, social and governance (ESG) aspects. This applies for our internal underwriting processes and for our products and services.

A large number of 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. This is because, in many cases, there are significant interdependencies. The systematic recognition of ESG aspects enables us to identify these risks and to minimise them in cooperation with our clients. This approach is relevant for our business in three different ways:

- 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
- At the same time, we enhance our business partners' risk awareness and work with other businesses, associations and non-governmental organisations (NGOs) with these aims in mind.
- 3. The identification of previously unknown ESG risks can provide starting points for new coverage concepts and product innovations. With our sustainable solutions, we are systematically opening up business opportunities.

Below, we set out how we implement our approach in practice, with details of the processes we have established and projects we are pursuing.

Practical implementation: Group-wide approach, processes, guidelines and tools

Group-wide "Corporate Responsibility in Business" strategy and Board of Management objectives

By corporate responsibility in business, we understand taking appropriate account of ESG criteria in the business fields of primary insurance and reinsurance, and in investment business.

In reinsurance, the emphasis is on the underwriting process and on dialogue with our clients and business partners. The ERGO Group mainly writes personal lines insurance, focusing on easy-to-understand products and a holistic approach to sales advice. In ERGO's commercial and industrial business, the emphasis is the same as in reinsurance.

In the field of investment, MEAG – the asset manager of Munich Re (Group) – has the brief to press ahead with the integration of ESG aspects and thus put into practice our ur voluntary commitments as part of the Principles for Responsible Investment (PRI).

Integration of ESG aspects into core business was included for the first time in the three-year targets from 2012 to 2014 for the members of the Parent Board of Management and for the Strategy Committee, and extended for the period 2015–

Prudent Group-wide control and support: Sustainability and Reputational Risk Committees

In 2012, we established a cross-business-field Group Corporate Responsibility Committee (GCRC), which advises the Board of Management on the development of our sustainability strategy. It identifies and prioritises sensitive business topics, on which we develop positions that apply Group-wide. These are









Related topics

CR in investment Sustainable solutions Munich Re and human rights

External links

UNEP FI
UN Global Compact
Principles for Responsible
Investment
Principles for Sustainable Insurance
ICLEI

then implemented by the business fields in the form of binding underwriting guidelines, best practices and guidance for our employees (see diagram).

Individual transactions of potential concern are submitted to the Reputational Risk Committees (RRCs) which have been established for each field of business. These committees check whether a planned transaction is appropriate and ensure that we do not make any decisions that could harbour ESG, and ultimately, reputational risks

Sensitive Issues: Munich Repositions and measures

Banned weapons Policy on cluster munition and land mines	Mining Position paper including specific questions on ESG aspects	ESG Tool Assessment of different industries (e.g. engineering business)
Fracking Position paper including specific questions on ESG apects	Artic drilling Guideline, risks to be referred to Arctic Drilling Panel	ESG country rating Exclusion of investments in government bonds of substandard countries
Oil sands Position paper including specific questions on ESG apects	Investments in farmland Mandatory ESG check for investments	Sensitive issues under observation Tax evasion, pulp and paper, palm oil

c~uroe: Munich Re

Detailed orientation: Corporate responsibility guidelines, ESG aspects and sensitive

In 2012, as the first step towards implementation, 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 work for the corresponding manuals in the business fields. At the same time, it constitutes a generally binding basis for all Group underwriting guidelines. In 2013, we established ten generally applicable ESG aspects (see diagram), which were approved by our Group Corporate Responsibility Committee (GCRC). These ESG aspects apply to insurance and investment business alike.

Environmental, social and governance aspects



- and biodiversity



Social aspects

- ment and public perception
- Working conditions - Health and safety
- for the community Resettlement of people
- Cultural heritage



- planning and assessment
- Compliance Consultaion and transparency

Targeted knowledge transfer: Staff training courses and expert networks

With the approach we take, full responsibility for assessing ESG aspects in business deliberately remains with the business unit concerned. We offer staff members established training courses in handling ESG aspects. These courses are customised for individual industries and regions, and include information ranging from technical implementation of our underwriting guidelines all the way to current sustainability topics. The courses are given by staff members from the Corporate Responsibility Department, and are aimed at managers, underwriters, client managers, business analysts and trainees in the various divisional units. These are also open to all other interested staff members and have become an integral part of our client seminars.

In the reinsurance field, a coordinators' network has been developed for corporate responsibility in business. Almost 600 staff members have been sensitised to ESG aspects and, in their role as multipliers, are now transferring their knowledge within their own departments, in risk assessments, client discussions and in exchanges with other units.

In the primary insurance business field, the analysis of ESG aspects has been a standard component in the product development process for private clients since 2014. In our sales units the ERGO Compass - a standardised, technically supported guideline for advising clients - ensures a consistently high level of consulting quality.

Practical guidelines: ESG questionnaires and ESG country ratings

The ESG questionnaires, which are individually tailored for sensitive topics, were integrated into an assessment tool; this helps our underwriters systematically

incorporate ESG aspects into their risk assessments. This tool is also used in asset management for investments in infrastructure projects.

Since 2013, our investment activities have taken into account an external ESG country rating for the sustainability performance of individual countries. In cases where countries fail to satisfy our criteria, MEAG refrains from investing in their government bonds or the bonds of quasi-governmental organisations. The ESG country rating serves as an additional source of information for staff in units that write business worldwide, and offers a quick overview of important indicators.

Transforming ESG risks into business opportunities: Innovative solutions

New kinds of risks and global challenges call for new approaches, e.g. in the field of renewable energies and innovative technologies, in dealing with climate change, or with access to insurance in emerging and developing countries. ESG aspects are also taken into consideration in the development of innovative coverage concepts. This allows us to open up new business opportunities, while at the same time creating benefits for society in keeping with our shared value approach.

You can find detailed information on our sustainable solutions here.

Current projects: We are also promoting the integration of ESG aspects at

industry level, and encouraging the development of best practices

Combating infectious diseases: Partnership with the Global Fund

One example of this is the cooperation we began in 2014 with the Global Fund. The Global Fund is a financing mechanism used to combat the three major infectious diseases: AIDS, malaria and tuberculosis. It operates in 140 different countries, making it one of the most important tools to fight these diseases. Our divisional unit Special and Financial Risks (SFR) is developing a series of products and solutions for the non-profit sector, and thus for people affected by diseases, while at the same time generating financial added value for Munich Re.

Risk evaluation of infrastructure developments: ESG in risk management for surety bonds

Together with partners including the International Finance Corporation (IFC) and the University of Technology in Sydney, Australia, Munich Re initiated the Principles for Sustainable Insurance (PSI) project "ESG in risk management for surety bonds". As part of the project, a detailed survey was carried out to obtain an insight into current practice regarding ESG assessment of surety bonds, with the joint aim of enhancing awareness of ESG aspects. The findings have shown that uniform guidelines for ESG risks have yet to be applied to surety bonds, although such guidelines would be relevant for surety underwriters – particularly in the risk assessment of infrastructure projects. These results were discussed at a meeting of the International Credit Insurance & Surety Association (ICISA) in September 2016 and an ICISA working group is now translating them into appropriate uniform guidelines.

Resilience of public infrastructure projects: "City Innovation Platform: African Infrastructure Risk & Resilience"

Together with South African insurer Santam, the Principles for Sustainable Insurance Initiative, ICLEI (a network for sustainable development at municipal level), and other partners, Munich Re is working on developing solutions for sustainable urban development. In a pilot project with the Tanzanian capital Dar es Salaam, in May 2016 investors, insurers, city officials, project developers, engineers and politicians were brought around a table to develop ideas for more sustainable project planning and better risk management. For the city, this resulted in a better understanding of risks and how to handle them. The partners in the project are now better able to understand the background to urban planning. The project also aims to make this collaboration concept available both to other towns and cities and to the insurance industry as a best practice, and to further develop cooperations between the financial services industry and municipalities.

Preventive measures for catastrophe risks: Global Resilience Project

With the "Global Resilience Project", Munich Re is taking part in a further initiative of the Principles for Sustainable Insurance. This project hopes to achieve a change in perspective on the part of governments, non-governmental organisations (NGOs), local authorities and companies, and bring them to invest more heavily in the prevention of catastrophe risks instead of only spending funds on disaster response. A better understanding of the need for catastrophe prevention needs to be achieved for this, by quantifying the socio-economic cost of catastrophes and assessing the effectiveness of prevention measures. The information obtained should serve as starting material for a strategic commitment on the part of the insurance industry within the context of the PSI initiative, to initiate preventive measures in highly exposed countries.



MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Responsibility Corporate responsibility in business

CR in investment

Responsibility

Corporate responsibility in business

CR in insurance

CR in investment

Sustainable solutions

Munich Re and human rights

manion no ana maman ngina

Corporate governance

Employees

Environment

Social impact

Foundations



Related topics

PRI reporting Organisational positioning

External links

MEAG Principles for Responsible Investment (PRI) All MEAG funds at a glance

Responsible investment strategy

As an integral part of our Group strategy, corporate responsibility is also reflected in our sustainable approach to investment. The Principles for Responsible Investment (PRI) serve as the framework in this context.

Insurance companies are subject to strict security and return requirements. They have to ensure that their clients' money is invested safely and profitably. Munich Re's investments are largely bundled under the umbrella of MEAG, our internal asset management arm. This simplifies the process of investing Group assets in accordance with uniform rules and principles and also helps us keep track of and monitor investments at all times.

MEAG currently manages a global portfolio worth more than €260bn. Over and beyond the financial aspects, we also take ecological, social and governance (ESG) criteria into consideration when making investment decisions. The bulk of our capital investment meets sustainable investment criteria. Our asset management follows the Principles for Responsible Investment (PRI). We played a prominent role in drafting these principles and were the first German company to sign them in 2006.

Below, we describe how we put into practice our approach to sustainable investment, the processes we have established, and the product solutions we can offer:

Our approach: Responsible Investment Guideline

At Group level, a team consisting of representatives of Munich Re, ERGO and MEAG strategically develops socially responsible investment in line with PRI requirements. Some 100 experienced MEAG portfolio managers are responsible for implementing investment decisions and selecting attractive securities.

As early as 2002, we decided that our equity and bond investments had to meet specific sustainability criteria. In 2005, this requirement was incorporated in our Group-wide Investment Guideline. The Responsible Investment Guideline (RIG) was extensively revised in 2016 and now summarises all guidelines and requirements related to PRI and ESG concerning asset management at Munich Re (Group). For the asset classes of infrastructure, renewable energies and forestry, we have established an investment process that takes into account both financial and ESG criteria. We regularly review our sustainability criteria for these asset classes using the ESG criteria of external rating agencies. Sustainability investment criteria have not yet been defined for all asset classes. The small number of blank spots on our sustainability map are gradually being filled in on the basis of criteria developed in-house and criteria available externally.

Our sustainable investment criteria in the different asset classes:

- Equities and corporate bonds: We base our investments on the analyses and classifications of external research providers in the field of sustainability. Munich Re invests in equities and corporate bonds featured in sustainability indices, such as the Dow Jones Sustainability World Group Index, the FTSE4Good Index Series and the Ethibel Sustainability Index (ESI).
- Government bonds: We also assess government bonds in terms of sustainability. As the starting point for this process, we take the internal Munich Re (Group) sustainability country rating, which is based on the Country Risk Monitor of the Sustainalytics rating agency. In cases where countries fail to satisfy our criteria, MEAG refrains from investing in their government bonds or the bonds of quasi-governmental organisations.
- All other bodies issuing interest-bearing securities, such as state-owned companies, public and private financial institutions, or issuers of covered

bonds, are assessed as well. We use the ratings of independent providers of ESG analyses, for example oekom research, for this purpose.

- Real estate: Sustainability is also important for us when it comes to real estate. We have defined sustainability criteria (for example, for energy efficiency and construction materials) which we apply on the purchase, construction or renovation of properties.
- Infrastructure/renewable energies: As investments in renewable energies or infrastructure may extend over very long periods, we carefully examine all risks associated with these investments. For this investment class, we have also defined specific ecological, social and governance aspects (ESG criteria) which form part of the due diligence. In addition to these aspects, we examine meteorological and climate-related factors (such as solar irradiation in the case of solar installations or wind force in the case of onshore wind farms), as well as political parameters such as the relevant national energy policy.
- Forestry: In the asset class of forestry, we have also established an investment process which, as well as financial criteria, follows additional important objectives relating to investment (including ESG criteria). We regularly review our sustainability criteria for these asset classes using the ESG criteria of external rating agencies.

Our investments: Priority on investment in infrastructure with a focus on renewable energies

Our investment in infrastructure with a focus on renewable energies has a double leverage effect: we contribute to the advancement of social developments by using our risk knowledge to promote new technologies through investment and innovative coverage concepts.

On behalf of Munich Re, MEAG, the Group's internal asset management arm, invests in infrastructure projects around the world. These include direct equity and outside capital investment in solar parks and wind farms, as well as participations in a power grid and a natural gas grid. By the end of the 2016 financial year, the volume of investment was around €2.8bn.

As things stand at present, we plan to increase our investment in infrastructure to a cumulative total of $\mathfrak{S}.0$ hn, provided general conditions remain solid and a reasonable yield can be achieved. We aim to achieve this by continuing to strongly diversify our infrastructure investments, both regionally and by segment. This will enable us to obtain a spread of the technological and political risks, and thus of this portfolio's main risk drivers.

Our products: Investment funds with sustainable success

Meeting economic, ecological and social requirements need not be a contradiction in terms. MEAG offers its institutional and private clients the international equity fund MEAG Nachhaltigkeit, and also the defensive mixed fund MEAG FairReturn, both of which are geared towards sustainable issues:

- MEAG Nachhaltigkeit: The equity fund MEAG Nachhaltigkeit, which was set up on 1 October 2003, primarily invests worldwide in companies that conduct business in a responsible manner. Companies are selected on the basis of their environmentally friendly and socially responsible track record as well as their financial success. This involves supplementing holdings in standard stocks with forward-looking niche providers. Producers of tobacco, alcoholic beverages, and arms manufacturers are excluded, as are companies in the gambling industry.
- MEAG FairReturn: The MEAG FairReturn fund, set up in June 2009, invests predominantly in Europe in accordance with strict social, ecological and financial criteria recommended by the oekom research rating agency. At the same time, there is a requirement for positive growth in value. The fund grew so successfully that MEAG opened it up to private clients at the beginning of 2010 with a separate shareholding class. 2017 saw MEAG FairReturn named foundation fund of the year for the fifth time in a row.

GRI Content Index: G5-35; G4-EC2; G4 DMA Indirect Economic Impacts; G4-EC7; G4-EC8; G4-EN7; G4-EN27; G4-HR1; G4 DMA FSS Product Portfolio; G4-FS7; G4-FS8; G4-FS11













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Responsibility Corporate responsibility in business

Sustainable solutions

Responsibility

Corporate responsibility in business

CR in insurance

CR in investment

Sustainable solutions

Munich Re and human rights

Corporate governance

Employees

Environment

Social impact

Foundations



Related topics

CR in insurance CR in investment

Sustainable solutions to meet the challenges of today and tomorrow

Corporate responsibility is reflected in Munich Re's products and services. We address the environmental and social challenges with innovative and sustainable solutions.

Complex risk scenarios and increasing interdependencies in a globalised world mean that the challenges and opportunities in our business and that of our clients are constantly changing. Our objective is always to ensure maximum flexibility in combination with carefully considered risk assessment.

Whether for insurance solutions for renewable energies, support with assessing risks and solutions in the areas of crop loss covers, natural catastrophes or microinsurance: at the heart of all our actions is the desire to identify and reduce new risks, and take into account environmental, social and governance aspects (ESG) in our core business operations.

Here is an overview of our sustainable insurance solutions

Insurance solutions for renewable energies



We offer innovative insurance solutions tailored to new technologies and their operators. We thus promote the development and propagation of such new methods of generating electricity from renewable energy sources.

Our insurance solutions in the corporate client segment:

- Performance guarantee covers for solar module manufacturers and solar farms, fuel cells and LED light technology, and performance guarantees for batteries and bioenergy plants: Our insurance concepts secure technological risks and, should the manufacturer become insolvent, can compensate project investors directly for guarantee trigger events.
- Comprehensive insurance cover for wind farms: With the help of holistic risk management, for example to secure the construction phase or protect against serial losses, extraordinary costs for investors are analysed before the project starts and minimised by way of risk transfer.
- Productivity risk insurance for geothermal projects: Back in 2003, Munich Re became the world's first insurer to develop a policy also covering operator's costs for unsuccessful geothermal drilling projects.
- Investment security for industrial projects with Project Risk Rating: In cooperation with the German technical inspection agency, TÜV SÜD, Munich Re has been offering a detailed risk assessment service for industrial projects (Project Risk Rating) since the start of 2014, specialising in the areas of infrastructure and renewable energies, and which also takes into account environmental aspects.

Our insurance solutions for businesses and consumers:

- Ensuring businesses' survival in the event of 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 existence of businesses. With comprehensive expert advice and appropriate preventative measures, ERGO's environmental impairment insurance helps avoid losses.
- Reduced yield insurance for operators of photovoltaic solar power plants: This
 innovative extended cover from ERGO offers protection if the expected
 annual energy yield is not met due to lower global radiation or defective
 components.

Insurance solutions in other segments and markets:

- Renewable energy solutions from HSB for the US market: As a leading specialist provider of insurance solutions for renewable technologies, our subsidiary HSB has developed a series of insurance products and services that help protect your clients' investments and optimise their profit, as for example in relation to engineering or performance risks with solar installations
- Environmentally friendly redevelopment of residential buildings: ERGO's homeowners' comprehensive insurance can also cover the additional costs of ecologically sustainable and energy efficient redevelopment.
- Cover for electric cars: With the "Elektro Plus" module, if electric vehicles need to be towed because the battery is flat, ERGO refunds the cost of the towing service.

Assess risks from natural catastrophes worldwide with NATHAN Risk Suite



NATHAN (Natural Hazards Assessment Network) Risk Suite supports Munich Re (Group) clients in the assessment of natural hazard risks worldwide – from entire portfolios down to individual risks at address level. Since April 2017, NATHAN has been equipped with additional functions and risk assessment innovations.

The revamped platform connects geospatial intelligence and big data analytics, and allows complex analyses to be carried out in almost real-time. It constitutes a major step forwards: on the one hand, users can analyse much larger volumes of data, and even – for example – upload and screen entire treaty portfolios containing hundreds of thousands of risk locations. On the other hand, they can examine their risk portfolios with previously unparalleled granularity. Underwriters and risk managers, for example, can thus benefit from more rapid and accurate results, which will serve as a basis for calculating premiums, assessing risks, controlling accumulation and improving risk selection.

NATHAN Risk Suite (munichre.com)

Crop failure insurance



Hail, drought, intense rainfall, frost and storms: agricultural production is directly exposed to all of these climate and weather-related risks. Agriculture bears the brunt of the impact of climate change, which in turn increases the hazard. For this reason, it is becoming increasingly important to ensure that national agricultural production is adequately protected with tailored insurance solutions. One criterion for success in this context is a risk partnership between the state, the agricultural sector, banks and the insurance industry.

More on the topic can be found here: Agro

Microinsurance



In cooperation with primary insurers, other institutions and international NGOs, Munich Re supports the development of microinsurance policies. Successful microinsurance covers must be adjusted to the needs of low-income sections of the population, and protect them against losing their livelihoods. The aim should be to develop a viable and scalable insurance concept in each case that reaches a large section of the population in the developing and emerging regions.

Through our commitment to these regions, we are promoting economic stability and social development on the ground, and also investing in a growth market – and thus in the future of Munich Re. Among other things, we offer insurance policies tailored to the financial situation and personal circumstances of people in these regions. Here is one example: In India, our German-Indian joint venture HDFC ERGO markets a wide range of microinsurance policies in the rural sector, including weather-index-based, health, personal accident and fire, as well as special policies for farmers.

Public-sector risk transfer solutions



As part of Munich Re's Public Sector Business Development Initiative, Munich Re experts are supporting supranational organisations and development banks. These organisations and development banks are either our direct clients, or partner us in developing and implementing innovative risk transfer solutions for third parties.

The experts also advise our business units on innovative risk transfer solutions for the public sector, or with risks where providing safeguards is in the public interest. We measure our success by the number of transactions and the positive economic and social effects that are achieved.

Here is a selection of our partnerships and projects:

- Caribbean Catastrophe Risk Insurance Facility (CCRIF): Munich Re supported the World Bank and the Caribbean Catastrophe Risk Insurance Facility (CCRIF) in setting up the first Caribbean catastrophe bond. The programme was launched because of the limited economic resources among Caribbean countries that are subject to natural disasters, and to reduce their dependence on financing from international donors for post-disaster needs. The CCRIF provides immediate liquidity to Caribbean countries after major natural catastrophes.
- Pandemic Emergency Financing Facility: In May 2016, the World Bank announced the launch of the Pandemic Emergency Financing Facility (PEF). The aim of this innovative facility is to provide funds to combat epidemics and pandemics promptly, so that in future, events like the 2014 Ebola catastrophe in West Africa can be contained faster and more effectively, thereby reducing human suffering and negative economic consequences. The facility is supported by donor countries, and by Munich Re and other bodies.
- African Risk Capacity (ARC): Prompted by recurrent catastrophic drought events in the Sahel, the ARC Agency was established as a specialised agency of the African Union (AU). In 2014, ARC Ltd was established as a mutual insurance company in the Bermudas. The role of the ARC is to assist AU member states to reduce the risk of loss and damage from extreme weather events and natural disasters. Following the droughts in 2014/15, for example, coverage was triggered for Senegal, Mauritania and Niger. The three countries affected received a combined total of US\$ 26m.
- Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI): PCRAFI is a programme funded by various donors and implemented by the World Bank. It was established on the advice of the World Bank's Disaster Risk Financing and Insurance Program (DRFIP). The objective is to finance emergency aid very quickly from the payments of the insurance mechanism in the event of an earthquake or a tropical cyclone.
- Weather-index-based insurance for individuals with low incomes in the Caribbean: Under the umbrella of the Munich Climate Insurance Initiative (MCII) and in collaboration with Munich Re, the Caribbean Catastrophe Risk Insurance Facility (CCRIF) and other partners, a weather-index-based insurance for individuals with low incomes

was developed for the Caribbean islands of Jamaica. St. Lucia and Grenada. If pre-defined wind speeds or amounts of rainfall are exceeded, the insurance (Livelihood Protection Policy) pays out to policyholders within a few days. The policyholders receive an SMS advance warning before a storm event arrives.

Health



With its focus on risk carrying and risk management, Munich Re delivers individual, sustainable primary insurance and reinsurance solutions for the health market. The special combination of resources provides the basis for the success and security of our clients in their respective markets.

At Munich Re, we are currently working on new forms of prognosis and treatment, which will play an increasingly important role in the future. With common conditions like diabetes, back pain, and chronic cardiac insufficiency, these technical innovations offer promising options for prevention. Wearables, for example, are being used for diabetes prevention and control. These are bodyworn devices equipped with sensors for recording medical signs and communicating these via an app to patients' smartphones. This form of remote monitoring establishes a better healthcare regime for the patient.

The Digital Doctor App developed by Munich Re goes one step further. This is a health management app, through which insureds can receive treatment recommendations for symptoms 24/7 worldwide. An intelligent questionnaire enables details of symptoms and medical signs to be obtained and an initial assessment made and, if desired, passed on to a qualified pool of doctors. After examining the data, a doctor provides medical advice by telephone, live video or chat. In addition, medical examination reports, blood counts, X-rays and other relevant documents can be stored for rapid access. The Digital Doctor app is currently being offered to around 5,000 pilot customers for testing. The results of the algorithm currently represent a recommendation which cannot replace a medical consultation.

In the Topics section, we present our sustainable approaches and projects for the health sector.

GRI Content Index: G4-EC2; G4 DMA Indirect Economic Impacts; G4-EC7; G4-EC8; G4-EN7; G4-EN27; G4 DMA Local Communities; G4-FS13; G4-FS14; G4 DMA Product Portfolio













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Responsibility Corporate responsibility in business

Munich Re and human rights

Responsibility

Corporate responsibility in business

CR in insurance

CR in investment

Sustainable solutions

Munich Re and human rights

Corporate governance

Employees

Environment

Social impact

Foundations



Taking up our responsibilities on human rights

We are convinced that our business concept can only be successfully realised in the future through sustainable and responsible action. For that reason, observance of human rights is axiomatic for Munich Re (Group). This is why the Board of Management of Munich Re has confirmed this commitment, stating the Group's position on 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 potential adverse human-rights impacts that could arise from our business activities. To systematically identify these, we have defined four dimensions: employees, procurement, (re)insurance business and asset management. For each of these dimensions, we have implemented a set of policies, governance instruments and internal position papers to guide our decision-making and responsible business conduct.

Munich Re (Group) reports on its human rights performance via the Corporate Responsibility Portal, the annual Communication on Progress to the UN Global Compact, and the annual reports submitted under the Principles for Sustainable Insurance (PSI) and the Principles for Responsible Investment (PRI).

We aim to constantly improve our processes, expand our risk screening, raise awareness among our employees and business partners, and keep them informed regularly. An ongoing exchange with our stakeholders provides important catalysts. Munich Re (Group) offers its staff members, clients, suppliers and other business partners the Munich Re Compliance Whistleblowing Portal, where they can draw our attention to potential compliance breaches.

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

- United Nations Global Compact
- Principles for Sustainable Insurance (PSI)
- Principles for Responsible Investment (PRI)
- Charta der Vielfalt (Diversity Charter)

Codes and policies

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

Governance instruments

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

Please find further information about Munich Re's approach to human rights in the factsheet Human Rights (PDF, $86~{\rm KB}$).

GRI Content Index: G4 DMA Human Rights Investment; G4-HR1

External links

UN Global Compact PSI PRI Charta der Vielfalt (diversity charter)

Downloads

Factsheet Human Rights at Munich Re (PDF, 86 KB) Statement UK Modern Slavery Act (PDF, 665 KB) Code of Conduct (PDF, 467 KB) Procurement Principles (PDF, 77 KB) Diversity Policy (PDF, 410 KB) *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













Factsheet Human Rights

Contacts

Dr. Michael Menhart Head of Department Corporate Responsibility mmenhart@munichre.com

Kerstin Lücke Consultant Corporate Responsibility kluecke@munichre.com

June 2017

Taking up responsibilities on human rights

We are convinced that our business concept can only be successfully realised in the future through sustainable and responsible action. Therefore we are committed to respecting human rights in line with internationally accepted human rights principles¹ and the United Nations Guiding Principles on Business and Human Rights.

The Board of Management of Munich Re (Group) has confirmed this commitment stating the Group's position on human rights which can be found on the Corporate Responsibility Portal.

Furthermore our commitment on human rights is manifested in Munich Re's participation in the **United Nations' Global Compact**, which we joined in 2007.

As a signatory to the United Nations' Global Compact Munich Re has committed itself to

- support and respect the protection of internationally proclaimed human rights;
- make sure that the company is not complicit in human rights abuses;
- uphold the freedom of association and the effective recognition of the right to collective bargaining;
- support the elimination of all forms of forced and compulsory labour;
- promote the effective abolition of child labour; and
- foster the elimination of discrimination in respect of employment and occupation.

¹ 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.

For several years now, Munich Re has been addressing the human rights due diligence in various ways. To identify human rights risks and impacts of our business and to strengthen our management systems we have continuously analysed our sphere of influence. Thus, Munich Re (Group) has defined four dimensions involved in the management of human rights: employees, procurement, (re)insurance business and asset management. For each of these dimensions, we have implemented a set of policies, governance instruments and internal position papers to guide our decision-making and responsible business conduct.

We are aware that human rights is such a broad and evolving topic that it is impossible to deal with it conclusively. It is for this reason that we constantly improve our processes, expand our risk screening, raise awareness among our employees and business partners, and keep them informed regularly. An ongoing exchange with our stakeholders provides important catalysts.

Employees

All of our employees contribute to our success through their skills, performance and dedication. That is why we are committed to investing in their development and provide all staff with equal opportunities and top-quality working conditions. Munich Re not only adapts to the current demands of the labour market we also understand how to meet the changing needs of our staff. Equal treatment is an inherent part of our corporate culture.

Diversity is also a core value at Munich Re. This is anchored in a **Diversity Policy** for the entire Group. The different mindsets, cultures and values of our staff are key to Munich Re's success.

Our Codes of Conduct specifies that we expect our employees to observe the personal dignity, privacy and personality rights of every individual. We do not tolerate any discrimination (on grounds of age, sex, ethnic origin, nationality, political opinion, race, religion or the like), sexual harassment, other personal harassment, or insulting behaviour.

Development opportunities at work and in private life are important objectives for us. We therefore offer our staff numerous different models of flexible working conditions, attractive working-hours models and needs-based support.

Also, the health of our staff is a matter of priority. Our most important objective is to take preventive measures to protect and promote the long-term health and performance of our employees. Our offerings focus on a wide variety of programmes promoting health and prophylaxis. Munich Re complies with the statutory health and safety requirements conscientiously.

Procurement

As a global organisation, Munich Re procures many different goods and services throughout the world. Buying at the best total value in terms of quality, time and cost, while ensuring compliance at all times, the procurement functions throughout the Group seek to make a substantial and lasting contribution to the success of Munich Re.

Along the entire value chain, our procurement activities are shaped by a deep sense of corporate responsibility. Environmental, social and governance (ESG) criteria are at the heart of our approach, and we expect our suppliers to meet them as well. We have established Procurement Principles to guide our interaction with suppliers. These apply to most business units and will be extended Group-wide. Accordingly, as a requirement for cooperation, Munich Re also expects its business partners to commit to the principles of the UN Global Compact, explicitly including human and labour rights. Should these principles be violated, Munich Re reserves the right to extraordinary termination of an agreement for good cause.

We treat all suppliers with respect and deal with them honestly, ethically, and fairly. In accordance with Munich Re's codes of conduct, we conduct business in compliance with all applicable laws and regulations wherever we operate. We believe that buyers and suppliers optimise their working relationship when there is a foundation of trust. By treating suppliers and potential suppliers honestly, ethically and fairly, we do our part in building that foundation, and expect that the supplier will do likewise. We do this not only because we believe it is right, but also because it makes working with Munich Re attractive to current and potential suppliers. In an ongoing relationship, we communicate our expectations openly and share our goals with the supplier.

(Re)insurance business

Our business, which links us to all sectors of industry and the economy, makes it possible for entrepreneurial risks to be taken. We are conscious of the fact that there are a range of industries and projects that may have a major impact on the environment, local communities and other stakeholder groups. We have therefore established generally applicable environmental, social and governance (ESG) criteria which explicitly include human and labour rights. These criteria help to prioritise industrial sectors with high ESG exposure, thus allowing sensitive business topics to be identified.

The systematic anchoring of those aspects in core business enables us to identify risks and to minimise them in cooperation with our clients. Additionally, in signing up to the **Principles for Sustainable Insurance** (PSI), we committed ourselves to making allowance for ESG aspects that are relevant for our insurance business.

Our Group Corporate Responsibility Committee (GCRC) – which provides counsel to the Board of Management on Munich Re's corporate responsibility commitments and activities – evaluates and prioritises sensitive issues. The committee has already approved position papers and guidelines on various sensitive topics, which are implemented by the business fields in the form of binding underwriting guidelines, best practices and guidance for our employees:

Arctic drilling, ESG country rating, ESG criteria for engineering, fracking, mining, oil sands, policy on banned weapons

Our strategic ESG framework is continually implemented in practice. We therefore provide relevant training for managers, underwriters and client managers in the different divisional units. To promptly identify possible risks, Munich Re has also implemented a Reputational Risk Committee (RRC) in each business field to deal with reputational risk issues that arise in the course of our day-today business operations. Employees can refer critical cases to their respective RRC prior to closing a transaction. The committees verify the acceptability of the business transactions and ensure we do not take operational decisions involving reputational risks.

Asset management

Insurance companies are subject to strict security and return requirements. They have to ensure that their clients' money is invested both safely and profitably. We take the responsibility that comes with this very seriously. MEAG (MUNICH ERGO Asset-Management GmbH) is the asset manager of Munich Re (Group). In April 2006, Munich Re became the first German company to sign the **UN Principles for Responsible** Investment (PRI). Since then, the PRI have served as guidelines for our investment strategy, anchoring environmental, social and governance (ESG) aspects more firmly in our investment process.

The major portion of our investments meet sustainable investment criteria, which is manifested in our Responsible Investment Guideline (RIG). In the asset classes of infrastructure, renewable energies, forestry and farmland, we have established an investment process which follows additional important sustainable objectives relating to investment. For example, our guideline and policy "Investment in farmland" includes several aspects of human rights. Additionally, according to our RIG, investments have to comply with the "Policy on banned weapons" and "Ban on speculation in food-related commodities". We regularly review our sustainability criteria for all assets, mainly using the ESG criteria of external rating agencies (including ESG criteria, thereby implicitly also human and labour rights aspects).

Wherever possible, we use the know-how of external service providers to ensure the sustainability of our investments. We combine the assessments of these providers with our own investment criteria. Since 2013, our investment activities have taken into account an external ESG country rating that reflects the sustainability performance of individual countries. In cases where countries fail to satisfy our criteria, MEAG refrains from investing in their government bonds or the bonds of quasi-governmental organisations.

Grievance mechanisms

Munich Re (Group) offers its staff members, clients, suppliers and other business partners whistle-blowing portals to report potential or actual compliance breaches. Here, relevant information can be exchanged safely and confidentially globally and around the clock. The Compliance units receive this information and are responsible for processing it further. Employees can provide information anonymously or by using their name. If legally possible, anonymity is guaranteed.

The following page provides an overview of the most relevant commitments, policies, governance instruments and internal position papers which are in place to oversee our human rights due diligence.

Commitments

- United Nations Global Compact
- Principles for Sustainable Insurance (PSI)
- Principles fir Responsible Investment (PRI)
- Charta der Vielfalt (Diversity Charter)

Codes and policies

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

Governance instruments

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

Position papers/ sensitive issues

- Arctic drilling
- Banned weapons
- ESG criteria for engineering
- Fracking
- Investments in farmland
- Mining
- Oil sands
- ESG country rating

© 2017

Münchener Rückversicherungs-Gesellschaft Königinstrasse 107, 80802 München, Germany

Münchener Rückversicherungs-Gesellschaft (Munich Reinsurance Company) is a reinsurance company organised under the laws of Germany. In some countries, including in the United States, Munich Reinsurance Company holds the status of an unauthorised reinsurer. Policies are underwritten by Munich Reinsurance Company or its affiliated insurance and reinsurance subsidiaries. Certain coverages are not available in all jurisdictions.

Any description in this document is for general information purposes only and does not constitute an offer to sell or a solicitation of an offer to buy any product.



Munich Re's Statement on the UK Modern Slavery Act

This statement is made pursuant to section 54 (1) of the UK Modern Slavery Act 2015 and constitutes Munich Re's slavery and human trafficking statement for the financial year ending 31 December 2016.

About Munich Re

Munich Re stands for exceptional solution-based expertise, consistent risk management, financial stability and client proximity. This is how Munich Re creates value for clients, shareholders and staff. Munich Re is the parent company of Munich Re Group. In the financial year 2016, the Group, which combines primary insurance and reinsurance under one roof, achieved a profit of €2.6bn. It operates in all lines of insurance with over 43,000 employees throughout the world. With a premium income of around €28bn from reinsurance alone, it is one of the world's leading reinsurers. Especially when clients require solutions for complex risks, Munich Re is a much sought-after risk carrier.

The global investments are managed by MEAG (MUNICH ERGO Asset Management GmbH), which also makes its competence available to private and institutional investors.

We are convinced that our business concept can only be successfully realised in the future through sustainable and responsible action.

Therefore, we are committed to respecting human rights in line with internationally accepted human rights principles² and the United Nations Guiding Principles on Business and Human Rights.

The Board of Management of Munich Re has confirmed this commitment in a position on human rights, available on the Corporate Responsibility Portal. Furthermore, Munich Re shows its commitment to human rights by participating in the United Nations' Global Compact, which Munich Re joined in 2007.

For several years now, Munich Re has been addressing its human rights due diligence in numerous ways. To identify human rights risks and impacts on our business and to strengthen our management systems we have continuously analysed our sphere of influence.

Munich Re addresses human rights from four perspectives: Employees, Procurement, (Re)Insurance Business and Asset Management. For each of these dimensions, we have implemented a set of policies, governance instruments and internal position papers to guide our decision-making and responsible business conduct.

Employees

All of our employees contribute to our success through their skills, performance and dedication. That is why we are committed to investing in their development and provide all staff with equal opportunities and top-quality working conditions.

Munich Re does not only adapt to the current demands of the labour market but we also understand how to meet the changing needs of our staff. Equal treatment is an inherent part of our corporate culture.

Our Code of Conduct and additional self-commitments for responsible behaviour specify that we expect our employees to observe the personal dignity, privacy and personality rights of every individual. We do not tolerate any discrimination (on grounds of age, sex, ethnic origin, nationality, political opinion, race, religion or the like), sexual harassment, other personal harassment, or insulting behaviour.

¹ Munich Re (Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München)

² 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

Munich Re Munich Re's Statement on the UK Modern Slavery Act

Procurement

Munich Re procures many different goods and services throughout the world. Buying at best total value in terms of quality, time and costs, while ensuring compliance at all times, the procurement function seeks to make a substantial and lasting contribution to the success of Munich Re.

Along the entire value chain, our procurement activities are shaped by a deep sense of corporate responsibility. Environmental, social and governance (ESG) criteria are at the heart of our approach and we expect our suppliers to meet them as well. We have established Procurement Principles to guide our interaction with our suppliers. The principles ensure compliance with ESG criteria and acceptance of the ten principles of the UN Global Compact in our day-to-day interaction with suppliers.

To ensure compliance with the UN Global Compact within the supplier relationship, Munich Re implements a Corporate Responsibility (CR) clause into its standard contracts. If we believe the principles of the UN Global Compact have been breached, Munich Re reserves the right to cancel the contractual relationship by way of extraordinary termination for good cause.

Supplier registration

If a new supplier wishes to do business with Munich Re, it must first complete a supplier registration process. Using a self-disclosure questionnaire, it is requested to provide key information on the subject of sustainability. This voluntary information also addresses aspects relevant for exclusion criteria (refusal to sign the CR clause can be an exclusion criteria).

Within the supplier registration process, it is mandatory for the supplier to confirm compliance with the UN Global Compact.

(Re)Insurance Business

Our business, which links us to all sectors of industry and economy, makes it possible for entrepreneurial risks to be taken. We are conscious of the fact that there is a range of industries and projects that may have a major impact on the environment, local communities and other stakeholder groups. The systematic anchoring of environmental, social and governance (ESG) aspects in core business enables us to identify these risks and, in cooperation with our clients, to minimise them as far as possible.

Munich Re has signed up to the Principles for Sustainable Insurance (PSI) and as such is committed to making allowance for ESG aspects that are relevant for our insurance business. This applies to our products, services and internal processes.

In 2012, a Group Corporate Responsibility Committee (GCRC) was established. It provides counsel on Munich Re's corporate responsibility commitments and activities. Moreover, it evaluates and prioritises sensitive issues including human and labour rights aspects.

Also, Munich Re has established a committee for dealing with reputational risks that arise in the course of our business operations. Employees can refer critical cases to this committee prior to closing a transaction. The committee verifies the acceptability of our business transactions and ensures that we do not take operational decisions involving undue reputational risks. Any new topic that emerges as a sensitive business issue in these discussions is referred to the GCRC for detailed assessment and a potential extension of the existing Group-wide policies.

In 2013, we established ten generally applicable ESG aspects which explicitly include human and labour rights.

These aspects help to identify industrial sectors with high ESG exposure, thus allowing sensitive business topics to be recognized. This helps our underwriters and asset managers to systematically incorporate consideration of ESG aspects (including aspects of human and labour rights) into the risk assessments. The GCRC has approved position papers and guidelines on various sensitive topics.

In the reinsurance sector our experts for corporate responsibility coordinate the implementation of the Principles for Sustainable Insurance (PSI) and the integration of ESG aspects in our core business. With this in mind, our experts on corporate responsibility provide relevant training for managers, underwriters and client managers in the different divisional units. In addition, a "Corporate Responsibility in Business"-coordinators' network was established in the reinsurance sector and the coordinators were made aware of the topic. More than 600 staff members have been sensitized to ESG aspects and, in their role as multipliers, are now transferring their knowledge within their own departments, in risk assessments, client discussions and in exchanges with other units.

Asset Management

Insurance companies are subject to strict security and return requirements. They have to ensure that their clients' money is invested both safely and profitably. We take this responsibility very seriously. MEAG is the asset manager of Munich Re. In April 2006, Munich Re became the first German company to sign the UN Principles for Responsible Investment (PRI). Since then, the PRI have served as guidelines for our investment strategy, anchoring ESG aspects more firmly in our investment process.

Munich Re Munich Re's Statement on the UK Modern Slavery Act

The vast majority of our investments meet sustainable investment criteria, as outlined in our Responsible Investment Guideline. In the asset classes of infrastructure, renewable energies, forestry and farmland, we have established an investment process which follows additional important sustainable objectives relating to investments. We regularly review our sustainability criteria for all assets, mainly using the ESG criteria of external rating agencies (including ESG criteria, thereby implicitly also human and labour rights aspects).

Wherever possible, we use the know-how of external service providers to ensure the sustainability of our investments. We combine the assessments of these providers with our own investment criteria. Since 2013, our investment activities have taken into account an external ESG country rating that reflects the sustainability performance of individual countries. In cases where countries fail to satisfy our criteria, MEAG refrains from investing in their government bonds or the bonds of quasi-governmental organisations.

Grievance Mechanisms

Employees have the opportunity to report incidents directly to their line managers, the Compliance Officer or to Internal Audit. To additionally strengthen the compliance system, an independent external ombudsman has been appointed.

Furthermore, Munich Re offers its staff members, clients, suppliers and other business partners a whistle-blowing portal to report potential or actual compliance breaches. Here, relevant information can be exchanged safely and confidentially – globally and around the clock. The compliance unit receives this information and is responsible for processing it further. Employees can provide information anonymously or by using their name. If legally possible, anonymity is guaranteed.

Final Remark

We will continue to work on the implementation of the human and labour rights aspects and to consider our obligations under the UK Modern Slavery Act 2015.

Munich, 30 June 2017

Joachine Wenning

Dr. Joachim Wenning Chairman of the Board of Management Munich Re

© 2017

Münchener Rückversicherungs-Gesellschaft Königinstrasse 107, 80802 München, Germany

Münchener Rückversicherungs-Gesellschaft (Munich Reinsurance Company) is a reinsurance company organised under the laws of Germany. In some countries, including in the United States, Munich Reinsurance Company holds the status of an unauthorised reinsurer. Policies are underwritten by Munich Reinsurance Company or its affiliated insurance and reinsurance subsidiaries. Certain coverages are not available in all jurisdictions.

Any description in this document is for general information purposes only and does not constitute an offer to sell or a solicitation of an offer to buy any product.



CORPORATE RESPONSIBILITY

MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Responsibility

Corporate governance

Responsibility

Corporate responsibility in business

Corporate governance

Employees

Lilipioyees

Environment Social impact

Foundations



Related topics

Corporate responsibility in insurance Corporate responsibility in investment

Responsible corporate governance

Munich Re attaches great importance to responsible and sustainable company management. Corporate governance, our compliance systems and anti-fraud management, as well as sustainable risk management, direct our day-to-day actions and help determine long-term strategic decisions.

Owing to our international corporate structure, we are subject to a raft of national and international legal systems, standards and corporate governance regulations. Within the Group, our own Code of Conduct binds our management and staff members to engage in ethically and legally impeccable conduct. Since 2013, the principles of the United Nations Global Compact have also been integrated in this Code of Conduct.

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

Here is an overview of what we believe are the key aspects of responsible corporate governance (click on the links to find additional and more detailed information at munichre.com):

- Corporate governance: high standards, efficient distribution of responsibilities in Group management.
- Compliance: compliance with applicable laws and internal company rules.
- Financial Crime Management: combatting financial crime.
- Risk management: an essential component of our corporate management.
- Sustainable procurement: responsible selection of and collaboration with suppliers.
- **Lobbying:** our knowledge and expertise for political decision-making.
- Commissioning of external journalists: clear distinction between journalism and PR.

GRI Content Index: G4 DMA Local Communities; G4-SO3; G4-SO4; G4-SO5













The Group

THE GROUP

REINSURANCE

PRIMARY INSURANCE

INVESTOR RELATIONS

MEDIA RELATIONS

CAREER

0

Home

Corporate Governance

Company

Portrait

Strategy

Board of Management

Supervisory Board

Corporate Governance

Our Understanding: Corporate governance report

Combined Statement of Corporate Governance

Declarations of conformity with GCGC (DCGK)

Articles of Association

Board of Management

Supervisory Board

Annual General Meeting

Auditors Report

Co Determination Agreement

Compliance

Financial Crime Management

Munich Re Code of Conduct

Lobbying

Employees

Corporate Responsibility Portal

Central Procurement

Group History

Corporate Art

Corporate Governance

Corporate governance stands for a form of responsible company management and control geared to long-term creation of value. One of our particular aims in this context is to foster the confidence of investors, clients, employees and the general public. Also of great relevance for us are efficient practices on the Board of Management and Supervisory Board, good collaboration between these bodies and with the companies' staff, and open and transparent corporate communications.

Our understanding: Corporate governance report

Corporate governance stands for a form of responsible company management and control geared to long-term creation of value.

more

Combined Statement of Corporate Governance for the 2016 financial year pursuant to Section 289a and Section 315 (5) of the German Commercial Code (HGB)

As a joint-stock company listed on the stock exchange and as the parent company in accordance with Section 289a (1) of the German Commercial Code (HGB), Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München (Munich Reinsurance Company) has published the following Statement on Corporate Governance pursuant to Section 289a of the Commercial Code, and the Statement on Corporate Governance for the Group pursuant to Section 315 (5) of the Commercial Code.

more

Declarations of conformity with GCGC (DCGK)

Declarations of compliance by Munich Reinsurance Company's Board of Management and Supervisory Board with the German Corporate Governance Code in accordance with Section 161 of the German Stock Companies Act.

more

Articles of Association (Satzung)

The German Stock Companies Act requires joint-stock companies to have Articles of Association. These record such information as the company's name, its registered seat, the amount of its share capital and the number of members of its Board of Management and Supervisory Board.

more

Board of Management

All the members of Munich Reinsurance Company's Board of Management, their areas of responsibility and remuneration, at a glance.

more

Supervisory Board

All the members of the Supervisory Board, its five committees and remuneration. more

Annual General Meeting

Munich Reinsurance Company's Annual General Meeting allows shareholders to advise and adopt resolutions on important matters affecting the Company.

more

Auditors report

Auditor for fiscal year 2016: KPMG Bayerische Treuhandgesellschaft
Aktiengesellschaft Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft.
more

Co-determination agreement

At Munich Reinsurance Company, the co-determination of employees on the Supervisory Board is duly outlined in the co-determination agreement. more

Compliance

Compliance with applicable laws and internal rules and principles is binding for all employees of Munich Re.

more

Additional Information

Dates Order reports Articles of Association (Satzung)

Financial Crime Management

The risk of falling victim to financial crime increases with a company's size and the rising complexity of its structures and workflow.

more

Munich Re Code of Conduct

In our Code of Conduct we clearly state our views on corporate integrity, i.e. legally impeccable behaviour based on ethical principles.

more

Lobbying

In the interests of our stakeholders, we contribute our knowledge and expertise to the political decision-making process.













Munich RE ==

GROUP REINSURANCE

PRIMARY INSURANCE

MEDIA RELATIONS

CAREER

Home T

The Group Corporate Governance

Compliance

Company

Portrait

Strategy

Board of Management

Supervisory Board

Corporate Governance

Our Understanding: Corporate governance report

Combined Statement of Corporate Governance

Declarations of conformity with GCGC (DCGK)

Articles of Association

Board of Management

Supervisory Board

Annual General Meeting

Auditors Report

Co Determination Agreement

Compliance

Financial Crime Management

Munich Re Code of Conduct

Lobbying

Employees

Corporate Responsibility Portal

Central Procurement

Group History

Corporate Art

Binding rules of conduct for the Group

INVESTOR RELATIONS

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 rules, minimum compliance requirements and suitable information and documentation systems as prevention and monitoring measures.

Each individual employee at Munich Re (Group) is responsible for compliance. On the basis of our Code of Conduct and additional self-commitments for responsible behaviour, all staff are obliged to act in an ethical and reliable manner. In doing so, they are to avoid any activity that might harm Munich Re (Group), and are to take business decisions in compliance with legal provisions, supervisory regulations and internal rules. Our managers have a special responsibility to integrate compliance as a fundamental component into the business processes. They have a role model function for their staff and the obligation to ensure that all actions within their area of responsibility comply with the law, statutes and internal rules. All staff receive the Code of Conduct and additional self-commitments for responsible behaviour. Also, an elearning programme has been developed and made available to for all staff.

For us, the full meaning of compliance is not simply adhering to the letter of the law, regulatory requirements and internal rules (in particular, those of the Code of Conduct), but also extends to making decisions and acting in the spirit of compliance. Compliance is therefore a basis for initiating and conducting business transactions, a platform for realising integrity, and a key element in our business processes.

In the primary insurance sector, ERGO is taking a progressive approach: On 1 July 2013, with the aim of establishing a clear business foundation for cooperation with insurance brokers, the ERGO was one of the first companies to commit to the Code of Conduct for selling insurance products which was initiated by the German Insurance Association (GDV) . This voluntary commitment applies to all operational German subsidiaries that sell insurance products with the aim of ensuring the high quality of client consulting. The appropriate implementation of principles and measures to satisfy regulations was confirmed in June 2014 by an external auditor.

Group-wide Compliance Management System (CMS)

The compliance function is responsible for specifying the necessary organisational measures for compliance by Munich Re (Group), top and senior management, as well as staff, including monitoring such compliance. For this purpose, the compliance function has set up an appropriate compliance organisation across the Group, which is tailored to the structure, business activities, risks and particularities of Munich Re (Group)'s business model. The Munich Re (Group) Compliance Management System (CMS) is the methodical framework for the structured implementation of early warning, risk control, consulting and monitoring functions Group-wide:

- The early-warning system evaluates the potential impact of any emerging legal changes on Munich Re (Group). Therefore, Munich Re (Group) companies regularly report on changes in their legal environment (legal change risk).
- Risk control duties include the identification, assessment and monitoring of compliance risks within Munich Re (Group).
- Monitoring refers to reviewing compliance with the relevant legal, supervisory, and internal rules within Munich Re (Group).
- Consulting means that the Munich Re (Group) compliance function and the Groupwide compliance organisation support and train top and senior executives, managers, and staff on how to prevent and deal with compliance risks.

Our CMS is designed to identify key compliance risks, to prevent compliance breaches and behaviour that puts our reputation at risk (prevention), to investigate any potential compliance violations that may occur despite appropriate measures (investigation), and to sanction and terminate breaches (reaction). The CMS is based on external standards and has been carefully adjusted to Munich Re (Group) characteristics. It consists of the following seven tools:

Related topics

Financial Crime Management Corporate Responsibility - Corporate Governance Procurement at Munich Re

External links

Munich Re's Compliance Whistleblowing Portal United Nations Global Compact GDV: Code of conduct sales force (German)

Downloads

munichre.com: Risk report (PDF, 85 KB) munichre.com: Code of conduct (PDF, 354 KB)

ERGO: Code of conduct (PDF, 183 KR)

ERGO: Code of conduct sales force



- As described above, our compliance culture serves as the foundation of our business activities. In accordance with the "tone from the top" principle, our top and senior executives are a living example of compliant conduct. The central standard for our behaviour is our Code of Conduct and additional self-commitments for responsible behaviour, which describe our understanding of values and have also been implemented by our subsidiaries. They contain binding rules for all Munich Re (Group) staff and, together with other policies, guidelines and work instructions, set the limits of our activities. All staff receive copies of the Code of Conduct and additional self-commitments for responsible behaviour. All breaches are thoroughly investigated and sanctioned within legally admissible limits. The Code of Conduct and additional self-commitments for responsible behaviour are regularly reviewed and amended as needed.
- Our compliance risk management is the process designed to systematically identify compliance risks, analyse, mitigate and monitor them Group-wide. Key compliance topics considered are, for example, fraud prevention, financial sanctions, sales compliance, data privacy, and antitrust law. In addition, each Group unit must identify any further compliance risks that are relevant for it, duly assess them, and document this in writing. The results of the compliance risk analysis are used to design the compliance measures. In addition, each unit prepares a compliance plan, which is submitted to senior management.
- Organisation and processes: For us, this CMS-element means the organisational set-up of the compliance function, the Group-wide compliance organisation, and their interfaces. Our compliance department monitors Munich Re (Group)'s compliance activities through Group-wide standards and a network of regional and local compliance officers. This also includes monitoring the handling of compliance topics which are not assigned to the compliance department, but are nevertheless compliance-relevant. We comply with fit and proper criteria when filling key positions.
- We advise, communicate with, and train our target groups. Our compliance organisation answers staff questions on compliance issues. In addition, we run regular training sessions on compliance topics, in order to raise awareness of compliance, strengthen the compliance culture at Munich Re (Group), and increase confidence in dealing with compliance risks. For example, for our staff reaching out to customers and business partners we run regular training sessions on compliant handling of gifts and invitations. Our governance training for managers enhances their understanding of compliance and strengthens their cooperation within the governance functions.
- Our Compliance Reporting is issued to the Board of Management and the Supervisory Board's Audit Committee ad hoc and quarterly. This includes compliance violations, the results of special investigations, and any measures implemented, including any sanctions for breaches. For this purpose, we have implemented a reporting process from Group companies to the compliance function. Corresponding reporting to the local management and supervisory bodies is also performed at the Group companies themselves.
- Our monitoring and controls include assessing the appropriate design of compliance controls and their effective implementation. Therefore, we have implemented risk-based monitoring instruments. All units report regularly on both the implementation of CMS standards as well as on significant compliance issues, violations, and emerging legal changes. The Supervisory Board's Audit Committee monitors CMS effectiveness including the whistleblowing system.
- Documenting the CMS: We document all Munich Re (Group) compliance activities clearly, comprehensibly and transparently. The documentation is reviewed annually and stored for ten years as a matter of principle.

The scope and extent to which compliance activities for these seven CMS elements are implemented are based on the risk profile of the respective Group company, though minimum compliance requirements are mandatory for every entity.

Direct channels of communication and whistleblower anonymity

Munich Re (Group) has a Group-wide system for reporting violations of rules and laws. This system enables the Group Chief Compliance Officer (GCCO) to quickly report potential violations to the Board of Management. The GCCO is the first contact for all compliance questions and assists the Board of Management in developing and implementing organisational measures. Staff members can report infringements and violations to Compliance, their line manager, or to Internal Audit. In addition, an external, independent ombudsman may be contacted. A further whistleblowing channel is available to make the CMS even more robust: A Compliance Whistleblowing Portal is

available to all staff and third parties for reporting compliance violations. Information can be provided anonymously or by using your name. If legally possible, anonymity is guaranteed.

GRI: G4-27; G4-56; G4-57; G4-58; G4-DMA-Procurement Principles; G4-EC9; G4-EN32; G4-EN33; G4-DMA-Supplier Assessment; G4-DMA-Human Rights; G4-HR2; G4-HR3; G4-HR4; G4-HR5; G4-HR6; G4-HR7; G4-HR8; G4-PR6













THE GROUP REINSURANCE PRIMARY INSURANCE INVESTOR RELATIONS MEDIA RELATIONS CAREER

Financial Crime Management The Group Corporate Governance Home

External Links

Whistleblowing portal

Company

Portrait

Strategy

Board of Management

Supervisory Board

Corporate Governance

Our Understanding: Corporate governance report

Combined Statement of Corporate Governance

Declarations of conformity with GCGC (DCGK)

Articles of Association

Board of Management

Supervisory Board

Annual General Meeting

Auditors Report

Co Determination Agreement

Compliance

Financial Crime Management

Munich Re Code of Conduct

Lobbying

Employees

Corporate Responsibility Portal

Central Procurement

Group History

Corporate Art

Combatting financial crime concerns us all

The risk of falling victim to financial crime increases with a company's size and the rising complexity of its structures and workflow. The financial loss and consequences can be devastating for the company's reputation. Munich Re is resolutely countering this risk with an effective system for combatting fraudulent

Financial crime may take on many different guises, ranging from direct asset losses and corruption to manipulation of accounts. Although there is no such thing as complete protection, much can be done to reduce the risks.

A holistic approach in combatting fraudulent activities and comprehensive prevention is of central importance. It is for this reason that Munich Re has assigned these Grouplevel functions to a separate Group Compliance Department, which underlines the importance of the matter and creates the basis for a stringent procedure across the Group. Our "Policy on Combatting of Financial Crime" contains minimum requirements to be observed by all Group companies. A process of coordination with Group Compliance guarantees adherence to the minimum requirements, but allows some leeway in defining measures, depending on the risk situation and observance of local

Explicit specifications for the behaviour of employees in handling transactions are included in the measures. Clearly defined processes and responsibilities, effective checks which also monitor the example set by management, in addition to training, heighten employees' awareness of the fact that every single individual can make a contribution to combatting fraudulent activities. If employees notice that something is amiss or their suspicion is aroused, they have the option of contacting the respective persons in Group Compliance and Group Audit, or their line managers.

Electronic Whistleblowing Portal

Employees can also turn to our external ombudsman or use the electronic Whistleblowing Portal. Our clients, contractual partners and other third parties can also contact the ombudsman or place a message on the Whistleblowing Portal. Anonymous messages can also be submitted. The system lets the user create a sort of mailbox to allow communication while preserving anonymity. The messages on the Whistleblowing Portal are actioned by the specially trained workers in Group Compliance.

Munich Re also provides training to heighten employee awareness of the subject and the risks, and provide information on hazard characteristics. Training sessions have been developed that are aimed at top management. These are held jointly by Risk Management, Group Audit and Group Compliance.

Measures to uncover suspicious circumstances

Specially trained staff members in Group Audit conduct appropriate investigations in the event of concrete suspicion of fraudulent activity. A confirmed suspicion always entails consequences. Munich Re tolerates no fraudulent activity, and takes action based on industrial, criminal and/or civil law, depending on the individual case. To supplement the actions outlined, Group Audit supports the Board of Management and managers in their controlling functions, providing auditing and consulting services.

The combatting of fraudulent activities and the enhancement of an effective system have uppermost priority at Munich Re. Our system is thus subjected to continual monitoring, and to ongoing development on the basis of the latest findings and trends.

GRI: G4-57; G4-58; G4-DMA-Society; G4-SO3; G4-SO4; G4-SO5













THE GROUP

REINSURANCE

PRIMARY INSURANCE

INVESTOR RELATIONS

MEDIA RELATIONS

CAREER

Home

The Group

Central Procurement



Related topics

Compliance

External Links

ERGO MEAG

Company

Portrait

Strategy

Board of Management

Supervisory Board

Corporate Governance

Employees

Corporate Responsibility Portal

Central Procurement

Procurement at Munich Re – Reinsurance

Archive Conditions of Purchase

Group History

Corporate Art

Procurement at Munich Re

As a globally operating organisation, Munich Re procures many different goods and services throughout the world. By purchasing at best total value in terms of quality, time and cost, while ensuring compliance at all times, the procurement functions throughout the Group seek to deliver a substantial and lasting contribution to the success of Munich Re.

At all locations and along the entire value chain, our procurement activities are shaped by a deep sense of corporate responsibility. Environmental, social and governance (ESG) criteria are at the heart of our approach, and we expect our suppliers to meet them as well.

We have established the following principles (PDF, 77 KB) to guide our interaction with our suppliers. These apply to all business units Group-wide:

Human Rights

- Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2: make sure that they are not complicit in human rights abuses.

Labour

- Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4: the elimination of all forms of forced and compulsory labour;
- Principle 5: the effective abolition of child labour; and
- Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

- Principle 7: Businesses should support a precautionary approach to environmental challenges;
- Principle 8: undertake initiatives to promote greater environmental responsibility; and
- Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

 Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

If you are interested in becoming a supplier of Munich Re, please use the links below to find out more and contact the appropriate business segment.

- Reinsurance and Munich Health
- ERGO
- MEAG













THE GROUP REINSURANCE PRIMARY INSURANCE INVESTOR RELATIONS MEDIA RELATIONS The Group Corporate Governance Lobbying Home Company Transparent lobbying activities In the interests of our stakeholders, we contribute our knowledge and expertise Portrait to the political decision-making process. In doing so, we place an emphasis on fairness and transparency. Strategy Board of Management Unlike the laws of nature, making regulations is a job for people, and is subject to different values and perspectives. In order to draw up new legislative texts, the Supervisory Board government constantly draws on the knowledge, experience and assessments of those affected to allow it to reach balanced and appropriate decisions. This may take the form Corporate Governance of hearings and consultations, as well as individual discussions. Our Understanding: Corporate In the interests of our clients, employees and shareholders, we participate in the governance report political decision-making process. We focus on topic areas that affect our Group and Combined Statement of Corporate our stakeholders, and in which we possess a level of expertise. It is then up to the Governance decision-makers to weigh our arguments against those of the other parties involved. Thus, the only form of influence is a cogent argument. With many Munich Re concerns, Declarations of conformity with GCGC the corporate interest matches the general societal interest, for example in the areas of (DCGK) climate protection and data security, or with investments in infrastructure. Articles of Association The Governmental Affairs department is responsible for lobbying on behalf of Munich Board of Management Re Group. With staff members in the locations Munich, Berlin and Brussels, our activities focus on registering the Group's concerns with governments, national and Supervisory Board supranational authorities and other organisations. In addition, our experts in the specialist departments play an active role on the committees of various industry Annual General Meeting associations, such as the German Insurance Association (GDV) and Insurance Europe, **Auditors Report** the European insurance and reinsurance federation. Co Determination Agreement Munich Re attaches importance to ensuring its lobbying activities are transparent. We therefore provide details to the transparency register of the European Parliament and Compliance the European Commission on focal points, memberships and the cost of our lobbying Financial Crime Management activities. Munich Re Code of Conduct GRI: G4-23; G4-58 Lobbying Employees Corporate Responsibility Portal Central Procurement Group History Corporate Art

External links

CAREER

EU transparency register













Newsletter

THE GROUP REINSURANCE PRIMARY INSURANCE INVESTOR RELATIONS MEDIA RELATIONS CAREER Guidelines for dealing with journalists Media Relations Home munichre.com Service Guidelines for dealing with journalists Corporate Governance Munich Re respects journalists' independence and favours a strict separation of Dates

Contact Guidelines for dealing with journalists journalism and public-relations work. When we conclude contracts with journalists (whether salaried employees or freelancers) to act as PR consultants, moderators or authors, we ensure that this cooperation does not influence media reporting about our company or issues related to our company.

In Germany, where Munich Reinsurance Company has its registered office, the guiding principles defined in the "DPRG guidelines for dealing with journalists" of the Berlinbased German Public Relations Association (DPRG) and the statutes of the German Council for Public Relations serve as a basis for our cooperation with journalists. These guidelines are in keeping with those of the German Press Council and the recommendations of the Federation of German Industries for combating corruption in Germany.

In order to provide maximum transparency in accordance with the above rules, the names and places of residence of all journalists who have worked for us either on a salaried or freelance basis during the past two years are published here.

Michael Aberger, Munich, Germany Paul Begala, Washington, D.C., USA Dirk Benninghoff, Hamburg, Germany Bärbel Brockmann, Cologne, Germany Tucker Carlson, Washington, D.C., USA Dr. Melinda Crane, Berlin, Germany Doris Eichmeier, Glonn, Germany Christoph Fasel, Mössingen, Germany Reiner Gärtner, Wangen im Allgäu, Germany Dirk von Gehlen, Munich, Germany Leticia Gow, Munich, Germany Ralf Grauel, Berlin, Germany Beate Hoffbauer, Berlin/Cologne, Germany Iris Janke, Dusseldorf, Germany Peter Kleffmann, Hamburg, Germany Olaf Kolbrück, Frankfurt am Main, Germany Jennifer Lachmann, Hamburg, Germany Adrian Ladbury, Bournemouth, United Kingdom Jane Lanhee Lau, Shanghai, China Julia Leendertse, Cologne, Germany Tobias Mandelartz, Berlin, Germany Stefan Merx, Cologne, Germany Carl-Eduard Meyer, Hamburg, Germany Joachim Müller-Jung, Herschbach, Germany Dr. Tanja Neuvians, Heidelberg, Germany Dr. Max Rauner, Hamburg, Germany Victor Reichardt, Berlin, Germany Martin Roschitz, Hamburg, Germany Prof. Dr. Konrad Scherfer, Cologne, Germany Andreas Schmitz, Munich, Germany Andreas Schuck, Munich, Germany Harald Schultz, Berlin, Germany Dr. Hajo Schumacher, Berlin, Germany Heiko Schwöbel, Tübingen, Germany Michael Smerconish, Philadelphia, PA, USA Jakob Struller, Cologne, Germany Sivam Subramaniam, Singapore Thomas Trösch, Berlin, Germany Anke Trutter, Munich, Germany

Similar policies are in place at our branches and subsidiaries outside Germany.













CORPORATE RESPONSIBILITY

MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Responsibility Employees

Responsibility

Corporate responsibility in business

Corporate governance

Employees

Environment

Social impact



Related topics

Awards
Munich Re career portal –
reinsurance
ERGO career portal
MEAG career pages

Munich Re as a responsible employer

Competence and know-how are the decisive factors for our success. For this reason, we attach the greatest importance to dealing with our staff in a responsible and respectful manner.

With their specialist knowledge, commitment and constant willingness to innovate, our employees drive our business forward and are thus a crucial factor in our success. We are therefore committed to a corporate culture that offers opportunities for personal development, encourages independence and rewards success and performance. We thus attract young talent and specialists and train them for the right jobs within the Group. For many years, we have enjoyed a high level of employee loyalty and consistently low staff turnover rates.

Our founder, Carl von Thieme, was considered one of the most socio-politically advanced employers of his time. We continue this tradition by protecting our employees in the best possible way, and by supporting them with modern and flexible services and benefits. A Group-wide governance framework in human resources work is complemented by individually tailored systems and instruments in primary insurance, reinsurance, and at our asset management arm, MEAG.

The following overview provides information on our comprehensive human resources strategy. You can find additional details and examples for insurance and reinsurance and for MEAG under the links shown and in the respective career portals of Munich Re, ERGO and MEAG.

Our programmes for training and development

We want to attract the best employees for our Group companies and retain them over the long term. With its student and graduate trainee programmes, Munich Re systematically promotes young talent. Trainee programmes in the reinsurance group and MEAG offer graduates interesting, challenging and widely diversified opportunities to start careers. In autumn 2016, our new International Group Trainee Programme EXPLORE started up across all the Munich Re (Group) fields of business. We also offer employees the option of intelligently combining career and study. Under the respective links, you can learn more about the combined career and study options at Munich Re Munich, ERGO and MEAG. We also have a special initial and further training programme to facilitate lateral entry for experienced professionals and experts.

With our development programmes (Group Management Platform for all fields of business, MEAG Young Manager and Hydrogen in the reinsurance group), we provide a thorough preparation for young talents to assume their first and subsequent management positions nationally and internationally. One example of the effectiveness of these programmes is that, throughout Germany, in 2016 we were again able to fill over 80% of management posts from among our own employees. In combination with long-term succession planning for the current senior management cadre, we ensure that the quality of our management remains consistently high. Our staff acquire further professional and intercultural skills through rotation within the Group.

We promote our employees' further development through lifelong learning. We offer a wide range of training options in each of our business fields. These include continually updated e-learning platforms to which Munich Re staff around the world have access.

The statistics on days of training that our employees have participated in, and our expenditure for training, can be found under "Employee indicators".

The remuneration Munich Re (Group) pays to staff is designed to reward the success of every individual and of the Group as a whole. We are constantly refining our holistic remuneration system, thus making a key contribution towards successful, value-based corporate governance as well as to staff motivation.

For example, in reinsurance, remuneration reflects both the employee's personal performance and the success achieved as part of the Group. Individual performance-related remuneration is based upon personally agreed objectives and performance appraisals using clear criteria. We determine the share in the Group's success using transparent indicators.

At Munich Re, additional benefits have a long-standing tradition and we attach great importance to them. Membership of our company pension scheme, in particular, is a key part of the attractive package we offer. Munich Re (reinsurance group) and ERGO are also members of the German insurance employers' association and have signed the respective collective bargaining agreements.

We also pay students and graduates appropriately and endeavour to offer them excellent opportunities to ensure a successful start to their careers. That is why the reinsurance group and ERGO have joined the Fair Company Initiative, committed to providing fair internships and offering genuine opportunities for university graduates.

Balancing family and career

Munich Re (Group) offers its staff a number of different models and arrangements for flexible working conditions, attractive working hours and needs-based support services. In the reinsurance group, the general "Flexible Working" concept introduced in 2015 offers various ways of giving our employees' greater flexibility in terms of hours and location. For example, employees can convert bonuses into leave or save up holidays over a period of three years, allowing them to take longer periods of leave. Mini-sabbaticals allow staff a further three months of release from duties. In consultation with their line managers, the specific working days and working hours per week can be flexibly defined. Depending on the responsibilities involved, a portion of the work can also be done via teleworking, while our mobile systems offer a wide range of options for working flexibly while travelling or from home.

At the Munich site, the internal company agreement "Career and family" goes above and beyond what is required by law and has allowed staff to realise both private and professional plans since 2002.

Munich Re also offers numerous forms of assistance for staff for various personal circumstances: in Germany, for example, places in daycare centres close to the Group's premises, contributions towards childcare costs for staff members who make their own childcare arrangements, parent-and-child offices, support from internal and external family services, childcare during holiday periods and assistance with caring for family members are available.

We make every effort to encourage our staff to return to work following parental leave. The early planning of appropriate measures such as further training courses, ERGO's parent network and flexible working hours for parents make it easier for them to return to work after a career break.

For its commitment to its distinctly family-friendly human resources policy, ERGO has already won the "audit berufundfamilie®" (family and career audit) certificate five times for all its main administrative centres in Germany. This certificate is awarded by the non-profit Hertie Foundation.

You can find more details about our family-friendly services here:

- ERGO website Career and family
- Munich Re's career portal under Balancing family and career
- MEAG website Some additional benefits

Comprehensive company healthcare management

Munich Re (Group) is actively involved in promoting all aspects of health. We offer medical care, preventive measures, sport and relaxation programmes beyond the legal requirements, as well as personal measures to help staff return to work after a prolonged absence. Services also include expert advice and a range of support measures in the event of illness.

With regard to occupational safety, Munich Re complies with statutory health and safety requirements conscientiously and effectively. We provide staff with information on correct posture when working at a desk, tips on effective relaxation techniques and advice on further preventive measures. We also publish the latest travel advisories and arrange seminars on safety awareness during business trips

Outside working hours, Munich Re promotes the physical and mental well-being of employees with a wide variety of sports and leisure activities, for example at the Group swimming and sports facilities and in the ERGO back-care centre in Düsseldorf. ERGO offers one of the most extensive corporate sports programmes in Germany under the name "ERGO sports".

To promote the mental well-being of employees, we also offer expert counselling at several locations in Germany to help staff deal with difficulties at work or at home. At the reinsurance group in Munich, Human Resources collaborates with the Fürstenberg Institute to provide an extensive external Employee Assistance

Programme (EAP).

Preventing and dealing with stress is becoming an increasingly important topic. In mandatory workshops, new managers learn how to prevent stress-related and mental disorders among staff.

D.A.S. UK and Austria have won awards in recent years for outstanding corporate healthcare management. You can find further details in the "Awards" section.

Information on rates of sick leave at Munich Re can be found under "Employee indicators".

Diversity - Added value for our Group

The different mindsets, cultures and values of our staff are key to Munich Re's success. Our diversity management is geared to promoting this diversity, which assists us in achieving our Group objectives.

In introducing its Diversity Policy (PDF, 410 KB) across the Group in 2011, Munich Re laid the groundwork for an overarching and comprehensive diversity management programme. This policy sets out our definition of diversity, along with the main principles for promoting diversity within the Group, and underlines our global commitment to embracing diversity as a strength and investing in it. Specific measures to achieve our diversity targets are implemented for each field of business - across primary insurance, reinsurance and MEAG.

Focus areas of our activities: Gender, age, internationality

- Gender: As part of this commitment, Munich Re undertook in October 2011 to increase the quota of women in leading positions in Germany to at least 25% by the end of 2020. This is an ambitious target in light of the low staff turnover rate and the average age of managers, but we are on track to achieve it. Statistics on the current proportion of women at Munich Re can be found under "Employee indicators".
- Age: In this area, we focus on the step-by-step expansion of health promotion programmes and lifelong learning programmes. With our flexible work models, we wish to fully integrate employees of every age throughout all stages of their career.
- Internationality: We prepare our employees for growing globalisation through secondments, job rotations and assignments to international projects. The Group now employs staff in more than 50 countries, and the percentage of employees outside Germany has once again increased in this reporting year.

Specific measures to achieve our diversity targets are implemented for each field of business - across primary insurance, reinsurance and MEAG. You can read about the concepts and measures we employ, the initiatives we participate in, and the successes we have achieved on the respective Munich Re, ERGO and MEAG websites.

In the lead nationally and internationally - What we have achieved

Our progressive human resources work is paying off: Munich Re's reputation is being further strengthened in the face of national and international competition. This is reflected by the numerous awards and top rankings we have received in recent years. Our human resources concepts in Germany and abroad have gained widespread recognition - from "Top employer", "Top4women" and "Top intern" through to awards for our training measures, family friendliness, our good work climate, commitment to diversity and health promotion.

You can find an overview of our awards here.

GRI Content Index: G4-10; G4 DMA Market Presence, G4 DMA Labor Practices and Decent Work; G4-LA2; G4-LA3; G4 DMA Managment Relations; G4 DMA Occupational Health and Safety; G4-LA5; G4-LA6; G4-LA7; G4 DMA Training and Education; G4-LA9; G4-LA10; G4-LA11; G4 DMA Diversity and Equal Opportunity; G4-LA12; G4 DMA Equal Renumeration for Women and Men; G4-LA13; G4-HR3













CORPORATE RESPONSIBILITY

MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Responsibility

Environment

Responsibility

Corporate responsibility in business

Corporate governance

Employees

Environment

Social impact

Foundations



Related topics

Environmental indicators

Download

External verification environmental data 2016 (PDF, 14 KB) External verification environmental data 2015 (PDF, 137 KB)

Environment and climate protection at Munich Re - Systematic and targeted

A key component of our Group-wide environmental and climate protection strategy is the continuous reduction of our consumption of resources and the resulting carbon emissions. With our internal environmental management system, we set out the structural framework for measuring the material direct impact of our business operations on the environment and climate, and continuously realising improvements in this area.

Our strategy

In 2012, Munich Re (Group) introduced a standardised, binding environmental management system (EMS) for all Group locations. It is based on the requirements of the internationally valid DIN ISO 14001 standard and sets out the environmental guidelines and key performance indicators (KPIs) we use to determine our carbon footprint. In addition, our EMS describes the processes required for this, and also the organisational responsibilities. In 2016, 83% of our staff members were working at sites integrated in the EMS. 43% of Group employees work in companies that are certified to the DIN ISO 14001 standard by an external auditor.

At Munich Re (Group), the full Board of Management is responsible for the Group-wide environmental and climate protection strategy, and for all activities in the field of environmental protection. The full Board is represented by the Chairman of the Board of Management, Dr. Joachim Wenning. Anja Hirsch, Consultant Corporate Responsibility, in the central division Group Development, is the designated environmental officer. The Group Committee determines the Group's environment and climate protection strategy. Environmental managers at Group level handle implementation of the strategy, of the environmental management system, and of data collection across the business fields of reinsurance, Munich Health, ERGO and MEAG. Local environmental managers are responsible for implementation of the EMS at the individual locations. This includes achieving the environmental targets and programmes, introduction and implementation of measures to reduce carbon emissions, and the collection of environmental data.

The carbon footprint from our business activities is the key indicator in the assessment of 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. An external audit company confirms that we have met our objectives for environmental figures in 2016 throughout the Group (see downloads).

Our objectives

The Munich Re (Group) Strategy Committee decided in September 2015 to continue our successful environmental and climate protection strategy until 2020 with the following objectives:

- Further savings in Group carbon emissions: 35% (kg CO₂ per employee) in 2009– 2020, whilst preserving carbon neutrality;
- Procurement of more electricity from renewable energy sources: 100% Group-wide if possible;
- Consistent increase in the percentage of environmentally friendly consumables procured (e.g. paper, vehicles);
- Enhance motivation on the part of employees to behave in an environmentally friendly way.

Our successes

The consistent implementation of strategy has paid dividends: we have already reached our carbon emissions savings target of 35% less carbon dioxide (kg per employee in 2009-2020) today. Of particular help in making the savings was the application of measures with a high degree of leverage. Examples of these are the increased energy efficiency in and occupancy of our buildings, the ever-expanding use of digital communication, the rigorous shutting down of computers overnight, and the procurement of environmentally friendly consumables. Approximately 70% of the electricity purchased Group-wide in 2016 came from renewable, emission-free energy sources. Alongside the standardised conversion factors of the Greenhouse Gas Protocol (GHG) and the Association for Environmental Management in Banks, Savings Banks, and Insurance Companies (VfU), we have also taken individual factors into consideration since 2016 when calculating our carbon footprint, for example for the carbon emissions of our vehicle fleet. This ensures that using environmentally friendly vehicles has a direct positive effect on the carbon footprint of the respective site, motivating the staff there to take further measures.

Since 2015, Munich Re (Group) has been carbon-neutral. Unavoidable carbon emissions are neutralised by purchasing carbon credits. We have strict requirements when selecting projects: At least one project must meet a gold standard and be realised in a least-developed country. Alongside the technologies used to avoid carbon emissions, we attach great importance to social aspects when making a selection. For example, we support projects that promote health, facilitate education, develop local infrastructure, avoid deforestation and maintain biodiversity.

To achieve carbon neutrality for the 2016 fiscal year, we obtained carbon certificates from the following projects:

- Solar power from the autonomous region Ningxia Hui in China (PDF, 1.5 MB)
- Wind farms in the Shandong region in China (PDF, 1.5 MB)
- Solar cookers in Henan province in China (PDF, 1.9 MB)
- Run-of-river power stations in Madagascar (PDF, 715 KB)
- Efficient cooking stoves in Uganda (PDF, 2.3 MB)

You can find comprehensive key indicators for our environmental performance in the section "Environmental indicators" under the heading "Key figures".

GRI Content Index: G4 DMA Category Environmental, G4-EN3; G4-EN6; G4-EN7; G4-EN8; G4-EN19; G4-EN30; G4 DMA Audit













CORPORATE RESPONSIBILITY

MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Responsibility Social impact

Responsibility

Corporate responsibility in business

Corporate governance

Employees

Environment

Social impact

Foundations



Related topics

Foundations Memberships and Partnerships

Social impact

With our social commitment, we play our part as a responsible enterprise, and place the emphasis on projects that are close to our core business.

We prefer to support projects in which we can actively contribute our risk expertise, while at the same time broadening our own horizons. In so doing, we seek to improve the effectiveness of the projects while generating valuable ideas for our employees and positive effects for our business.

In our corporate responsibility strategy, which we have geared to the shared-value approach, we are concentrating on three key global challenges we want to help solve: mitigating the effects of climate change, improving access to healthcare, and enhancing risk awareness. When selecting projects, we are guided by the criteria of our social impact concept, which we also use to measure the effectiveness of our actions.

We also support projects at our business locations that bring social and cultural benefits, and assist in acute catastrophe situations.

Our involvement – Partners and projects at a glance

Combating the effects of climate change

- Insurance Institute for Business & Home Safety (IBHS): Munich Re America supports the IBHS in South Carolina, an institute researching how buildings can be made more resilient to natural catastrophes. In 2016 together with its founder member Munich Re America the Institute developed a resilient construction methods application for homeowners, building contractors and architects.
- Munich Climate Insurance Initiative (MCII): At the initiative of Munich Re and representatives from the World Bank, NGOs and the scientific community, the MCII was established in 2005 as a charitable organisation with a secretariat at the United Nations University in Bonn. The underlying idea was to support adaptation to climate change in developing and emerging countries by providing insurance-related risk management mechanisms. Since then, MCII has contributed suggestions on risk management to climate negotiations and provided technical support in the discussions on dealing with losses from climate change, for example under the UNFCCC "Loss and Damage" programme.

Improving access to healthcare

- Health4Good: The objective of this idea contest, which was initiated by DKV Seguros for start-ups, is to promote innovations, talent and the development of new digital ideas in the healthcare sector. The competition was held for the first time in 2016, with four of the 30 start-ups selected to take part making it to the final round and winning financial and other prizes.
- Eden 5K Run: Through its sponsorship of the Eden 5K Run, Munich Re America supports the charitable organisation Eden Autism Services, which performs research into autism and supports autistic children and adults.
- Integration at Hestia Poland and DKV Seguros: Sponsored by each company's in-house foundation, customers who call Hestia Poland and DKV Seguros contact centres are advised by colleagues with physical disabilities.

- GeoHazards International (GHI): In a joint project with this international NGO based in California, Munich Re has supported earthquake and landslide risk protection in the north-east Indian town of Aizawl since 2012. Local risk resilience has been raised through risk mapping, risk analysis for sensitive municipal infrastructure such as schools, hospitals and administrative buildings, reviews of local building techniques and training for structural engineers, geologists and urban planners.
- Institute for Business and Home Safety (IBHS): In the USA, Munich Re America and the American Modern Insurance Group are supporting IBHS in a partnership. Independent experts and scientists use natural disaster and hazard scenarios to verify the safety and building standards of private and commercial buildings. The results of this research are then used to make recommendations for US building standards commissions and regulations.

Commitments at business locations

- Cuidam: Via donations, DKV Seguros supports the Cuidam programme, which aims to improve healthcare for needy children worldwide. Children from Africa, South America, Asia and Eastern Europe who previously had no access to medical care can thus receive treatment.
- Matching Gift Program: Hartford Steam Boiler Inspection and Insurance Company (HSB) regularly promotes charitable giving by its employees by matching their donations with its own.
- Joblinge: Munich Re supports the "Joblinge" initiative with scholarships and mentors - a joint, nationwide commitment on the part of business, government and society to help qualify socially disadvantaged young people for integration into the labour market.
- Habitat for Humanity: Hartford Steam Boiler Inspection and Insurance Company (HSB) supports the non-profit housing organisation Habitat for Humanity in the form of voluntary work performed by its employees and financial donations. HSB employees receive paid holiday if they help to build houses for needy families. The building materials are paid for with donations from HSB.
- Tú decides: As part of the campaign "Tú decides" (you decide), clients, employees, doctors, insurance brokers and service providers vote for the projects which they think DKV Seguros should support for a period of one year. Voters can choose between various health and environmental protection projects aimed at improving the quality of life of disadvantaged groups.
- Eight Billion Lives: Within the framework of a one-year fellowship programme, Munich Re and Impact Hub Munich have found solutions to the challenges of the growing global population, together with social start-ups. With their creativity and expertise, Munich Re staff members coached the young Fellows and supported them in developing their business models throughout the project.

GRI Content Index: G4-EC1/FS-EC1; G4 DMA Local Communities













Home

CORPORATE RESPONSIBILITY

Responsibility

Foundations

Responsibility

Corporate responsibility in business	
Corporate governance	
Employees	
Environment	
Social impact	
Foundations	









Related topics

Social impact Health care Integralia

External links

Munich Re Foundation Dr. Hans-Jürgen Schinzler Foundation ERGO "Youth & Future" Foundation DKV Integralia Foundation

Foundations

Munich Re's commitment to society is complemented by the activities of the four Group foundations: the Munich Re Foundation, the Dr. Hans-Jürgen Schinzler Foundation, the ERGO Youth and Future Foundation and the DKV Integralia Foundation.

Our foundations' focus areas at a glance:

Munich Re Foundation

The Munich Re Foundation was established in 2005 and helps to support people in risk situations and improve their living conditions, primarily in developing countries. The work of the foundation focuses primarily on disaster reduction, microinsurance, water, climate change and education.

Dr. Hans-Jürgen Schinzler Foundation

The Dr. Hans-Jürgen Schinzler Foundation was set up in 2004. It supports projects on which employees can work on a voluntary basis. The Foundation also organises various "social days" each year, on which employees can lend a hand with selected social projects.

ERGO "Youth & Future" Foundation

The ERGO Youth & Future Foundation helps young people to take personal responsibility for shaping their future. Its flagship "Job Locomotive" project helps socially disadvantaged youngsters to obtain professional qualifications and improve their career prospects

DKV Integralia Foundation

The Integralia Foundation established by DKV Seguros has been working on the social and professional integration of people with physical disabilities since 1999. To this end, the foundation has established a number of call centres in Spain that are staffed by people with disabilities. It also runs a number of projects to promote the social and professional integration of people with physical disabilities.

Follow the links to find out more about the work of our foundations.













CORPORATE RESPONSIBILITY

MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Topics Climate change



Further topics

Topic: Health care Topic: Risk awareness

Climate change - Solutions for climate protection

Increasing carbon dioxide concentrations, record-breaking global temperatures and more frequent extreme weather events: Munich Re has been investigating weather and climate risks for 40 years and develops sustainable solutions based on its findings.



A global priority

Robert Glasser is the United Nations Special Representative for Disaster Risk Reduction. In a Skype interview he talks about how the insurance industry can protect people in developing countries against the consequences of natural disasters and how globally shared risk data can open up new markets.

Interview with Robert Glasser



Overcoming natural disasters

Droughts, floods, earthquakes: Insurance protection promotes risk reduction measures in exposed areas, reduces financial burdens after a disaster and strengthens resilience.

Resilience



In future, will there be more climate refugees than war refugees?

In future, climate change could be the main driver of migration flows and have different effects on economies and societies. Munich Re is looking for solutions to cushion the financial impact of climate migration and analysing its causes and consequences.

Migration



Climate insurance – An opportunity for developing countries

Low-income countries are particularly vulnerable to natural disasters. Climate insurances for countries and individuals which are geared to weather parameters can provide swift payouts in the event of weather disasters.

Climate Insurances



"We have avoided the unmanageable"

Extreme weather events and their consequences particularly affect the world's poorest people. Hans-Joachim Schellnhuber, Director of the Potsdam Institute for Climate Impact Research, and Peter Höppe, Head of Munich Re's Geo Risks Research/Corporate Climate Centre, talk about climate insurance.

Interview with Professor Schnellnhuber



TOPICS

Home > Climate Change and Natural Disasters > Resilience > A global priority

Resilience

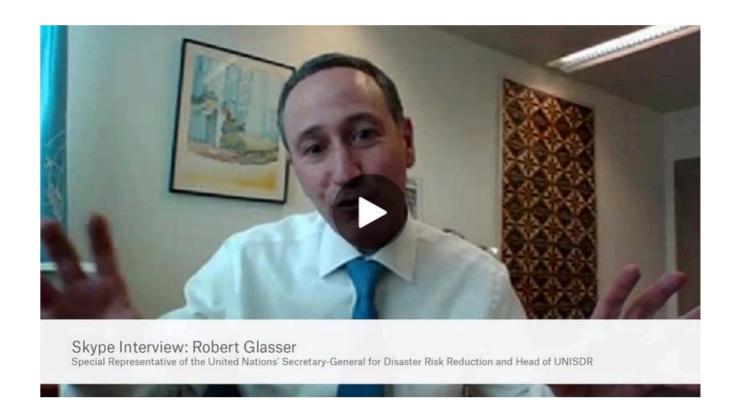
A global priority

The United Nations has made risk resilience a top priority, establishing a dedicated secretariat to facilitate the International Strategy for Disaster Reduction (ISDR) in 1999. Skype interview with Munich Re: Robert Glasser, Special Representative of the United Nations' Secretary General for Disaster Risk Reduction and Head of UNISDR.

09.03.2017

It is now about one year since you assumed your role as Head of the UNISDR. What has been your most positive experience in this position so far?

Robert Glasser: Most remarkable is the amount of progress I've seen in confronting disaster risk. I've now travelled extensively to take part in regional platform meetings with ministers, officials and heads of government. It's really striking to see how much progress has been made in some places, although not everywhere. And of course there's still a huge amount of work to do. But I am now seeing disaster risk reduction plans. I see in some cases even national constitutions being amended to incorporate disaster risk. I see improving regulatory environments and a stronger role of parliament in enacting laws and regulations. There is also huge success in elements of the disaster risk reduction agenda, particularly in such areas as early-warning systems, evacuation plans and storm shelters in countries like Bangladesh, India and Pakistan. The engagement of private-sector stakeholders is also improving.



What do you see as the major contributing factors to improving/strengthening resilience in the face of natural disasters?

One of the most critical factors adding to the threat and its unpredictability is climate change, so it follows that efforts to reduce greenhouse gases are a major contribution to resilience. I say that because everything we do to reduce disaster risk will be overwhelmed on a planet faced with ever-increasing greenhouse gas emissions. Arguably, the most urgently needed contribution is to cut down greenhouse gas emissions. Then if I look at the next level of detail, I'd say we need to ensure that disaster risk is incorporated into core economic planning. Countries have to understand disaster risk and what it's costing as well as the trends, because with climate change and other factors the past is no longer a reliable indicator of the risks you face in the future. The insurance industry has this data and is absolutely fundamental in the overall risk management programme.

How can the insurance sector and insurance-related risk transfer mechanisms support your effort to improve resilience?

Transferring risk is of course one of the most important tools countries have in managing risk. While countries need to do everything they can to reduce risk in other ways – by making sure they're not constructing hospitals in flood zones, for example – at the end of the day, once they've done all they can they should have options to transfer a portion of the risk through insurance. In some countries, however, the regulatory framework makes it difficult for insurers to assume this role. Especially in communities that are marginalised, the insurance industry is in a unique position to develop suitable products like mutuals that can reach stakeholders who tend to be particularly vulnerable and exposed to hazards. A further aspect is the fact that governments need first to fully understand risks before they can decide on measures to mitigate them and consider risk transfer. There are huge gaps in both rich and developing nations when it comes to understanding their exposure. Here, the insurance community can offer key support to countries and other stakeholders in raising awareness and laying the groundwork for risk transfer.

You've mentioned the vulnerability of poorer communities. What should be done to further increase resilience in developing and emerging countries specifically?

While all countries face the challenge of building resilience with limited resources, the gaps in developing nations are far greater. These countries are hugely disproportionately affected when disaster strikes. In our analysis, the average annual loss from natural catastrophes in low-income nations equates to over 20% of their annual social expenditure. Secondly, there are gaps in knowledge about disaster losses and generally weak tools for risk profiling and for incorporating risk into economic planning. All of these areas need attention for us to reduce disaster risk, and the insurance industry has a key role to play in every one.

Are there any flagship public-private partnership projects you think could serve as a blueprint – that could be upscaled or copied?

There are actually quite a few in this sphere. Some of them are linked to microinsurance, enabling communities to access insurance products, and working with governments and NGOs. The UNISDR has a major private-sector partnership operating both at a global level with multinationals and at the regional level with very dynamic chapters of private-sector firms, particularly in Japan and the Philippines. This alliance, called the Arise Network, is developing a series of public-private partnerships to reduce disaster risk. Activities range from incorporating risk in the curriculum of business schools, fostering a new generation of executives with an understanding of disaster risk, to working with small to medium-sized enterprises to test their resilience and preparedness regarding disasters – and everything in between. There's also a very interesting initiative we're just beginning linked to the financial sector regulators, the Bank for International Settlements and the Financial Stability Board. We've found important opportunities to incorporate disaster risk into the global regulatory environment that sets the rules for the insurance sector around the world. The challenge is to work out what the appropriate role of the public sector is, because there has to be a compelling private-sector interest as well. It has to be win-win.

The first of four priorities for action stated by your organisation for the next 15 years is "understanding disaster risk". How can insurers support you in this regard?

One of the key ways is what I've mentioned, ensuring that disaster risk is embedded in core economic planning. Working backward from there, there are a whole variety of steps, like understanding disaster loss and risk profiling. On a global level, it would be extremely useful if insurers would open up their data on risk and make it more available. I know in many cases it's proprietary information, but I think there is a compelling shared interest – on the part of insurers as well – in pooling what we know where there's a lack of open knowledge. This will enable better pricing of risks and open up markets, so more risk can be transferred.

With our nat cat database, Munich Re has a long tradition of sharing knowledge with international bodies, including the UN. Does this go in the direction you're talking about?

Yes, and we are thankful for that. I'm glad to say that others are following suit.



TOPICS

Home > Climate Change and Natural Disasters > Resilience > Resilience - Overcoming natural disasters

Resilience

Resilience - Overcoming natural disasters

Losses from natural disasters are increasing in many parts of the world. Since even the best risk management cannot actually prevent major loss events, the focus must be on managing them. The keyword here is resilience, and insurance cover against natural hazards is a major component of this.

09.03.2017

Hurricanes, floods and earthquakes – human beings are powerless to influence where Mother Nature will strike next, and with what intensity. However, the extent to which such events have a fortunate outcome or destroy people's livelihoods is by no means a matter of chance. Warning systems, safe buildings and well-coordinated aid and relief services can help ensure as many people as possible come through a loss event unscathed and recover quickly from its consequences.

Yet long-term impacts are inevitable if an extreme natural event hits people who are poorly prepared and vulnerable. Such was the case in Haiti, which still remains largely paralysed today after the destructive earthquake of early 2010. In October 2016, Haiti was hit by Hurricane Matthew, the consequences of which were many times worse because the country had not recovered from the earthquake damage. In contrast, life returned to normal long ago in Chile and New Zealand, two countries that were also hit by powerful earthquakes in late February 2010 and early 2011 respectively. It is a fact that countries with low economic strength and poorly developed social systems are particularly vulnerable.



Restoring control

Resilience refers to the ability of individuals, societies or socio-economic systems to cope with the sudden impact of crises or disasters, and to restore as quickly as possible their ability to function and their capacity to act.

The concept of resilience is relatively new in the context of disaster reduction. It is characterised by resistance and flexibility and aims at quickly returning life to normal. However, it would be a mistake to see resilience merely in terms of resistance and vulnerability. This is because the ability to respond flexibly is a precondition for quickly restoring normal conditions after a disaster. It would also be short-sighted to see resilience simply as an emergency response system, because the crucial criterion for resilient systems is that they are able to restore all key functions as quickly as possible.

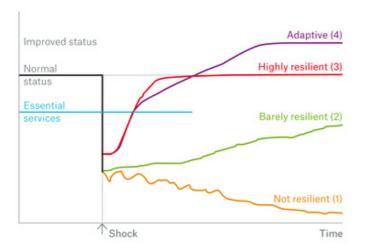


Features of resilient societies

Because accidents and crises can occur at any time and at any place, the concept of resilience can serve as a guide for disaster protection, crisis management and damage limitation.

Resilient systems must meet a range of different requirements, based on the fact that resilience covers both preparation and damage limitation, and the ability to respond appropriately following an event. Firstly, they must be properly set up to combat extreme events through appropriate measures (Prepare) to ensure that a loss does not happen in the first place (Prevent). If it happens nevertheless, the protective measures established beforehand need to work properly to minimise the consequences (Protect). The next phase (Respond) relates to the system's agility, which is dependent on prompt, well-organised and effective emergency aid. Once the acute hazard is over, the rebuilding phase can begin (Recover). At this point, it is crucial that lessons are learned to ensure the system is even better prepared for future events. So resilience is not a static condition, but rather a characteristic of systems that are adaptive, flexible and constantly evolving.

How systems with different levels of resilience respond to shocks



- (1) A society that is not resilient does not succeed in returning to its previous status after a shock. Recovery efforts fail.
- (2) A society that is barely resilient is slow to return to its previous status, and generally does so only with external aid.
- (3) In a highly resilient society, the shock is less severe (because of preventive measures), and all key functions are up and running again after a short time. The previous status is quickly restored. External aid is generally not required.
- (4) An even higher level of resilience can be achieved by eliminating weaknesses in the earlier system during the recovery phase. Because of the planning this involves, the complete recovery period may take more time.

© Source: Munich Re

How systems with different levels of resilience respond to shocks

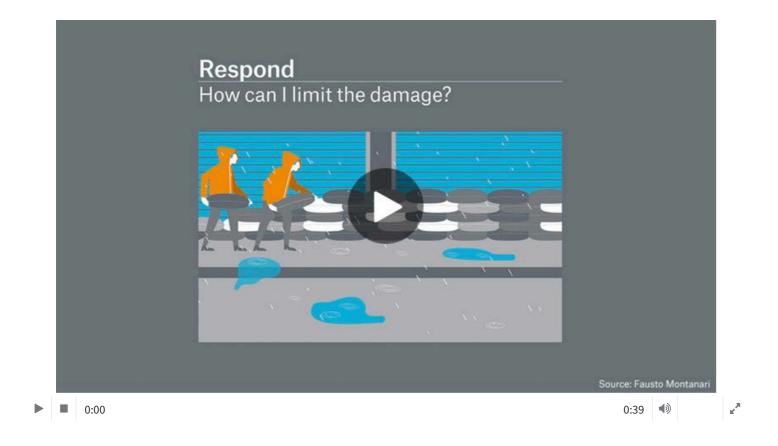


Resilience efforts in practice

More and more countries are redoubling their efforts to achieve greater resilience. The motivation is the realisation that, because of the diversity, complexity and unpredictability of modern risks, a population's safety cannot always be guaranteed. As a result, the focus of considerations is increasingly on coping with loss events. The United Kingdom, for example, has launched numerous initiatives over the last ten years to strengthen resilience. Similarly, in the USA there is a special body within the National Security Council that deals with anchoring resilience as a core element in the national prevention and action plan for crisis scenarios. At the start of 2013, with his Presidential Policy Directive 21 "Critical Infrastructure Security and Resilience", US President Barack Obama initiated a raft of measures designed to make critical infrastructure more resistant in the event of any breakdown.

The topic is also gaining importance on a global level. The UNISDR, for example, has launched a campaign entitled "How to Make Cities More Resilient". The rationale behind this is that, with the global trend to urbanisation, resilience of cities is key.

Highly vulnerable low-income countries with ineffecient public bodies and poor infrastructure frequently struggle to achieve a sustainable strengthening of resilience. The statistics send a clear message: more people die from natural disasters in such countries than in rich countries, both in absolute terms and relative to the total population. Part of the reason is that in many of the poorest parts of the world, weather extremes like floods and droughts pose a greater threat to both the lives and the economic and environmental foundations of entire communities there. Loss prevention measures and early-warning systems offer substantial improvement.

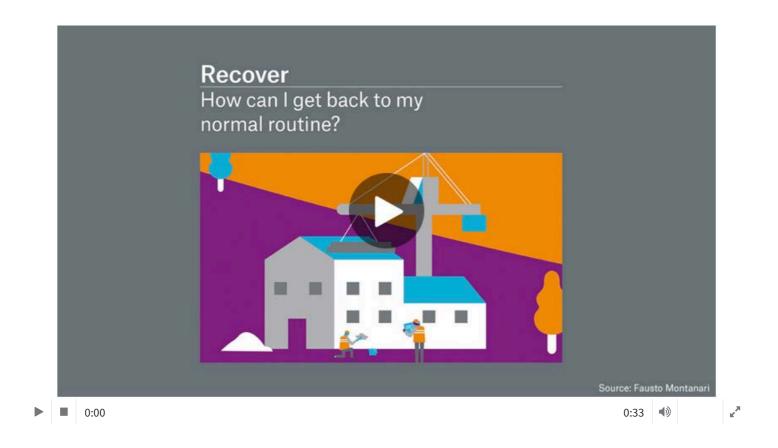


Insurance as an instrument for strengthening resilience

After a disaster, focus shifts to coping with the consequences. This includes both humanitarian aid and financing systems. Insurance is a central component in managing the economic consequences by facilitating prompt repair and reconstruction measures.

The results of scientific research show that well-functioning financial and insurance markets provide a markedly positive stimulus. One example is after the 2012 drought in the USA, when the US agricultural insurance scheme assisted many farmers with payments. Without these payments, it is highly likely that agricultural production would have been affected in 2013 as well. The system is a public-private partnership (PPP), where the private insurance industry provides its expertise to help ensure accurate risk assessments and rapid payouts. Since, alongside the government support, the farmers pay part of the premiums themselves, they also have an incentive to implement loss-minimising measures.

Generally speaking, adequate insurance protection can cushion the effects of natural disasters in two ways. Firstly, it motivates insurers to take preventive measures in order to save money on insurance premiums. Insurers allocate a price to the risk to be insured, thereby increasing the incentive to lower that price through implementing measures to minimise the risk. Secondly, payments following a disaster provide prompt financial relief, so that the reconstruction of factories, for example, can be tackled without delay. Recent studies show that if you take two countries with identical per-capita income, the country with higher insurance cover will be more resilient to natural disasters.



G7 embraces climate insurance

The realisation that insurance can make a key contribution to strengthening resilience was reflected in the negotiations to reach a global climate protection agreement. The Paris Agreement at the 2015 climate summit mentioned insurance solutions as a way to facilitate adaptation to climate change. At the G7 summit in Elmau in June 2015, the member states agreed to launch a climate insurance initiative (InsuResilience), highlighting the importance of financial risk transfer concepts, particularly for emerging and developing countries.

The objective by the year 2020 is to expand insurance coverage against weather disasters in developing and emerging countries, an initiative from which around 400 million people will benefit. This will be organised either on a macro level with insurance cover for entire countries, or on a micro level with policies for individuals. In April 2016, representatives from UN organisations, the World Bank and the insurance industry announced the establishment of the Insurance Development Forum (IDF) to support projects like this. It is planned to incorporate the insurance industry's risk expertise into government regulations to reduce risks and improve access to the insurance system for those sections of the population most in need of protection. Today, we already see pool solutions in operation in some African countries, in the Caribbean, as well as in Pacific island states.

Summary: A better understanding of the concept of resilience and subsequent recommendations for political decision-makers can help achieve a significant reduction in the loss of life and the financial, social and environmental damage resulting from natural disasters. Insurance cover against natural hazards is a key component to allow a population to get back on its feet as quickly as possible after a loss.

& Munich Re Experts



Dr.-Ing. Wolfgang Kron

is head of Research, Hydrological Hazards in Geo Risks Research and in charge of everything concerned with "water as a natural hazard".

wkron@munichre.com



CORPORATE RESPONSIBILITY

MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Migration

Home Topics Climate change



Migration: In future, will there be more climate refugees than refugees of war?

While in recent months it has been mainly war refugees who have been making their way to Europe from the Middle East, Far East and Africa, in the future the main driver of massive global migration movements will be climate change. Associated with this development are new and complex risks for local and global economies, and for all the societies affected. Munich Re always makes allowance for this development in its risk cover.

In 2015, Europe experienced its largest influx of refugees since the Second World War. Over one million people arrived in Europe in that year, most of them war refugees from Syria, Afghanistan and Iraq. According to the European Commission, upwards of another three million refugees came in 2016.

As a reinsurer, Munich Re has for many years been analysing the risks from, causes and consequences of migration movements. Alongside steadily increasing conflicts in many countries, climate change could become the main driver of future migration flows. Droughts lead to famine; flat, heavily populated coastlines are under threat from rising sea levels; and water shortages are affecting more and more regions. According to a study by the Internal Displacement Monitoring Centre (IDMC), over 20 million people have already been displaced from their homelands by climate- or weather-related events.

Migration scenarios show that there is little time left for concrete solutions

The climate-driven migration expected in our scenarios could prove an even greater challenge for the global community than the current refugee crisis. Solutions that focus on the needs of those affected therefore need to be found relatively quickly.

Migration today is mainly intracontinental. Figure 1 illustrates this. It shows that in 2015, the bulk of the international migration flows were within Asia (62 million people), followed by Europe (40 million people) and Africa (18 million people). The largest intercontinental migration flows to Europe came from Asia (20 million people) and Africa (9 million people).

Further topics

Topic: Health care Topic: Risk awareness

Interview with Robert Glasser



A global priority

Resilience



Overcoming natural disasters

Climate insurance



An opportunity for developing countries

Interview with Prof. Dr. Schellnhuber



"We have avoided the unmanageable"

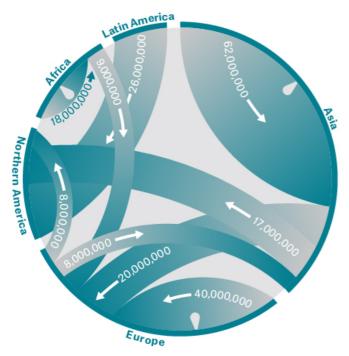


Fig. 1: Number of international migrants in 2015 classified according to region of origin and target destination

Image source: United Nations, International Migration Report 2015

Migration has both short-term and long-term effects

Munich Re is already investigating the economic, political and social impact of the growth in migration. The phenomenon produces short-term and long-term effects: In the short term, it can place a strain on the social insurance systems in the arrival or destination countries and, associated with this, lead to shortages, followed by rising prices, for example in the housing market. In the long-term, however, the social insurance systems may be relieved by the successful integration of the new arrivals, because demographic change will be reduced in the long run by the migration movement, with positive spin-offs such as increased domestic consumption and enhanced innovation capability through diversity.

According to estimates by the International Organization for Migration (IOM), there could be 200 million climate refugees worldwide by the middle of the century. The effects that this will have on the countries receiving the majority of these migrant flows are difficult to predict at present. As things stand today, these will continue to be industrialised nations and emerging markets like India. But what will be the effect on the economies of the countries that lose the majority of their population due to climate migration? The inescapable fact is that these countries will have to cope with major changes.

Sustainable approach and solutions to cushion the financial impact of climate migration

Migration is a partial aspect of an important topic that has posed a particular challenge to us as a Group for several decades: climate change. For over 40 years, we have been studying the effects of climate change in terms of both the change in weather-related natural hazards and with regard to regulatory and technical changes. In 2008, Munich Re bundled its competence and expertise in an expert unit and developed a strategic approach that comprehensively maps the topic.

In the Corporate Climate Centre, staff investigate the consequences of climate change in a Group-wide and external network. They work on developing pioneering concepts and product solutions that help to pre-empt the risks emanating from migration, and that are intended to reduce the scale of negative effects from unavoidable global challenges. One example is weather and climate insurance solutions in the agriculture, real estate and infrastructure sectors that pursue the principle of adaptation and help make the impact from climate change more manageable for emerging and developing countries.

Munich Re has been developing cover and risk solutions in this area for decades, and contributing its expertise at national and international level. You can find detailed information on this under the heading "Sustainable solutions".

GRI Content Index: G4-EC2; G4-EC8; G4-EN27











TOPICS

Home > Climate Change and Natural Disasters > Resilience >

Climate insurance - An opportunity for developing countries

Resilience

Climate insurance – An opportunity for developing countries

Low-income countries are particularly vulnerable to natural catastrophes, as few of their inhabitants can afford insurance protection. At the 2015 climate summit in Paris, insurance solutions were already adopted as one means of addressing climate risks. Climate insurance makes it possible to help developing and emerging countries adapt to climate change, by cushioning the material impacts and providing a building block for sustainable economic growth. The private sector and national governments need to cooperate in this area.

16.11.2016

The Paris Agreement contains long-term agreements not only on climate protection but also on adapting to the now unavoidable consequences (of loss) from climate change. The Agreement officially entered into force on 4 November 2016, after the threshold for ratifications by UNFCCC member states was achieved at the beginning of October. Now we need to breathe life into it. We need specific emission-reducing measures to ensure that global warming can indeed be limited to under two degrees. But implementing the Paris Agreement will not be easy, either for individuals or for industry. Implementation will require a sea change in behaviour (to reduce emissions) and may well threaten many jobs in established industries (such as coal, oil and gas). What's more, we need to significantly increase funding for research into low-carbon technologies. Even if the global community follows the path of decarbonisation (abandoning fossil fuels), the risks from weather-related natural hazards will, in all probability, continue to increase. This is because CO2 has a mean residence time in the atmosphere of approximately 100 years and contributes to global warming throughout this period. The frequency and intensity of severely damaging weather events – torrential rainfall and heatwaves in particular – have already increased in many regions over the past few decades.

Developing countries most at risk

Low-income countries are particularly vulnerable. More poor than rich lives are lost, both in absolute terms and as a percentage of population. Moreover, material losses that cannot be repaired or replaced because of insufficient funds lead to a lasting loss of prosperity. According to Munich Re's NatCatSERVICE, approximately 861,000 people lost their lives between 1980 and 2015 as a result of weather-related natural catastrophes worldwide. Of these, 61% (522,000) lived on less than US\$ 3 per day (income groups in accordance with the World Bank definition), and therefore counted among the world's poorest people. As a proportion of the world population, however, this group represented only around 12% in 2015. If you consider the next-highest income group (daily income of up to approx. US\$ 11), the rate drops considerably but still shows a disproportionately high mortality rate from weather catastrophes among low-income sections of the population. In our assessment, the reasons for this are clear. Poor access to risk information and early-warning systems, and insufficient financial resources needed to protect oneself from natural catastrophes with structural measures, for example, drive up the number of victims.

Adaptation options vary depending on the region and hazards involved, but there are two main categories:

- Ex-ante preventive measures taken ahead of a catastrophe in order to mitigate losses. These include early-warning systems, but also structural precautions and land-use regulations.
- Ex-post measures to deal with the consequences of loss, including humanitarian aid and financing schemes. These help to overcome the economic impact of a disaster and pave the way for repair and reconstruction efforts, thereby developing resilience.

Climate insurance - A crucial adaptation instrument

For the first time ever, the final document of a UN Climate Conference of the Parties (COP) mentions insurance solutions as a way to facilitate adaptation to climate change. At the G7 summit in Elmau in June 2015, the member states agreed to launch a climate insurance initiative (InsuResilience), highlighting the importance of financial risk transfer concepts, particularly for emerging and developing countries.

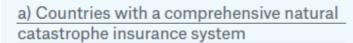
The objective of InsuResilience is to give an additional 400 million people in emerging and developing countries access to insurance by the year 2020 to protect themselves against weather-related catastrophes. This will either be organised on a macro level with insurance cover for entire countries (indirect insurance of the population), or on a micro level with insurance policies for individual persons (direct insurance of the population). Claims payments are linked to clearly defined weather parameters such as levels of rainfall or wind speed.

Such products are known as parametric or trigger-based covers. In this way, people can insure themselves against drought, windstorm or heavy rainfall, each of which is recorded using objective measurement methods. This mechanism makes terms and conditions transparent, reduces the administrative cost of calculating claims amounts, and thus enables payouts to be made promptly. It should be remembered, however, that besides the above-mentioned advantages of parametric triggers, there is also a basis risk to be taken into account (occurrence of a loss before the defined trigger level has been reached).

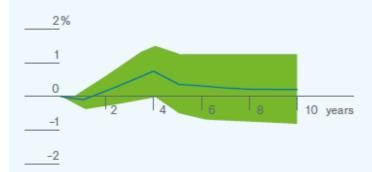
However, the simplicity of the payout principle on a parametric basis means that micro and macro solutions already exist in a number of developing countries and, in line with the G7 declaration, should be further built upon. If structured well, insurance solutions not only create incentives to take preventive measures (by way of knowledge transfer and/or deductibles), but also represent an effective tool to finance claims burdens. If the public and private sectors are to overcome the immense financial impact of such disasters, it is imperative to soften their long-term impact on the economy. To this end, the introduction of climate insurance solutions promotes the construction of robust social and economic structures, thereby developing resilience.

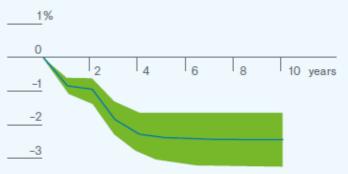
Cumulative development of a country's gross domestic product following a major loss

In the years following a natural catastrophe, GDP deviates from the trend it would have taken without the event. It can be clearly seen that the performance of countries with a comprehensive insurance system is much better, and that the duration of the slump is much shorter. The diagrams show the development of GDP with and without insurance.









Source: Munich Re, based on von Peter et al., Bank for International Settlements, 2012 (schematic presentation)

Public-private partnerships are required

If the G7 target is to be attained, the affected countries will have to adopt the necessary regulatory measures and participate financially in the project. The additional provision of international aid or ramp-up support from climate funds, such as the Green Climate Fund (GCF), also constitutes a promising solution. This is the only way to develop lasting (i.e. sustainably financed) insurance schemes in developing countries and emerging markets that enable people to better adapt to the new risks resulting from climate change. Climate insurance solutions could become a textbook example for cooperation between the public and private sectors. The roles of the individual cooperation partners are clearly defined based on the competences and resources of each:

- The public sector defines the legal and regulatory framework and the socio-political aims. The
 establishment of weather databases, the development of publicly accessible risk information systems,
 and knowledge building among the population can also be supported at both national and international
 levels.
- The insurance industry is responsible for the development and implementation of climate insurance solutions. To this end, it provides expertise, risk models, best practices from other countries and, most importantly, risk capital. Risk-commensurate premiums need to be charged for the mechanism to function in a lasting and stable manner. Only then will pricing adequately reflect the risk potential and create an incentive for people to take measures that reduce the risk.

In the past, diverging views between the private and public sectors often presented insurmountable obstacles in the realm of risk financing that made it impossible to develop insurance schemes in less developed countries. But there is a growing awareness that it is precisely these countries that have the most urgent need to adapt to the consequences of climate change.

Energy issues

The topic of energy is closely linked to both climate objectives and development policy goals. It is for this reason that the UN brought into being the Sustainable Energy for All (SE4All) initiative. The General Assembly has declared 2014–2024 the "Decade of Sustainable Energy for All", setting out the following goals to be achieved by 2030:

- Ensure universal access to modern energy services
- Double the global rate of improvement in energy efficiency (the ratio of GDP to energy use)
- Double the share of renewable energy in the global energy mix

According to estimates by the World Bank, annual investment in the energy sector of between US\$ 600bn and US\$ 800bn will be required to develop the low-carbon energy technologies needed. More recent figures from the International Energy Agency (IEA) are even higher. Such amounts pose a formidable challenge. However, if we consider how the annual global inflow of capital into technologies for renewable energies increased fivefold between 2004 and 2015 to US\$ 330bn, the target seems feasible. Here too, the insurance industry can make a valuable contribution by safeguarding project risks and thus making energy projects more attractive to investors. Many of these risk-transfer solutions are special products requiring particular expertise. It is up to the political leaders, as with the insurance solutions for adaptation to climate change, to give clear signals and support the energy policy objectives with concrete initiatives. The aim should be to achieve additional cost efficiency through public-private partnerships and standardisation on the financing and risk-transfer side. The insurance industry can also play a major part by itself investing in energy projects. International climate policy has opened a window of opportunity for a fresh approach. With its geoscientific and underwriting expertise, loss data from its NatCatSERVICE database, and by providing risk capital, Munich Re supports the development of insurance systems in the areas of climate change and natural catastrophes.

& Munich Re Experts



Ernst Rauch
is Head of the Corporate Climate Centre in Geo Risks Research.
erauch@munichre.com



TOPICS

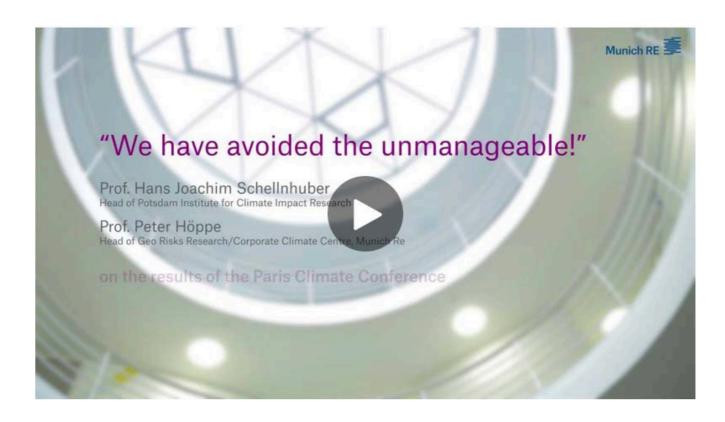
Home > Climate Change and Natural Disasters > Climate Change > Schellnhuber-Höppe

Climate Change

"We have avoided the unmanageable"

Not long after the Climate Summit in Paris, Hans Joachim Schellnhuber, Director of the Potsdam Institute for Climate Impact Research, and Peter Höppe, Head of Munich Re's Geo Risks Research/Corporate Climate Centre, met to discuss the results.

02.03.2016



"We have avoided the unmanageable!"

Hans Joachim Schellnhuber, Director of the Potsdam Institute for Climate Impact Research, and Peter Höppe, Head of Geo Risks Research/Corporate Climate Center at Munich Re.

Peter Höppe: You participated in many events at the Climate Summit in Paris. What is your overall assessment of its outcome?

Hans Joachim Schellnhuber: In a nutshell, the spirit of Paris has defeated the ghost of Copenhagen. But we still need to do a lot and we can achieve a lot.

PH: I was surprised that the 195 countries would even agree to tighten the two-degree limit, let alone put "well below two degrees" in the agreement. How will we now have to shape regulations to achieve this?

HJS: In a way, the politicians got slightly carried away by their love of the climate, but I'm saying this with a smile. It is entirely appropriate to try to land Planet Earth somewhere between 1.5 and two degrees. However, I'm only tolerably pleased with the plan to come to zero net CO2 emissions by 2070 to 2080. Because when you really convert the Paris Agreement into scenarios for emissions, you come to the robust conclusion that you already have to phase out CO2 emissions between 2050 and 2070. That is the crux of the matter.

PH: Apart from mitigation, adapting to the unavoidable consequences of climate change takes up a lot of space in the Paris Agreement. The US\$ 100bn to support developing countries have been confirmed again, which is very important. But what else is necessary to become more resilient against the effects of climate change?

HJS: In my view, the key phrase is capacity-building. It's not just about money. Recently, I went to Cameroon, where they told me: "When the British left the country in the 1960s, we had 49 meteorological stations. Now we have just three left at the big airports." So we need capacity-building, which enables the countries to absorb the money, the help and the expertise. In countries like those in sub-Saharan Africa this is absolutely key.

PH: In Article 8 of the Paris Agreement, insurance is mentioned as a potential solution in the framework of climate change adaptation. In your new book, Self-Combustion, you use data from Munich Re's NatCatSERVICE database, showing the trends of natural disasters and the losses they have caused. What role do you see for insurance now, after Paris, in terms of adaptation?

HJS: If we are moving into a new regime of extreme events – and a world two degrees warmer will be a new regime – and if we want to provide the most vulnerable people with a shock-absorbing system, then that can only be done with insurance. The problem is that those people who are most vulnerable will not be able to afford the premiums, so it has to be set up as a global system of solidarity. I wonder whether we could take a more detailed look at who is really affected by extreme events. Can we show from data that the poor are hit hardest?

PH: Yes, we can. We have broken down our data in the NatCatSERVICE database into different income groups. So we have the very poor countries, the middle-income countries and the rich ones. Here we can clearly see that the poorest people are affected most, especially if you relate losses to the GDP of the country, to what they have, to what they can afford.

HJS: In terms of income?

PH: Right. The rich countries can afford disasters. They have insurance, they have quick access to money to stabilise or even boost their economy. But the poor countries fall into a poverty trap if there is nothing available – like insurance – which can help them get back into business. The other reason why poor countries are more affected by climate change is that most of them are situated in extreme climate zones. Being aware of that, we established the Munich Climate Insurance Initiative about ten years ago. And just before Paris, we saw that the G7 countries – parallel to the climate negotiation process – have decided to initiate a large project on climate risk insurance. Do you see this as a valuable contribution to the whole negotiation process?

78

HJS: I am really enthusiastic about it actually. And I am so glad it happened just before Paris. It sent the right signal. But let me also refer to something else that we may have to consider: if you talk about adaptation as a global strategy, then I guess the most important adaptation of all is migration. But not everyone has the means to migrate. A lot of people are trapped in risk zones – they have no money, not even information. But I guess if we have two degrees warming, we will have to move people around the planet.

PH: Especially from the small island states.

HJS: The Maldives are doomed, even with well below two degrees, let's face it. But also other people in other regions are affected by changes in weather patterns or precipitation. So yes, if we want to provide support for people, if we want to absorb shocks, we might have to think about new forms of insurance to make people more mobile, even if this might be going beyond the classic format of insurance.

PH: Munich Re is certainly one of the first movers in this respect. We have provided data on losses and shown that weather-related loss events have already changed, thus creating an awareness of the problem. We are providing new solutions, microinsurance for example. But is there anything else that you would expect in the coming years from the insurance industry?

HJS: First of all, let me re-emphasise that you are a double hero in this game, so to speak. You have indeed provided some of the best data in the world on the development of extreme events and losses, and everyone looks at the tables and charts compiled by Munich Re. You have the climate change unit, and you were among the first to consider new formats and schemes for insuring those who have no chance to be insured under normal conditions. But I think you would complete your mission if you would also think about how to divest from fossil business. You increase your own risks because, in the end, you fund the creation of tropical storms, and that doesn't make sense.

PH: That's a point that certainly needs to be looked at. And what about climate research? You have built up one of the most renowned climate impact research institutes in the world. Do you see, after Paris, any necessary changes in the fields of your research?

HJS: Paris is also very good news for climate impact research. I have been in extremely unpleasant situations talking about futures of the planet which are not researchable any more. What can you do with climate impact research when you talk about catastrophic situations? However, we can conduct a very solid impact analysis if we are able to keep global warming well below two degrees, even if this is already quite a departure from the world as we know it. We have avoided the unmanageable now. Or we will at least get a chance to avoid the unmanageable. Now let's manage the unavoidable.



MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Topics Health care





Further topics

Topic: Climate change Topic: Risk awareness

External links

DKV Seguros DKV Integralia (Spanish)

Health - Sustainable strategies for the health market

The global health market is expanding, while at the same time lifestyle diseases are on the rise. With its focus on risk carrying and risk management, Munich Re provides its clients with individual, sustainable primary insurance and reinsurance solutions.

EIGHT BILLION LIVES

The Eight Billion Lives programme: Business ideas for a better world

Together with Impact Hub Munich, Munich Re has organised an accelerator programme for social entrepreneurs. Here, it was important to Munich Re to not only provide the Eight Billion Lives Fellowship with financial support, but also pass on the expertise of Munich Re staff members to the start-ups. The objective was to find solutions to the challenges of the growing global population.

Fellowship programme



Everyday life and work for wheelchair users

An accessible call centre in which customer service is provided by people with disabilities – that's how the DKV Integralia Foundation works. Its success is evident from the growing number of employees, the good economic result and its own training facility.

Integralia healthcare



Rare diseases are more calculable today for insurers

More and more people are affected by rare diseases – altogether 7% of the world's population. Insurance medicine is continually evolving in order to offer insurance solutions for sufferers. In its Medical Centre of Competence, Munich Re is working to systematically improve efficiency when it comes to rare medical conditions and underwriting.

Rare diseases



DKV Prize for Medicine and Solidarity 2016

DKV Seguros has been awarding a prize for medicine and solidarity each year since 2014. It thus recognises individuals and healthcare organisations who have given outstanding service in the area of voluntary work and novel healthcare projects, for example.

Award winners



The doctor is online

Munich Re's "Digital Doctor" app helps end-customers and primary insurers. It asks about symptoms, determines health data and provides medical advice from a specialist – by phone, through chat or live video.

The Doctor is online













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Topics Health care Fellowship 8 Billion Lives

EIGHT BILLION LIVES

LLION IVES

Everyday life and work for wheelchair users

Rare diseases

Further topics

Topic: Climate change Topic: Risk awareness



Rare diseases are more calculable today for insurers

Award winners



DKV Prize for Medicine and Solidarity 2016

The "Digital Doctor" app



The doctor is online

Externe Links

ImpactHub 8 Billion lives hawadawa Grow good farms Useley Querfeld

The Eight Billion Lives programme: Business ideas for a better world

A one-year programme offered by Munich Re and Impact Hub Munich gave a number of social start-ups the chance to come up with solutions to challenges posed by the growing global population. Munich Re employees were also involved as mentors. By the end of the programme, four young social entrepreneurs had developed their ideas into marketable business models.

By 2025, eight billion people will be living on Earth. This growth in the world's population presents enormous challenges. In the Eight Billion Lives fellowship programme jointly designed by Munich Re and Impact Hub Munich, social business ideas were developed addressing this issue. The aim of the programme was to find ways to make the world better and more resilient for the future, with particular focus on the areas of urbanisation, food production and consumption, and the opportunities presented by digitalisation.

A two-phase qualification programme

The fellowship programme started with an application phase lasting several weeks, from which 15 start-ups qualified. These start-ups then presented their business ideas to a distinguished jury, including employees from Munich Re. The jurors selected eight teams, who then moved on to the first phase – the so-called cohort phase. In the following three months, the young social entrepreneurs worked intensively on their business ideas. They made regular use of the working space at Impact Hub Munich, where they benefited from both the creative environment and the support and coaching they received.

At the end of the cohort phase, the start-ups again had to convince an independent jury and put their further-developed business models to the test. The four teams with the greatest chances of success were selected to go through to the nine-month incubation phase. It was at this point that they officially became fellows. During this period, each team was assisted by a Munich Re staff member who, as mentor, regularly supported the fellows both on a professional and personal level. Where required, the start-ups were also able to call on the support of additional Munich Re experts.

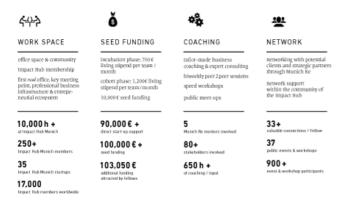
Hawa Dawa - Digital healthcare

One of the four teams of entrepreneurs selected was Hawa Dawa. This company aims to raise people's awareness of air pollution – a global problem which, according to the World Health Organization, causes seven million deaths each year. The highly motivated young entrepreneurs developed a technology for reliably measuring air quality in real time. Portable and stationary devices use sensors to record data and software to transfer them on to a digital map. The Hawa Dawa network now includes Munich, Valencia, La Paz, Cairo and New Delhi.

With its idea, Hawa Dawa aims to help citizens, organisations and urban planners to identify and systematically evaluate air pollution. This is the basis for developing targeted measures to improve air quality. Such analyses can also help vulnerable groups such as asthmatics, pregnant women and the elderly to organise their outdoor activities accordingly. This preventive approach to modern healthcare is already reflected in the start-up's name: in Hindi, Arabic and various other languages, Hawa Dawa means "air medicine".

01 02 03 04 05 06 07 08 09

SUPPORT & OUTCOME



EIGHT BILLION LIVES



Profiles of the start-ups and the Eight Billion Lives programme

Impact Hub - a network for social entrepreneurs

In the Eight Billion Lives fellowship programme, Impact Hub Munich not only provided the actual location where work was carried out but also offered the fellows access to a lively community and individual support in developing their business. This forms part of the global Impact Hub Network, with over 16,000 members at over 100 locations in more than 80 countries, consisting of entrepreneurs for whom sustainable management and social change go hand in hand.

The Impact Hub also organised a series of public events. The aim of these meetings was to make the start-ups' ideas more accessible to a wider audience. The topics included, for example, the "Internet of Things" and "poverty reduction". The events promoted direct dialogue between social enterprises and representatives of business, politics, science and the public sector, as well as members of the public and residents of Munich who are actively involved in social innovation.

Knowledge transfer in all directions

From the very beginning of the programme, it was important for Munich Re to focus not only on financial support for the start-ups, such as maintenance grants and start-up capital. It was more about Munich Re passing on its expertise to the fellows in order to promote their business models. At the same time, Munich Re staff benefited from the new forms of cooperation and inspiration from the world of start-ups. Both sides were able to discover new working environments and make use of the synergies.

Mentors and experts from Munich Re supported the teams in bilateral meetings and workshops. Every two weeks, the entrepreneurs dragged themselves away from their work of developing their products to meet up with their mentors from Munich Re. There they discussed their progress and any obstacles they had faced and get the mentors' advice on how to tackle these problems. Together with the mentors, they found solutions to structural issues and fine-tuned their business models. The young entrepreneurs worked hard and gratefully took on board valuable advice on issues such as strategic focus, even if that meant having to say goodbye to many a cherished idea for the sake of clarity and feasibility.

From idea to marketable business model

At the end of the programme, all four teams promoted in the incubation phase of the Eight Billion Lives fellowship acquired their first clients, entered into partnerships and took on staff. The fellows agreed that the exchange of ideas with Munich Re staff was an essential factor in the success of their further development, without which many important steps in the process would not have been possible.

Michael Menhart, Head of Economics, Sustainability & Public Affairs, is delighted with the fellowship programme's results: "The mentors have contributed a remarkable 500 hours of their time to these joint ventures. I am fully convinced that this investment has been worth it: Not only have we helped the social start-ups to develop their ideas so positively, but the mentors have also benefited from exchanging ideas with the young entrepreneurs."













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Topics Health care Integralia: Everyday life and work for wheelchair users



Integralia: Everyday life and work for wheelchair users

For over 15 years, DKV Seguros funds a foundation that provides employment for severely handicapped people. Its CEO, Josep Santacreu, played a leading role in establishing Integralia.



Customers ringing their health insurer, DKV Seguros, in Spain are answered by a friendly and competent staff member in a call centre. But many callers are unaware that the person they are talking to is sitting at his or her computer in a wheelchair. As well, it is quite possible that these staff members are operating the keyboard with the help of a pointing device attached to their hands with a elastic strap. Because the Integralia call centre only employs people with disabilities.

The company was founded back in 1999 at a time when DKV Seguros wanted to improve its customer service, and was looking to launch a social sector project at the same time. CEO Josep Santacreu recalls that it was meant to be something with power enough to develop the spirit of the company. Very soon the idea was born of merging the two projects, and that was what started off Integralia – as a foundation and a non-profit organisation. The call centre in El Prat de Llobregat near Barcelona was modified for disabled access (everything is a little wider than in standard workplaces) to ensure that staff in wheelchairs can move around more easily. And of course, there are also slopes and ramps instead of steps.

Original team of nine now 400

Integralia started off with just nine employees. Today, 400 staff assist the insurance company's customers and other contracting authorities, such as hospitals and the Spanish Interior Ministry. Their work is expected to be of a very high standard: "Our customers expect a high level of service," says Santacreu. Thorough and patient training is therefore essential, along with psychological support – since the team also includes people who are confined to wheelchairs following traffic accidents. One of the aims of the foundation is to support and encourage such people: "We want to offer employees a meaningful life, not just a workplace." That includes having an everyday routine, maintaining friendships, and starting a family. "And the best way to do that is to make the most of your own potential."

The success of the foundation's concept is reflected in more ways than just the increasing number of staff. Integralia is growing year by year, and has made a profit from day one, even during the financial crisis. Santacreu puts that down to the staff themselves: "What sets them apart is their exceptional commitment and motivation." In comparison with other call centres, Integralia has a lower sickness rate, a higher standard of service, and lower staff fluctuation.

A major success thanks to training

The foundation has also established a training facility called "Integralia School", where severely handicapped people can take specialised courses in the fields of banking, insurance and telecommunications. With the qualification they attain at the end of their course, participants can then apply for jobs on the regular labour market.

Further topics

Topic: Climate change Topic: Risk awareness

Fellowship programme

EIGHT BILLION LIVES

The Eight Billion Lives programme: Business ideas for a better world

Rare diseases



Rare diseases are more calculable today for insurers

Award winners



DKV Prize for Medicine and Solidarity 2016

The "Digital Doctor" app



The doctor is online

External links

DKV Seguros (Spanisch) DKV Integralia (Spanisch) A total of 76 graduates from the school found jobs in this way in 2014. A further training programme gives participants a qualification in the management and operation of call centres. And Santacreu believes the project is far from having achieved its full potential. As well as the call centre in Barcelona, there are now offices in four other Spanish cities: Madrid, Denia, Badajoz and Jerez. In Poland, Integralia has helped ERGO Hestia establish a call centre based on the original Spanish model and there are now further examples in Peru, Colombia and India. "Integralia is the best thing we have ever done," says Santacreu. And he is right...













MUNICH RE		STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE			
Home	Topics	Health care	Rare diseases						
								Further topics	



Rare diseases

Just two decades ago, patients with cystic fibrosis – one of the most well-known rare diseases – rarely survived to adulthood. Yet nowadays, a child suffering from cystic fibrosis has a good chance of living to the age of 50. Why rare diseases are more calculable today for insurers.

The life insurance application submitted by a 35-year-old Australian woman looked certain to ruin the day of the insurance technician. In the questionnaire, the woman had stated that she suffered from Lynch syndrome. The problem with Lynch syndrome is that it falls into the category of what are termed "rare diseases". These are diseases that affect a maximum of one in 2,000 people. So how was the insurance employee to carry out the required risk assessment? There is not a single study worldwide that assesses life expectancy for patients with Lynch syndrome. In view of the indeterminable risk, would a direct insurer not be better off turning down the policy?

That would certainly have been the less acceptable solution. Declining a potential contractual partner simply because there is not enough knowledge about their illness does not cast insurance or the industry in general in a very positive light. After all, advances in clinical medicine have an impact on insurance medicine. In the 1960s, pacemakers were categorised as an "experimental risk", yet today patients with pacemakers are insured without any risk loading, provided there are no other risk factors involved. In addition to which, the insurance company would be losing out on a potential market share because rare diseases, as paradoxical as it may sound, are on the rise. Experts currently number around 6,000 diseases in the category, and the figure will probably rise to 8,000 before too long. Already today, 7% of the world's population is affected – in Europe, this corresponds to 30 million people with around 4 million sufferers in Germany alone. And the figures are expected to increase. According to estimates, as many as 10% of prospective policyholders will present with a rare disease in the year 2020. What are the reasons for this increase?

The history of medicine: Identifying and diagnosing diseases

In actual fact, it is medical advances themselves that are leading to the growing number of cases. Whether a patient is ill or not depends on the symptoms. But how a disease is identified is a question of diagnosis. And the options for diagnosis have steadily multiplied over the course of medical history. Back in 1530, Theophrastus Bombastus von Hohenheim, better known as Paracelsus, viewed disease in a philosophical light, because "the eyes of the physician are unable to penetrate the skin". However, today there are countless diagnostic methods available to doctors that allow them to do just that — and much more besides.

An initial endeavour to systematically record diseases can be found in the "London Bills of Mortality", which was the death list compiled in the plague year of 1665. The cause of death, however, was often given simply as "fever" — or even "teeth". And right up to the 19th century, irregular mixtures of humours (bodily fluids), or poisonous vapours known as miasmas, were seen as the cause of diseases. One of the first people to counter this romanticised belief was pathologist Jakob Henle in his "Handbook of rational pathology" from 1846 onwards. But it was not until many years later that his teaching on contagiousness, the principal pathogen, was confirmed by the ground-breaking findings of leading physicians like Rudolf Virchow (Theorie der Zellularpathologie, Theory of cellular pathology — 1858) and Robert Koch (Entdeckung des Milzbranderregers, Discovery of the anthrax pathogen — 1876). More and more diseases could now be precisely defined, their courses were more predictable and, in many cases, they were often open to treatment as a result.

A rare disease suffered by just one person in the world

Today, we speak about precision diagnosis, with which even unusual subtypes of common diseases like diabetes can be identified and systematically treated. Whereas doctors in the past puzzled about the different bodily fluids (humours), such as "yellow and black bile", physicians can now diagnose something as unusual as ribose-5-phosphate isomerase deficiency – a disease for which there has so far been just one patient worldwide!

The Berlin Centre for Rare Diseases (Berliner Centrum für Seltene Erkrankungen – BCSE) was established at the Charité Hospital in Berlin in 2011 to provide treatment options even for extreme cases. The centre's experts collate experience from different hospitals, assess it and then develop healthcare structures. Patients with rare diseases should thus be able to find the right contacts for diagnosis and treatment. Research on the individual disease patterns is also bundled here, which means that an increasing number of specific forms of treatment can be offered. Since 2013, the centre has been assisted by the Nationale Aktionsplan für Menschen mit Seltenen

Topic: Climate change Topic: Risk awareness

Fellowship programme

EIGHT BILLION LIVES

The Eight Billion Lives programme: Business ideas for a better world

Integralia healthcare



Everyday life and work for wheelchair users

Award winners



DKV Prize for Medicine and Solidarity 2016

The "Digital Doctor" app



The doctor is online

External links

Berliner Centrum für Seltene Erkrankungen

Erkrankungen (National action plan for people with rare diseases). Project funding amounting to up to €27m aims to improve national and European research partnerships by 2018. The Zentrale Informationsportal Seltene Erkrankungen (Central information portal on rare diseases – ZIPSE) serves as a source of information for sufferers

The Gate - Munich Re's internal platform

Its expertise is also used by Munich Re's specialists at the Group's centre of medical competence in Munich. They apply the available medical, biological and underwriting expertise to represent the insurance risks in model form, even where there is only a very sparse pool of data. In contrast to a clinical physician, they face the difficulty that they are unable to observe the course of the disease in the patient, yet they must make a decision about the future course of the disease. The decision they reach will have irreversible financial repercussions over the entire duration of the insurance contract. For this reason, in addition to the question of whether an insurance application should be accepted or declined, a limitation to the term must also be considered.

The centre of competence's findings are available on the internal knowledge platform The Gate: "Get access to medical expertise". It collates in anonymised form the different individual medical histories, the results of relevant examinations, the decisions made on a case-by-case basis, and all the data and calculation models applied for the decisions. The information on the 35-year-old patient with Lynch syndrome was also incorporated into this database. Despite her illness, would it still be possible to acquiesce to the applicant's wish to take out a life insurance policy?

A positive result for both the patient and the insurer

Since no studies were available, a workaround needed to be found. Despite the fact that the mortality rate could not be determined for Lynch syndrome directly, the probability of contracting certain types of cancer, such as intestinal cancer, could be calculated. And there are mortality tables for this with a high level of forecasting reliability. It was possible to calculate the risk for the life insurance policy using a combination of these results and a model of the probability calculation. Ultimately, the recommendation given was to insure the patient with a moderate loading despite her rare disease. It was a good result, both for the woman concerned and the Australian insurer.











SERVICE



STRATEGY

MUNICH RE

CORPORATE RESPONSIBILITY

Home Topics Health care Award winners

Topics Health care Award winners

TOPICS

KEY FIGURES

Further topics

Topic: Climate change Topic: Risk awareness

Fellowship programme

EIGHT BILLION LIVES

The Eight Billion Lives programme: Business ideas for a better world

Integralia healthcare



Everyday life and work for wheelchair users

Rare diseases



Rare diseases are more calculable today for insurers

The "Digital Doctor" app



The doctor is online

DKV award for medicine and solidarity 2016

RESPONSIBILITY

DKV Seguros has for the third time presented its awards for organisations and individuals in the healthcare sector. The award winners each received €10,000.

The Award for Medicine and Solidarity went to the Ulls del Món (eyes of the world) foundation. The organisation builds structures to provide medical treatment for people with eye diseases in developing countries and, among its other activities, offers advanced training for local ophthalmologists. Ulls del Món has a network of 800 volunteers from Spain and Portugal. They include ophthalmologists, OP staff, opticians, technical staff and other specialists.

The DKV Seguros employee award was given to the Nens Hospital. This teaching hospital of the foundation Hospital de Niños de Barcelona (Barcelona Children's Hospital) has specialised in treating children from socially deprived families. A further area of focus is on preventive medicine.

The Achievement Award was given to AFANIC (Asociación de Familiares y Amigos de Ninos con Cáncer), an institute in Bolivia, which has been supporting children with cancer and their families for over fifteen years.

And Israel Moliner, President, accepted the City of Barcelona award worth €5,000 on behalf of the Obertament foundation. Obertament campaigns for the integration of people with mental health issues.

DKV Seguros has been presenting the Award for Medicine and Solidarity since 2014. The objective is to recognise and promote voluntary work by individuals and initiatives in the fields of medicine, health and well-being. The panel selects new types of health projects in Spain and abroad that establish trends, contribute to research, and/or develop treatment or therapies for fringe groups. With its Employee Award, DKV recognises the performance and commitment of a medical specialist. The Achievement Award honours the entire work of an individual or organisation from the healthcare sector.

The City of Barcelona award acknowledges the work of a local organisation and is financed by a public donation campaign. DKV Seguros tops up the award to the sum of €5,000.













Home > Health > The doctor is online

Health

The doctor is online

Munich Re has developed the "Digital Doctor" app – an intelligent digital service for primary insurers, and a further component in its integrated Health Ecosystem.

Bloodshot burning eyes, itching and increased lacrimation. Eye symptoms can have various causes, such as irritation, overexertion, allergies or even bacterial or viral inflammation, and the treatment is different for each. How do you go about getting to the bottom of a troublesome problem quickly, pragmatically and easily?

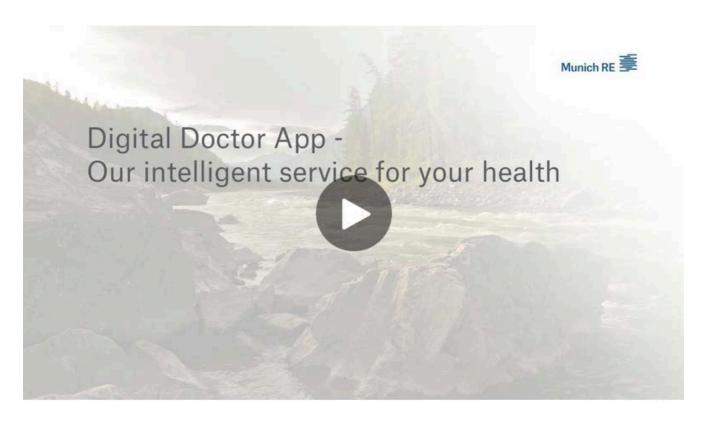
Munich Re has a convincing digital answer to that question: the Digital Doctor app. Its intelligent questionnaire based on algorithms asks for details of the user's symptoms and, if appropriate, their vital data to form a picture of their condition. After considering the data provided, a doctor provides medical advice directly by telephone, live video or chat. Other medical documents can be attached to support the assessment (medical examination reports, laboratory test results, x-rays, etc.). If necessary, the customer will then be referred to a specialist from the insurer's pool of doctors.

The Digital Doctor app is currently being offered to around 5,000 pilot customers. For now, the algorithm results constitute a recommendation that cannot replace a consultation with a doctor. Hence, the next step is the CE-certification of the app as a medical product.

Online doctors app: Win-win for everyone

The app provides the insurer with a continuously updatable mobile customer-service tool that it can use to intensify its contact with the insured. In addition, the information on user behaviour produced by the app generates health data that enables insurers and reinsurers to model the risks more accurately. Another – long-term – advantage is that the app has the potential to reduce costs, because both unnecessary doctor's visits and expensive appointments can be avoided.

And most of all, with its global 24/7 service, the app meets the most important needs of insurance customers: the rapid clarification of symptoms and a straight-forward referral to a specialist, for which people may otherwise often face a long wait.



The feedback from app users has been very positive. It shows that the Digital Doctor is making possible a new type of relationship to the insured. Its key aspect is our customers' desire to have a friendly, seamless connection to their health insurer.

Munich Re as healthcare manager

The role of the insurer is constantly changing. Modern technology is affecting the sector; customers are demanding better scope and quality from their services. Munich Re deeply understands these developments, and is therefore offering closely interwoven, digital health solutions that span from classical medical components through to lifestyle elements such as nutritional advice. In short, Munich Re is providing an integrated Health Ecosystem, in which it acts as a digital healthcare manager for primary insurers and customers.

"With innovative services such as the Digital Doctor app, which can be used equally well in both primary insurance and reinsurance, we are creating an integrated Health Ecosystem. We feel that much more is at stake than payments when an insured event occurs. That is why we are creating an intelligent network of digital solutions instead, which actively

promotes our customers' health and lifestyle, and improves the insurers' risk and cost management."

Christoph Wittmann Head of Health Development





Sabine Fischer

Head of Health Products & Innovation
safischer@munichre.com



Christoph Wittmann
Head of Health Development
chrwittmann@munichre.com



Bernd Eisemann
Project Manager
beisemann@munichre.com



MUNICH RE STRATEGY RESPONSIBILITY TOPICS **KEY FIGURES** SERVICE

Home Topics

Risk awareness



Further Topics

Topic: Climate change Topic: Health care

External links

GeoHazards International

Risk awareness - A pilot development-aid project with good prospects

The number of victims and amount of damage can be significantly reduced with the help of intelligent prevention measures. Munich Re supports disaster reduction projects around the world.



City Innovation Platform for African Infrastructure Risk and Resilience

In October 2016, investors, insurers, municipal authorities and politicians came together for a pilot project with the de facto Tanzanian capital, Dar es Salaam. The aim was to cultivate ideas for more sustainable urban development and better risk management of infrastructure measures

City Innovation Platform



A pilot development-aid project with good prospects

In the Indian city of Aizawl, Munich Re and the NGO GeoHazards International are working together on earthquake and landslide risk protection. Training courses and practical exercises are used to raise the awareness of risks and disaster prevention among the inhabitants of this earthquake-prone region.

Pilot development-aid project



Preventive measures can make the difference between life and death

Earthquakes and their secondary effects such as landslides, fire or tsunamis, are difficult to avoid. Intelligent prevention measures can significantly reduce the number of victims and the amount of damage caused.

Living with risk



Partnerships between states, international organisations and the insurance industry contribute to protecting against losses due to natural disasters. As a risk carrier, Munich Re is involved in setting up international risk pools.

Munich Re participates in risk pools













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Topics Risk awareness City Innovation Platform



City Innovation Platform for African Infrastructure Risk and Resilience

Munich Re has been involved in the City Innovation Platform for African Infrastructure Risk and Resilience (CIP AIRR) Initiative since 2016. Together with partners from the insurance sector, the company supports sustainable urban development in Africa. In dialogue with city representatives, the initiative looks at how public infrastructure projects can be planned and implemented in a more sustainable way, and what contribution insurers can make.

In emerging and developing countries especially, adequate sustainable development of the type of infrastructure needed to promote economic and social development is often lacking. In fast-growing cities in particular, urban development often cannot keep up with population growth. Climate change intensifies and accelerates problems and can even bring a completely new set of challenges. Yet there are very few cases where investors and insurers are involved in the early stages of the planning and decision-making processes. After all, knowledge of the risks and how they can be avoided and minimised is essential for sustainable infrastructure developments, and financing can only be achieved with the help of professional risk management.

Financial and insurance markets as stabilisers of society

Scientific research shows that effective financial and insurance markets provide positive impetus and stability following natural catastrophes, thereby enabling the consequences of disasters to be dealt with more quickly. In emerging and developing countries, however, most of the losses caused by such events are not insured.

This is where the CIP AIRR Initiative comes in: together with its partners, it aims to offer advice, propose solutions and, above all, raise political leaders' awareness of the insurance industry's supporting role. Together with the South African insurer Santam, the Principles for Sustainable Insurance Initiative and ICLEI, a network for sustainable development at municipal level, and other partners like UCT's African Centre for Cities, Marsh Risk Consultancy, Sanlam Africa Investments, Global Infrastructure Basel (GIB) and ClimateWise, Munich Re has developed a concept for a dialogue platform with cities.

The goal: cities and municipalities will be enabled to plan and implement infrastructure measures proactively, so that they can better withstand natural disasters and other negative impacts.

A pilot project with potential

In October 2016, investors, insurers, municipal authorities, project developers, engineers and politicians were brought together in a pilot project with the Tanzanian capital city, Dar es Salaam. The participants developed ideas for more sustainable project planning and better risk management.

Dar es Salaam is a fast-growing metropolis and Tanzania's commercial centre. More than 4.3 million people live in this city on the Indian Ocean. With annual population growth of 4.39%, Dar es Salaam is in the top ten of the world's fastest-growing cities. This rising population poses major social, economic and ecological challenges for city officials.

Everyone was pleased with the results: the city's representatives had gained a clearer picture of the risks and how to deal with them. It also became clearer to them that insurers are able to assume residual or unavoidable risks. The project partners from the financial sector also had an opportunity to better understand the general conditions and problems of urban planning and to give them greater consideration in future.

It is hoped that the cooperation model will serve as best practice for other cities and the financial services industry and encourage other partners and regions to likewise initiate a process of dialogue. The results of the workshop and the knowledge of sustainable urban planning gained from the pilot project were therefore presented in a report by ClimateWise.

Further Topics

Topic: Climate change Topic: Health care

Pilot development-aid project



A pilot development-aid project with good prospects

Living with risk



Preventive measures can make the difference between life and death

After a disaster



Munich Re participates in risk pools

Externe Links

» City Innovation Platform



» Guide to multi-sector collaboration on infrastructure risk and resilience

As an insurance and reinsurance group that operates globally, Munich Re will continue to be involved in the initiative in the years ahead, while our partners will benefit from the company's expertise in risk minimisation and risk transfer. Munich Re has documented extensive data on natural hazards and can therefore provide valuable insights for urban planners. With specific knowledge on the region and markets, its branch in South Africa is a competent contact for clients there.



"As the Munich Re Group, we are excited to be associated with the CIP. As a reinsurer, we are particularly interested in how the CIP encourages long-term thinking to address wider societal issues and close the protection gap. We look forward to bringing our global experience in respect of such similar projects."

Boniface Chiwota, Executive Manager, Munich Reinsurance Company of Africa:

This involvement in the CIP AIRR underscores the shared value approach that Munich Re pursues as part of its corporate responsibility activities: combining business interests and added social value, sharing knowledge of risk and developing new coverage concepts. This initiative encourages the expansion of urban infrastructure in Africa and reduces the risks for the population. It therefore addresses two of the main challenges we want to tackle in the next three years: combating the effects of climate change and heightening risk awareness.













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Topics Risk awareness Development aid with good prospects



Further Topics

Topic: Climate change Topic: Health care

Living with risk



Preventive measures can make the difference between life and death

City Innovation Platform



City Innovation Platform for African Infrastructure Risk and Resilience

After a disaster



Munich Re participates in risk pools

External links

GeoHazards International

Development aid with good prospects

Munich Re has supported earthquake and landslide risk protection in the Indian city of Aizawl since 2012. The joint project with GeoHazards International (GHI), an international NGO based in California, aims to bolster local resilience to catastrophes. The partners in the project looked at what had been achieved in a closing presentation.

The city of Aizawl has over 300,000 inhabitants and lies in a high-risk earthquake zone in north-east India. "This is due to a combination of geology and climate in the region", explains Janise Rodgers, Chief Operating Officer at GHI. The city lies in the area between the Indian and the Eurasian Plates. Buildings up to ten storeys high are situated on landslide-prone slopes and relatively steep mountain ridges. There is a high risk of buildings collapsing after heavy rainfall According to GHI, the area has one of the highest potential earthquake mortality rates.

Cooperation prospects

Despite the fact that many of the project's objectives have been achieved, Aizawl remains highly exposed. Rodgers believes it will be decades before the risk can be reduced to an acceptable level. Many Indians still rely on financial support from the state after a crisis and expect to receive compensation for their loss. More comprehensive cover for losses, such as that offered by insurance, cannot be provided by the Indian government.

Making the population more aware of the potential risks improves the prospects of increasing insurance penetration – something that will benefit both the inhabitants and the city administration – as in India, which is traditionally underinsured, it is conceivable to offer cover for personal injury or property risks arising from earthquakes or secondary effects such as landslides. "Since I began working here 10 years ago, India has changed perceptibly. In future, finance and insurance products will become more and more a part of people's lives and their expectations", says Rodgers. Georg Justus Schwarz, Corporate Responsibility Consultant in GD1.3, added, "We have also found that a change in thinking is taking place in emerging and developing countries with regard to personal cover, also due to the burgeoning middle class in these societies."



Where the road may lead

The project in Aizawl can be seen as a blueprint for other markets, for earthquake-prone regions in particular, but also for countries in which demand for insurance cover is still low. For the risk calculation and assessment, local building regulations – as in Aizawl – serve as a regulatory framework enabling the actual risk exposures to be

calculated. GHI is in discussion with the Indian National Disaster Agency, with a view to establishing national standards precisely in this area. The authorities are very appreciative of the help given.

Although earthquakes and secondary effects such as landslides are not avoidable, contingency measures can reduce losses considerably. In emergencies, they can make the difference between life and death. The catastrophe prevention project of Munich Re and GHI, which has now been in existence for five years, is aimed at reducing extreme hazards, and raising awareness of risk among decision-makers and the population alike. At the same time, Munich Re is expanding its expertise on social impact projects related to its core business, and generating valuable knowledge for future projects and business opportunities in this area.

01 02 03 04 05



Colleagues from GD, Geo/CCC, and Munich Re Foundation discuss the project with Janise Rodgers

Milestones and results of the pilot project

A number of milestones have been reached since the project started four years ago. There was previously a lack of technical resources and knowledge on how to make buildings and infrastructure earthquake-resistant and avoid their construction in landslide-prone areas. What is more, a plan with rules of conduct for emergency situations applicable within the municipal area has been drawn up for the first time. Training and instruction given at universities and in hospitals, schools and particularly important city buildings also heighten people's awareness of the day-to-day risks and reduce the risk of each individual in the event of an earthquake. The production of a risk plan with the various exposure zones and the associated risks is one of the main results of the cooperation. "With Munich Re's great support, we have been able to prepare risk maps and site-development guidelines that prevent people from erecting unsafe buildings, and that gives us grounds for hope that the risks faced by people living in Aizawl will continuously decrease in the future", concluded GHI's Janise Rodgers.













CE

Home Topics Risk awareness Living with risk



Further Topics

Topic: Climate change Topic: Health care

Pilot development-aid project



Development aid with good prospects

City Innovation Platform



City Innovation Platform for African Infrastructure Risk and Resilience

After a disaster



Munich Re participates in risk pools

External links

GeoHazards International

Living with risk

150 earthquakes of magnitude 6.0 or greater occur every year around the world. In many cases the main reasons for the high numbers of victims are lack of design and construction skills and ignorance about the correct way to behave in a disaster situation. By adopting intelligent measures to prepare for earthquakes, however, people can help to significantly reduce the number of victims and losses.

Millions of people live in high-risk earthquake zones around the world. Between 1980 and 2015, these earthquakes and their secondary effects such as landslides, fires or tsunamis claimed the lives of more than 800,000 people. Though earthquakes are unavoidable, the damage they cause can be significantly reduced with the right preparations. In an emergency, the preventive measures taken can be the difference between life and

Aizawl has started to prepare for the next earthquake

Aizawl has begun to make such preparations with assistance from GeoHazards International (GHI) and Munich Re. Together, they launched a catastrophe prevention project to improve the long-term safety of inhabitants and protect against the threat of earthquakes and landslides. The city of Aizawl in northeastern India, with 300,000 inhabitants, was deliberately chosen as a pilot project. Situated on the boundary between the Indian and Eura-sian tectonic plates, Aizawl has an exceptionally high exposure to seismic risk. The city's vulnerable buildings have a high potential to collapse in an earthquake and kill people at a per-capita rate that is, one of the highest that GHI assessors have ever come across.

Buildings up to 10 storeys high are situated on steep, landslide-prone slopes along mountain ridges. Aizawl has had limited technical resources and expertise to design the buildings and infrastructure in an earthquake-resistant manner and to avoid areas at very high risk of landslides. Likewise, until now, there has been no adequate emergency planning for what to do in the event of an earthquake.

Scenario: Aizawl - Preparation can be the difference between life and death (please click through our picture story)

01 02 03 04 05



It is 2 p.m. on a Monday afternoon when a magnitude 7.0 earthquake strikes the Indian city of Aizawl. Centred on a fault 10 km northwest of Aizawl and 30 km deep, it is not the largest earthquake that could happen – but it is large enough to do tremendous damage. The shaking lasts for 30 seconds. In that brief time, it changes Aizawl forever.

The catastrophe prevention project of GeoHazards International and Munich Re

This is where the catastrophe prevention project of GHI and Munich Re comes in. It mainly involves capacity building and training among the local population. The following measures are key elements of the programme and have already been successfully implemented.

- A team of local and international experts developed an earthquake scenario report, which describes the impacts of a magnitude 7.0 earthquake. The report presents detailed recommendations to reduce earthquake and landslide risk. These include improvements to infrastructure, development policies and plans, building design and construction and emergency planning.
- In cooperation with local geologists, landslide geology experts from GHI drew up landslide hazard maps for Aizawl and the surrounding district. The hazard maps highlight the regions that are particularly prone to landslides, where development should be greatly restricted. A 400 km² area in and around Aizawl has already been mapped, and the findings have been incorporated by the authorities into new land use policies and regulations.
- Experts from GHI trained local geologists and city agencies to prepare and use the landslide hazard maps.
 After the project is complete, local geologists will be able to update the maps and continuously improve assessment of hazards.
- Teachers have been trained to prepare their pupils to behave correctly in an emergency and to conduct evacuation drills with them. Over 7,000 pupils and more than 500 teachers in 32 schools have already undergone training, and are now better prepared for a catastrophe. Schoolchildren generally bring home their learning about earthquake and landslide safety and share it with their families. That way the knowledge is spread even wider across the city.

Expanding the catastrophe prevention project to other regions in risk

The measures taken as part of the catastrophe prevention programme mean that Aizawl is now much better prepared for earthquakes and landslides than it was before. A significant reduction in risk was achieved with the help of relatively simple methods. Other exposed regions can therefore also benefit from the prevention project. The particular long-term benefit from the project stems therefore not just from empowering the local population in Aizawl, but also from the ability to transfer and apply the model to other risk regions.













TOPICS

Home > Climate Change and Natural Disasters > Resilience > Disaster prevention works

Resilience

Disaster prevention works

In developing and emerging countries, the vast majority of damage from natural disasters is not insured. The gap between insured and uninsured damage is much bigger than in industrial countries. Between 1980 and 2016, D&E countries accounted for 10% of global uninsured losses but just 1% of insured losses. Following a disaster, lack of insurance cover can delay reconstruction, or even make it impossible, particularly in poorer countries. Many developing countries have inadequate financial resources, and generally rely on external help when a disaster strikes.

09.03.2017

Partnerships between governments, supranational organisations and the insurance industry have proved useful in providing better financial cushioning against the consequences of natural disasters. As a risk carrier, Munich Re participates in various risk pools, offering transnational insurance cover against risks from weather-related disasters, and in some cases also against earthquakes and tsunamis. These pools have emerged over the last few years in the Caribbean (Caribbean Catastrophe Risk Insurance Facility, CCRIF), in Pacific island states (Pacific Catastrophe Risk Assessment & Finance Initiative, PCRAFI), and in Africa (African Risk Capacity, ARC).

CCRIF was founded in 2007 as the world's first risk pool, and has many participating countries in the region. It insures 16 Caribbean states against earthquakes and hurricanes, and operates like a mutual insurance society. The fund retains a portion of the risks insured by the member countries, and transfers the rest to the reinsurance market. Payments are linked to the intensity of a natural disaster using what are called parametric triggers, rather than actual loss figures. This is to ensure payments can be made promptly, thereby providing much-needed liquidity. Thanks to the pool set-up, the risks are spread more effectively, which in turn reduces the total costs.

Between 2007 and 2016, CCRIF paid out almost US\$ 68m in disaster aid to its member states. The largest payment was US\$ 23m to Haiti in 2016, less than two weeks after Hurricane Matthew had devastated the southwest of the island. In 2016, the pool was extended to Central America, when Nicaragua became the first country from this region to join. The range of cover was also extended to include insurance against torrential rain.

PCRAFI is a programme financed by various donors and administered by the World Bank. Under the insurance programme, the member states (Vanuatu, Solomon Islands, Cook Islands, Marshall Islands, Tonga, Fiji and Samoa) cede risks from tropical cyclones and earthquakes/tsunamis via an insurance derivative to the World Bank, which then passes on these risks to the insurance market.

The parametric triggers used here also facilitate prompt payouts. The funds that are made available can then be used for emergency aid and clear-up operations following a natural disaster. PCRAFI was developed in close cooperation with the participating nations in order to ensure their exact needs were met. This involvement gave the countries a more accurate picture of their own risk exposure, allowing them to coordinate measures for risk prevention and risk reduction.

In 2010, the African Union decided to develop ARC, a drought insurance programme for African countries. During an extreme drought, small farmers use up their provisions within a few months, and are then forced to slaughter their cattle. The drought insurance is intended to prevent this happening. To become a member, a country must have drought emergency aid plans in place. These specify how insurance payments are used in the event of a disaster. In this way, the population receives prompt assistance. People can buy new seed, food for themselves and feed for their cattle. The payments are made automatically once satellite images show that a specified loss threshold has been exceeded.

Another example of an insurance solution to strengthen resilience is FONDEN (Fondo de Desastres Naturales) in Mexico. It was established by the Mexican government in 1999 after it had designated disaster prevention a national priority. Its objective is to ensure that the public infrastructure can be rapidly restored after a natural disaster. All the federal states pay into the fund and if a loss event occurs, a local government can count on prompt payment. The fund is covered by a reinsurance policy.

One of the fund's main features is the detailed settlement or loss protocol, which forms part of the reinsurance treaty. The protocol defines the settlement process, and sets out deadlines and guidelines. As soon as independent sources have confirmed a disaster, the federal state affected draws up an initial loss estimate. After that, settlement follows the procedure defined in the loss protocol. FONDEN is therefore a programme that endeavours to make loss settlement transparent, as well as transferring the risk in question.

Public-private partnership in catastrophe risk financing

Natural disasters usually result in large losses. The destruction of infrastructure and the breakdown in communication systems make it more difficult for the population to overcome the consequences of a disaster. A comparison between Hurricanes Katrina and Sandy illustrates the difference that preparedness and well-devised emergency plans can make. Whereas Katrina caused enormous damage due to inadequate flood protection and insufficient disaster preparation, with the result that the crisis response was slow and sluggish, when Hurricane Sandy struck seven years later, the New York/New Jersey region was spared much more serious consequences thanks to relatively good emergency planning.

The Department of Homeland Security used Katrina as an opportunity to make fundamental changes to its procedures, and take a more comprehensive approach. In future, all areas of society should be prepared to face emergencies of any kind. A Critical Infrastructure Task Force concluded that increasing resilience, rather than strengthening and extending protection measures, should be the top priority. As a result, FEMA, the national response coordination centre, had already initiated key measures before Sandy made landfall. As well as public institutions, private and charitable organisations were also involved in the preparations to identify what people on the ground most urgently required. FEMA set up depots with aid supplies, established emergency centres, and sent more than 900 staff to the region. And its efforts paid off: losses were kept within reasonable limits, and life in New York and New Jersey quickly got back to normal after Sandy.

Bangladesh has also learned from experience. In the early 1970s, the government introduced the Cyclone Preparedness Programme (CPP) after a cyclone had claimed the lives of 300,000 people there. The CPP has over 200 permanent staff, and has recruited almost 50,000 volunteer helpers. At its headquarters in the capital Dhaka, meteorological data on approaching cyclones are analysed and the information is passed on via radio, mobile phones and the internet. Volunteers receive first aid training, take part in exercises, and are equipped with everything they need in an emergency. Thousands of concrete shelters, many of them on stilts, have also been built so that people can take refuge during cyclones. Over the rest of the year, the buildings are generally used as schools. When, in 2007, a cyclone of similar strength to 1970 swept across the same region as, the number of fatalities was around 3,000 – significantly less then decades before.

Public responsibility

Government



Donors/International financial institutions (IFIs)



Postdisaster subsidised loans and grant facility

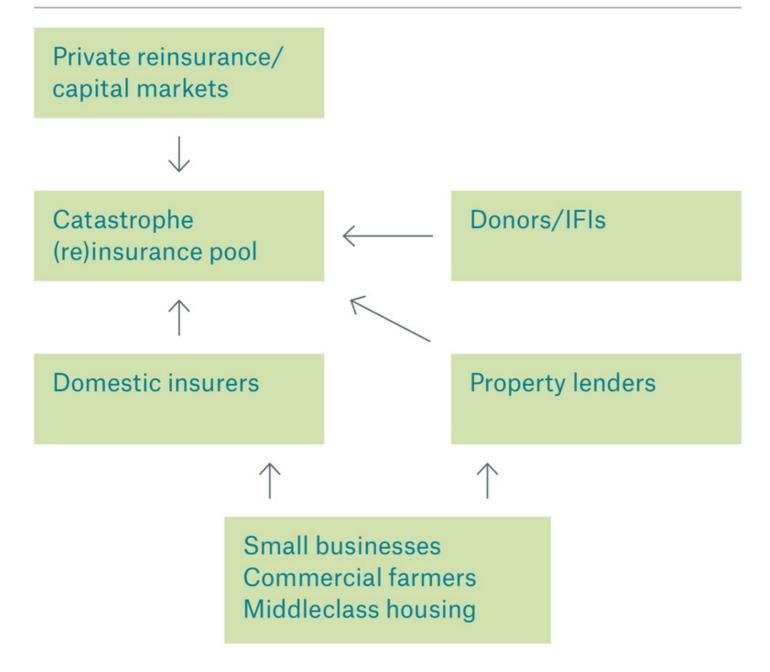


Lifeline infrastructure The poor and disadvantaged

© Source: Munich Re, based on Global Facility for Disaster Reduction and Recovery (GFDRR)

Public responsibility

Private responsibility



© Source: Munich Re, based on Global Facility for Disaster Reduction and Recovery (GFDRR)

Private responsibility





Dr.-Ing. Wolfgang Kron

is head of Research, Hydrological Hazards in Geo Risks Research and in charge of everything concerned with "water as a natural hazard".

wkron@munichre.com



MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Key figures Financial indicators

Financial indicators (IFRS)

At home **around the world:** with over **40,000** employees in **60 countries**

Vou figures (IEDC)						
Key figures (IFRS)						
Munich Re Group		2016	2015	2014	2013	2012
Gross premiums written	€bn	48.9	50.4	48.8	51.1	52.0
Net earned premiums	€bn	47.1	48.3	47.4	49.2	50.5
Net expenses for claims and benefits	€bn	-38.5	-38.7	-39.7	-39.9	-41.0
Net operating expenses	€bn	-12.3	-12.4	-12.0	-12.4	-12.6
Operating result	€m	4,025	4,819	4,027	4,398	5,349
Taxes on income	€m	-760	-476	312	-108	-878
Consolidated result	€m	2,581	3,122	3,170	3,333	3,204
Attributable to non-controlling interests	€m	1	15	18	29	16
Earnings per share	€	16.13	18.73	18.31	18.45	17.94
Dividend per share	€	8.60	8.25	7.75	7.25	7.00
Dividend payout	€m	1,338	1,329	1,293	1,254	1,255
Share price at 31 December	€	179.65	184.55	165.75	160.15	136.00
Munich Re's market capitalisation at 31 December ¹	€bn	28.9	30.8	28.7	28.7	24.4
Carrying amount per share	€	200.86	188.40	178.13	146.15	152.34
Investments	€bn	219.4	215.1	218.9	202.2	213.8
Insurance-related investments	€bn	9.6	9.2	8.5	7.3	
Equity	€bn	31.8	31.0	30.3	26.2	27.4
Return on equity	%	8.1	10.0	11.3	12.5	12.5
Off-balance-sheet unrealised gains and losses ²	€bn	17.3	16.0	17.4	8.7	11.0
Net technical provisions	€bn	202.2	198.5	198.4	187.7	186.1
Balance sheet total ³	€bn	267.8	268.9	265.6	254.3	258.4
Staff at 31 December		43,428	43,554	43,316	44,665	45,437
Reinsurance		2016	2015	2014	2013	2012
Gross premiums written	€bn	27.8	28.2	26.8	27.8	28.2
Investments (incl. insurance-related investments)	€bn	88.9	89.2	88.0	79.2	83.8
Net technical provisions	€bn	65.5	65.4	63.5	60.5	61.1

Related topic

Environmental indicators Employee indicators Social impact indicators

Downloads

Group annual report 2016 (PDF, 1.6 MR)

Major losses (net)	€m	-1,542	-1,046	-1,162	-1,689	-1,799
Natural catastrophe losses	€m	-929	-149	-538	-764	-1,284
Combined ratio property-casualty	%	95.7	89.7	92.7	92.1	91.0
ERGO		2016	2015	2014	2013	2012
Gross premiums written	€bn	16.0	16.5	16.7	16.7	17.1
Investments (incl. insurance-related investments)	€bn	135.4	131.0	135.5	126.7	124.9
Net technical provisions	€bn	133.6	130.3	132.4	125.1	122.8
Combined ratio property-casualty Germany	%	97.0	97.9	95.3	96.7	98.0
Combined ratio International	%	99.0	104.7	97.3	98.7	99.8
Munich Health		2016	2015	2014	2013	2012
Gross premiums written	€bn	5.0	5.6	5.3	6.6	6.7
Investments (incl. insurance-related investments)	€bn	4.7	4.1	3.9	3.6	4.2
Net technical provisions	€bn	3.2	2.8	2.5	2.2	2.2
Combined ratio ⁴	%	98.5	99.9	98.8	98.3	100.2

 $^{^{\}rm 1}\,$ For 2013, 2014, 2015 and 2016, this contains treasury shares earmarked for retirement.

GRI Content Index: G4-22; G4-EC1/FS/EC1











² Including those apportionable to minority interests and policyholders.

³ Previous years' figures adjusted owing to IAS 8; see "Changes in accounting policies and other adjustments".

⁴ Excluding health insurance conducted like life insurance.



MUNICH RE STRATEGY RESPONSIBILITY TOPICS **KEY FIGURES** SERVICE

Key figures Home

Environmental indicators

Environmental indicators

Our climate strategy: We create more value with less CO₂!

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

In our reporting on our consumption of resources and ${\rm CO_2}$ 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 ${\rm CO_2}$ emissions are measured and externally quality assured. The continuous reduction in these emissions is the main indicator of success for our environmental performance and has been targeted throughout the Group.

Munich Re (Group) environmental 2016 2015 2014 2013 indicators Proportion of employees % of employees 43** 38 captured by the certified environmental management system 84** % of employees 83** Proportion of employees captured by 86 87 data collection Direct energy consumption Megawatt hours (MWh) 3 79** 4 02** 4.3 4 66 (e.g. oil, gas, fuels) per employee Indirect energy consumption Megawatt hours (MWh) per employee 5.63** 5.5** 5.7 6.05 (e.g. electricity, district heating) Paper consumption Tonnes (t) per employee 0.03** 0.03** 0.04 0.04 Water consumption 16.9** 17.5** 17.9 15.98 Cubic metres (m3) per employee Waste Tonnes (t) per employee 0.30** 0.25** 0.28 0.26 Business trips Kilometres (km) per employee 7.163** 7.825** 7.418 6.915 CO₂ emissions, kg per employee up 3,872** 3,898 3.879 Kilos (kg) per employee to 2015* CO₂ emissions, kg per Kilos (kg) per employee 2.813** employee from 2016* No. of employees as at 31 43.428 43.554 43.316 44.665 December

You will find further detailed environmental indicators in the download area in the right-hand column.

*Notes on the environmental indicators:

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 (GHG) 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 carbon savings target was expanded - from 2009 to 2020 we want to achieve Group-wide carbon savings (kg per employee) of 35%. Figures from 2016 are limited in their comparability to those from 2015 due to divergent applications of carbon emission factors as well differences in the calculation of carbon emissions from

Related topics

Financial indicators Employee indicators Social impact indicators

Env. Indicators MR Group 2016 (XLSX, 32 KB) External verification environmental data 2016 (PDF, 14 KB) External verification environmental data 2015 (PDF, 137 KB)

External links

ERGO environmental indicators

regenerative energy sources.

From 2016, the Group's carbon emissions will be calculated on the basis of the latest conversion factors of 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 renewable sources of 70%** (2015: 69%**) is calculated at zero emissions. The VfU conversion factors are taken as the basis for calculating the Scope 2 emissions "district heating" and the Scope 3 emissions of paper, water and waste, as well as the "company vehicles, taxis, hire cars, train journeys" components of the "business trips" element. Business travel with company cars is calculated with individual conversion factors of the respective site's fleet, if available.

More detailed explanations of the conversion factors applied up to 2015 are available in the download area in the right-hand column.

Carbon emission sources

- Scope 1: Direct emissions from primary energy consumption (natural gas, heating oil, emergency diesel generators, fuel for company vehicles),
- Scope 2: Indirect emissions from procured energy (purchase of electricity and district heat),
- Scope 3: Other indirect emissions (business trips, consumption of paper and water, waste).
- ** Selected quantitative environmental indicators are verified Group-wide by an external auditing company (XLSX, 32 KB).

GRI Content Index: G4-22; G4 DMA Category Environmental; G4-EN1; G4-EN2; G4-EN3











Munich Re (Group) environmental indicators

In the table below, Munich Re provides additional environmental figures, thereby responding to increasing numbers of enquiries from external stakeholders and ensuring maximum transparency. Please note: at this time, 83% of the Group's employees are covered by the environmental data gathered. All figures we provide are extrapolated to 100% of the Group's employees. The conversion factors of the Greenhouse Gas Protocol (GHG Protocol) and the specifications from the Association for Environmental Management in Banks, Savings Banks, and Insurance Companies (Verein für Umweltmanagement und Nachhaltigkeit in Finanzinstituten – VfU) were used to calculate the carbon emissions. Figures from 2016 are limited in their comparability to those from 2015 due to divergent applications of carbon emission factors as well as differences in the calculation of carbon emissions from regenerative energy sources.

For data from the 2016 financial year, these carbon emission factors from the GHG Protocol and VfU were applied in the latest available version. GHG protocol has been applied for most of the conversion factors of components of the Scope 1 and Scope 2 emissions, as well as the component "Long Haul and Short Haul Flights" in Scope 3 emissions. The conversion of electricity consumption into carbon emissions is based on country-specific conversion factors derived from the average electricity mix for the country in question. Since 2016, consideration has been given to the fact that a share of 70%** was obtained from regenerative energy sources Group-wide and calculated with zero emissions. The VfU conversion factors form the basis for calculating emissions from district heating and cooling (Scope 2) as well as Scope 3 emissions from paper, water and waste; and the components "Rail Travel, Taxi and Rented cars" of "Business Travel". Business travel with company cars is calculated with individual conversion factors of the respective site's fleet, if available.

Up to 2015, the conversion factors of GHG Protocol and VfU carbon emission factors were calculated as at 2011. The GHG protocol was applied for the conversion of components of the Scope 1 and Scope 2 emissions, as well as the components "Taxi" and "Rented Cars" in Scope 3 emissions. The conversion of electricity consumption into carbon emissions was based on country-specific conversion factors derived from the average electricity mix for the country in question. The conversion factors for the VfU formed the basis for calculating Scope 3 emissions from paper, water and waste and the components "Air Travel" and "Rail Travel" of the indicator "Business Travel". The standardised use of the conversion factors in the GHG protocol and the VfU (as at 2011) for the target achievement period 2009–2015 (on which the carbon neutrality strategy was based) had the objective of improving the comparability of the quantitative values over that period. Carbon dioxide emission sources: direct emissions from primary energy consumption (natural gas, heating oil, diesel for emergency generator, fuel for company cars) – Scope 1, indirect emissions from power supplied by third parties (purchase of electricity, district heating and district cooling) – Scope 2, other indirect emissions (business travel, paper and water consumption, waste) – Scope 3.

General information	Unit	2016	2015	2014	2009 (base year)
Employees at 31 December	Number of employees	43.428	43.554	43.316	47.249
Proportion of employees captured by data collection	% of employees	83%**	84**	86	84
Proportion of employees covered by data collection verified by an external third party	% of employees covered by data collection	100**	100**	12	Data not available
Proportion of employees captured by an ISO 14001 certified environmental management system	% of employees	43%**	38**	38	Data not available
Gross premiums written by Munich Re (Group)	€bn	48,9	50,4	48,8	41,4

Emissions (absolute)	Unit	2016**	2015**	2014	2009 (base year)	% change from base year 2009 to 2016***
Total CO ₂ emissions ¹		122.147	168.641	169.409	217.315	-44%
Direct CO ₂ emissions		47.761	58.929	58.516,78	65.931,60	-28%
(Scope 1)		41.101	50.525	30.310,70	00.001,00	-20 /0
Indirect CO ₂ emissions	Metric tonnes (t)	47.362	77.700	80.220	117.476	-60%
(Scope 2) ¹						
Other CO ₂ indirect emissions		27.023	32.012	30.672	33.352	-19%
(Scope 3)						
1 Green electricity first considered from 2016						
Split of emissions from business travel, water consumption, paper consumption and waste	Unit	2016**	2015**	2014	2009 (base year)	% change from base year 2009 to 2016***
CO ₂ emissions – Waste generated		3.152	2.510	2.927	2.895	9%
CO ₂ emissions – Business travel	Matria tarana (4)	36.144	49.646	46.158	53.195	-32%
CO ₂ emissions – Paper purchased	Metric tonnes (t)	1.586	1.653	1.823	2.839	-44%
CO ₂ emissions – Water purchased		516	569	578	639	-19%
Emissions (relative)	Unit	2016**	2015**	2014	2009 (base year)	% change from base year 2009 to 2016***
Total CO₂ emissions¹		2,81	3,87	3,91	4,60	-39%
Direct CO ₂ emissions (Scope 1)		1,10	1,35	1,35	1,40	-21%
Indirect CO ₂ emissions	Metric tonnes	1,09	1.78	1,85	2,49	-56%
(Scope 2) ¹	(t)/employee	1,00	1,70	1,00	2,40	0070
Other indirect CO ₂ emissions (upstream; includes business travel, paper, water and waste)		0,62	0,74	0,71	0,71	-12%
(Scope 3)						108

Split of emissions from business travel, water consumption, paper consumption and waste	Unit	2016	2015	2014	2009 (base year)	% change from base year 2009 to 2016***
CO ₂ emissions – Waste generated		0,07**	0,06**	0,07	0,06	18,5%
CO ₂ emissions – Business travel	Metric tonnes (t)/employee	0,83**	1,14**	1,07	1,13	-26,1%
CO ₂ emissions – Paper purchased		0,04**	0,04**	0,04	0,06	-39,2%
CO ₂ emissions – Water purchased		0,01**	0,013**	0,013	0,014	-12,1%
Emission intensity: Total CO ₂ emissions per gross premiums written	Metric tonnes/€m gross premiums written	2,50	3,35	3,47	5,25	-52,4%
Energy	Unit	2016	2015	2014	2009	% change from base year 2009 to 2016***
Total direct energy consumption (e.g. oil, gas, fuels)	MWh	164.575**	175.069**	184.446	195.291	-15,7%

Energy	Unit	2016	2015	2014	2009	% change from base year 2009 to 2016***
Total direct energy consumption (e.g. oil, gas, fuels)	MWh	164.575**	175.069**	184.446	195.291	-15,7%
Direct energy consumption per employee	MWh/employee	3,79**	4,02**	4,26	4,13	-8,3%
Total indirect energy consumption (e.g. electricity, district heating)	MWh	244.365**	241.882**	245.355	348.885	-30,0%
Indirect energy consumption per employee	MWh/employee	5,63**	5,55**	5,66	7,38	-23,8%
Percentage of electricity sourced from renewables	%	70**	69**	67	28	150%
CO ₂ emissions from energy per employee ¹	Metric tonnes (t)/employee	2,19**	3,14**	3,20	3,88	-43,6%
Energy intensity: Total energy consumption per gross premiums written	MWh/€m gross premiums written	8,36	8,28	8,80	13,14	-36,3%

Paper	Unit	2016	2015	2014	2009	% change from base year 2009 to 2016***
Total paper consumption	Metric tonnes (t)	1.344**	1.378**	1.532	2.366	-43,2%
Paper consumption per employee	Metric tonnes (t)/employee	0,03**	0,03**	0,04	0,05	-38,2%
Recycled paper	%	38%	44%	51%	17%	126,1%
CO ₂ emissions from paper per employee	Metric tonnes (t)/employee	0,04**	0,04**	0,04	0,06	-39,2%
Paper intensitiy	Metric tonnes t/€m gross premiums written	0,03	0,03	0,03	0,06	-51,9%

Water	Unit	2016	2015	2014	2009	% change from base year 2009 to 2016***
Total water consumption	m³	737.865**	761.804**	768.307	859.181	-14,1%
Water consumption per employee	m³/employee	17**	17,5**	17,7	18,2	-6,6%
CO ₂ emissions from water per employee	metric tonnes (t)/employee	0,012**	0,013**	0,013	0,014	-12,1%
Water intensity	m³/€m gross premiums written	15,1	15,1	15,7	20,7	-27,3%

Waste	Unit	2016	2015	2014	2009	% change from base year 2009 to 2016***
Total waste		12.972**	10.952**	11.887	14.054	-7,7%
Incinerated waste (hazardous)		36	21	17,8	26,1	36,5%
Incinerated waste (non-hazardous)		2.755	1.958	2.103	2.472	11,4%
Recycled waste (hazardous)	Metric tonnes (t)	95	90	80,3	24,8	281,8%
Recycled waste (non-hazardous)	Metric torines (t)	7.337	6.102	6.927	8.796	-16,6%
Organic waste		8.677	7.329	8.069	9.852	-11,9%
Waste to landfill (hazardous)		0	0	0	13,4	-100,0%
Waste to landfill (non-hazardous)		1.001	1.195	1.116	1.176	-14,8%
Waste per employee	Metric tonnes (t) per employee	0,30**	0,25**	0,27	0,30	0,4%
CO ₂ emissions from waste per employee	Metric tonnes (t) per employee	0,07**	0,06**	0,07	0,06	18,5%
Waste intensity	Metric tonnes t/€m gross premiums written	0,27	0,22	0,24	0,34	-21,8%

Business travel	Unit	2016	2015	2014	2009	% change from base year 2009 to 2016***
Total business travel		311.075.398**	340.802.014**	321.175.768	350.167.683	-11,2%
Air travel	Kilometres (km)	182.146.431**	204.699.033**	190.745.352	189.257.132	-3,8%
Road, rail travel		117.880.069**	136.102.981**	130.430.416	160.910.551	-26,7%
Business travel per employee	km/employee	7.163**	7.825**	7.415	7.411	-3,3%
CO ₂ emissions from business travel per employee	kg CO₂/employee	0,83**	1,14**	1,07	1,13	-26,1%

Business travel intensity	km/€m gross premiums written	6.361	6.765	6.575	8.453	-24,7%	
---------------------------	---------------------------------	-------	-------	-------	-------	--------	--

Emissions breakdown by region	Unit	2016	2015	2014	2009	% change from base year 2009 to 2016***
Germany						
Direct CO ₂ emissions		27.167	32.432	31.851	42.889	-36,7%
(Scope 1)		27.107	32.432	31.031	42.009	-30,7 %
Indirect CO ₂ emissions	Metric tonnes (t)	7.806	42.720	43.171	59.011	-86,8%
(Scope 2) ¹	wethe tornes (t)	7.000	42.720	45.171	39.011	-00,0 /0
Other CO ₂ indirect emissions		10.894	14.448	12.904	14.668	-25,7%
(Scope 3)		10.094	14.440	12.904	14.006	-25,7 %
Rest of the world (ex Germany)						
Direct CO ₂ emissions		20.595	26.497	26.666	23.043	-10,6%
(Scope 1)		20.595	20.431	20.000	25.045	-10,070
Indirect CO ₂ emissions	Metric tonnes (t)	39.556	34.981	37.049	58.465	-32,3%
(Scope 2)	ivietric toriries (t)	39.330	34.901	37.049	30.403	-32,3 /0
Other CO ₂ indirect emissions		16.129	17.564	17.768	18.684	-13,7%
(Scope 3)		10.129	17.504	17.700	10.004	-13,7 /0

Energy breakdown by type	Unit	2016	2015	2014	2009	% change from base year 2009 to 2016***
Total energy consumption		408.940	416.952	429.145	543.365	-24,7%
Liquid fuels		890	832	945	573	55,3%
Natural gas		163.685	174.237	183.238	194.718	-15,9%
Natural gas for cogeneration		132.857	145.540	154.014	65.715	102,2%
On-site energy generation	MWh	132.416	125.303	124.484	0	
Electricity consumed		149.967	152.036	157.146	236.939	-36,7%
Green electricity consumed		105.569	104.525	105.230	67.032	57,5%
District cooling		11.417	8.588	10.275	12.998	-12,2%
District heating		82.982	81.259	77.541	98.136	-15,4%

^{**} The environmental indicators were verified by an external auditor in 2015 and 2016.
*** The figures of the fiscal year 2009 are comparable with the figures of 2016 only to a limited extent. See information about calculation methods in the text above.



CORPORATE RESPONSIBILITY

MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Key figures Employee indicators

Employee indicators

Female expertise:

33% of our managers and 54% of our employees are WOMEN

Highly qualified, motivated and performance-oriented staff are key to the success of our business. Munich Re currently has some 43,400 employees. Thanks to their risk knowledge, expertise and innovative thinking, our staff create long-term value. This section of the corporate responsibility portal shows the evolution in Munich Re's main employee indicators for the period 2013–2016.

Employee indicators (Coverage Munich Re (Group) 100%, for deviations see footnotes)

Indicator		2016	2015	2014	2013			
Staff	(abs.)	43,428	43,554	43,316	44,665			
Employees by line of business	Reinsurance (%)	27.9	27.6	27.1	25.3			
	Primary insurance (%)	66.2	66.6	65.9	66.3			
	Asset management (%)*1	*1	*1	*1	1.9			
	Munich Health (%)	5.9	5.7	7.0	6.5			
Group staff by region	Germany (%)	48.5	50.1	50.6	51.8			
	Rest of Europe (%)	35.9	34.5	33.7	33.4			
	North America (%)	12.1	12.5	12.4	11.9			
	Asia and Australasia (%)	2.5	2.1	1.8	1.5			
	Africa and Middle East (%)	0.6	0.6	1.2	1.1			
	Latin America (%)	0.4	0.3	0.3	0.3			
Percentage of female staff	Female employees (%)	54.0	54.0	53.9	54.1			
	Women in management (%)	32.6	30.8	31.1	30.2			
Group staff by age	20 or younger (%)	0.2	0.2	0.2	0.2			
	21-25 (%)	3.5	3.7	3.6	4.0			
	26-30 (%)	9.7	10.2	11.0	11.0			
	31-35 (%)	13.5	13.7	13.8	13.7			
	36-40 (%)	14.1	14.3	14.3	14.6			
	41-45 (%)	14.7	15.4	16.2	17.0			
	46-50 (%)	16.9	16.9	16.9	16.5			
	51-55 (%)	14.4	14.0	13.1	12.6			

Related topic

Responsibility: Employees Financial indicators Environmental indicators Social impact indicators

External Links

ERGO: Key employee figures

Indicator		2016	2015	2014	2013
	56-60 (%)	9.1	8.1	7.5	7.0
	over 60 (%)	3.9	3.5	3.4	3.4
No. of staff by type of employment contract	Permanent employment (%)	95.8	95.4	96.8	94.8
	Temporary employment (%)	4.2	4.6	3.2	5.2
Salaried employees	Full-time (abs.) - female	15,558	15,963	14,135	_*2
Salariou omproyesse	Part-time (abs.) - female	7,007	6,654	5,973	_*2
	Total (abs.) - female	22,565	22,617	20,108	_*2
					_*2
	Full-time (abs.) - male	18,767	18,974	17,115	
	Part-time (abs.) - male	1,190	1,169	944	_*2
	Total (abs.) - male	19,957	20,143	18,109	_*2
	Full-time (abs.)	34,325	34,937	30,879	_*2
	Part-time (abs.)	8,197	7,823	6,967	_*2
	Total (abs.)	42,522	42,760	37,746	_*2
	400		*0	*0	
Sick leave	(%)	4.2*3	6.6 ^{*3}	4.3 ^{*3}	4.4
itaff turnover	Weighted average turnover rate (%)	11.9	10.5	11.8	10.5
	Voluntary fluctuation (%)	4.3	4.1	3.4 ^{*6}	1.0*6
	Lay-offs (abs.)	591	388	544	638
Open positions filled by internal candidates	(%)	30.0*3	78.8 ^{*7}	89.3 ^{*7}	90*7
Longth of contra	V (6)	10.1	10.7	10.0	10.1
Length of service	Years (Ø)	13.1	12.7	12.3	12.1
Training	Training costs per staff member (€)	917*4	981 ^{*4}	898 ^{*3}	975 ^{*5}
	No. of days' training per staff member (\emptyset)	3.0* ³	4.0*3	3.2 ^{*4}	3.8*4
Employees receiving regular performance and career development reviews	(%)	100,0	100.0	100.0	100.0
Employees covered by collective bargaining agreements	(%)	96* ⁸	96 ^{*5}	96 ^{*5}	96 ^{*5}

^{*1} Since 2014, the figure for asset management has been distributed across the business fields.

Comments

We are steadily extending the amount of employee data in order to cover additional items and thus to improve the reliability of our key figures. As a result of the expanded data base, some of the figures have changed retroactively. Since the data now being used are of greater quality than earlier, some data (e.g. the employee turnover rate, length of service and training) have only limited comparability with figures from earlier years.

^{*2} No data collected

^{*3} Coverage Munich Re (Group): >=90%

^{*4} Coverage Munich Re (Group): >=70%

^{*5} Coverage Munich Re (Group): >=50%

^{*6} Coverage: ERGO Germany (~40% of Munich Re (Group)
*7 Coverage: Munich Re Munich (~9% Munich Re (Group)
*8 Coverage: Munich Re (Group) Germany ~50% Munich Re (Group)

Interesting? Share this content on your favourite social media platform.













CORPORATE RESPONSIBILITY

MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Key figures Social impact indicators

Social impact indicators

Related topics

Financial indicators Employee indicators Environmental indicators

A point of honour: our employees did approximately 7,500 hours of voluntary work in 2016

There is a long tradition of social commitment at Munich Re. As part of our shared-value approach, we focus on three global challenges that are closely connected with our core business: mitigating the effects of climate change, improving access to healthcare, and enhancing risk awareness.

Below is a list of the social impact expenses of Munich Re (Group).

Social impact (SI) indicators								
Indicator	Unit	2016	2015	2014	2013			
Coverage Munich Re Group	%	99.6	95.3	95.5	94			
SI expenses of Munich Re Group*	€	3,952,034	7,114,356	6,480,170	6,788,357			
Total SI expenses**	€	7,738,945	10,390,192	9,328,608	9,147,054			

^{*} Up to and including 2015, this amount is made up of donations, social sponsorships and corporate responsibility memberships. As of 2016, this amount includes donations and social sponsorships.

Political donations

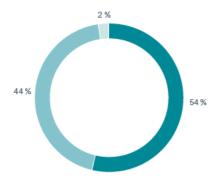
Munich Re (Group) supports the democratic political process and, to this end, donates to the following parties: Bündnis90/Die Grünen, CDU, CSU, FDP and SPD. With no conditions attached, each of the parties receives the same donation amount, which corresponds to an annual total of €150,000 for all parties. Of that sum, €75,000 is contributed by Munich Re and €75,000 by ERGO. 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. These may total a maximum of €25,000 per financial year for Munich Re and ERGO respectively. In 2016 political payments sum up to €170,500.

Social impact expenses 2016

^{**} Up to and including 2015, this amount additionally includes donations in kind, political donations, corporate volunteering expenses, ERGO foundations and Munich Re foundations. As of 2016, this amount also includes corporate responsibility memberships.

Social Impact expenses of Munich Re (Group) In 2016: €3,952,034*



- Activities at our locations €2,151,123 Social impact projects 11 Social impact projects that pay into the
 - three global challenges €1,739,637 1. Combating the effects of climate change
 - 2. Improving access to healthcare
- 3. Enhancing risk awareness

 Disaster relief €61,274

Additional social impact expenses**:

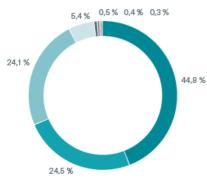
Memberships: €841,474 Donations in kind: €68,712 Political donations: €170,500 Corporate volunteering: €649,558

ERGO foundation and association: €564,908 Munich Re foundations: €1,491,785

- $^{\star}\,$ 0.12% of pre-tax result (social impact expenses including donations and social sponsorship)
- $^{\star\star}~0.23\%~of~pre-tax~result~(social~impact~expenses~including~also~donations~in~kind,~political~donations,~corporate~responsibility$ memberships, corporate volunteering and foundations)

Social impact expenses 2016 (regional classification)

Social impact expenses 2016 (regional classification)*



- North America €2,157,504Germany €1,181,141
- Europe (excluding Germany) €1,161,059
- Australia and New Zealand €260,784
- Asia €21,844
- Latin America €16,722Africa €14,928

*Excluding donations in kind, political donations, corporate responsibility memberships, corporate volunteering and foundations.

Corporate citizenship expenses in 2015

Corporate citizenship expenses 2015 (regional classification)

Corporate citizenship expenses in 2014

Corporate citizenship expenses in 2014 (regional classification)

Corporate citizenship expenses in 2013



CORPORATE RESPONSIBILITY

MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE

Home Key figures GRI Content Index and Global Compact Communication on Progress

GRI Content Index and Global Compact Communication on Progress

In preparing the Munich Re (Group) corporate responsibility portal, we have taken as a basis for the current reporting period the G4 reporting standard of the Global Reporting Initiative (GRI) and the Financial Services Sector Supplement. Our aim is to make our performance more transparent and comprehensible.

Our report is prepared "in accordance" with the guidelines for the "core" optionand includes all the relevant information for Munich Re and our most important stakeholders. The "core" option creates a background against which enterprises can communicate the impacts of their economic, environmental and governance performance.

The indicators presented in the GRI disclosures simultaneously meet the requirements of the annual Communication on Progress required by the UN Global Compact. We document the measures Munich Re has taken to firmly anchor the ten principles of the Global Compact in our operations.

The GRI table (see download area on right) refers to the corporate responsibility portal and other Munich Re publications and contains comments and explanations of individual indicators and any deviations. KPMG's "reasonable assurance" covers all the information and data in the consolidated financial statements and management report sections of Munich Re's Annual Report 2016. In addition, selected quantitative environmental indicators for the financial year 2016 have been externally verified across the Group by Ernst & Young.

GRI Content Index: G4-32

Interesting? Share this content on your favourite social media platform.













Download

Global Reporting Initiative 2017 -Results of the GRI Report (PDF, 257



GRI-Content-Index – Core

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	<u>External</u> <u>Assurance</u>	<u>UNGC</u> <u>Principle</u>
GENERA	AL STANDARD DISCLOSUF	RES		
Strategy and	Analysis			
G4-1	Statement by the CEO			GC 1-10
Organisationa	al Profile			
G4-3	Imprint/Service: p. 180 (AR)	Münchener Rückversicherungs-Gesellschaft		
G4-4	Corporate Structure (CWS)		Reasonable	
	Group structure: pp. 23-28 (AR)		assurance*	
	Munich Re portrait (CWS)			
G4-5	Imprint	Munich, Germany		
G4-6	Munich Re worldwide (CWS)		Reasonable	
	ERGO International (CWS)		assurance*	
	MEAG locations (MEAG)			
	Group structure: pp. 23-28 (AR)			
G4-7	Shareholder profile (CWS)		Reasonable	
	Share profile (CWS)		assurance*	
	Other information – Parent: p. 263 (AR)			
G4-8	Munich Re portrait (CWS)		Reasonable	
	Group structure: pp. 23-28 (AR)		assurance*	
	Corporate Structure (CWS)			
G4-9	Business performance: pp. 48-60 (AR)		Reasonable	
	Financial position: pp. 61-65 (AR)		assurance*	
	Other information – Number of staff: p. 164 (AR)			
G4-10	Employee indicators			GC 6
	Employees			



Munich Re Seite 2/21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	<u>UNGC</u> <u>Principle</u>
	Group/Employees (CWS)			
G4-11	Employee indicators			GC 3
G4-12	Procurement at Munich Re (CWS)			
	Procurement principles Munich Re			
	Procurement at Munich Re – Reinsurance			
	Supplier self-assessment – ERGO			
	Procurement principles – MEAG			
G4-13	Group structure: pp. 23-28 (AR)		Reasonable	
	Balance sheet press conference 2017		assurance*	
G4-14	Risk management – Tasks and organization (CWS)		Reasonable assurance*	
	Risk Report: Excerpt from Annual Report 2016 (AR)			
	Emerging Risks (CWS)			
G4-15	Our commitments			
	Memberships and Partnerships			
G4-16	Memberships and Partnerships			
Identified Ma	terial Aspects and Boundaries			
G4-17	List of shareholdings: pp. 168-177 (AR)		Reasonable	
	Group structure: pp. 23-28 (AR)		assurance*	
G4-18	Stakeholder and Materiality			
G4-19	Stakeholder and Materiality			
G4-20	Stakeholder and Materiality About the Corporate Responsibility portal Challenge – Climate Change Challenge – Access to Health Challenge – Risk Awareness	Climate Change: relevant particularly for risk assessment, corporate underwriting and business development Access to health: relevant particularly for the Life and Health sector as well as for the primary insurance sector. Risk awareness: relevant for the whole Group, particularly for the		
		identification/analysis of new risks and opportunities (risk assessment, business potentials), business development/access to clients/development of future markets		



Munich Re Seite 3/21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	<u>UNGC</u> <u>Principle</u>
G4-21	Stakeholder and Materiality	Climate Change: relevant particularly for clients and shareholders		
	About the Corporate Responsibility portal	Health: particularly relevant for clients in the health and life		
	Challenge – Climate Change	business as well as in primary insurance, relevant for shareholders Risk awareness: clients/markets; partner organisations (science, associations etc.), GOs and NGOs, shareholders		
	Challenge – Access to Health			
	Challenge – Risk Awareness			
G4-22	Financial indicators	We generally report on several years in order to show the development of performance indicators. Reasons for		
	Environmental indicators	restatements of data (if necessary) are disclosed on the respective pages.		
	Employee indicators			
	Social impact indicators			
G4-23	Our guiding principles	Munich Re has reviewed/sharpened its Corporate Responsibility		
	Stakeholder and Materiality	strategy towards a shared value-approach in 2015/16. At the same time material topics/challenges were redefined.		
	Challenge – Climate Change			
	Challenge – Access to Health			
	Challenge – Risk Awareness			
Stakeholder En	gagement			
G4-24	Stakeholder and Materiality			
	Memberships and Partnerships			
G4-25	Stakeholder and Materiality			
	Memberships and Partnerships			
G4-26	Stakeholder and Materiality			
	Memberships and Partnerships			
G4-27	Stakeholder and Materiality			
	Memberships and Partnerships			
	Annual General Meeting/Countermotions (CWS)			
Report Profile				
G4-28	About the Corporate Responsibility portal			
G4-29	Downloads	June 2016		
G4-30	About the Corporate Responsibility portal	annual		
G4-31	Contact	Kerstin Lücke		
		Dr. Michael Menhart		



Munich Re Seite 4/21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	<u>UNGC</u> Principle
		responsibility@munichre.com		
G4-32	Reporting/GRI			
G4-33	Annual Report Auditors Report, p. 178 (AR) About the Corporate Responsibility portal	No external assurance of the Corporate Responsibility-report (Portal). Consolidated financial statements and Group management report in the Annual Report 2016 with reasonable assurance from KPMG.		
		The environmental data for the financial year 2016 have been verified Group-wide by Ernst & Young.		
Governance				
G4-34	Organisational positioning Corporate Governance (CWS) Articles of Association (CWS)	Group Corporate Responsibility Committee		
	Report of the Supervisory Board: pp. 9-13 (AR)			
	Corporate Governance Report: p. 14-20 Statement on Corporate Governance for the 2016 financial year			
G4-35	Organisational positioning			
	Corporate Responsibility in Insurance			
	Corporate Responsibility in Investment			
	Report of the Supervisory Board: pp. 9-13 (AR)			
	Corporate Governance Report: pp. 14-20			
G4-36	Organisational positioning			
	Corporate Responsibility in Insurance			
Ethics and Inte	egrity			
G4-56	Our commitments			GC10
	Guiding principles			
	Compliance			
	Codes of Conduct: (ERGO, Group) (CWS)			
G4-57	Financial Crime Management			GC 10
	Compliance			
	Codes of Conduct: (ERGO, Group) (CWS)			



Munich Re Seite 5/21

<u>Standard</u> <u>Disclosure</u>	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	<u>External</u> <u>Assurance</u>	<u>UNGC</u> <u>Principle</u>
G4-58	Compliance			GC 10
	Financial Crime Management			
	Lobbying			



<u>Standard</u> <u>Location of Munich Re's disclosure***</u> <u>Disclosure</u>

Additional explanation/Reason for Omission

External Assurance

UNGC Principle

SPECIFIC STANDARD DISCLOSURES

CATEGORY: ECONOMIC

Economic Per	rtormance	
G4-DMA	Strategy (CWS)	Reasonable
	Important tools of corporate management,	assurance*
	pp. 46f. (AR)	
	Corporate Governance (CWS)	
	Report of the Supervisory Board (CWS)	
G4-EC1	Financial indicators	Reasonable
FS-EC1	Key figures (IFRS): front cover flap (AR)	assurance*
	Business performance: pp. 48-60 (AR)	
	Notes to the consolidated balance sheet –	
	Equity and liabilities, p. 140f. (AR)	
	Personnel expenses: p. 163 (AR)	
	FS-EC1:	
	Group: p. 23 (AR)	
	Social Impact	
	Social impact indicators	
G4-EC2	Challenge – Climate Change	Reasonable GC 7
	Sustainable Solutions	assurance*
	Corporate Responsibility in Investment	
	Focus topics/Climate Change (CWS)	
	Topic Climate Change	
	Risk Report/Climate Change: p.74. (AR)	
	Opportunities Report: pp. 76f. (AR)	
G4-EC3	Other provisions: pp. 115f.; pp. 148-151 (AR)	Reasonable
		assurance*
G4-EC4	To our best knowledge, Munic	ch Re did not receive financial

To our best knowledge, Munich Re did not receive financial assistance from government.

122



Munich	R
Seite 7/	21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	UNGC Principle
Market Prese	nce			
G4-DMA	Employees Group/Employees (CWS)			
G4-EC5	Personnel expenses: p. 163 (AR) Employee indicators Munich Re (Reinsurance) Salary ERGO (Primary Insurance) Salary	Munich Re salaries are substantially above the local minimum wage level. In general, Munich Re pays wages that are higher than the local minimum wages (where they exist).	Reasonable assurance*	GC 6
G4-EC6	Employee indicators Employees			GC 6
Indirect Econo	omic Impacts			
G4-DMA	Our guiding principles Corporate Responsibility in Investment Sustainable Solutions	We use our knowledge to come up with solutions that meet the needs both of our clients and of society and its financial structures, since insurance only works if the risks – including indirect economic impact – can be calculated.	Reasonable assurance*	
	Opportunities Report:p.75-77			
G4-EC7	Corporate Responsibility in Investment Sustainable Solutions Procurement at Munich Re (CWS) Procurement principles Munich Re Munich Climate Insurance Initiative (CWS)			
G4-EC8	Corporate Responsibility in Investment Sustainable Solutions Challenge – Climate Change Challenge – Risk Awareness Focus topics/Climate Change			
Procurement	Practices			
G4-DMA	Procurement at Munich Re (CWS) Procurement principles Munich Re Procurement at Munich Re – Reinsurance Compliance			
G4-EC9	Procurement at Munich Re (CWS)	Partially reported		



Muni	ch	Re
Spita	2/	21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	<u>UNGC</u> Principle
	Procurement principles Munich Re			
	Procurement at Munich Re – Reinsurance			
	Supplier self-assessment – ERGO			
	Procurement principles – MEAG			
	Compliance			
CATEGRO	RY: ENVIRONMENTAL			
G4-DMA	Group: p. 23 (AR) Environment	Our explanations regarding this DMA applies to the following Aspects: Materials, Energy, Water, Emissions, Effluents and		
	Environmental indicators	Waste, Products and Services, Compliance, Transport, Supplier Environmental Assessment, Environmental Grievance		
	More detailed environmental indicators (xls)			
	Our guiding principles	Mechanisms.		
	Corporate Responsibility in Insurance			
	Corporate Responsibility in Investment			
Materials				
G4-EN1	Environmental indicators More detailed environmental indicators (xls)		Environmental	GC 7,8
G4-EN2	Environmental indicators		dutu	GC 8
O+ EIV2	More detailed environmental indicators (xls)			
Energy				
G4-EN3	Environmental indicators More detailed environmental indicators (xls)		Environmental data**	GC 7,8
	Environment			
G4-EN5	More detailed environmental indicators (xls)		Environmental data**	GC 8
G4-EN6	More detailed environmental indicators (xls)			GC 8,9
	Environment			
G4-EN7	Environment			GC 8,9
	Sustainable Solutions			
	Corporate Responsibility in Investment			
	More detailed environmental indicators (xls)			



Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	UNGC Principle
Water				
G4-EN8	Environment More detailed environmental indicators (xls)	As a financial services provider, Munich Re is not a water-intensive company.	Environmental data**	GC 7,8
G4-EN9		None		GC 8
G4-EN10		This indicator is of limited relevance, no water is recycled nor reused at our sites. Toilets at our offices in Munich are flushed with rainwater.		GC 8
Biodiversity				
G4-EN11		not material		GC 8
G4-EN12		not material		GC 8
G4-EN13		not material		GC 8
G4-EN14		not material		GC 8
Emissions				
G4-EN15	More detailed environmental indicators (xls)		Environmental data**	GC 7,8
G4-EN16	More detailed environmental indicators (xls)		Environmental data**	GC 7,8
G4-EN17	More detailed environmental indicators (xls)		Environmental data**	GC 7,8
G4- EN18	More detailed environmental indicators (xls)		Environmental data**	GC 8
G4-EN19	More detailed environmental indicators (xls)			GC 9
	Environment			
Effluents and \	Waste			
G4-EN23	More detailed environmental indicators (xls)		Environmental data**	GC 8
G4-EN24		There were no significant spills of hazardous materials during the reporting period. Our activity as a financial services provider		GC 8

spills are thus unlikely.

entails very little contact with hazardous materials and significant



<u>Standard</u> Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	<u>UNGC</u> Principle
G4-EN25		Munich Re works with certified waste disposal entities that guarantee the correct transfer and processing of waste.	Assurance	GC 8
Products and S	Services			
G4-EN27	Corporate Responsibility in Insurance			GC 7,9
	Corporate Responsibility in Investment			
	Sustainable Solutions			
	Challenge – Climate Change			
	Focus topics/Climate Change			
G4-EN28		Not material		GC 8
Compliance				
G4-EN29		None		GC 8
Transport				
G4-EN30	More detailed environmental indicators (xls)		Environmental	GC 8
	Environment		data**	
Supplier Enviro	onmental Assessment			
G4-EN32	Procurement at Munich Re (CWS)	100%		GC 8
	Procurement principles Munich Re			
	Procurement at Munich Re – Reinsurance			
	Supplier self-assessment – ERGO			
	Procurement principles – MEAG			
	Compliance			
G4-EN33	Procurement at Munich Re (CWS)	None, not material		GC 8
	Procurement principles Munich Re			
	Procurement at Munich Re – Reinsurance			
	Supplier self-assessment – ERGO			
	Procurement principles – MEAG			
	Compliance			

Environmenta	Grievance	Mechanisms
--------------	-----------	------------

G4-EN34 Annual General Meeting/Countermotions

(CWS)

GC8



Munich Re Seite 11/21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	UNGC Principle
CATEGORY	Y: SOCIAL			
Sub-categor	y: Labor Practices and Decent Work			
G4-DMA	Employees Group: p. 23 (AR) Munich Re as an employer – Overview		Reasonable assurance*	
Employment				
G4-LA1	Employee indicators	Partially reported (Employee turnover rate)		GC 6
G4-LA2	Employees Munich Re as an employer/what we offer/salary (CWS)	Munich Re does not differentiate between benefits provided to full-time staff and those provided to part-time staff.		GC 6
G4-LA3	Employees Employee indicators			GC 6
Management	Relations			
G4-DMA	Group: p. 23 (AR) Employees Group/Employees (CWS) Code of conduct (CWS) Munich Re (Reinsurance): Diversity ERGO (Primary insurance): Diversity		Reasonable assurance*	
G4-LA4		In the event of operational changes, the Staff Council is duly informed of the action planned in accordance with its right to information, so that it can have a say in whether, when and how such changes are effected		GC 3
Occupational I	Health and Safety			
G4-DMA	Employees Group: p. 23 (AR) Group/Employees (CWS) Code of conduct (CWS)		Reasonable assurance*	
G4-LA5	Employees	Data coverage: Germany (Munich Re Munich, ERGO, MEAG): 100% in-house staff/ MR America: 100%		



Munich Re Seite 12/21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	<u>UNGC</u> Principle
		All of Munich Re's activities/actions in its various lines of business are based on the same principles, but with local freedom of application.		
G4-LA6	Employees Employee indicators	Partially reported		
G4-LA7	Employees	"Preventing and dealing with stress in general is becoming increasingly important topic." []		
G4-LA8		Each company discusses safety at work issues with its own employee representatives. The relevant statutes are applied.		
Training and	Education			
G4-DMA	Employees Munich Re as an employer/what we offer/further training and development opportunities (CWS)		Reasonable assurance*	
	ERGO as an employer/promotion & development			
	Group/Employees (CWS) Group: p. 23 (AR)			
G4-LA9	Employees Employee indicators			GC 6
G4-LA10	Employees Munich Re as an employer/what we offer/further training and development opportunities (CWS) Careers at Munich Re (CWS) Future excellence in leadership (CWS) Specialist career (CWS)			
G4-LA11	Employees	Performance appraisals are part of Munich Re's performance management system. Employees and managers set objectives that are reviewed on a regular basis. Personnel development initiatives are part of the annual appraisal interviews. This is valid for the whole Munich Re Group.		GC 6



Muni	ch	Re
Seite	13	/21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	<u>UNGC</u> <u>Principle</u>
Diversity and	Equal Opportunity			
G4-DMA	Employees		Reasonable	
	Group: p. 23 (AR)		assurance*	
	Munich Re (Reinsurance): Diversity			
	ERGO (Primary insurance): Diversity			
G4-LA12	Employees		Reasonable	GC 6
	Employee indicators		assurance*	
	Corporate Governance/Supervisory Board (CWS)			
	Curriculum vitae Supervisory Board (CWS)			
	Group/Employees (CWS)			
Equal Remun	eration for Women and Men			
G4-DMA	Employees	We do not differentiate between men and women in our		
	Code of conduct (CWS)	remuneration system. Our policy on salary determination is not based on gender but on individual expertise, experience and market-based criteria.		
G4-LA13	Employees	We do not differentiate between men and women in our		GC 6
	Code of conduct (CWS)	remuneration system. Our policy on salary determination is not		
	Munich Re (Reinsurance): Munich Re as an employer/what we offer/salary (CWS)	based on gender but on individual expertise, experience and market-based criteria.		
	ERGO (Primary insurance): Salary & Benefits			
Supplier Asse	ssment for Labor Practices			
G4-DMA	Procurement at Munich Re (CWS)			
	Procurement principles Munich Re			
	Procurement at Munich Re – Reinsurance			
	Supplier self-assessment – ERGO			
	Procurement principles – MEAG			
	Compliance			
G4-LA14	Procurement at Munich Re (CWS)	100%		
G4-LA15	Procurement at Munich Re (CWS)	None		



Muni	ch	Re
Soito	11	/21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	<u>UNGC</u> <u>Principle</u>
Labor Practices	s Grievance Mechanisms			
G4-LA16		Not material		
Sub-categor	y: Human Rights			
Investment				
G4-DMA	Munich Re Position on Human Rights			
	Munich Re and Human Rights – Factsheet			
G4-HR1	Munich Re Position on Human Rights			GC 2
	Munich Re and Human Rights – Factsheet			
	Corporate Responsibility in Insurance			
	Corporate Responsibility in Investment			
	Principles for Responsible (PRI)-Reporting			
	Our commitments			
G4-HR2	Compliance	Partially reported: Training programmes on the Code of Conduct		GC 1
	Code of Conduct (CWS)	for our employees as well as e-learning module on this topic.		
	Corporate Responsibility in Insurance			
Non-discrimina	ation			
G4-HR3	Compliance	Partially reported		GC 6
	Code of Conduct (CWS)			
	Employees			
Freedom of as	sociation and collective bargaining			
G4-HR4	Compliance	To our best knowledge, in the period under review, no business		GC 3
	Procurement principles Munich Re	operations were identified in which freedom of association and		
		the right to collective bargaining were at risk.		
Child Labor				
G4-HR5	Compliance	To our best knowledge, in the period under review, no business		GC 5
		operations were identified in which there was a significant risk of		
		child labour.		



Munich Re Seite 15/21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	UNGC Principle
Forced or Con	mpulsory Labor			
G4-HR6	Compliance	To our best knowledge, in the period under review, no business operations were identified in which there was a significant risk of forced or compulsory labour.		GC 4
Security Pract	tices			
kG4-HR7	Compliance	Munich Re's Code of Conduct applies to 100% of its own security staff. For all external security personnel, the conditions of the new Purchasing Guidelines apply for reinsurance and require that all new supply and service contracts contain a Corporate responsibility clause based on the UN's Global Compact.		GC 1
Indigenous Ri	ghts			
G4-HR8	Compliance	To our best knowledge, in the period under review, no business operations were identified in which the rights of indigenous peoples were violated.		GC 1
Assessment				
G4-HR9	Corporate Responsibility in Insurance			GC 1
Supplier Hum	an Rights Assessment			
G4-HR10	Procurement at Munich Re (CWS) Procurement principles Munich Re Procurement at Munich Re – Reinsurance Supplier self-assessment – ERGO Procurement principles – MEAG	100%		GC 2
G4-HR11		None		GC 2
Human Rights	s Grievance Mechanisms			
G4-HR12	Annual General Meeting/Countermotions			GC 1

Sub-Category: Society



Muni	ch	Re
Seite	16	/21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	<u>UNGC</u> <u>Principle</u>
Local Commu	nities			
G4-DMA	Corporate governance Financial Crime Management Code of Conduct (CWS) ERGO Corporate Governance Sustainable Solutions Social Impact	This DMA applies to the aspects Local communities, Anticorruption, Public Policy, Anti-competitive behavior, Compliance, Supplier Assessment for Impacts on Society, Grievance Mechanisms for Impacts on Society.		
G4-SO1		Little relevance for Munich Re as a financial services provider: we have only a comparatively small impact on the local community with our office-based business operations.		GC 1
G4-SO2		Little relevance for Munich Re as a financial services provider: we have only a comparatively small impact on the local community with our office-based business operations.		GC 1
G4-FS13	Sustainable Solutions			
G4-FS14	Sustainable Solutions Munich Re Foundation			
Anti-corruption	on			
G4-SO3	Corporate governance Financial Crime Management			GC 10
G4-SO4	Corporate governance Financial Crime Management			GC 10
G4-SO5	Corporate governance Financial Crime Management ERGO Corporate Governance			GC 10
Public Policy				
G4-SO6	Social impact indicators			GC 10
Anti-competi	tive Behavior			
G4-SO7	Code of Conduct (CWS)	Data not reported		



Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	<u>UNGC</u> <u>Principle</u>
Compliance				
G4-SO8	Code of Conduct (CWS)	Munich Re was not subject to any fines or sanctions in the reporting year		
Supplier Asses	sment for Impacts on Society			
G4-SO9	Procurement at Munich Re (CWS)	100%		
	Procurement principles Munich Re			
	Procurement at Munich Re – Reinsurance			
	Supplier self-assessment – ERGO			
	Procurement principles – MEAG			
G4-SO10		None		
Grievance Med	chanisms for Impacts on Society			
G4-SO11	Annual General Meeting/Countermotions			
	ry: Produkt Responsibility			
Customer Heal	lth and Safety	This DMA applies to the aspects Product and Service Labeling	Reasonable	
Customer Heal	Ith and Safety Code of Conduct (CWS)	This DMA applies to the aspects Product and Service Labeling, Marketing Communication, Customer Privacy and Compliance	Reasonable assurance*	
Customer Heal	lth and Safety	This DMA applies to the aspects Product and Service Labeling, Marketing Communication, Customer Privacy and Compliance		
Customer Heal	Code of Conduct (CWS) Our guiding principles Group structure: pp. 24-26 (AR)			
Customer Heal G4-DMA Product and Se	Code of Conduct (CWS) Our guiding principles Group structure: pp. 24-26 (AR)	Marketing Communication, Customer Privacy and Compliance In accordance with our codes of conduct, we are fair and open in		
Customer Heal G4-DMA Product and Se	Code of Conduct (CWS) Our guiding principles Group structure: pp. 24-26 (AR)	Marketing Communication, Customer Privacy and Compliance In accordance with our codes of conduct, we are fair and open in our business relations. Munich Re endeavours to give clients the		
Sub-Categor Customer Heal G4-DMA Product and Se G4-DMA (FSS): (former FS15, FS16)	Code of Conduct (CWS) Our guiding principles Group structure: pp. 24-26 (AR)	Marketing Communication, Customer Privacy and Compliance In accordance with our codes of conduct, we are fair and open in		
Customer Heal G4-DMA Product and Se G4-DMA (FSS): (former	Code of Conduct (CWS) Our guiding principles Group structure: pp. 24-26 (AR)	In accordance with our codes of conduct, we are fair and open in our business relations. Munich Re endeavours to give clients the best possible advice and the information they need to take sound decisions. Munich Re's product and service range – from development and		
Customer Heal G4-DMA Product and Se G4-DMA (FSS): (former	Code of Conduct (CWS) Our guiding principles Group structure: pp. 24-26 (AR)	In accordance with our codes of conduct, we are fair and open in our business relations. Munich Re endeavours to give clients the best possible advice and the information they need to take sound decisions. Munich Re's product and service range – from development and marketing to conclusion of the business – is subject to strict		
Customer Heal G4-DMA Product and Se G4-DMA (FSS): (former	Code of Conduct (CWS) Our guiding principles Group structure: pp. 24-26 (AR)	In accordance with our codes of conduct, we are fair and open in our business relations. Munich Re endeavours to give clients the best possible advice and the information they need to take sound decisions. Munich Re's product and service range – from development and		



Munich Re Seite 18/21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	UNGC Principle
		primary insurance group ERGO has significantly improved the transparency of all documents. Customers receive all the information they need on the conditions of liability relating to		
		their insurance protection in a clear and transparent format.		
G4-PR3		Munich Re's product and service range – from development and marketing to conclusion of the business – is subject to strict quality controls. Hence no significant product or service categories are covered by and assessed for compliance with such procedures.		
		To further clarify insurance terms and conditions, especially our primary insurance group ERGO has significantly improved the transparency of all documents. Customers receive all the information they need on the conditions of liability relating to their insurance protection in a clear and transparent format.		
G4-PR4		Not applicable For us, adherence to high ethical and legal standards is a matter of principle and is regulated by our Code of Conduct.		
G4-PR5	Stakeholder and materiality Group structure: pp. 24-26 (AR)			
Marketing Co	ommunications			
G4-PR6	Corporate Responsibility in Insurance Compliance Code of Conduct (CWS) ERGO Code of Conduct (CWS)			
G4-PR7		For us, adherence to high ethical and legal standards is a matter of principle and is regulated by our Codes of Conduct. To our best knowledge, no cases of non-compliance occurred during 2016.		
Customer Pri	vacy			
G4-PR8		For us, adherence to high ethical and legal standards is a matter of principle and is regulated in our Codes of Conduct and our safety regulations. To our best knowledge, Munich Re has not received any information about material breaches of privacy rules.		



Munich Re Seite 19/21

Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	<u>UNGC</u> <u>Principle</u>
Compliance				
G4-PR9		For us, adherence to high ethical and legal standards is a matter of principle. To our best knowledge, no cases of non-compliance occurred, and no fines were paid during 2016.		

Disclosure



Seite 20/21 Standard

Location of Munich Re's disclosure***

Additional explanation/Reason for Omission

External **Assurance** UNGC Principle

FINANCIAL SECTOR SUPPLEMENT ASPECTS: PRODUCT PORTFOLIO

Product Portfolio	0	
G4-DMA (former FS1-FS5)	Corporate Responsibility in Insurance Corporate Responsibility in Investment Sustainable Solutions Stakeholder and materiality	Further specialised units/panels for early ESG risk detection include: Reputational Risk Committees (AR 2016, p. 73) Emerging Risks Think Tank (AR 2015, p. 132). Internal control system (ICS) (AR 2016, p. 73) In 2007, Munich Re established the Corporate Climate Centre (CCC), forming the link between geoscientific research and operative underwriting.
G4-FS6	Consolidated financial statements – Segment Reporting, pp. 117-123. (AR)	
G4-FS7	Objectives, measures and milestones Corporate Responsibility in Investment Principles for Responsible (PRI)-Reporting	Partially reported The Responsible Investment Guideline was extensively revised in 2016 and now summarises all guidelines and requirements related to PRI and ESG concerning asset management at Munich Re (Group). For the asset classes of infrastructure, renewable energies and forestry, we have established an investment process that takes into account both financial and ESG criteria. These ESG criteria include human rights issues. Our asset management arm, MEAG, offers different sustainable investment funds: MEAG Nachhaltigkeit and MEAG FairReturn.
G4-FS8	Objectives, measures and milestones Corporate Responsibility in Investment Principles for Responsible (PRI)-Reporting	Partially reported Our Responsible Investment Guidelines stipulate that the vast majority of our own investments in shares and bonds should satisfy sustainability criteria.
Audit		
G4-DMA (former FS9)	Environment About the Corporate Responsibility Portal	



Standard Disclosure	Location of Munich Re's disclosure***	Additional explanation/Reason for Omission	External Assurance	UNGC Principle
	Risk Report, pp. 66f. (AR)			
	Annual Report Auditors Report, p. 178 (AR)			
	Report of the Supervisory Board: pp. 10f.			
Active Owners	hip			
G4-DMA (former FS12)		MEAG analyses whether corresponding shareholder resolutions are in line with long-term ESG considerations and MEAG's corporate objectives, its voting being determined on that basis.		
		Shareholdings in other joint-stock companies make up a relatively low percentage of Munich Re's investments at the present time.		
		We exercise our right to vote primarily at the annual general meetings of German companies, since exercising such rights outside Germany entails substantial costs.		
		MEAG also holds in-depth talks with individual companies aimed at improving their SRI performance.		
G4-FS10		It is difficult to put a precise figure on the number of companies with which we interact on social or ecological issues. In the course of our business relationships, our asset management has dealings		
		with the managements of several hundred companies, these contacts also being used to address environmental issues in the		
		context of our comprehensive risk analyses. Munich Re's commitment to the Principles for Responsible Investment reinforces the relevance of such issues to our relationships with		
		our partners. Although engagement cannot be tracked at a global level, MEAG does engage with companies in its investment		
		portfolio, particularly those included in its socially responsible investment funds.		
G4-FS11	Corporate Responsibility in Investment Principles for Responsible (PRI)-Reporting			

^{*} Reasonable Assurance by KPMG for the following sections of the Munich Re Annual Report 2016: Consolidated financial statements and notes; combined management report

^{**} Environmental data for the FY 2016 has been externally verified by Ernst & Young

^{***} Corporate Responsibility-Portal/ Corporate Website (CWS)/ Annual Report (AR)



CORPORATE RESPONSIBILITY

MUNICH RE

Home

STRATEGY

RESPONSIBILITY

TOPICS

KEY FIGURES

SERVICE

SRI indices, SRI ratings and awards

Key figures

Key figures

Financial indicators

Environmental indicators

Employee indicators

Social impact indicators

GRI Content Index and Global Compact Communication on Progress

SRI indices, SRI ratings and awards

Memberships and partnerships

PRI reporting

PSI reporting



Related topics

Social Impact Investor Relations

Munich Re corporate responsibility strategy rated positively

Open and transparent dialogue with our national and international stakeholders on our commitment in the areas of corporate responsibility and socially responsible investment (SRI) is an essential part of our corporate culture.

Munich Re Group's inclusion in numerous sustainability indices, our good to very good results in many different SRI ratings, and the awards we have received show that we are on the right track here.

As there are so many SRI rating and ranking programmes, our SRI rating strategy outlines the criteria that determine which programmes we participate in: the basic prerequisite for our participation in an SRI rating is that it involves a broad-based approach to sustainability, i.e. considers environmental, social and governance (ESG) aspects. Transparent methodology and a comprehensible assessment system are also essential

SRI indices

Dow Jones Sustainability Indices In Collaboration with RobecoSAM 40

Included in the DJSI for many years Munich Re has been continually listed in the

Dow Jones Sustainability Indices since 2001, with a valuation always above average.



Munich Re listed in ethical indices

The Italian asset management company ECPI includes Munich Re in the ECPI Global Ethical, ECPI World ESG Equity and ECPI Global Climate Change Equity indices.





Represented again in two Ethibel Forum indices

Munich Re is represented in the ESI (Ethibel Sustainability Index) Excellence Europe and the ESI Excellence Global. Ethibel is an independent French consulting agency specialising in socially responsible investments and uses data from the research provider Vigeo Eiris for its ratings.



Continuous listing for Munich Re in the various FTSE4Good index series

Since the establishment of this rating in 2001. Munich Re has been ever-present in the various FTSE4Good index series. The FTSE4Good is an index family for sustainability and corporate governance published by the London service provider FTSE.

Munich Re represented in Vigeo Eiris indices

Munich Re has been included in the Euronext Vigeo World 120 and Euronext Vigeo Europe 120 indices since 2012, and in the Euronext Vigeo Eurozone 120 Index since 2013.









Munich Re listed in the STOXX® Global ESG Leaders Index

The Global ESG Leaders Index ranks leading companies according to ESG criteria. The list is based on analyses conducted by Sustainalytics.

SRI ratings



Industry leader in Sustainalytics' industry rating In 2017, Munich Re came a very good

In 2017, Munich Re came a very good second in the insurance sector in Sustainalytics' industry rating.



Munich Re in Bronze Class

Munich Re again receives Bronze Class distinction from RobecoSAM for the best and most sustainable companies. RobecoSAM assesses the sustainability performance of all global players and determines the composition of the Dow Jones Sustainability Indices.

Bloomberg

Munich Re among industry leaders

Bloomberg analyses and evaluates corporate transparency in regard to environmental, social and governance (ESG) aspects. Munich Re is among the companies evaluated annually. According to Bloomberg, all clients using its 250,000 data terminals have access to all publicly available ESG data for 2,000–3,000 companies.



Good rating from MSCI

Munich Re is rated AA in MSCI's 2017 ESG rating. MSCI is a leading global provider of investment solutions.



Prime rating

Munich Re was again awarded a "prime" corporate responsibility rating by oekom research in 2016, thus maintaining its insurance sector best-in-class status. oekom research is one of the world's leading SRI rating agencies.

Awards



Munich Re subsidiary DKV Seguros: "Best Workplaces in Spain"

Following the annual survey by Great Place to Work[®], Munich Re's Spanish subsidiary DKV Seguros was included in the "Best Workplaces in Spain 2017" in the category for companies with between 500 and 1,000 employees. The company took third place in the ranking for the 50 best workplaces in 2017.

Apollo Munich Health Insurance Company Ltd. in the Top 100 in the insurance segment

Each year, Great Place to Work® partners with more than 5,500 organisations with some ten million employees worldwide to conduct the world's largest annual set of workplace culture studies.





Family-friendly company: DKV Seguros

DKV Seguros was awarded the FFC ["EFR" in Spanish] seal of quality as a family-friendly company by the Másfamilia Foundation. The foundation is committed to establishing processes that create a work-life balance in companies.



Potentialpark: Online Talent Communication

In 2016, ERGO was ranked in the top 30 companies in the area of online talent communication (OTaC).



Company healthcare management certificate of quality

D.A.S. Austria was once again recognised for its successful workplace health promotion projects. It has again been awarded the certificate of quality for the sustainability of its healthcare programmes for the period 2015 to 2017.



Career and Family Audit

For its family-friendly human resources policy, ERGO has already won the "audit berufundfamilie[®]" (family and career audit) five times for its office locations in Germany. This certificate is awarded by the non-profit Hertie Foundation.





BOMA Awards for Munich Re in Canada and America

Some Munich Re buildings have received awards from the Building Owners and Management Association (BOMA) for their high energy efficiency. The office buildings of Munich Re America now bear the "BOMA 360" quality seal, while the office buildings of Munich Re Company of Canada have also received the "BOMA BEST" award.



BOMA 7-Point Challenge

Munich Re America received special recognition from the Building Owners & Managers Association (BOMA) for its ambitious energy saving programme. The rating was performed as part of an international programme aimed at reducing Group-wide energy consumption by at least 30%.





LEED Gold and Platinum certificates

Munich Re America and DKV Seguros buildings received various LEED certifications, including the highest award, LEED Platinum. LEED (Leadership in Energy and Environmental Design) is a leading certification system for environmentally friendly, resource-saving, sustainable construction.

Munich Re awarded DZ Bank's sustainability label.



DZ Bank Sustainable Investment Research evaluates economic, environmental, social and corporate governance criteria. Sustainable investments are awarded DZ Bank's sustainability label.



Asia Insurance Industry Awards At the 20th Asia Insurance Industry Awards in 2016, Munich Re received awards in the category "General Reinsurer of the Year".

Interesting? Share this content on your favourite social media platform.











CORPORATE RESPONSIBILITY

MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Key figures Memberships and partnerships

Memberships and coo

Financial indicators

Environmental indicators

Employee indicators

Social impact indicators

GRI Content Index and Global Compact Communication on Progress

SRI indices, SRI ratings and awards

Memberships and partnerships

PRI reporting

PSI reporting



Related topics

Social Impact Foundations

Cooperations, initiatives and foundations

For Munich Re, corporate responsibility means working actively in collaborative forums and committees, and supporting targeted initiatives. In so doing, we contribute not only financially, but also seek to employ our expertise to create forward-looking solutions for society.

Cooperations, memberships and committee work

Munich Re contributes its knowledge in numerous cooperations, memberships and committees. The list that follows provides examples of our commitments:



acatech – German Academy of Science and Engineering



Australian Business Roundtable for Disaster Resilience and Safer Communities



Charta der Vielfalt (Diversity Charter)



City Innovation Platform (CIP) for African Infrastructure, Risk and Resilience (AIRR)



Geneva Association



GeoHazards International (GHI)



German Insurance Association (GDV)



Global Climate Forum



Global Earthquake Model (GEM)

Global Volcanoe Model (GVM)





Impact Hub Munich



Insurance Development Forum



Max Planck Society



Munich Climate Insurance Initiative (MCII)



OECD (committee for disaster management)



Principles for Responsible Investment



Principles for Sustainable Insurance (PSI)



The Global Fund



aring for Climate



UN Caring for Climate



UN Global Compact



UNEP Finance Initiative



UNISDR Gremium der Private Sector Alliance for Risk Sensitive Investment (AR!SE)



Association for Environmental Management in Banks, Savings Banks, and Insurance Companies (VfU)

Initiatives and activities

To us, corporate responsibility also means assuming responsibility for the community in which we live and work. The initiatives that follow show a selection of our areas of involvement:



Arrival Aid

Caritas





German Red Cross

ergo: wir helfen e.v.

ergo: wir helfen e.V.

HORIZONT e.V.



Horizont e.V.



Joblinge Foundation



Munich University Society



Association for the Promotion of Science and Humanities in Germany



Stiftung Pfennigparade ("Penny Parade" Foundation)



Mission Handicap Assurance of the French Insurance Federation

Foundations

For many years now, we have accepted social responsibility via our foundations and put our extensive knowledge at the service of mankind.



DKV Foundation "Integralia"





Munich Re Foundation



Dr. Hans-Jürgen Schinzler Foundation



ERGO Youth & Future Foundation

GRI Content Index: G4-15; G4-16; G4-24; G4-25; G4-26; G4-27

Interesting? Share this content on your favourite social media platform.











MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Key figures PRI reporting

Responsibility in business

Financial indicators

Environmental indicators

Employee indicators

Social impact indicators

GRI Content Index and Global Compact Communication on Progress

SRI indices, SRI ratings and awards

Memberships and partnerships

PRI reporting

PSI reporting

Principles for Responsible Investment – Investing responsibly

At Munich Re, responsible management has top 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 we were the first German company to sign them.

A holistic investment strategy aligned with ESG (environmental, social, governance) criteria also has a 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 of good corporate governance, in their investment decisions. Munich Re is committed to fulfilling the PRI in an appropriate and forward-looking

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

Related topics

Objectives and measures
Our guiding principles
Challenges: Climate change
CR in investment

External links

UN: Principles for Responsible Investment Munich Re PRI Transparency Report 2016

No.	Principle	Examples of measures
1	"We will incorporate ESG issues into investment analysis and decision-making processes." Sustainable investment process	 We are pursuing the best-in-class approach in the investment process. In other words, from the base population of investable shares and corporate bonds, we select the most sustainable titles in every sector. If two risk-returns profiles are identical, we select the more sustainable issuer.
2	"We will be active owners and incorporate ESG issues into our ownership policies and practices." Active investor	 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.
3	"We will seek appropriate disclosure on ESG issues by the entities in which we invest." Sustainability disclosure	 For the mutual funds, MEAG Nachhaltigkeit and MEAG FairReturn, we request informatior relevant to our sustainable investment criteria from the issuers. We have taken sustainability criteria into account when purchasing real estate since 2007.
4	"We will promote acceptance and implementation of the Principles within the investment industry." Patron of PRI	 We proclaim and stress our principles via 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 FairReturn.
5	"We will work together to enhance our effectiveness in implementing the Principles." Cooperation to realise the PRI	 Through its PRI membership, Munich Re contributes to the further development and propagation of the principles. We are driving the exchange of experience forward with other PRI members in Germany and around the world.

No.	Principle	Examples of measures
6	"We will each report on our activities and progress towards implementing the Principles." Reporting on activities and progress relevant to PRI	 We participate in UNEP's annual PRI Reporting and Assessment Survey. We report on the PRI and our activities pertaining to it (such as reports and ESG analyst discussions). Munich Re takes part in ESG ratings and factors appraisals into corporate decision-making.

GRI: G4-DMA-Human Rights; G4-HR1; G4-FS7; G4-FS11











MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Key figures PSI reporting

Responsibility in business

Financial indicators

Environmental indicators

Employee indicators

Social impact indicators

GRI Content Index and Global Compact Communication on Progress

SRI indices, SRI ratings and awards

Memberships and partnerships

PRI reporting

PSI reporting

Principles for Sustainable Insurance – Corporate responsibility in business

Acting responsibly while at the same creating added value for the Group and for society is Munich Re's guiding principle. We implement this maxim throughout the Group by way of our corporate responsibility strategy, which is geared towards the shared value approach. In our core business of primary insurance and reinsurance, and also in our associated investments, the Principles for Sustainable Insurance (PSI) and the Principles for Responsible Investments (PRI) are important guiding frameworks for us.

These two codes, and other voluntary commitments the Group has made, go well beyond what is required by law or supervisory regulations. By implementing them resolutely, we meet our stakeholders' demands in terms of our corporate responsibility.

Principles for Sustainable Insurance

Sustainability is about managing risks and creating opportunities. The objective of sustainable economic value creation is anchored in the core principles of our corporate strategy and underscored by our shared value concept. By taking into account environmental, social and governance (ESG) aspects, we can achieve the maximum effect for our Group and for society.

Statement by the CEO

Within the framework of the PSI, we work together with various market participants from the insurance industry and with a wide range of stakeholders from society at large.

The following examples from 2016 show how Munich Re (Group) is putting the four principles into practice:

Principle 1

We will embed in our decision-making environmental, social and governance issues relevant to our insurance business.

A holistic Group strategy underlies our business of primary insurance and reinsurance. We reflect this in a framework for integrating ESG aspects into our core business and asset management, geared to the respective business fields. Our shared value approach underlines this by more strongly connecting our risk knowledge and business intelligence to corporate responsibility.

Corporate responsibility in business Corporate responsibility in insurance

To ensure that our commitment is implemented and put into practice, members of Munich Re's Board of Management have PSI targets in their long-term performance objectives, which they also pass on to subordinate management levels.

Annual Report 2016 (PDF, 1.6 MB) (p. 29 pp)

For five years now, we have had a cross-business-field Group Corporate Responsibility Committee (GCRC), which advises the Board of Management on the development of our sustainability strategy. It identifies and prioritises sensitive topics, on which we develop positions that apply Group-wide. These are implemented by the business fields in the form of binding underwriting guidelines, best practices and guidance for our employees. For particularly sensitive activities such as Arctic drilling, we have created an Arctic Drilling Panel, an expert team which assesses all business activities related to Arctic drilling exposures (e.g. exploration or production).

So far, the GCRC has approved position papers and guidelines on the following sensitive topics:





External Link

PSI Signatories: Signatory companies

Sensitive Issues: Munich Repositions and measures

Banned weapons Policy on cluster munition and land mines	Mining Position paper including specific questions on ESG aspects	ESG Tool Assessment of different industries (e.g. engineering business)
Fracking Position paper including specific questions on ESG apects	Artic drilling Guideline, risks to be referred to Arctic Drilling Panel	ESG country rating Exclusion of investments in government bonds of substandard countries
Oil sands Position paper including specific questions on ESG apects	Investments in farmland Mandatory ESG check for investments	Sensitive issues under observation Tax evasion, pulp and paper, palm oil

e--- roe: Munich Re

Position papers and measures on sensitive topics at Munich Re

With our approach, full responsibility for each transaction intentionally remains with the business unit concerned. Experts from our Corporate Responsibility department support our employees in assessing ESG criteria in business operations. We offer a broad-based range of training programmes, from technical implementation of our underwriting guidelines to current sustainability topics, tailored in each case to the individual industry and region. At the same time, we expect and promote active dialogue among our employees and between them and their managers. By the end of 2016, more than 600 staff members (underwriters, client managers, business analysts) in Munich and major international hubs have been sensitised to ESG aspects and, in their role as multipliers, are now transferring their knowledge within their own departments, in risk assessments, client discussions and in exchanges with other units.

Corporate responsibility in insurance business

An ESG tool for engineering projects, developed in 2013, was continually extended to other industry sectors. It supports our underwriters in systematically incorporating ESG aspects into their risk assessment. Furthermore, it helps our asset managers to assess risks when investing in infrastructure projects.

Our primary insurer ERGO attaches great importance to the integration of ESG aspects in its personal lines insurance business and offers a multiplicity of insurance solutions that take account of ecological aspects. In 2014, ERGO introduced ESG aspects into the product development process for private customer business. In 2015, ERGO implemented a new branding for products which meet all relevant ESG standards: ERGO thus labels, for example, a car insurance for e-vehicles with special batteries with an "ESG icon". The range of products is continuously being expanded. In the sales process, the ERGO Compass – a standardised, technically supported guideline for advising clients – ensures a consistently high level of consulting quality.

Sustainable Solutions

Principle 2

We will work together with our clients and business partners to raise awareness of environmental, social and governance issues, manage risk and develop solutions.

The world around us is changing, with global warming continuing apace and natural catastrophes posing a threat to emerging yet still vulnerable economies. The global population is rising, with too many people having insufficient or no access at all to healthcare.

Topic: Climate Change Topic: Health Care Topic: Risk awareness

New kinds of risks and global challenges call for new approaches, e.g. in the field of renewable energies and innovative technologies, in dealing with climate change, or with access to insurance in emerging and developing countries. ESG aspects are also taken into consideration in the development of innovative coverage concepts. This allows us to open up new business opportunities, while at the same time creating benefits for society in keeping with our shared value approach.

Sustainable Solutions

We share our findings in our dialogue with ceding companies and other business partners. At the same time, Munich Re Group staff regularly speak at international conferences, market events or client seminars about PSI and ESG integration.

Munich Re is driving forward ESG integration at industry level, and we are encouraging the development of best practices.

One example of a new cooperation involving less traditional partners is the "Global Resilience Project". This project hopes to achieve a change in perspective on the part of governments, non-governmental organisations (NGOs), local authorities and companies, and get them to invest more heavily in the prevention of catastrophe risks instead of only spending funds on disaster response. To that end, a better understanding of the need for catastrophe prevention needs to be achieved by quantifying the socio-economic cost of

catastrophes and assessing the effectiveness of prevention measures

In another PSI Initiative, Munich Re cooperates with a variety of other partners including ICLEI, a network for sustainable urban development at municipal level: "City Innovation Platform: African Infrastructure Risk & Resilience". The project started with a pilot phase in the Tanzanian capital Daressalam and developed concepts for more sustainable urban infrastructure planning and risk management. It is envisaged to make the concept available both to other towns and cities and to the insurance industry as a best practice.

More details on these cooperations and partnerships can be found here.

Principle 3

We will work together with governments, regulators and other key stakeholders to promote widespread action across society on environmental, social and governance

Munich Re has always valued an open and ongoing dialogue with its stakeholders. Transparent communication with our stakeholders is the basis for mutual trust. At the same time, this exchange enables us to identify important social challenges and changes at an early stage so that we can then offer or develop suitable business solutions for the future.

Stakeholder dialogue

Through the departments responsible (Corporate Responsibility, Group Legal, Corporate Climate Centre and others) we are in constant contact with a large number of interest groups, NGOs, UN institutions, public administration bodies and the scientific community at national and international level.

Working with a wide range of different political institutions and national governments, Munich Re provides advice on current topics relating to climate change and contributes the expertise of its Corporate Climate Centre. Munich Re is an active member of many insurance industry initiatives and associations.

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 the Global Earthquake Model (GEM), GeoHazards International (GHI), the Global Climate Forum (GCF) and the Munich Climate Insurance Initiative (MCII). In addition to providing financial resources, Munich Re makes available its comprehensive risk and insurance expertise.

Membership in national and international bodies, initiatives and foundations

Principle 4

We will demonstrate accountability and transparency in regularly disclosing publicly our progress in implementing the principles.

This is our fifth progress report in connection with the Principles for Sustainable Insurance. It covers the calendar and financial year 2016 (1 January to 31 December). We will publish an update for the financial year 2017 within a year

An extensive overview of all our activities can be found on the Corporate Responsibility Portal and on our corporate website.

Corporate Responsibility Portal Munich Re Corporate website SRI indices, SRI ratings and awards received

N.B.: Hyperlinks in this report refer to pages on our Corporate Responsibility Portal, of which this report is an integral part. Links also refer to Munich Re's corporate website and other pages in the public domain, which may be updated at irregular intervals.

Munich, June 2017

Lucia Rückner Senior Consultant Corporate Responsibility Munich Re responsibility@munichre.com

GRI: G4-DMA-Human Rights













MUNICH RE STRATEGY RESPONSIBILITY TOPICS KEY FIGURES SERVICE

Home Service About the CR portal

About us

About the CR portal

Downloads

Glossary

Contact and feedback



Related topics

GRI reporting & Global Compact

Downloads

External verification environmental data 2016 (PDF, 14 KB)
Corporate Responsibility Report 2016/17

About the Corporate Responsibility Portal

The Corporate Responsibility Portal presents Munich Re's approach to corporate responsibility. We illustrate this with specific examples and detailed indicators, and explain the relationship between corporate responsibility and our business.

In the form of our annual Corporate Responsibility Report, the portal provides a review of the further development of our processes and systems, the measures we have taken in the last year, and the successes achieved. We also report regularly on the corporate responsibility activities of the entire Group. This comprises the business fields of reinsurance, primary insurance and MEAG, Munich Re's asset manager.

The measures and activities presented focus mainly on the period from 1 January 2016 to 30 March 2017; the key figures relate to the financial year 2016 (ending 31 December 2016). The contents of the Corporate Responsibility Portal are available in German and English and can be downloaded as a PDF document. This document also serves as our Corporate Responsibility Report for 2016.

Selected topics - Qualitative and quantitative reporting

To ensure that the Corporate Responsibility Portal gives a comprehensive picture of our performance, the topics and contents have been chosen according to their importance and the interests of our stakeholders.

Selected quantitative environmental data for the financial years 2015 and 2016 have been verified Group-wide (see downloads on the right).

GRI Guidelines and Global Compact "Communication on Progress" Report

To provide greater transparency and clarity in preparing the Corporate Responsibility Portal, we have used as a basis the G4 Guidelines of the Global Reporting Initiative (GRI) and the Financial Services Sector Supplement. We report "in accordance with" the "core option" in the GRI G4 Guidelines. The GRI indicators and additional sectoral indicators have been compiled in separate GRI disclosures. The Corporate Responsibility Portal and the GRI disclosures also constitute our annual Communication on Progress Report for UN Global Compact. As part of reporting on the Corporate Responsibility Portal, we also report on the Principles for Sustainable Insurance (PSI).

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. An external audit company confirmed that the entire Munich Re Group had met its objectives for selected quantitative environmental data in 2015 and 2016 (see audit reports in the download area on the right).

Contacts

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

Kerstin Lücke, Corporate Responsibility Consultant, is responsible for the Corporate Responsibility Portal. Please send your questions and comments to responsibility@munichre.com

Editorial note

In texts on the Corporate Responsibility Portal, we dispense with gender-related alternative expressions (e.g. he/she) for the sake of better readability.

GRI Content Index: G4-20; G4-21; G4-28; G4-30; G4-33













MUNICH	I RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE
Home	Service	Downloads				

Service

About the CR portal Downloads Glossary Contact and feedback

Downloads

File		Download
	Corporate Responsibility Report 2015/2016 (PDF, 12 MB)	
	Corporate Responsibility Report 2014/2015 (PDF, 18 MB)	
	Corporate Responsibility Report 2013/2014 (PDF, 7.7 MB)	
	Corporate Responsibility Report 2012/2013 (PDF, 2 MB)	
	Corporate Responsibility Report 2011/2012 (PDF, 2.4 MB)	

Corp	orate Responsibility Short Reports	
File		Download
	Corporate Responsibility Short Report 2014/2015 (PDF, 2.5 MB)	
	Corporate Responsibility Short Report 2013/2014 (PDF, 2.7 MB)	
	Corporate Responsibility Short Report 2012/2013 (PDF, 2 MB)	
	Corporate Responsibility Short Report 2011/2012 (PDF, 2.3 MB)	

File	Download
Group Annual Report 2016 (PDF, 1.6 MB)	
Group Annual Report 2015 (PDF, 3.9 MB)	
Group Annual Report 2014 (PDF, 12 MB)	
Group Annual Report 2013 (PDF, 9.3 MB)	
Group Annual Report 2012 (PDF, 7.7 MB)	
Group Annual Report 2011 (PDF, 10.9 MB)	

File	Download
Munich Re Risk report 2016 (PDF, 85	KB)
Munich Re Risk report 2015 (PDF, 146	6 KB)
Munich Re Risk report 2014 (PDF, 111	KB)
Munich Re Risk report 2013 (PDF, 1.6	MB)
Munich Re Risk report 2012 (PDF, 487	′ KB)

File Download

Munich Re Risk report 2011 (PDF, 543 KB)

Munich Re Codes of Conduct

File Download

Munich Re Codes of Conduct

Munich Re Code of Conduct (reinsurance) (PDF, 467 KB)

ERGO Code of Conduct (PDF, 113 KB)

Code of Conduct for Self-employed Sales Agents of ERGO Companies (PDF, 46 KB)

Principles for Sustainable Insurance (PSI) Reports

File Download

PSI Disclosure 2015 (PDF, 13.5 MB)

PSI Disclosure 2014 (PDF, 114 KB)

PSI Disclosure 2013 (PDF, 121 KB)

PSI Disclosure 2012 (PDF, 1.2 MB)

TOPICS GEO – Natural catastrophes

File Download

TOPICS GEO – Natural catastrophes 2016 (PDF, 15.6 MB)

TOPICS GEO – Natural catastrophes 2015 (PDF, 17.7 MB)

TOPICS GEO – Natural catastrophes 2014 (PDF, 15.1 MB)

TOPICS GEO – Natural catastrophes 2013 (PDF, 13.6 MB)

TOPICS GEO – Natural catastrophes 2012 (PDF, 9.4 MB)

TOPICS GEO – Natural catastrophes 2011 (PDF, 11.4 MB)

Procurement

File Download

Procurement Principles (PDF, 77 KB)

Environment and climate

File Download

External verification environmental data 2016
(PDF, 14 KB)

External verification environmental data 2015
(PDF, 137 KB)

Carbon Disclosure Report 2013 (PDF, 332 KB)

Carbon Disclosure Report 2012 (PDF, 145 KB)

Carbon Disclosure Report 2011 (PDF, 133 KB)

File Download

Environmental guidelines of Munich Re 2012 (PDF, 222 KB)

SystemAgro 2013 (PDF, 335 KB)

GRI: G4-29











MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE								
Home Service	Glossary												
								Α	В	С	D	Е	F
Service		Α						G	Н	1	J	K	L
								М	Ν	Ο	Р	Q	R
		Actuary Qualifie		analyses problem	ns from the are	a of insurance.	home loans.	S	Т	U	V	W	X
		investme	ents and per	nsions using metho	ods of probabil	ity theory and fi	nancial	Υ	Z				
About the CR port	al		mathematics, and develops solutions with due regard to legal and economic parameters.										
Downloads		paramo	.010.										
Glossary			ability mana	agement ALM, asset-liabilit	tv managemer	nt is a risk mode	el for managing						
Contact and feedb	ack						LM is to manage all						
		without are simi	exceeding th ultaneously a is developed	alance sheet in suc e desired level of I unalysed with regal d to achieve the de	risk. In an ong rd to their retu	oing process, a rns and timing.	ssets and liabilities From this, a						

Management of an investment portfolio on the basis of risk and return considerations. It covers both the preparation and implementation of investment decisions regarding

Interesting? Share this content on your favourite social media platform.





Asset management



assets and the management of Special funds.







Contact and feedback

CORPORATE RESPONSIBILITY

MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE							
Home Service	Glossary											
							Α	В	С	D	Е	F
Service		С					G	Н	1	J	K	L
							М	Ν	Ο	Р	Q	R
		Cedant Client o		ce company.			S	Т	U	٧	W	Χ
							Υ	Z				
About the CR port		, ,	(carbon neutral)	eutrality clima	te neutrality involves the redu	ction						
Downloads					ompany's CO ₂ emissions can							
Glossary			0	'		In other words, the emission of	of a					

Code of conduct

A collection of behavioural guidelines voluntarily drawn up by a company. It generally contains rules for the company's whole supply chain and may cover a wide range of issues

emission of an equivalent amount elsewhere in the world. This is achieved through

used to offset the purchaser's own CO2 emissions.

climate-friendly projects like the construction of a wind farm to replace an old coal-fired power station. The purchase of carbon credits makes such projects possible and is

Combined ratio

The percentage ratio of the sum of net claims expenses plus net operating expenses to premium income. A combined ratio of 100% means that expenses and payments are equal to premium volume. A ratio below 100% indicates that the company is earning an underwriting profit, while a ratio above 100% shows a loss.

As defined in the German Corporate Governance Code, "compliance" means acting in accordance with applicable laws and internal company rules (hereinafter "regulations"). "Internal company rules" include the principles and values laid down in Munich Re's Code of Conduct. Compliance requires that a company has the necessary organisational and control measures in place - including appropriate information and documentation systems - to prevent violations of laws and regulations.

Corporate Citizenship

A company's social involvement, i.e. its active involvement as a "good citizen" in local civil society, and in ecological or cultural issues, above and beyond the defines of its business activities

Corporate Climate Centre (CCC)

Unit at Munich Re concerned with the consequences of climate change. It was created in 2008 from the former Centre of Competence for Geo Risks Research, founded in 1974. One of the tasks of this cross-cutting network is to advise underwriters and clients on the development of future-oriented products. The CCC experts maintain close contact with researchers, associations and organisations worldwide and are involved in a number of research and development projects.

Corporate governance

Corporate governance refers to the legal and factual framework for managing and monitoring companies. Corporate governance rules serve to provide transparency and thus strengthen confidence in responsible management and control geared to the creation of value.

Corporate volunteering

Company activities promoting the voluntary social involvement of employees.













MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE								
Home Service	Glossary												
								Α	В	С	D	Е	F
Service		D						G	Н	1	J	K	L
								М	Ν	Ο	Р	Q	R
		Diversi Repres	•	dling and the equa	I treatment of o	roups with differen	t	S	Т	U	V	W	X
						der, sexual orienta		Υ	Z				
About the CR port	tal	and reli	gion (belief).										
Downloads			Due diligence Due diligence refers to a risk assessment carried out with "due care", whereby the strengths and weaknesses of the subject are analysed, thus helping to establish its										
Glossary													
Contact and feedback		value.	io and would		oct and analyses	a, alao libining to o							













MUNICH RE STRATEGY	RESPONSIBILITY TOPICS KEY FIGURES SERVICE									
Home Service Glossary										
		Α	В	С	D	Е	F			
Service	E	G	Н	1	J	K	L			
		М	Ν	Ο	Р	Q	R			
	Emerging risk A new risk for which no empirical data or experience values are yet available.	S	Т	U	V	W	Χ			
		Υ	Z							
About the CR portal	Emission credits (emission allowances) Economic instrument designed to reduce emissions of climate-changing greenhouse	Emission credits (emission allowances) Economic instrument designed to reduce emissions of climate-changing greenhouse								
Downloads	gases.									
Glossary	Ethical walls									
Contact and feedback	The practice in the financial world of separating departments of a company with different clientele and objectives in such a manner that there is no information interchange between them, thus avoiding conflicts of interests.									
	EU GreenBuilding certificate European Commission programme to improve energy efficiency and promote the use of renewable energies. Certificates are awarded to non-residential buildings for which relevant measures have been taken. In Germany, the programme is coordinated by the									

Interesting? Share this content on your favourite social media platform.





Deutsche Energieagentur (DENA).









MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE							
Home Service	Glossary											
	vice the CR portal						Α	В	С	D	Е	F
Service		F					G	Н	1	J	K	L
							М	Ν	0	Р	Q	R
			Fraud Deception, cheating or misappropriation. In a corporate context, it refers to deliberate						U	V	W	Χ
		acts on	the part of o	ne or more manag		or third parties to gain an	Υ	Z				
About the CR port	tal	unjustif	ed or illegal	advantage.								
Downloads												
Glossary												
Contact and feeds	nack											













MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE								
Home Service	Glossary												
								Α	В	С	D	Е	F
Service		G						G	Н	1	J	K	L
					_			M	Ν	О	Р	Q	R
				e Governance Cod e of conduct for list		. Intended to make	German rules	S	Т	U	V	W	Χ
			-	•		nt to national and in		Υ	Z				
About the CR port	tal	investo	rs and thus i	ncrease confidence	e in how Germ	an companies are r	nanaged.						
Downloads		Gesam	tverband de	er deutschen Vers	sicherungswir	tschaft e.V. (GDV)							
Glossary					-	n of the German in à-vis representative							
Contact and feeds	oack	industr	and the ger	neral public and ad	dresses the va	arious consumer gro extensive consultan	oups with its						

Global Compact

its member companies.

The United Nations Global Compact (GC) is a strategic policy initiative for businesses worldwide to implement ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption.

Global Reporting Initiative (GRI)

GRI is a non-profit organisation that drafts internationally recognised guidelines for preparing sustainability reports. Its aim is to make the various organisations' sustainability reports comparable and to structure information on ESG (ecological, social and governance) criteria. The GRI's guidelines are the most renowned and widespread ESG reporting standards worldwide.

Group Chief Risk Officer (CRO)

The person responsible for risk management Group-wide. The CRO is supported by CROs in the business fields and by interdisciplinary teams of highly qualified staff.

Group Compliance Committee (GCC)

The Group Compliance Committee (GCC) considers reputational risks at Group level to ensure uniform analysis and handling throughout the Group.

Group Corporate Responsibility Committee (GCRC)

Group Corporate Responsibility Committee: Group-wide committee at Munich Re for steering and coordinating CR activities at the Group level.

Group Investment Committee (GIC)

Specific investment risks are dealt with and managed in the Group Investment Committee.













MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE								
Home Service	Glossary												
								Α	В	С	D	Е	F
Service								G	Н	1	J	K	L
								М	Ν	0	Р	Q	R
		_		nagement (IRM) Management Divis	sion (IRM) sup	ervises risk manag	ement Group-	S	Т	U	٧	W	Χ
		wide v	ith the suppo	rt of decentralised	structures in a			Υ	Z				
About the CR portal	I	heade	d by the Chief	Risk Officer (CRC	0).								
Downloads		ISO 14											
Glossary				rd stipulating globans. It focuses on a									
Contact and feedba	ack	ensure	that the envi	ronmental perform	ance of an org	anisation (company	y, service						
		is base establi	ed on the Plar sh an environ mme and an	etc.) reaches the gith and a control of the	DCA) approacl ironmental obje	n. For this, the organictives, an environr	anisation has to mental						













MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE							
Home Service	Glossary											
							Α	В	С	D	Е	F
Service		L					G	Н	1	J	K	L
							М	Ν	Ο	Р	Q	R
		Lobbyi Is a me	_	senting social and	political conce	ns, whereby interest groups	S	Т	U	V	W	Χ
						cisions or public opinion.	Υ	Z				
About the CR port	tal											
Downloads												
Glossary												
Contact and feeds	oack											













MUNICH RE STRATEGY RES	PONSIBILITY TOPICS KEY FIGURES SERVICE						
Home Service Glossary							
		Α	В	С	D	Е	F
Service	M	G	Н	1	J	K	L
	Materiality analysis	M	Ν	Ο	Р	Q	R
	The examination and evaluation of the results of a stakeholder survey.	S	Τ	U	V	W	Χ
	MEAG	Υ	Z				
About the CR portal	Munich ERGO Assetmanagement GmbH (MEAG) is one of the major asset managers						
Downloads	in the European finance sector and manages nearly all assets of Munich Re und ERGO.						
Glossary	LINGO.						
Contact and feedback	Microinsurance Insurance providing poor population groups, especially in developing countries, with protection against basic risks such as illness, disability, consequences of natural disasters or unexpected crop failures.						
	Microloans Very small loans, ranging from €1 to €1,000 to small businesses, mainly in developing countries.						
	Mixed fund Fund that invests in a variety of items, e.g. money market securities or segregated real property as well as shares and bonds.						
	Munich Climate Insurance Initiative (MCII) The MCII was launched by Munich Re in 2005 in order to develop insurance-based solutions for adapting to climate change in conjunction with other insurers, NGOs and scientific institutions.						











MUN	ICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE						
Home	Service	Glossary										
								Α	В	С	D	
Se	ervice		Ν					G	Н	1	J	
							M	N	Ο	Р		
			_		organisation (NG ation. The term wa	•	the United Nations to make a	S	Т	U	V	
							representatives and government	Υ	Z			
Abou	ut the CR po	tal	represe	ntatives.								
Dow	nloads											
Glos	sary											
Conf	act and feed	back										













MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE							
Home Service	Glossary											
								Α	В	С	D	Е
Service	ervice Glossary ervice	O						G	Н	1	J	K
								M	N	О	Р	Q
		Ombud A neutr		vho can be called	on to resolve d	sputes in various a	areas and find	S	Т	U	V	W
				great deal of burea		.,		Υ	Z			
About the CR portal	I											
Downloads												
Glossary												
Contact and feedba	ıck											













idilion it								•					
MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE								
Home Service	Glossary												
								Α	В	С	D	Е	F
Service		Р						G	Н	1	J	K	L
								M	Ν	Ο	Р	Q	R
		Pander The spi		ease or – in the na	rrower sense -	- infectious disease	across	S	Т	U	V	W	X
						, which is a disease		Υ	Z				
About the CR por	tal	limited	area and tim	e, a pandemic is n	ot restricted to	a certain geograph	ical area.						
Downloads		Premiu	m										
Glossary						ver provided by an i	,						
Contact and feedl	pack	that ha	s become pa	yable in the financ	ial year. The p	ritten means all pre ortion of this premit cial year is referred	um income that						
						an investment natu							

Primary insurer

products.

Insurance companies that assume risks in return for an insurance premium and have a direct contractual relationship with the holder of the insurance policy (private individual, firm or organisation).

financing treaties and unit-linked life insurance), it only includes – under IASs/IFRSs – the amount serving to cover the risk and costs. However, under statutory accounting rules in the insurance company's home country, premium income may also include the policyholders' savings premiums from unit-linked life insurance and capitalisation

Principles for Responsible Investment (PRI)

The PRI provide a set of rules for considering ESG criteria in investment decisions. Adherence to these principles, established under the auspices of the UNEP Finance Initiative, is voluntary.

Principles for Sustainable Insurance (PSI)

The PSI provide the insurance industry with a framework for systematic application of ESG criteria. Like the PRI, the PSI are part of the UNEP Finance Initiative.

Public-private partnership

Long-term arrangement between private companies and public bodies with the aim of providing public services in a more economical manner.













MUNICH RE STRA	TEGY RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE								
Home Service Glos	sary											
							Α	В	С	D	Е	F
Service	R						G	Н	1	J	K	L
							М	Ν	0	Р	Q	R
		g agency any that asse	sses and rates the	creditworthine	s of husinesses ar	nd even whole	S	Т	U	V	W	Χ
			gs are expressed in				Υ	Z				
About the CR portal	rangii	ig from AAA (t	op quality) to D (in	solvent).								
Downloads	Reins											
Glossary			es that assume the having any direct o									
Contact and feedback						,						
			sons or systems to conditions.	recover from c	amage or loss susi	tained and to						
	RRC											
	busin comp	ess either by t arable proced	sues arising out of heir own Reputatio ure in which the op can always be con	nal Risk Comn inions of exper	ittee (RRC) or thro s are obtained. A l	ough a legal entity's						

Interesting? Share this content on your favourite social media platform.





of reputational risks.









MUNICH RE STRATEGY R	ESPONSIBILITY TOPICS KEY FIGURES SERVICE						
Home Service Glossary							
		Α	В	С	D	Е	F
Service	S	G	Н	1	J	K	L
		М	Ν	О	Р	Q	R
	Shared value According to Michael E. Porter's definition, the shared value approach comprises	S	Т	U	V	W	Χ
	guidelines and practices which increase an enterprise's competitiveness whilst	Υ	Z				
About the CR portal	simultaneously improving the economic and social circumstances of the community in which it operates. Responsible action thus creates added value both for the enterprise						
Downloads	and for the community.						
Glossary	Socially responsible investing (SRI)						
Contact and feedback	An investment strategy geared to maximising social as well as financial profit.						
	Solvency II Project of the European Commission to fundamentally reform and harmonise European insurance supervisory regulations. Solvency II follows the three-pillar approach: minimum capital requirements (quantitative), supervisory review processes (qualitative) and market discipline (disclosure).						
	Stakeholder Any person or group that can be affected by a company's operations and that, conversely, has an influence on the company in question.						













MUNICH RE STRATEGY	RESPONSIBILITY TOPICS KEY FIGURES SERVICE						
Home Service Glossary							
		A	В	С	D	Е	F
Service	Т	G	Н	- 1	J	K	L
	Total shows had don make me	M	Ν	0	Р	Q	R
	Total shareholder return Performance indicator for an investment in shares. It combines sha	are price S	Т	U	V	W	Χ
	appreciation and paid dividends to show the total return to the shar	•	Z				
About the CR portal	certain period.						
Downloads							
Glossary							
Contact and feedback							













MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE							
lome Service	Glossary											
							Α	В	С	D	E	F
Service		U					G	Н	1	J	K	L
							М	Ν	0	Р	Q	R
		Underv Membe		urance company a	cting on behalf	of his or her employer to	S	Т	U	V	W	Χ
			. ,	reject the terms of	-		Υ	Z				
About the CR port	al	UNEP	=1									
Downloads		The Un	ited Nations			Initiative (UNEP FI) is a public-						
Glossary			partnership e and the fina		n the United N	ations Environment Program						
Contact and feedb	ack	(OIVE)	and the init	110101 000101.								













MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE							
lome Service	Glossary											
							Α	В	С	D	E	F
Service		V					G	Н	1	J	K	L
							М	Ν	0	Р	Q	R
Value-added calculation Calculation for determining the advantageousness of a particular investment. It can				S	Т	U	٧	W	Χ			
render visible the relationship between return on investment, cost of capital and					Υ	Z						
About the CR port	al	increas	e in value.									
Downloads			Volatility									
Glossary		Measure of the fluctuations in financial market parameters such as the prices of shares or investment fund units. It is an expression of the risk involved in an investment.										
Contact and feedb	aal	OI IIIVes	ancia lunu u	ilio. It is all explet	SSION OF THE HS	involved in an investment.						











Siteman	Contact	I RSS Feed	I Privacy statement	Legal notice	I Imprint	I Deutsch



MUNICH RE	STRATEGY	RESPONSIBILITY	TOPICS	KEY FIGURES	SERVICE		
Home Service	Contact and f	eedback					
	0	Contact					
Service		Please with yo	do not hesita	s and comments.		e's Corporate Responsibility Team se use the feedback form at the	When you h fields marke please click will be sent Corporate F
About the CR port	tal	Suppo	rt for maste	r's and bachelor's	theses:		Privacy st
Downloads		We reg	ularly receive	e requests for the s	upervision of a	academic studies and for	
Glossary				_		st shown in our work is most r understanding that we are only	
Contact and feedb	oack	studen	employee p		blish advertise	n the context of internships or ements for such positions several	
		E-Mail:	tant Corpora	te Responsibility y@munichre.com			
		Head o Econor E-Mail:		ision ability & Public Affa y@munichre.com	uirs		
		_	ıstr. 107 München				
		Contac	t Media Rela	tions			
		Your m	essage to d	our Corporate resp	onsibility exp	perts	
		Form o	f address*	Ms.			
				○ Mr.			
		Surnan	ne*, first nam	ne			
		Compa	ny				
		Country	/ *	Please sel	ect	\$	
		E-mail*					
		Subjec	*				
		Your m	essage*				

Interesting? Share this content on your favourite social media platform.











nave completed all the ed with an asterisk (*) Send, and your message to our experts on Responsibility.

atement

Independent Auditor's Limited Assurance Report regarding Sustainability Information

The assurance engagement performed by Ernst & Young (EY) relates exclusively to the German version of the Corporate Responsibility Report 2016/2017 of Münchener Rückversicherungs-Gesellschaft, Aktiengesellschaft in München. The following text is a translation of the original German Independent Assurance Report.

To the Management Board of Münchener Rückversicherungs-Gesellschaft, Aktiengesellschaft in München

We have been engaged to perform a limited assurance engagement on information marked with the symbol ** in the Corporate Responsibility Report 2016/2017 of Münchener Rückversicherungs-Gesellschaft, Aktiengesellschaft in München, for the reporting period from 1 January to 31 December 2016 (hereafter the report). Our engagement is exclusively limited to the information marked with the symbol ** in the German version of the report.

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 criteria as set out in the G4 Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI) and for the selection of the information to be assessed.

This responsibility includes the selection and application of appropriate methods to prepare the report and the use of assumptions and estimates for individual sustainability disclosures that are reasonable under the circumstances. Furthermore, the legal representatives are responsible for internal controls that they deem necessary for the preparation of a report that is free from - intended or unintended - material misstatements.

Auditor's Statement regarding Independence and Quality

We are independent from the Company in compliance with the German statutory and professional requirements, and have complied with other professional requirements.

The quality assurance system of Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft is based on the national statutory regulations and professional pronouncements including, but not limited to the Professional Charter for German Public Auditors and German Sworn Auditors and the draft standard "Requirements to quality control for audit firms" (IDW EQS 1) issued by the Institute of Public Auditors, which are in accordance with the International Standards on Quality Control issued by the International Auditing and Assurance Standards Board (IAASB).

Auditor's Responsibility

Our responsibility is to express a conclusion on information marked with the symbol ** in the report based on our work 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 level of assurance to preclude that the information marked with the symbol ** in the report for the reporting period from 1 January to 31 December 2016 has not 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 evidence gathering procedures are more limited than for a reasonable assurance engagement and therefore significantly less assurance is obtained than in a reasonable assurance engagement. The procedures selected depend on the auditor's judgment.

Within the scope of our work we performed amongst others the following assurance and other procedures:

- Inquiries of employees concerning the sustainability strategy, sustainability principles and sustainability management of Münchener Rückversicherungs-Gesellschaft, Aktiengesellschaft in München, including dialogue with stakeholders, materiality analysis and disclosures of the specified management approaches,
- Inquiries of employees responsible for the preparation of information marked with the symbol ** in the report in order to assess the sustainability reporting system, 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 ** in its entirety,
- 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 head quarter office of Münchener Rückversicherungs-Gesellschaft, Aktiengesellschaft in München, and during two site visits at Munich Reinsurance America, Inc., Princeton and at ERGO Hestia S.A., Sopot,
- · Analytical measures 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 limited assurance engagement, nothing has come to our attention that causes us to believe that the information marked with the symbol ** in the Corporate Responsibility Report of Münchener Rückversicherungs-Gesellschaft, Aktiengesellschaft in München, for the reporting period from 1 January to 31 December 2016 has not been prepared, in all material respects, in accordance with the 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 limited assurance engagement has been performed for the purposes of Münchener Rückversicherungs-Gesellschaft, Aktiengesellschaft in München, and is solely intended to inform Münchener Rückversicherungs-Gesellschaft, Aktiengesellschaft in München, about the results of the assurance engagement.

Limitation of Liability

The report is not intended to be used as a basis for (financial) decision-making by third parties of any kind. We have responsibility towards Münchener Rückversicherungs-Gesellschaft, Aktiengesellschaft in München, only. We do not assume any responsibility towards third parties.

Munich

30 June 2017

Nicole Richter Nina Müller

Wirtschaftsprüferin Wirtschaftsprüferin (German Public Auditor) (German Public Auditor)

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft