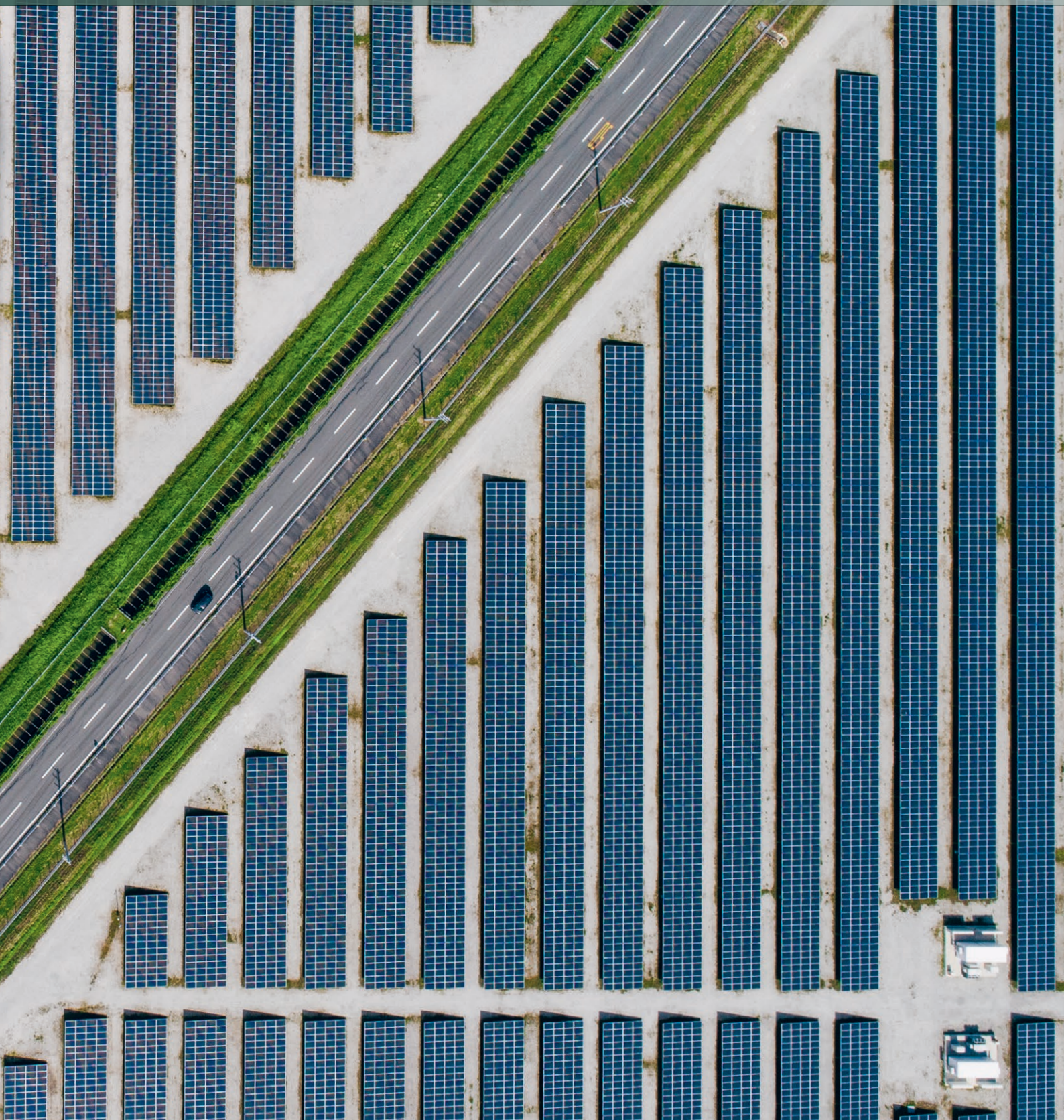


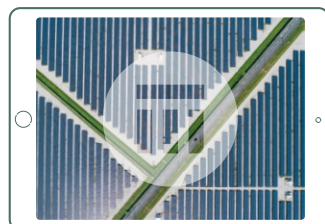
2018 Corporate Responsibility Report

Enabling sustainable progress



Cover

Through our re/insurance solutions we offer protection for the risks of renewable energy projects. In 2018, for example, we helped develop the first solar revenue “put” insuring most of the output risk of a solar farm. You can learn more about our solutions supporting sustainable progress on pages 18–25.



More information online:
reports.swissre.com/corporate-responsibility-report/2018/

In this report

We describe our commitment as a responsible company and the actions we have taken.

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Executive statement



Walter B. Kielholz, Chairman of the Board of Directors



Christian Mumenthaler, Group Chief Executive Officer

Dear stakeholders,

We are pleased to share the 2018 edition of our Corporate Responsibility Report with you. In this annual publication, we explain what we want to achieve as a responsible company and describe the actions we have taken. As we clearly state in our value framework, “playing our part in enabling sustainable progress” has long been an overarching objective.

For our business this translates into managing and monitoring risks and opportunities associated with environmental, social and governance (ESG) issues. To stay competitive, we need to adapt to the changing risk landscape and address such issues consistently in all aspects of our business. This creates long-term value for Swiss Re as well as for society in general.

On the following pages you can read in detail about the sustainability topics we regard as the most relevant. The overview includes links to the UN Sustainable Development Goals and shows what actions we have taken to meet the internal goals we have set for the topics.

Our Corporate Responsibility Report also meets important external requirements. It is our official disclosure document for two voluntary commitments we have made to the United Nations: the UN Global Compact and the UNEP FI Principles for Sustainable Insurance. You can view the two reference tables in the online version of the report. We will continue to honour both commitments and report on our activities to meet their principles.

Among the sustainability topics we address, climate change continues to be a key issue. Reflecting this, we also made a voluntary commitment three years ago to publish Climate-related Financial Disclosures as recommended by the Financial Stability Board. We have included these detailed disclosures in our 2018 Financial Report and invite you to read them in parallel with the present publication.

Below we would like to highlight some major achievements across the different areas where we implement our commitment to corporate responsibility.

In our core re/insurance business, we continued to offer our clients protection against various environmental and social risks by creating tailor-made, innovative solutions. They range from large covers for hurricane damage in Florida and other southern US states to pioneering solutions for low-income women entrepreneurs in Egypt and small-scale farmers in Zambia. We also completed the industry's first-ever solar energy "put", which offers protection against shortfalls in power output due to lack of sunshine. In the life and health segment, we continued our efforts to improve access to affordable insurance solutions through our digital-based iptiQ programme.

At the same time as we help develop solutions against certain environmental and social risks, we put a strong focus on addressing risks that may undermine sustainable progress, raise ethical questions and/or increase long-term loss potential. In 2018, we introduced our thermal coal policy, pledging not to provide re/insurance to businesses with more than 30% exposure to thermal coal utilities or mining. The policy has been fully integrated into our Sustainability Risk Framework and marks a further important step in our efforts to support the transition to a low-carbon economy. To share our latest insights on emerging risks, we again published our SONAR report. One of the risks it describes is "algorithmic decision-making", on which you can read a case study in the present publication.

In our asset management we continued to integrate ESG criteria consistently across our investment portfolio. A year after having switched to ESG benchmarks, we remain convinced that this improves the risk-adjusted returns of our investment portfolio, especially in the long run. To share our experience on the switch, we launched a second publication "Responsible investments: The next steps in our journey". Besides having achieved our target of holding at least USD 1.5 billion of green bonds, we actively contributed to the global policy dialogue by being part of the European Commission's Technical Expert Group on Sustainable Finance, for instance.

Most risks potentially undermining sustainable progress are by nature complex, and finding effective responses requires the involvement of different players both from the private and the

public sector. For this reason, we place emphasis on ongoing dialogue with our stakeholders, true to our motto that "we're smarter together". After carefully reviewing our dialogue priorities, we introduced a streamlined set of three Top Topics in 2018: "Mitigating climate risk", "Building societal resilience" and "Driving digital insurance solutions". The Swiss Re Institute has continued to support our stakeholder dialogue by combining our own expertise with world-class external research.

Our efforts to enable sustainable progress include our own operations. Mitigating climate change and reducing energy consumption have long been our priorities. Through our Greenhouse Neutral Programme we have cut our total CO₂ emissions per employee by 8% since 2013, after almost halving them in the ten years before. As part of our commitment to the RE100 initiative, we have built several solar plants on our own premises in recent years and, in 2018, entered into a large "virtual power purchase agreement" in the US. This innovative mechanism provides funding for the construction of a new wind farm while at the same time offering us a financial hedge against potential swings in the price of electricity in the region.

Last but not least, we would like to take this opportunity to say thank you to our employees for the great work they have delivered for Swiss Re. As the highlights above illustrate, we constantly strive to create smart solutions that help improve the wellbeing of society and prepare for the changing needs of the future. For this we rely on people from many different backgrounds who bring together fresh perspectives and innovative thinking in a spirit of collaboration. In the present report you can learn more about what we have been doing to foster a flexible, inclusive and open culture throughout our company.

Zurich, 14 March 2019



Walter B. Kielholz
Chairman of the Board of Directors



Christian Mumenthaler
Group Chief Executive Officer

Who we are and what we do

Our vision: We make the world more resilient.

Swiss Re at a glance

The Swiss Re Group is a leading wholesale provider of reinsurance, insurance and other insurance-based forms of risk transfer. Dealing directly and working through brokers, our global client base consists of insurance companies, mid- to large-sized corporations and public-sector clients. From standard products to tailor-made coverage across all lines of business,

we deploy our capital strength, expertise and innovation power to enable the risk-taking upon which enterprise and progress in society depend.

Working with our clients and partners, we help to protect assets and lives around the globe – for a resilient future.

Headquartered in Zurich, Switzerland, Swiss Re has operations across the

OUR GLOBAL PRESENCE

Europe
(including Middle East and Africa)

Net premiums earned
and fee income in 2018
(USD billions)

11.0
(USD 10.5 billion in 2017)

Number of office locations*
as of 31 December 2018

33
(35 in 2017)

Number of employees (regular staff)
as of 31 December 2018

9 099
(8 630 in 2017)

* Counting each location with offices once; not counting data centres



world. At the end of 2018, we had over 80 office locations in 30 countries. Based on “net premiums earned and fee income from policy-holders”, our ten biggest markets in 2018 were: the US, the UK, Australia, China, Japan, Germany, Canada, Ireland, Switzerland and the Netherlands. They accounted for 78% of the Group’s total business over the year.

Swiss Re Ltd, the Group’s holding company, is a joint stock company, listed in accordance with the International Reporting Standard on SIX Swiss Exchange, domiciled in Zurich, and organised under the laws of Switzerland. No other Group companies have shares listed.

Our strategy

Our Group strategy helps us meet our financial targets and to make the world more resilient.

You can get more information on our strategy in the 2018 Business Report at: reports.swissre.com/2018/business-report/our-strategy.html

Americas	Asia-Pacific	Total	
16.1 (USD 16.1 billion in 2017)	7.3 (USD 7.1 billion in 2017)	34.5 (USD 33.7 billion in 2017)	
34 (37 in 2017)	15 (15 in 2017)	82 (87 in 2017)	
3 624 (3 740 in 2017)	2 220 (2 115 in 2017)	14 943 (14 485 in 2017)	

THE SWISS RE GROUP

Reinsurance



Reinsurance provides clients and brokers with reinsurance products, insurance-based capital market instruments and risk management services. Reinsurance operates globally through two segments – Property & Casualty and Life & Health.

Corporate Solutions



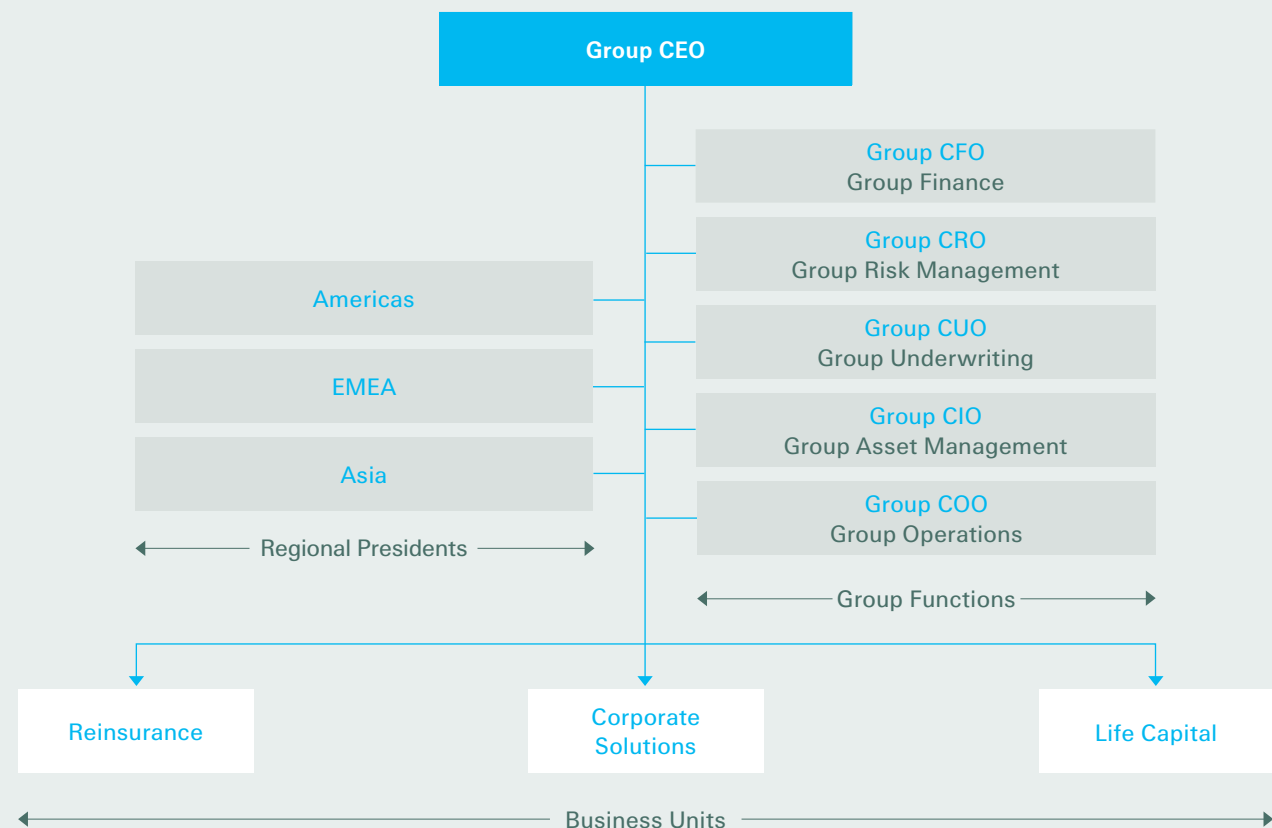
Corporate Solutions provides risk transfer solutions to large and mid-sized corporations around the world. Its innovative, highly customised products and standard insurance covers help to make businesses more resilient, while its industry-leading claims service provides additional peace of mind.

Life Capital



Life Capital manages closed and open life and health insurance books. It provides alternative access to the life and health risk pool, helping to generate stable returns and seize attractive new opportunities.

Operational Group structure



The financial figures in the table at the top provide information on the scale of the Swiss Re Group and income generated: total capitalisation broken down in terms of debt and equity, sales/revenues, operating costs and net income.

The information in the lower table shows the distribution of Group income to key stakeholders (employees, government and shareholders).

FINANCIAL HIGHLIGHTS

USD millions	2017	2018
Total assets	222 526	207 570
Total investments	161 897	147 302
Total liabilities	188 232	178 843
Total debt	10 581	10 135
Common shareholders' equity	33 374	27 930
Total revenues	42 487	37 047
Premiums earned and fee income	33 705	34 461
- P&C Reinsurance	16 667	16 095
- L&H Reinsurance	11 980	12 835
- Corporate Solutions	3 651	3 925
- Life Capital	1 407	1 606
Net investment income – non-participating business	3 708	4 075
Total expenses	-41 962	-36 497
Claims and claim adjustment expenses	-16 730	-14 855
Life and health benefits	-11 083	-11 769
Net income	331	421

ATTRIBUTION OF GROUP INCOME TO KEY STAKEHOLDERS

USD millions (unless otherwise stated)	2017	%	2018	%
Income before tax and variable compensation	814	100%	863	100%
Variable compensation ¹	351	43%	373	43%
Income tax expense	132	16%	69	8%
US GAAP net income attributable to shareholders	331		421	
of which paid out as dividend ²	1 592	196%	1 692	196%
of which share buy-back	1 032	127%	1 022³	118%
of which added to retained earnings within shareholders' equity	-2 293		-2 293	

¹ Aggregate compensation for all employees was CHF 2 208 million in 2018. See 2018 Financial Report, page 146.

² FY 2018 is estimated based on average year-to-date CHF/USD FX rates as of February 2019. The dividend is subject to AGM approval and the amount depends on the final number of dividend eligible shares and FX rates upon dividend payout.

³ Includes shares bought back between 7 May 2018 and 15 February 2019 as part of the buy-back programme authorised at the AGM 2018. The total amount represents an estimate translated at the 2018 average CHF/USD FX rate.

Our approach to corporate responsibility

We are committed to being a responsible company. Playing our part in enabling sustainable progress serves as a guiding principle for our actions.

Our commitment to corporate responsibility

Swiss Re has a long-standing commitment to being a responsible company. A key element in our understanding of what this means is the desire to play our part in enabling sustainable progress, for the benefit of our clients and society at large. Taking this long-term view helps us pursue our vision of making the world more resilient and is embedded in our value framework, which means “doing business the Swiss Re way”.

Importantly, this commitment is also in our own best interest: it strengthens our capabilities to address both risks and opportunities created by longer-term environmental and social challenges and, as a consequence, to retain our licence to operate.



WEBSITE

Learn more about our values at:
[www.swissre.com/about-us/
our-vision-mission-and-values.html](http://www.swissre.com/about-us/our-vision-mission-and-values.html)

OUR EXTERNAL COMMITMENTS ▼

Based on our commitment to corporate responsibility and enabling sustainable progress, we have signed up to a number of external charters and initiatives:

- EP100: see page 48
- Principles for Responsible Investment (PRI): see page 39
- RE100: see page 48
- Task Force on Climate-related Financial Disclosures (FSB-TCFD): see 2018 Financial Report, pages 172–189
- UNEP FI Principles for Sustainable Insurance (PSI): for our Public Disclosure of Progress, see online report
- UN Global Compact: for our Communication on Progress, see online report
- Carbon Disclosure Project (www.cdp.net)
- ClimateWise (www.cisl.cam.ac.uk/)

OUR VISION

We make the world more resilient



Our values mean **doing business the Swiss Re way:**

- Being open, honest and transparent in everything we do.
- Treating everyone with respect – both inside and outside the company.
- Taking the long-term view and playing our part in enabling sustainable progress – for stakeholders and society in general.
- Creating an inclusive culture that encourages diversity of thought and opinion.



Our commitment to corporate responsibility:

“Corporate responsibility” expresses Swiss Re’s commitment to being an open, honest and transparent organisation that treats all its stakeholders – employees, shareholders, clients, government agencies and the general public – with respect and integrity. In particular, we aim to take the long-term view and to play our part in enabling sustainable progress.



You can download our full commitment at

www.swissre.com/about-us/corporate-responsibility/approach.html

Board and senior management responsibility

Board of Directors

At Swiss Re's highest governance level, the task of overseeing implementation of our commitment to corporate responsibility has been assigned to a committee of the Board of Directors (BoD): It is one of the responsibilities of the Chairman's and Governance Committee to monitor the Group's strategic priorities with regard to enabling sustainable progress.

More specifically, the Board's Investment Committee reviews Swiss Re's Asset Management related activities and, as part of this, receives regular updates on Group Asset Management's responsible investing approach. The Board's Finance and Risk Committee defines the Group Risk Policy, reviews risk capacity limits, monitors adherence to risk tolerance, and reviews all top risk issues and exposures, including those with a specific sustainability dimension.

Group Executive Committee

While the BoD is responsible for defining overall strategic direction and overseeing its implementation, the Group Executive Committee (Group EC) owns and approves sustainability-relevant policies, action plans etc.

The Group EC sets and monitors risk capacity limits (including for natural catastrophes), and determines product policy and underwriting standards. As part of its mandate, it approves Swiss Re's sustainability policies – eg the thermal coal policy introduced in 2018 – and owns the further development of Swiss Re's sustainability strategy. The Group EC members have explicit tasks related to sustainability, which include but are not limited to the following:

- The Group Chief Risk Officer (CRO) is responsible for providing the BoD and Group EC with independent assurance that all of Swiss Re's risks are being appropriately modelled, governed and managed, and that adequate controls are in place. As part of executing these responsibilities, the Group CRO is charged with establishing the Group's Risk Management Framework for all risk categories, including sustainability and emerging risks.
- The Group Chief Investment Officer (CIO) has overall responsibility for Group Asset Management and its investment result, and with that also for the consistent integration of environmental, social and governance (ESG) aspects along the investment process. The Group CIO is responsible for investment decisions within the strategic asset allocation implementation, including those related to responsible investing and is informed of ESG updates through various channels including the Asset Management Investment Committee.
- The Group Chief Financial Officer (CFO) is responsible for the Group-wide Finance function with a focus on steering and achieving the company's financial targets. He also has accountability for Swiss Re's investor relations and public disclosures, including the Group Annual Report (including eg Climate-related Financial Disclosures).
- The Group Chief Underwriting Officer (CUO) is responsible for steering capital to the most attractive areas in underwriting that are of strategic importance for the Group's underwriting, and providing research and development that improves both capital allocation and risk selection.
- The Group Chief Operating Officer (COO) is responsible for the Group-wide Operations functions. This responsibility includes overseeing, besides Communication and Human Resources, the Corporate Real Estate & Services (CRES) division, Global Sourcing and IT. CRES steers and monitors the reduction of Swiss Re's environmental footprint and is in charge of Swiss Re's Greenhouse Neutral Programme to reduce our own CO₂ emissions.

Implementation

On an operational level, various divisions, departments and units across the Business Units and corporate functions are involved in implementing Swiss Re's commitment to corporate responsibility in daily business.

The Sustainability, Emerging and Political Risk Management unit drives the development of Group risk policies and related strategic projects and coordinates communication, dialogue and engagement efforts across the Group in close coordination with the respective units. In addition, the unit is responsible for producing Swiss Re's Corporate Responsibility Report, which is reviewed by senior management and approved by the BoD.

Enhanced Group Sustainability Strategy

Recently, we have reviewed our approach to corporate responsibility and formulated an enhanced Group Sustainability Strategy. This will also be reflected by Swiss Re's sustainability governance and future reporting.



CONTENT IN THE 2018 FINANCIAL REPORT

You can find a short introduction to the enhanced Sustainability Strategy in the "Corporate governance" chapter of the 2018 Financial Report, on page 102.

Our Corporate Responsibility Map

A key question for any company that understands corporate responsibility as taking a long-term view and enabling sustainable progress is what this means in the context of its own business and industry: which topics are “material” to achieving this goal?

In order to identify these material Corporate Responsibility Topics, we use both our internal risk expertise and ongoing dialogue with our stakeholders.

Currently, we focus on a total of twelve such topics and display them in a Corporate Responsibility Map.

Reflecting our two main insight sources and in line with current best practice, eg the recommendations of the Global Reporting Initiative (www.globalreporting.org), this map is structured along the two axes of “Stakeholder expectations” and “Relevance for Swiss Re” – in terms of risks as well as opportunities. The topics are positioned within three areas expressing different stages of relevance and maturity:

Priority: Topics with high stakeholder expectations as well as high internal relevance. Require continuous high attention and effort.

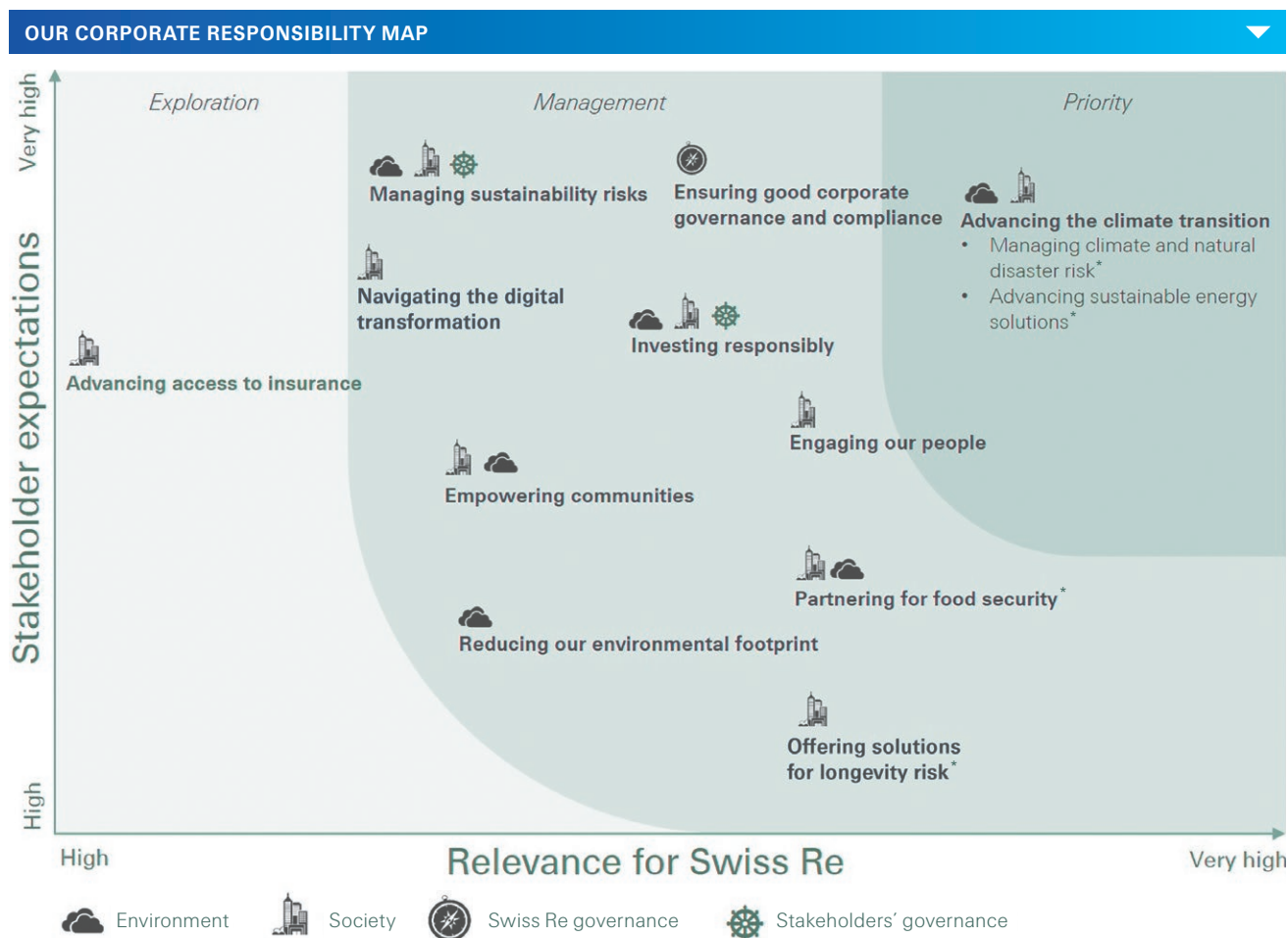
Management: Topics recognised as being relevant and for which we have well-established management procedures. Stakeholder interest in them varies, though.

Exploration: Topics with increasing relevance from an internal perspective and an expected increase in stakeholder inquiries. Warrant further analysis.



ONLINE CONTENT

You can learn more about the insight sources and process we use to identify material topics in the online version of the report: reports.swissre.com/corporate-responsibility-report/2018/cr-report/introduction/our-approach-to-corporate-responsibility/our-cr-map-and-how-we-determine-materiality.html



* These Corporate Responsibility Topics are also covered by the risk knowledge topics of our stakeholder dialogue. See pages 40–43.

For all our Corporate Responsibility Topics we have set goals – some of them quantitative, others qualitative. On the following four pages, we briefly describe why these topics are important

OVERVIEW: OUR CORPORATE RESPONSIBILITY TOPICS, SDG LINKS, GOALS AND KEY ACHIEVEMENTS

OUR CORPORATE RESPONSIBILITY TOPICS

Advancing the climate transition

In December 2015, nearly 200 governments agreed to strengthen the global response to the threat of climate change in the Paris Agreement. The private sector plays a key role in reaching the goals defined in Paris. Swiss Re advances the transition to a low-carbon economy from two angles:

1. Managing climate and natural disaster risk is at the core of what we do. Losses from floods, storms, earthquakes and other natural catastrophes impact the economies of entire countries and are therefore a key driver of the re/insurance business. Such losses are becoming more frequent and severe due to higher insurance penetration and the concentration of assets in exposed areas as well as climate change. By financing disaster risk mitigation and climate adaptation, we can strengthen the resilience of citizens, businesses, local and national economies and societies.

2. Advancing sustainable energy solutions is essential to combat global warming. Reducing greenhouse gas emissions while at the same time satisfying the energy needs of a growing population will be one of the great challenges we face in the coming decades. We continuously invest in our renewable energy research and solutions to help our clients and the global community to develop and establish secure energy supplies for the future.

Partnering for food security

Meeting the demand for food for the growing world population – estimated to reach 9 billion by 2050 – will be challenging, as supply is constrained by such factors as climate change, depleted agricultural soils and the distribution of land, water and energy. Today, about 800 million people – one in 11 – are chronically hungry and malnourished. Swiss Re is a leader in agricultural insurance markets. We use our experience, expertise and financial strength to provide cutting-edge solutions to all stakeholders of the agricultural value chain. By insuring the agricultural sector, we play a vital role in combatting hunger and poverty.

Offering solutions for longevity risk

People are living longer today than ever before, but the share of the working population is shrinking. The costs of funding retirement income, healthcare and long-term care in old age will increase dramatically. This could have significant financial consequences for individuals, insurers, employer pension funds and society in general. Swiss Re is the world's largest reinsurer of mortality, and life and health reinsurance is part of our core business. We help clients create solutions that better support people across the different phases of ageing and retirement.

Managing sustainability risks

Sound risk management is essential for a re/insurer. Besides the core categories of our risk landscape (insurance, financial market and credit risk), we also pay attention to further significant risks we may be exposed to, including sustainability risks. We define sustainability risks as ethical concerns related to potential environmental and socio-economic impacts of our business transactions, and the reputational risks they may entail. The risk assessments we make through our Sustainability Risk Framework, an advanced risk management instrument, flow directly into our re/insurance and investment decisions.

LINKS TO THE UN SUSTAINABLE DEVELOPMENT GOALS*



* Note: SDG 17 "Partnerships for the Goals" is important for most of our CR Topics.

for Swiss Re, their principal links to the UN Sustainable Development Goals, the internal goals we have set for them and what we achieved during the reporting year.

OUR CORPORATE RESPONSIBILITY GOALS	PROGRESS ON OUR CORPORATE RESPONSIBILITY GOALS
<ul style="list-style-type: none"> ■ For general strategic objectives, see special section on our climate change strategy on page 16. 	
<ul style="list-style-type: none"> ■ Based on our commitment made to the UN, advise 50 sovereigns and sub-sovereigns on climate risk resilience by 2020 and offer USD 10 billion of re/insurance protection against this risk. 	<ul style="list-style-type: none"> ■ By the end of 2018, had advised 96 sovereigns and sub-sovereigns on climate risk resilience, offering protection of USD 8.2 billion in total (page 23).
<ul style="list-style-type: none"> ■ Use our capacity and technical expertise to provide effective risk covers for complex offshore wind farm projects. 	<ul style="list-style-type: none"> ■ We were involved in further offshore wind projects, some of them supporting new trends: accelerated development in Asia and the advent of floating technology (page 24–25).
<ul style="list-style-type: none"> ■ In cooperation with key stakeholders, create solutions to improve food security by giving farmers protection against natural perils. 	<ul style="list-style-type: none"> ■ Helped develop a government-run e-voucher scheme in Zambia, which gives smallholder farmers more flexibility to buy the most suitable agricultural inputs and insures these inputs (page 22).
<ul style="list-style-type: none"> ■ Use our capacity, technical expertise and natural offset of our mortality business to offer our clients risk transfer solutions for their longevity risk. 	<ul style="list-style-type: none"> ■ Completed a number of landmark longevity transactions in recent years (page 25).
<ul style="list-style-type: none"> ■ Consistently identify potential sustainability risks in our business transactions and abstain from them if warranted. ■ Increase the effectiveness and efficiency of the Sensitive Business Risk (SBR) process by advancing automation of sustainability risk screening with our proprietary SBR Assessment Tool. ■ Engage with clients and industry partners on how to address and reduce sustainability risks in business transactions, especially in high growth markets. 	<ul style="list-style-type: none"> ■ Introduced a thermal coal policy for our underwriting and integrated it in our Sustainability Risk Framework (page 28). ■ Due to continuous fine-tuning of the SBR Assessment Tool and increasing underwriter awareness, achieved a decrease of transactions referred for an individual assessment between 2015 and 2017. In 2018, referrals rose, partly due to the introduction of our thermal coal policy (page 30). ■ Had several dialogue engagements with industry peers and civil society groups, in particular focusing on the topic of thermal coal and the policy we introduced in 2018 (page 31).

OVERVIEW: OUR CORPORATE RESPONSIBILITY TOPICS, SDG LINKS, GOALS AND KEY ACHIEVEMENTS

OUR CORPORATE RESPONSIBILITY TOPICS

Investing responsibly

Institutional investors such as re/insurers are naturally suited to invest responsibly because of their long-term view. Swiss Re systematically integrates environmental, social and governance (ESG) considerations into the investment process through its three-pillars approach: Enhancement (eg by applying ESG benchmarks), Inclusion (ie thematic investments) and Exclusion.

Engaging our people

We want to be an organisation where diverse talents come together globally to apply fresh perspectives and knowledge to “make the world more resilient”. Once a year, we seek feedback from our employees through the Employee Engagement Survey (EES). The EES is an opportunity to hear from our employees what engages them and what ideas they have to improve their experience at Swiss Re.

Ensuring good corporate governance and compliance

We consider good corporate governance as a key precondition to ensure sustainability throughout the Group’s activities and indispensable to maintaining long-lasting, valuable relationships with our stakeholders. We conduct business in a legal, fair, ethical and transparent way by adhering to best practices at all times, and apply the principles of our Code of Conduct across all company lines and regions.

Reducing our environmental footprint

As a knowledge company in the financial services sector, our environmental impacts through our own operations are limited. Nonetheless, we firmly believe it is important for a responsible company to minimise its environmental footprint, thus leading by example. Tackling our CO₂ emissions and reducing energy consumption are key targets across the Group. Our pioneering initiatives include the Greenhouse Neutral Programme and the CO_{you2} Programme.

Advancing access to insurance

Access to insurance is an important contributor to economic development. However, 60% of the world’s population still remains excluded from appropriate insurance products. We work on advancing public awareness of the societal value of insurance and the role insurance plays in achieving sustainable economic development. We further evaluate our contribution on selected Sustainable Development Goals (SDGs).

Navigating the digital transformation

The digital transformation has the potential to radically transform the insurance industry. New analytical techniques such as smart analytics, Big Data and FinTech boost innovation and modernisation in product design, distribution, claims management and fraud detection. As Swiss Re develops its “digital DNA”, we are also advancing industry awareness of ethical challenges surrounding the digital transformation.

Empowering communities

The Swiss Re Foundation reflects the social and humanitarian values of Swiss Re. It partners with social entrepreneurs, aid organisations, researchers, Swiss Re employees and clients to help communities increase their resilience. The Foundation’s initiatives address the causes and effects of risks in four areas – climate, natural hazards, water and society – both in emerging and developing countries and in regions where Swiss Re has offices.

LINKS TO THE UN SUSTAINABLE DEVELOPMENT GOALS*



* Note: SDG 17 “Partnerships for the Goals” is important for most of our CR Topics.



OUR CORPORATE RESPONSIBILITY GOALS

PROGRESS ON OUR CORPORATE RESPONSIBILITY GOALS

- Integrate ESG criteria systematically along our overall investment process.
- Meet our investment target for green bonds of at least USD 1.5 billion.

- Close to 100% of our assets under management consider ESG criteria (pages 34–38).
- Reached our green bond target during 2018, holding USD 1.6 billion in green bonds at the end of the year (page 37).

- Continue to build an organisation of diverse people that have a passion to make the world more resilient.
- Achieve a top-quartile employee engagement score (EES>74%).

- According to EES scores, 78% of our employees appreciate Swiss Re valuing diversity and having a collaborative, inclusive and friendly culture with high integrity (page 55).
- Per 2018, achieved an employee engagement score of 66% (page 55).

- Continuously assess our corporate governance against regulatory developments, best practice and new stakeholder demands.
- Manage compliance risks through maintaining adequate frameworks, delivery of effective training and awareness to our employees and oversee effective implementation within the business.

- For an overview of key focus areas and highlights in 2018, see our 2018 Financial Report, pages 102–103.
- Launched global internal Compliance tool to simplify employee access to compliance risk framework and governance information. Delivered mandatory compliance trainings. Risk-based tailored training activities for targeted employees continued (page 68).

- Keep per-capita CO₂ emissions from our own operations at 2013 levels, which we had reduced by 49.3% in the ten years since 2003.
- Reduce our energy intensity by an average 2% per year.
- Obtain 100% of power used for our own operations from renewable sources by 2020.
- Include our tier 1 and tier 2 vendors in the EcoVadis platform by 2020.

- Achieved a reduction of our per-capita CO₂ emissions by 8.1% compared with 2013 (page 47–48).
- Since 2013, achieved a total reduction of 28.9% (page 47–48).
- At the end of 2018, covered 94% of our total power consumption from renewable sources (page 48).
- Implementation completed for 30% of our tier 1 and 2 vendors (page 52).

- Advance our understanding of the societal impact of insurance and develop metrics to measure our impact on stakeholders.

- Based on our dedicated *sigma* study of 2017, continued in-house work towards developing a suitable methodology. No reportable results yet as per end of 2018.

- Refine our understanding of societal challenges related to the digital transformation.

- Engaged with regulators on the topic of big data/digital ethics, continued a research partnership on “Ethical and Legal Big Data Challenges in the Insurance Industry” with academic partners and contributed to a publication produced by the Geneva Association (page 43).

- Contribute to resilient societies by increasingly engaging Swiss Re employees with their skills and expertise.

- Continuing to create new opportunities for our employees to support the Swiss Re Foundation’s partners with their expertise, nearly 16% of the project portfolio encompassed an employee engagement component at the end of 2018 (see the Foundation’s 2018 Activity Report, pages 26–27).

CLIMATE CHANGE



Climate change has been our most important sustainability issue for many years: For a re/insurer, it constitutes a key topic because it will lead to an increase in the frequency and severity of natural catastrophes such as floods, storms, excessive rainfall and drought. In combination with growing asset concentrations in exposed areas and more widespread insurance protection, this will cause a steady rise in damage. Among our current Corporate Responsibility Topics shown on pages 11–15, two are directly linked to climate change: “Managing climate and natural disaster risk” and “Advancing sustainable energy solutions”.

Since detecting the long-term threat posed by climate change almost 30 years ago, we have been an acknowledged thought leader on the topic. To tackle the issue, we pursue a comprehensive strategy with four pillars.

The four pillars of our climate change strategy

- **Advancing our knowledge and understanding of climate change risks, quantifying and integrating them into our risk management and underwriting frameworks where relevant;**
- **Developing products and services to mitigate or adapt to climate risk;**
- **Raising awareness about climate change risks through dialogue with clients, employees and the public, and advocating a worldwide policy framework for climate change;**
- **Tackling our own carbon footprint and ensuring transparent, annual emissions reporting.**

Content organisation

We address our Corporate Responsibility Topics across the different areas of our business where they are relevant. These “implementation areas” are listed below and provide the basic chapter structure for our Corporate Responsibility Report:

Business solutions

Within our core business of re/insurance, we strive to develop innovative solutions that help tackle key environmental and social challenges. To achieve this, we work with our clients and partners in both the private and public sectors.

Risk intelligence

We develop and apply tailor-made tools to extend the scope of our risk management. This enables us to identify and appropriately address sustainability-related and emerging risks in our core business.

Investments

We integrate environmental, social and governance (ESG) criteria across our investment portfolio. Our approach is based on the three strategic pillars Enhancement, Inclusion and Exclusion.

Stakeholder dialogue

Through regular dialogue with our clients and other stakeholders, we help develop effective responses to sustainability and other key issues, by raising awareness of both the risks and opportunities arising from them.

Operations: our own footprint

We apply best-practice standards of resource management to our properties and logistic operations as well as guidelines to our sourcing activities. In doing so, we continually reduce Swiss Re’s direct environmental impact.

Operations: our people

Drawing on the know-how and experience of a diverse, multigenerational group of people, we want to ensure our employees can contribute to an organisation that is constantly looking for new ways to improve the wellbeing of society – where *how* we achieve results is as important as *what* we achieve.

Corporate governance and compliance

By adhering to the highest standards of governance and compliance, we seek to maintain effective checks and balances between the top corporate bodies and to ensure the application of laws, rules and regulations, and ethical standards in our business. Swiss Re's commitment to sustainability is fully integrated into our Code of Conduct.

Active in society

Playing an active role in society beyond our core business is important to us. Globally, we empower vulnerable communities to become more resilient to risk and, where we have offices, we encourage volunteering activities and support local institutions.

Within these core chapters, the content primarily reflects our current Corporate Responsibility Topics, displayed and described on pages 11–15. Our activities as an active citizen in society are described in detail in the separate Activity Report published by the Swiss Re Foundation.



ONLINE CONTENT

A full, interactive overview showing where and how we have addressed our Corporate Responsibility Topics in 2018 is available in the online version of the report: reports.swissre.com/corporate-responsibility-report/2018/cr-report/introduction/our-approach-to-corporate-responsibility/overview-where-and-how-we-have-addressed-our-cr-topics.html

Report profile

Our Corporate Responsibility Report covers the whole Swiss Re Group as it was organised on 31 December 2018, ie the publicly listed holding company Swiss Re Ltd, its three Business Units Reinsurance, Corporate Solutions and Life Capital, and all directly or indirectly held subsidiaries.

All the main chapters of the report have received independent assurance from PricewaterhouseCoopers. Their assurance report is included on pages 72–73.



ONLINE CONTENT

More detailed information on reporting scope, reporting period and publishing rhythm is available in the online version of the report: reports.swissre.com/corporate-responsibility-report/2018/cr-report/introduction/our-approach-to-corporate-responsibility-report-profile.html

Reporting frameworks

Our Corporate Responsibility Report incorporates our 2018 Communication on Progress (CoP) for the UN Global Compact (www.unglobalcompact.org). You can view the full list of references to the Compact's ten principles in the online version of the report.

WE SUPPORT



Furthermore, we continue to report against the Principles for Sustainable Insurance, PSI (www.unepfi.org/psi). Our Public Disclosure of Progress is also available in the online version.



Principles for Sustainable Insurance



ONLINE CONTENT

Our CoP for the UN Global Compact and our PSI Public Disclosure of Progress are available at: reports.swissre.com/corporate-responsibility-report/2018/cr-report/introduction/our-approach-to-corporate-responsibility/reporting-frameworks.html

In our Financial Report we provide detailed Climate-related Financial Disclosures, as recently developed and recommended by the Financial Stability Board (www.fsb-tcfd.org).



CONTENT IN THE 2018 FINANCIAL REPORT

You can view our Climate-related Financial Disclosures in the "Corporate responsibility" chapter, pages 172–189.

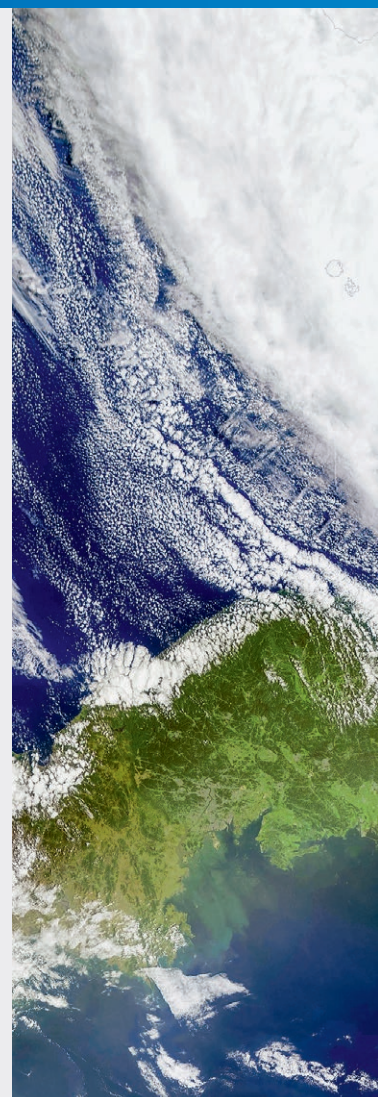
SUSTAINABILITY INDEX REPRESENTATION

Swiss Re is a member of various sustainability indices, including the Dow Jones Sustainability World and Europe, FTSE4Good, Euronext Vigeo World 120, Bloomberg Gender-Equality Index, the MSCI ESG Leaders and MSCI Global Socially Responsible (2019) index families. In May 2018, Swiss Re received an AAA rating on the MSCI ESG assessment.

Our most important index listings and ratings are displayed on page 75.

Creating solutions for sustainability

Our re/insurance solutions help address key environmental and social challenges. We focus on natural catastrophes and climate change, food security, renewable energy, longevity and advancing access to insurance.



USD 2.3 bn

Natural catastrophe
premiums in our P&C
Reinsurance business

(USD 2.3 billion in 2017)

By managing risks and covering losses, re/insurance creates stability and enables economic growth. However, some environmental and social challenges may undermine sustainable progress if left unaddressed. Helping our clients and society tackle such risks is a key part of our commitment as a responsible company and of our vision to make the world more resilient.

Currently, our focus is on the following themes: natural disaster and climate risks, food security, sustainable energy and longevity. We develop our solutions as part of our established risk modelling and underwriting activities or by creating innovative new products in close cooperation with our clients and partners.



WEBSITE

You can find out more about insurance-linked securities at:
www.swissre.com/investors/investors-ILS.html

Thus, our solutions frequently include:

- Public-sector partners: Besides direct insurers and corporate clients, we develop risk transfer solutions for, and in cooperation with, governments and various public-sector organisations;
- Index-based insurance products: We are a pioneer in creating innovative insurance solutions that use an index to determine payments;
- Insurance-linked securities (ILS) or cat bonds: We are a leading developer of these products, which enable cedents to transfer large risks to the capital markets.

Across our efforts, we seek to develop solutions that improve access to insurance protection, especially in emerging and developing countries. If governments and communities are financially protected against such risks as windstorms, earthquakes, drought and flooding, they can better cope with the immediate consequences of a disaster.



A typhoon approaching Japan. Natural catastrophes and the impact of climate change are key risks in our core business.

NATURAL CATASTROPHE DATA ▼

In our 2018 Financial Report, we provide detailed quantitative information on natural catastrophe perils: the four perils with the highest expected annual losses (page 184) and the liquidity requirements stemming from four extreme loss scenarios ("Insurance risk stress tests", page 91).

Just as importantly, our solutions help create the conditions for sustained social and economic development, as they protect investments, allow governments to stabilise budgets and give people the financial stability required to build and maintain businesses.

Natural catastrophes and climate change

Natural catastrophes are a key risk in our Property & Casualty (P&C) business. The damage caused by floods, storms, earthquakes and other natural catastrophes can affect millions of lives and the economies of entire countries. Following a relatively benign first half of the year, the second half saw a number of natural catastrophes, contributing to make 2018 the fourth-costliest year for the insurance industry according to the Swiss Re Institute.

Swiss Re's estimated combined claims from natural catastrophes were USD 2.2 billion in 2018.

These figures underline the significant benefits that access to effective re/insurance protection against natural catastrophes creates for our clients and for society at large. In 2018, our clients in P&C Reinsurance paid us USD 2.3 billion of natural catastrophe premiums (for losses larger than USD 20 million), equivalent to approximately 14% of total premiums in this business segment.

Even before 2017 and 2018, both economic and insured losses caused by natural catastrophes had steadily increased on average over the past 20 years. The main reasons are economic development, population growth, urbanisation and a higher concentration of assets in exposed areas.

This general trend will continue. But crucially, economic losses will be further aggravated by climate change. The scientific consensus is that a continued rise in average global temperatures will

have a significant effect on weather-related natural catastrophes. According to the Fifth Assessment Report (AR5, 2014) and the Special Report on Global Warming of 1.5 °C (SR15, 2018), published by the Intergovernmental Panel on Climate Change (IPCC, www.ipcc.ch), a changing climate gradually leads to shifts in the frequency, intensity, spatial extent, duration and timing of extreme weather events.

If climate change remains unchecked, the makeup of the main drivers will thus gradually shift, with climate change accounting for an increasingly large share of natural catastrophe losses.

To assess our Property & Casualty business accurately and to structure sound risk transfer solutions, we need to clearly understand the economic impact of natural catastrophes and the effect of climate change. This is why we invest in proprietary, state-of-the-art natural catastrophe models and regularly collaborate with universities and scientific institutions.

While the impact of climate change will increase gradually over the coming decades, most of our business is renewed and repriced annually, and our risk models are refined every few years. Risks are normally covered for 12 months (up to five years for cat bonds). Thus, re/insurance premiums do not reflect expected loss trends over the coming decades. Rather, for

underwriting and risk management purposes, our models provide an estimate of the current risk. But as natural catastrophe losses continue to rise as a result of the different factors listed above, our models will gradually factor in this trend.

In addition to providing re/insurance covers, we offer our clients strategic expertise and integral risk assessments of natural disasters and climate adaptation. These include free access for our clients to Swiss Re's CatNet® tool (swissre.com/reinsurance/property-and-casualty/solutions/property-specialty-solutions/catnet.html), which includes our recently launched Global Storm Surge Zones service, and our expertise publications.

Strengthening risk resilience: 2018 highlights

In this section, we describe a selection of the innovative transactions and initiatives we were involved in during 2018 to strengthen risk resilience. These transactions help address the following of our Corporate Responsibility Topics, often more than one at the same time:

- Managing climate and natural disaster risk
- Partnering for food security
- Advancing access to insurance

They help our clients and their communities become more resilient to the risks they face by ensuring that adequate funding is in place when it is needed.

Flood insurance for homeowners in Florida

As hurricanes Harvey, Irma and Michael underlined once again, many homeowners in Florida are exposed to the risk of flooding. Until recently, however, adding flood insurance to an existing homeowners insurance policy was rarely an option. Because flooding risk is sensitive to each specific location, it has been difficult to price accurately. In a joint venture with Security First Insurance (www.securityfirstflorida.com), we helped develop a flood insurance solution that overcomes this challenge.

The key to this innovative solution is that it uses Swiss Re's proprietary flood model. Based on the unique characteristics of a specific exposure such as location of the structure, type of construction and insured value, our model generates a premium that more accurately reflects the actual risk. Furthermore, the solution combines flood and wind risk in one policy with one deductible, meaning there is no longer a need to distinguish whether a loss has been caused partially by flood or partially by wind.

The customers of Security First can now choose to add the new, optional flood and water backup coverage to their existing homeowners policies. The fact that they can get comprehensive flood insurance protection at reasonable prices through one policy shows that flood risk is insurable in the private market. Beyond sharing the information of our flood model, we support the solution with claims, regulatory, marketing and underwriting expertise, all backed by reinsurance capacity.



CONTENT IN THE 2018 FINANCIAL REPORT

You can view our Climate-related Financial Disclosures in the "Corporate responsibility" chapter, pages 172–189.

Windstorm insurance in four US states

In 2018, Swiss Re Capital Markets structured and placed the issuance of USD 350 million of insurance-linked securities by Frontline Re Ltd on behalf of Frontline Insurance (www.frontlineinsurance.com). The transaction is Frontline's debut catastrophe bond and covers windstorms in Alabama, Florida, North Carolina and South Carolina for a period of four years.

It represents the largest cat bond of a Florida-based insurance company (that is, a non-government entity) to date. The innovative transaction uses an indemnity trigger, featuring an event-adjusted attachment level. For the first time in the cat bond market, this determines payments by ranking the size of events that occur during an annual risk period.

Swiss Re Capital Markets acted as the sole structuring agent and bookrunner for the transaction, which was well received by investors.

Protection against earthquake risk for four Latin American countries

Chile, Colombia, Peru and Mexico are all exposed to the threat of earthquakes. The most recent in a string of major earthquakes occurred in Mexico City in September 2017, taking more than 450 lives and causing economic losses of approximately USD 12 billion. Previously, Chile had been hit in 2010 and Peru in 2007.

In 2011, the four countries founded a regional integration initiative known as the Pacific Alliance (alianzapacifico.net). Working together through this organisation, the countries' governments recently took an important step to improve their financial protection against the potential losses of earthquakes, by sponsoring a catastrophe bond issued by the World Bank's International Bank for Reconstruction and Development (IBRD, www.worldbank.org/en/who-we-are/ibrd). With a total notional of USD 1.36 billion, it is the largest sovereign-sponsored catastrophe bond to date.

Swiss Re Capital Markets acted as joint structuring agent and bookrunner on this landmark transaction. Further, utilising its rated balance sheet,

Swiss Re acted as transformer between Mexico and IBRD to facilitate Mexico's access to the capital markets. The flexible nature of the parametric trigger allows the four countries to customise their individual coverage in line with their exposures and overall disaster risk financing strategies. As a result, the countries can now receive fast payouts once the coverage is triggered and are therefore able to accelerate their emergency response following a qualifying earthquake event.

Insuring homeowners in Mexico City against earthquakes

In addition to our involvement in the World Bank's earthquake catastrophe bond for the Pacific Alliance (see above), we also supported a local insurance solution addressing earthquake risks in Mexico City. When the large earthquake of September 2017 occurred, almost 6 000 houses in the city were affected – 61% of which were partially damaged and 39% totally destroyed. This in turn led to social unrest, as most of those affected were low-income homeowners, with neither private insurance nor financial resources to rebuild their homes.

In response, the city government sought ways to leverage its existing natural disaster fund and to provide homeowners with better financial protection against potential losses from earthquakes. In cooperation with a local cedent, Swiss Re has helped develop an innovative programme that offers the city government insurance protection against losses in excess of its own disaster fund, from earthquakes with a magnitude of 8.5 or more.

This insurance scheme automatically covers homeowners who meet a number of requirements. One of them is that they have fully paid their property taxes at the time of an event, which creates a strong incentive for tax compliance and increases the city's revenues. In combination, the insurance solution and the additional revenue will help Mexico City reduce the protection gap connected with major earthquakes.

Protecting coral reefs against hurricane damage

Around the world, coral reefs harbour rich marine ecosystems and are vital for coastal protection. However, they are under threat from a number of sources: disease, bleaching events, diminishing herbivores, algae overgrowth. The most important short-term risk affecting reef structures comes from strong hurricanes: A category 4 to 5 hurricane can destroy 20–60% of live coral cover.

In 2018, we supported the design of a new type of insurance product that offers protection against hurricane damage on the Mesoamerican Barrier Reef System. Stretching over 1 000 km, this is the second-longest reef system in the world and the longest in the Western hemisphere. Not only is it home to some of the world's most important and unique coral reefs, mangrove forests, fish species and marine mammals, it also protects the Riviera Maya, Mexico's primary tourism hub.

The new, innovative parametric insurance solution is designed to protect the coral reef and the beach sand. When triggered by a strong hurricane, it will automatically pay out, thus funding essential restoration measures. Premium payments for the programme will come from the Coastal Zone Management Trust, set up by the state government of Quintana Roo (www.qroo.gob.mx) with support from The Nature Conservancy (www.nature.org) to protect coastal areas in the Caribbean. The trust in turn will collect funds as a portion of tourism taxes and other government sources.

Giving low-income women in Egypt access to life and health insurance

Lack of health insurance is a major protection gap in many parts of the world. In Egypt, for example, many low-income women work in the informal sector, by running a market stall with fruit or vegetable, offering laundry services and similar activities. To date, these micro entrepreneurs usually lack any sort of insurance protection against loss of income due to illness.



In Egypt, most women who run a small business in the informal sector lack any sort of life and health insurance. In 2018, we worked with several partners to expand a pioneering microinsurance programme that addresses this protection gap.

In 2018, we helped expand a pioneering health microinsurance programme that targets this challenge. Originally conceived by Women's World Banking (www.womensworldbanking.org) and the Lead Foundation (lead.org.eg), a dedicated microfinance institution, the programme offers insurance linked to the micro loans Lead offers to its clients.

Called Hemayet Lead (which means "Lead's protection" in Arabic), the solution combines two benefits: a hospital cash benefit of EGP 300 for every night spent at hospital, with limited exclusions (maternity, in particular, is covered), and life insurance for an amount equal to three times the customer's micro loan. Together with AXA Egypt (www.axa-egypt.com), we are strategic partners of Hemayet Lead: AXA Egypt in its primary role of direct insurer, and Swiss Re as the main reinsurer and providing technical support.

At the end of 2018, the programme covered around 200 000 clients, 90% of them women. Such basic but ground-breaking microinsurance and microfinance solutions play a vital role in promoting economic development in emerging countries, and the rapid growth of Hemayet Lead demonstrates that there is strong interest from the informal sector in Egypt.

Supporting an agricultural e-voucher scheme in Zambia

Small-size farms are the main source of livelihoods for about 70% of Zambia's population. The productivity of these farms is generally low, threatening household income and food security. Starting in 2002, the government-run Farmer Input Support Program (FISP) has given the country's smallholder farmers access to improved inputs such as inorganic fertilisers and seeds. However, due to its overly rigid, top-down design and narrow focus, the programme's impact on productivity and, thus, rural poverty remained minimal.

Encouraged by local institutions such as the Indaba Agricultural Policy Research Institute (www.iapri.org.zm), the government changed the programme's delivery mode by introducing electronic vouchers and launched a pilot in 2015. The revamped E-FISP programme offers a more diversified range of products and gives farmers much more flexibility to acquire those inputs that best meet their actual needs based on local conditions. All inputs are insured through a weather index insurance programme designed by local insurance partners. Swiss Re has supported E-FISP by offering pricing and reinsurance capacity.

E-FISP has now been rolled out to the whole country. Regarding its insurance element, we have recently started to engage with the Zambian government on potential areas that need improvements, including product design, distribution and stakeholder engagement.

USD 8.2 billion

Total amount of
climate protection
offered to sovereigns
and sub-sovereigns
since 2014

(USD 5.3 billion by 2017)

Many of our recent efforts to expand insurance protection cover losses from natural catastrophes and weather volatility (eg drought or excessive rainfall). As climate change is predicted to increase these losses, such transactions also help communities strengthen their climate resilience. Furthermore, we have found that partnering with public-sector clients, especially national and regional governments, is an effective way to develop solutions.

Building on these experiences, we made a significant commitment to the United Nations at its Climate Summit in September 2014. Personally addressing the government leaders present at the summit, our then Group CEO Michel M. Liès made the following pledge: "By the year 2020, Swiss Re commits to having advised 50 sovereigns and sub-sovereigns on climate risk resilience and to have offered them USD 10 billion against this risk."

We have agreed with the United Nations to report publicly on the progress we make on this commitment. By the end of 2018, we had advised 96 sovereigns and sub-sovereigns on climate risk resilience and offered a total of USD 8.2 billion in re/insurance protection.

CLIMATE PROTECTION OFFERED TO (SUB-)SOVEREIGNS

	2016	2017	2018
Number of (sub-)sovereigns advised	26	66	96
Amount of climate protection offered (in USD)	3.9 billion	5.3 billion	8.2 billion

Insuring a Chinese county against natural disasters

In China, we helped develop and implement the first-ever natural catastrophe programme at county level. It provides the government of Mao County with comprehensive parametric insurance protection against losses from natural disasters, covering earthquakes, landslides, heavy rainfall and public safety accidents.

Mao County is a minority autonomous area in Sichuan Province, close to the epicentre of the devastating Wenchuan earthquake of 2008. With a magnitude of 8.0, the disaster claimed more than 80 000 lives, left millions of people homeless and caused total damage estimated at RMB 845 billion, with only a small portion covered by insurance.

Alongside the Mao County Government, this pioneering new partnership involves the Groupama-AVIC Property Insurance

Company (www.groupama.com.cn/en) as direct insurer. Swiss Re is the programme's sole reinsurer and has played a leading technical role in ensuring its successful implementation. A particular and noteworthy aspect of the programme is that it includes parametric insurance protection against losses from landslides, an innovative technical breakthrough.

Sustainable energy solutions

Sustainable energy sources play a crucial role in reducing CO₂ emissions and securing future energy supplies. Given our strategic focus on climate change, we are keen to support energy generation from renewable sources. But as sustainable energy projects increase in scale and complexity, so do the risks associated with them. However, innovative risk transfer solutions can help reduce these risks and drive investment in the sector.

We offer a range of re/insurance solutions to manage the risks of different kinds of renewable energy projects. At the end of 2018, we were providing risk cover to more than 3 300 wind and solar farms.

Offshore wind is considered one of the most promising renewable energy sources. But like renewable energy in general, it presents very complex risks. Unlike traditional lines, there is no long loss history to refer to. Underwriting such risks is therefore challenging from an insurance perspective.

Swiss Re Corporate Solutions takes a special interest in offshore wind as it has both the large capacity and the technical expertise to help manage the associated risks. We are continually enhancing our understanding of these risks and share our insights with our clients as well as other insurers. As an initiator and co-founder of the European Wind Turbine



Offshore wind farms pose complex risks. We have the technical expertise and financial capacity to offer effective risk transfer solutions to our clients in this important renewable energy sector.

Committee established in 2009, we were instrumental in launching the Offshore Code of Practice (OCoP), a best-practice guide for risk management in the sector. Mirroring these efforts, we are now considered a lead market for offshore wind risks. In the last five years, Swiss Re Corporate Solutions has participated in numerous offshore wind projects, including wind farms, stand-alone offshore sub-stations and stand-alone export cables.

In 2018, we were involved in a number of new offshore wind farm projects, some of which illustrate new trends in the sector: accelerated development in Asia and the advent of floating technology.

Offshore wind farms in Taiwan

Until recently, most large offshore wind farms have been constructed in Europe. Construction activity has now also started to pick up in Asia, particularly in

Taiwan. Swiss Re Corporate Solutions is currently involved in this growing market with two projects. One of them is the Formosa 1 OWF Phase 2, owned by Formosa Wind Power. Building on a successful pilot with two wind turbines generating 8 MW, the project is now into its second phase. This comprises the construction of 20 turbines with a total capacity of 120 MW. Distanced two to six kilometres from Taiwan's north-western coast, the wind farm will be able to supply approximately 85 000 homes with clean energy, cutting CO₂ emissions by 170 000 tonnes per year (data as provided by www.4coffshore.com).

In 2018, we also agreed to provide insurance protection to the Changhua Demonstration Offshore Wind Farm, owned and developed by the Taiwan Power Company (Taipower, www.taipower.com.tw/en). It is located between 6.7 and 8.7 km off the

Taiwanese east coast and will consist of 21 wind turbines generating a total capacity of 110 MW. This will be sufficient to power approximately 77 000 homes and avoid 156 000 tonnes of CO₂ emissions.

Pilot projects with floating structures

Offshore wind farms are not just evolving in terms of geographic location but also technologically. So far the large majority of wind farms has been built as fixed structures. However, floating structures have a much larger technical potential globally, since they are suitable for deep-water environments and can offer significant cost reductions. Swiss Re Corporate Solutions takes an interest in this evolving technology and has been involved in several pilot projects using floating structures, all of them in Europe. These pilots have the purpose of demonstrating both the technological and the commercial feasibility of floating windfarms.

One of the earliest projects we insured is the Hywind Scotland Pilot Park. It comprises five wind turbines generating a total capacity of 30 MW. When fully operational, it is predicted to power approximately 21 200 homes and avoid 43 000 tonnes of CO₂ emissions per year (compared with fossil fuelled power generation). Another, newer project is the Kincardine Offshore Windfarm (pilot-renewables.com) off the Aberdeenshire coast. We have provided insurance cover for its initial phase, which used just one turbine. Kincardine will be expanded to seven turbines with a total capacity of 50 MW. It is expected to power approximately 35 400 homes and avoid 71 500 tonnes of CO₂ emissions per year.

First solar revenue “put”

In 2018, we were also involved in the development of a pioneering risk transfer solution for the solar energy sector. Solar farms are faced with an inherent risk: output is unpredictable to a degree, because production rises and falls with the length and intensity of local irradiation conditions as well as actual panel and equipment production. In 2018, Swiss Re Corporate Solutions and our partner Kwh Analytics (www.kwhanalytics.com) collaborated to sell the industry’s first solar revenue “put”, an insurance product that can guarantee up to 95% of a solar farm’s expected output.

The solar “put” works like this: the Swiss Re policy sets a floor production level for electricity output from the solar farm. Our client pays a premium, and if the plant does not generate enough power to reach the floor, Swiss Re covers the difference. Underlying this new risk management solution is a large database of historical production of US solar power plants, developed by KWh Analytics.

As offered, the solar “put” significantly reduces the financial risk of a plant and makes debt financing available on better terms. This in turn lowers the plant’s overall cost of capital, enabling developers to fund more solar projects and contributing to the “decarbonisation” of the US power generation stock.

Life and health re/insurance

Life and health (L&H) insurance products play a crucial role in creating stability for individuals and society. They provide financial security in the event of death or illness, give access to medical treatment and offer dependable income in retirement. We help primary L&H insurers and other clients from the private and public sector to manage such risks efficiently, thanks to our specialist knowledge of mortality, morbidity and longevity trends.

Longevity and health insurance have remained two of our strategic priorities in the L&H business. The demand for longevity solutions is expected to grow further as demographics shift. We keep investing in research and development to improve our ability to predict mortality and longevity trends.

Demand for commercial health insurance solutions has also been growing, driven by several major demographic and socio-economic trends. These include: the greater healthcare needs of ageing societies; rising healthcare expectations of the new middle class, especially in growth markets; and healthcare finance reform, particularly in mature markets. We offer a variety of health reinsurance solutions to meet these needs, from short-term protection against the risk of volatility in medical expenses for insurers or employers to very long-term protection against the financial impact of disability or critical illness.

Solutions for longevity risk

With life expectancy rising, pension schemes face the risk that they will not be able to meet all their commitments. Longevity transactions cover this risk by insuring the schemes’ liabilities in case their members live longer than expected. In previous Corporate Responsibility Reports, we have described a number of landmark longevity transactions completed in recent years with different clients in the UK:

- The Scottish & Newcastle Pension Plan (19 000 members)
- The Aviva Staff Pension Scheme (19 000 members plus partners)
- One of AkzoNobel’s pension funds (17 000 members)
- The LV= pension fund (more than 5 000 members)
- The Royal County of Berkshire Pension Fund (11 000 members).

Life Capital: iptiQ

Our Life Capital Business Unit was created in January 2016 and dedicated to developing Swiss Re’s primary life and health business. It operates through three wholly owned subsidiaries in three lines of business: ReAssure for closed books, elipsLife for Group L&H insurance and iptiQ for individual L&H insurance.

iptiQ reflects Swiss Re’s commitment to introducing more people in society to the benefits of financial protection against life’s uncertainties – in particular to closing the gap between the amount of savings or insurance that someone has and the amount needed in the event of misfortune. iptiQ does not sell directly to consumers. Instead, it works in partnership with established and trusted brands, combining Swiss Re’s vast experience and expertise in designing protection products with the partner companies’ own know-how.

Offering products for term life, whole of life, critical illness and disability, iptiQ’s overriding goal is to offer simple, streamlined, digital solutions that remove the traditional hurdles to purchasing protection. Our partners can choose from more than 140 product configurations in order to get easy-to-understand, non-advisory products with clear and transparent pricing and optional add-ons. IptiQ has grown strongly since its creation in 2016, with the amount of new policies sold more than doubling for the second year in a row in 2018.



CONTENT IN THE 2018 BUSINESS REPORT

Learn more about how we help address diabetes, on pages 32–35.

Extending our risk intelligence

We address sustainability, emerging and political risks in our core business transactions. For this, we have developed specific tools and know-how.



SUSTAINABILITY RISKS

We define sustainability risks as ethical concerns related to potential environmental and socio-economic impacts of our business transactions, and the reputational risks they may entail.

Risk management is an integral part of Swiss Re's business model and key to the controlled risk-taking that underpins our financial strength. It is embedded throughout our business and ensures that the Group and the three Business Units have the necessary expertise, frameworks and infrastructure to support good risk-taking (see 2018 Financial Report, pages 72–73 and 81–97).

Sound risk management is essential for a re/insurer. Tight control of our exposures guarantees that we can fulfil our role in society as ultimate risk-taker and be a reliable partner to our clients when they need us. The core categories of our risk landscape comprise insurance risk (property and casualty, life and health) as well as financial market and

credit risk. In addition, we consider it essential for a responsible company to pay attention to further significant risks we may be exposed to, especially in the longer term.

Sustainability, emerging and political risks are particularly relevant in this respect. We have developed instruments and know-how that help us identify and assess all of them. This allows us to determine those risks we think we should avoid – because of their potential to increase losses, for ethical reasons or both.



WEBSITE

To learn more about how we address political risks, please visit our website at: www.swissre.com/about-us/corporate-responsibility/risk-intelligence/political-risks.html



Dams can potentially have serious impacts on local communities and the environment. One of the policies of our Sustainability Risk Framework clearly defines when and how our underwriters need to carry out due diligence on such risks.

Our Sustainability Risk Framework

In a market environment, profitable business activities create economic value. Occasionally, however, they may also have adverse effects on the environment and certain vulnerable groups. If such impacts are ignored, they may pose a threat to societies' long-term sustainable development.

For companies this situation can create dilemmas. A particular business transaction may be economically beneficial and in compliance with all legal and regulatory requirements, yet may have significant environmental or social downsides. Swiss Re recognises that such dilemmas exist and develops effective responses through a well-defined approach and by taking decisions based on ethical principles.

Our Sustainability Risk Framework is an advanced risk management instrument designed to identify and address the potentially negative effects of our transactions on local communities, workforces and the environment. This framework applies to all of our business transactions in re/insurance as well as investments, to the extent that we can influence their various aspects.

The Sustainability Risk Framework consists of:

- Two umbrella policies on human rights and environmental protection plus eight specific guidelines on sensitive sectors or issues;
- The Sensitive Business Risk (SBR) process comprising an online assessment tool and a referral tool – due diligence mechanisms to assess our business transactions;
- Company exclusions; and
- Country exclusions beyond mere compliance with international trade controls.

Policies and guidelines

Our Sustainability Risk Framework is based on the overarching principles of respecting human rights and protecting the environment, encapsulated in two umbrella policies that are valid for all our transactions. In addition, specific guidelines apply these overarching principles to eight sectors or issues in which we perceive major sustainability risks: the defence industry; oil and gas (including oil sands, hydraulic fracturing and arctic drilling); mining; dams; animal testing; forestry, pulp & paper and oil palm; nuclear weapons proliferation; and, newly from 2018, thermal coal.

We regularly review all the policies and guidelines of our Sustainability Risk Framework to ensure they stay abreast of relevant new risk developments and stakeholder expectations. In 2018, we introduced a comprehensive thermal coal policy for our underwriting business (see special section on the right), complementing a similar policy we had adopted in our asset management in 2016.



WEBSITE

You can download a summary of our main human rights and environmental concerns in these sectors at: www.swissre.com/about-us/corporate-responsibility/risk-intelligence/sustainability-risk-framework/policies.html

The Sensitive Business Risk process

Each of the two umbrella policies and eight sector guidelines of our Sustainability Risk Framework contains criteria and qualitative standards which define precisely when a transaction may present a “sustainability risk”. We assess such transactions through our Sensitive Business Risk (SBR) process, which consists of two due diligence mechanisms – the SBR online assessment tool and the SBR referral tool.

The online tool stores the relevant sustainability risk information for these sectors and thus provides our underwriters with an efficient means to check the potential impact of their transactions on human rights, labour rights and the environment. For transactions that reveal low to medium

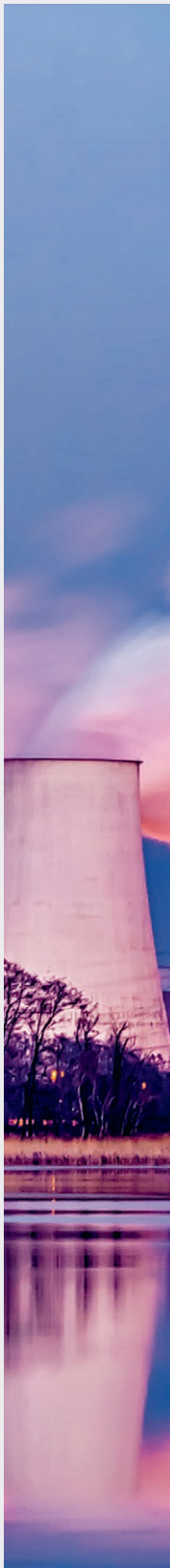
Introduction of our thermal coal policy

Swiss Re supports the worldwide reduction of greenhouse gas emissions and contributes to limiting global warming to 1.5–2°C above pre-industrial levels. To this end, we continually review measures to assist the transition to a low-carbon economy. Reflecting our commitment, in 2015 we signed the Paris Pledge for Action (www.parispledgeforaction.org) to affirm our support for the Paris Climate Agreement.

After a range of measures we have taken over the years in our product development, risk management and operations, we have recently taken a further significant step. In July 2018, we introduced a thermal coal policy for our underwriting, pledging not to provide re/insurance to businesses with more than 30% exposure to thermal coal utilities or mining. The policy is fully integrated into our Sustainability Risk Framework. It applies to both old and new thermal coal projects and across all lines of business (direct, facultative and treaty).

The introduction of our thermal coal policy is the first step towards the development of a carbon risk steering mechanism, to measure our carbon intensity and associated risks embedded in our re/insurance business. Over time, this will help us align our business activities with the Paris Climate Agreement and related Nationally Determined Contributions (NDCs).

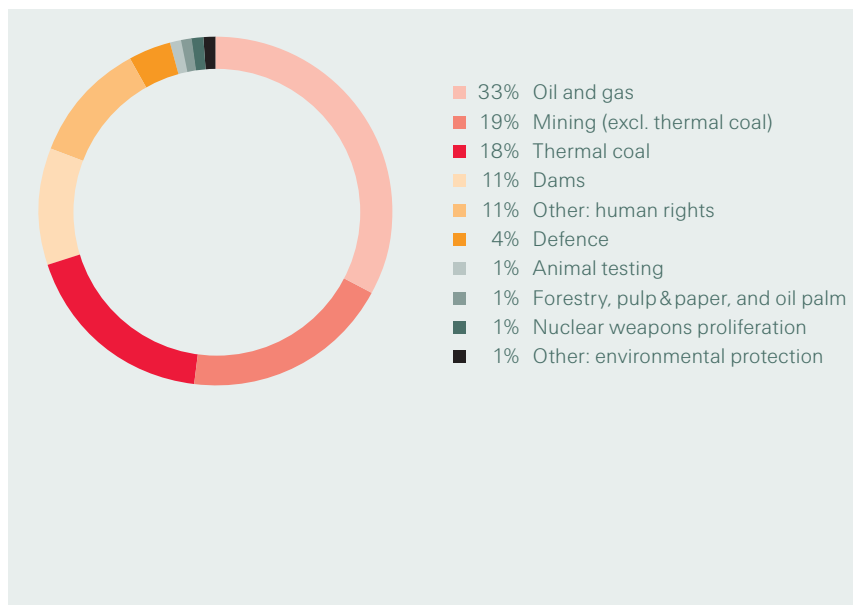
Given that there is no established methodology for such a carbon steering model in the re/insurance business, developing a purposeful model will take some time, but will enable us to take a holistic carbon risk perspective on our business and avoid a piecemeal approach.



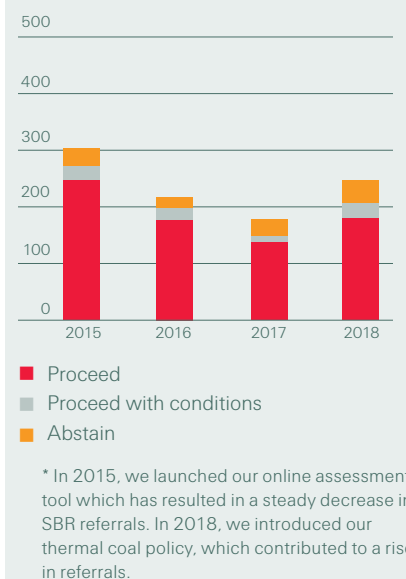


Thermal coal power plants are a significant source of CO₂ emissions. In 2018, we introduced a policy for our underwriting, pledging not to provide re/insurance to businesses with more than 30% exposure to thermal coal utilities or mining.

SENSITIVE BUSINESS RISKS REFERRED TO OUR EXPERT TEAM IN 2018, BY SECTOR/ISSUE



NUMBER OF SENSITIVE BUSINESS RISK REFERRALS AND DECISIONS TAKEN



247

Sensitive business transactions referred to our team of sustainability experts

(178 in 2017)

risks, they need to carry out additional due diligence based on industry and country advice provided by the tool.

If the potential human rights or environmental risks of a transaction are assessed as high but the responsible underwriter wants to pursue it, it is automatically transferred through the SBR referral tool to Swiss Re's in-house team of sustainability experts. These specialists then conduct in-depth research to decide whether the transaction at hand is acceptable on ethical grounds.

This decision takes the form of a binding recommendation either to go ahead with the transaction, to go ahead with certain conditions attached, or to abstain. If there is disagreement about the recommendation, the case can be escalated to the next management level and, ultimately, to the Group Chief Risk Officer and the Group Executive Committee.

Since we introduced the SBR assessment tool in 2015, we have continually fine-tuned it, thus strengthening our underwriters' ability to integrate sustainability risk

assessment into their decision-making. Between 2015 and 2017, this led to a marked, and steady, decrease of SBR referrals to our in-house sustainability experts.

In 2018, however, the number of referrals rose, from 178 in the previous year to 247. This increase was mainly driven by the introduction of our thermal coal policy (see special section on page 28). Many of the coal-related referrals were submitted by our underwriters to have the thermal coal exposures of specific transactions clarified. Of the 247 transactions in total, we issued negative recommendations in 40 cases and positive recommendations with conditions attached in 27 cases.

Company exclusions

Our Sustainability Risk Framework policies specify certain criteria that may lead us to exclude a company from both our re/insurance transactions and our investments, to the extent that such an exclusion is permissible (eg by virtue of mandatory law or internal policies) and possible (eg if existing documentation relating to such re/insurance transactions and investments provide for it). These criteria include: involvement in

prohibited war material; verifiable complicity in systemic, repeated and severe human rights violations; causing repeated, severe and unmitigated damage to the environment; unregulated proliferation of nuclear weapons; and unethical/cruel animal testing practices.

Country exclusions

Swiss Re also excludes certain countries from its business that have particularly poor human rights records. This step goes further than compliance with international trade controls (ITCs). Our goal is to refrain from directly underwriting risks or making investments in entities that are based in these countries. We review the list of excluded countries annually based on independent human rights assessments and update it if warranted.

As the Sustainability Risk Framework is based on the principles of respecting human rights and protecting the environment, the SBR process with its two due diligence tools, company exclusions and country exclusions is our principal means to ensure compliance with the UN Global Compact in our core business.



WEBSITE

You can read more about the international declarations and principles underpinning our Sustainability Risk Framework in a special publication dedicated to it: www.swissre.com/Library/sustainability-risk-framework.html

Training

Ever since we introduced our comprehensive Sustainability Risk Framework ten years ago, we have made considerable efforts to raise awareness of sustainability issues among our underwriters and client managers. Through training, we ensure that they know how to properly apply the framework with its underlying principles of respecting human rights and protecting the environment. In recent years, we have focused on high growth markets where we want to expand our business.

A couple of years ago, we developed a new eLearning course for our in-house training. While this continues to be compulsory for all our employees who work in underwriting and with our clients, it is now mandatory for all our new entrants, as well. In 2018, a total of 3 544 employees completed this mandatory training course.

Client and industry interaction

Over the year, we had a number of important external engagements on sustainability risks with clients, industry peers, investors and civil society groups such as environmental and humanitarian NGOs. We held in-person meetings with clients operating in sensitive sectors such as mining, forestry and oil & gas, discussing potential measures they could take to address their sustainability risks.

Further exchanges took place in the context of our activities around thermal coal, focusing on the dedicated policy we introduced during 2018. For example, we participated in the Coal Exit Roundtable organised by the Unfriend Coal Campaign (unfriendcoal.com) in Paris in March 2018.

In partnership with other re/insurers, we are also developing risk assessment tools designed to help the industry better understand and manage sustainability risks. One of these ongoing partnerships is the UNEP Finance Initiative Principles for Sustainable Insurance (UNEP FI PSI, www.unepfi.org/psi). In 2018, the UNEP FI PSI launched an insurance industry pilot examining the implementation of the Climate-related Financial Disclosures (TCFD), to which Swiss Re actively contributes.

EMERGING RISKS

We define emerging risks as newly developing or changing risks that are difficult to quantify and whose potential impact on our business is not yet sufficiently taken into account.

Emerging risks

Re/insurers operate in a rapidly changing and increasingly complex risk landscape. New demographic, economic, technological, socio-political, regulatory and environmental developments are all capable of changing risks or creating new ones. In addition, growing interdependencies between these developments can lead to accumulations of risk and create significant knock-on effects. People's risk perceptions are shifting, liability and regulatory regimes continue to evolve and stakeholder expectations are growing.

This complex landscape gives rise to "emerging risks" – newly developing or changing risks that are difficult to quantify and whose potential impact on our business is not yet sufficiently taken into account.

Detecting and investigating such risks early on forms an important part of our comprehensive approach to risk management. In analysing how risks are evolving and related to each other, we seek to assess their potential impact on Swiss Re. This is vital to reduce uncertainty and prevent unforeseen losses, raising awareness within the Group and across the industry.

EMERGING RISK CASE STUDY: ALGORITHMIC DECISION-MAKING



Increasingly important in decision-making, algorithms may also reinforce human judgement and are difficult to audit. To cope with potential ethical concerns while adapting to rapid digitalisation, Swiss Re is addressing algorithmic decision-making as an emerging risk.

Algorithms play an increasingly powerful role in ever more areas. They perform certain tasks faster than human beings, eg the analysis of (big) data, and their decisions are held to be more accurate and unbiased. But how objective can a computer programme that has been written, calibrated and tested by humans really be?

With artificial intelligence (AI), machine learning and unsupervised training data from which the machine learns, this question is becoming more virulent. The underlying algorithms may directly feed from human behaviour, thus in fact replicating both human virtues and flaws. Adapting, confirming and reinforcing imperfect human judgment may lead to discriminatory effects and raise ethical concerns. In a re/insurance context, such discriminatory bias can translate into defective modelling and prediction, in addition to causing reputational issues.

A particular challenge of algorithms is their explainability and thus auditability. While the accuracy of outputs may be tested empirically, the explainability of algorithmic workings remains limited. This “black box” problem of algorithms has spurred a whole new field of AI research, which seeks to enhance users’ understanding of algorithmic processes and thus help build trust towards them.

With the advent of the “algorithmic economy”, ethical debate and regulatory attention have picked up. One particular focus is the lack of – and potential need for – clear governance around the development and application of algorithms.

The re/insurance industry needs to cope with two types of pressure. One is to adapt in real time to the rapid digitalisation of the world, for example to the expected spread of autonomous vehicles.

The other is to be attentive to the risks that may be created if the speed of the digital transformation enlarges potential blind spots.

Swiss Re has covered important aspects of algorithmic decision-making in various publications. “Blame your robot” was the title of an emerging risk theme in the SONAR 2017 report. It was dedicated to the potential shifts in liability regimes caused by the advent of AI. The SONAR 2018 report (see page 33) highlights some of the challenges of algorithmic decision-making described above, under the heading “Algorithms are only human too – opaque, biased, misled”.

Swiss Re Institute also supported IRGC in organising a multi-disciplinary workshop on the governance of decision-making algorithms.

irgc.epfl.ch/issues/projects-cybersecurity/the-governance-of-decision-making-algorithms/

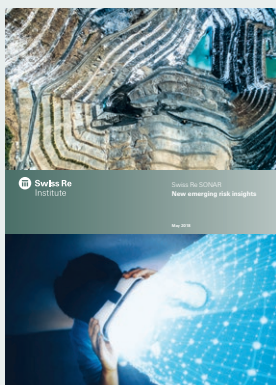
Our SONAR framework

SONAR ("systematic observation of notions associated with risk") is our Group-wide framework specifically designed to manage and communicate emerging risks. Firmly embedded in the Group's risk management organisation, SONAR allows us to identify, assess and report these risks in a timely manner and to factor them into our strategic business decisions.

The SONAR process involves several steps. The first is an interactive intranet platform which enables our employees to share and discuss risk notions based on developments in the re/insurance landscape, allowing for bottom-up identification and peer reviews. While many of the risk notions – or "early signals" – flagged on SONAR will never turn into emerging risks, others may well do so. However, as we cannot anticipate which signals will become emerging risks, we scan the horizon quite broadly before concentrating on those with the highest impact potential on the re/insurance business.

SWISS RE SONAR; NEW EMERGING RISK INSIGHTS

The Swiss Re SONAR report features emerging risk themes that have the potential to impact the re/insurance industry. These topics derive from our SONAR process and have been assessed by our emerging risk management experts in recent years. www.swissre.com/institute/research/sonar/sonar2018-a-peek-into-future-risk.html



Our emerging risk specialists periodically cluster and further assess these risk notions for their potential impact on our business. Finally, in-depth investigations are carried out on selected topics.

You can learn more about one of these topics – algorithmic decision-making – in the case study on page 32. To share some of our key insights on these emerging risks with external audiences, we published the fifth edition of our comprehensive Swiss Re SONAR report in 2018 (see below).

Further activities on emerging risks identified in the past

The emerging risks we previously examined in more detail and featured in our Corporate Responsibility Reports since 2007 are:

- 2007:** Electromagnetic fields
- 2008:** Critical infrastructure
- 2009:** Carbon nanotubes
- 2010:** Smart grids
- 2011:** Cyber attacks
- 2012:** 3D printing
- 2013:** New forms of mobility
- 2014:** Electronic cigarettes
- 2015:** The Internet of Things
- 2016:** Human-induced earthquakes
- 2017:** Antimicrobial resistance

Since we first identified these emerging risks, we have followed up on several of them in our core business and together with our stakeholders, eg "Critical infrastructure" and "Cyber attacks":



WEBSITE

You can read more about these activities at:
www.swissre.com/about-us/corporate-responsibility/risk-intelligence/emerging-risks/case-study-critical-infrastructure.html and
www.swissre.com/about-us/corporate-responsibility/risk-intelligence/emerging-risks/case-study-cyber-attacks.html

Strategic risk initiatives

Identifying and addressing emerging risks can be challenging. Their novelty and interconnectedness make it difficult to determine when a particular risk notion must be considered an emerging risk. Timing is of crucial importance. If measures to exclude a particular risk are taken too early, we may not be able to offer our clients insurance protection; if measures are taken too late, we may end up with increased loss potential. Given these challenges, we believe it is essential to foster risk dialogue with various partners. By sharing perceptions and assessments, all parties can gain a better understanding of potential emerging risks.



WEBSITE

You can read about our most important strategic initiatives concerning emerging risks at:
www.swissre.com/about-us/corporate-responsibility/risk-intelligence/emerging-risks/strategic-initiatives.html

Being a responsible investor

We integrate environmental, social and governance (ESG) criteria across our investment portfolio. Our approach is based on the three strategic pillars Enhancement, Inclusion and Exclusion.

As part of the Inclusion pillar of our responsible investment approach, we make thematic investments in infrastructure renewables ...

“We make the world more resilient” is Swiss Re’s vision. More than ten years ago, our Asset Management unit embarked on a journey to not only generate risk-adjusted, stable long-term returns, but to also consider environmental, social and governance (ESG) aspects in our investment decisions. With this approach, our Asset Management has contributed to the Group’s vision.

In 2017, we reached a key milestone on this journey. As one of the first re/insurance companies, we integrated ESG benchmarks into our investment portfolio, which was a significant step forward from considering ESG as an “add-on” approach. A year later, we are even more convinced that taking ESG criteria into account has a positive impact on the performance of our investment portfolio in the long-term.

Responsible investment approach

The cornerstone of our investment philosophy continues to be asset-liability management (ALM). To meet future claims and benefits, we invest the premiums generated by our underwriting activities in assets whose cash flows match the durations and currencies of our re/insurance liabilities. Therefore, we generally invest more in higher-quality fixed income securities with stable long-term returns. At the end of 2018, such investments accounted for 82% of our total assets under management¹ (see graph on page 35).

WEBSITE

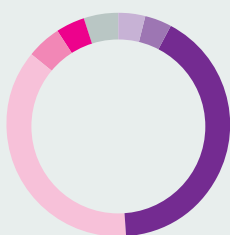
You can find out more about our approach to responsible investment at: www.swissre.com/our-business/managing-our-assets/responsible-investing-in-practice.html

¹ Asset classes considered are government bonds, credit, and mortgages and other loans.



OVERALL INVESTMENT PORTFOLIO

USD 122.6 bn, as of 31 December 2018



- 4% Cash and cash equivalents
- 4% Short-term investments
- 41% Government bonds
- 37% Credit bonds
- 5% Equities*
- 4% Mortgages and other loans
- 5% Other investments incl. policy loans

* Includes equity securities, private equity and Principal Investments

Including ESG criteria into the investment process makes economic sense, especially for long-term investors, as it improves risk-adjusted return profiles and hence reduces downside risks.

We consistently integrate ESG considerations along the three pillars Enhancement, Inclusion and Exclusion, of which Enhancement is strategically the most meaningful for Swiss Re.

Enhancement

This pillar refers to the systematic integration of ESG criteria along the investment process, from portfolio definition to monitoring and reporting. As part of our active risk management, we announced in 2017 that we had switched to ESG benchmarks.

These have been adopted in our investment mandates and consist of better-rated companies from an ESG perspective. This allows us to have both the right measurement and appropriate incentives for our portfolio managers in place. If benchmarks are not applicable, a minimum ESG rating threshold is applied to our mandates. For actively managed listed equities and corporate credit mandates, external managers have limited leeway to invest into securities they deem to have a positive ESG trend but are not yet included in the benchmark (see overview on page 36). At the end of 2018, approximately 45% of our investment portfolio was managed externally, and more than 96% of those assets were managed by PRI signatories.

OVERVIEW OF MAJOR ASSET CLASSES IN SWISS RE'S ASSET PORTFOLIO AND ESG CONSIDERATIONS



Government bonds	<ul style="list-style-type: none">■ Investments hold an ESG rating of BB or better■ Green bond mandate considering ICMA Green Bond Principles
Credit	<ul style="list-style-type: none">■ Active mandates benchmarked against ESG BB and better indices with limited leeway to deviate from the benchmarks■ Reinvestment universe of buy-and-hold mandates restricted to ESG rating BB or better■ ESG inclusion in infrastructure loans
Listed equities	<ul style="list-style-type: none">■ Active mandates benchmarked against MSCI ACWI ESG Leaders Index restricted to BB and above and limited leeway to deviate from it
Private equity	<ul style="list-style-type: none">■ New investments are only made into Private Equity funds, which adhere to ESG guidelines■ Swiss Re reviews ESG performance and compliance for each potential investment
Real estate	<ul style="list-style-type: none">■ ESG regarded as an important metric for the portfolio. Attractive initiatives that offer a high ESG impact are considered for both new acquisitions and the existing portfolio■ Benchmarked against different sustainability standards depending on the location of the property (Minergie standard, GreenGuide best practice, GreenPrint Environmental Management Platform, LEED certifications, GRESB scoring)



... as well as social infrastructure such as hospitals.

For our real estate portfolio, we focus on certified buildings, such as the Minergie label in Switzerland, or the world-wide known LEED certification. By the end of 2018, the value of our Minergie-labelled buildings reached USD 0.4 billion, or 23% of our Swiss portfolio. Furthermore, we also invest in the US, UK and Australian real estate markets, reaching a total size of USD 1.7 billion by the end of 2018.

The investment managers' approach to sustainability includes "GreenGuide: Sustainable Property Operations", a best-practice guideline for sustainable and efficient real estate operations; "ULI GreenPrint Foundation", a global environmental management platform; and "LEED Certification" from the U.S. Green Building Council. We also benchmark our US portfolio against GRESB, an industry-driven organisation transforming the way capital markets assess ESG performance of real asset investments. Our US portfolio outperformed the GRESB average of 68/100 with a score of 78/100.

Executing our shareholder rights is another part of Swiss Re's commitment to being a responsible investor. To reflect this pledge in our voting behaviour, we have defined principles in our Asset Management Voting Policy. See: www.swissre.com/our-business/managing-our-assets/Responsible-Investments-Shaping-the-future-of-investing.html

Inclusion

Thematic investments are an ideal approach to tackle specific sustainability topics. We mainly target investments that contribute to a low-carbon economy. An effective way to do this is by investing in infrastructure renewables and green bonds. As the latter is more of a concept than a specific investment class, we use the Green Bond Principles (GBP) from ICMA as guiding principles for our investments. In 2018, we reached our green bond target of at least USD 1.5 billion by holding USD 1.6 billion per year-end.

Infrastructure is an attractive asset class for our investment portfolio given its credit quality and inherent liquidity premium. Any of our infrastructure investments is assessed against a catalogue of ESG parameters to evaluate the underlying sustainability risk.

- 21% of our infrastructure investments are allocated to renewable energy, such as wind farms and solar panels
- 23% of our infrastructure investments are allocated to social infrastructure, such as hospitals, student dorms or affordable housing projects

In our 2018 Financial Report, we further disclose information on our climate change-related investment risk exposure (pages 172–189).

Exclusion

We apply a number of pre-defined criteria and qualitative standards that may lead to the exclusion of a company or a country from our investment scope if they do not meet these criteria and qualitative standards. Swiss Re's Sustainability Risk Management team develops and updates the Group-wide exclusion lists of countries and companies based on the Sustainability Risk Framework. Further information is available in this report on pages 27–31.

In order to mitigate the risk of stranded assets in light of an accelerating transition to a low-carbon economy, we avoid investments in companies that generate 30% or more of their revenues from thermal coal mining or that use at least 30% thermal coal for power generation. We also divested from companies with more than 20% revenues from tar sands operations.

Responsible investment governance framework

Our Asset Management operates within a well-defined framework. Strong governance is key to bringing ESG considerations into the investment process in a structured and controlled way. Our approach to responsible investment is based on clear principles, procedures and responsibilities.

The Swiss Re Responsible Investing Policy defines our approach to responsible investing, specifies roles and responsibilities in the organisation, and defines implementation and monitoring standards for ESG criteria in the Group's investment portfolio.

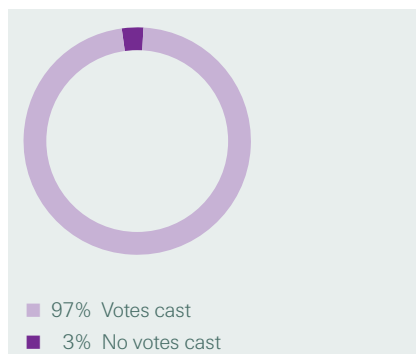
The policy is reviewed periodically and updated if required. It is complemented by the Swiss Re Asset Management Voting Policy, which provides guiding principles that apply to all our voting activities.

Swiss Re's Head Responsible Investing (Head RI) develops and coordinates the implementation of the ESG strategy within the unit. As part of this role, the Head RI steers the ESG Advisory Board, a committee formed by representatives of all investment units as well as Legal, Compliance and Group Risk Management. The ESG Advisory Board reports on responsible investment activities in the various investment units, develops and reviews improvement ideas, shares knowledge and monitors implementation progress.

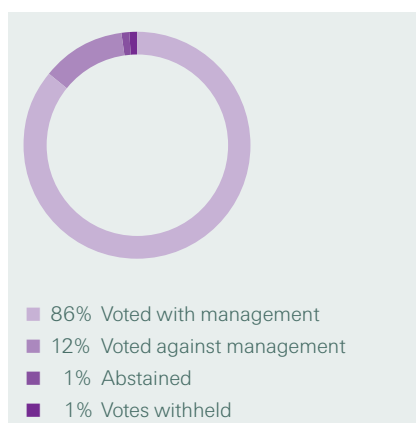
The Asset Management Investment Committee reviews and discusses Swiss Re's responsible investment approach and advises the Group Chief Investment Officer on related decisions and improvements.

The overall responsibility for our ESG approach lies with the Group Chief Investment Officer who signs off investment decisions within the Group's Strategic Asset Allocation.

OUR VOTING ACTIVITIES IN 2018 ▼



OUR VOTING BEHAVIOUR IN 2018 ▼



CONTENT IN THE 2018 FINANCIAL REPORT

For more information, see our Climate-related Financial Disclosures, pages 172–189.

How we engage

Voting

We believe that ESG considerations, especially good corporate governance and transparency towards shareholders, are key drivers for sustainable value creation. We recognise our shareholder rights and responsibilities as an integral part of our commitment to responsible investment. We review our constitutive voting principles periodically to keep them aligned with best practice.

In the case of internally managed equities, we make use of our influence as a responsible shareholder by directly exercising our voting rights. For externally managed portfolios, we work with the relevant portfolio managers to execute our proxy votes and related engagement activities.

We review the voting policies of external managers during the due diligence process to confirm compliance with our policy. In addition, external managers are required to report on voting activities conducted on Swiss Re's behalf.

In 2018, we exercised 97% of our voting rights of our listed equity portfolio. We voted on 4 363 voting items through our external managers. We voted in line with the respective management resolution recommendation in 3 770 cases (86%) and against it in 529 cases (12%). In 59 cases (1%), we abstained from voting. The remaining votes were withheld.

In addition to shares in listed companies, investments in our equity portfolio include equity exchange-traded-funds (ETFs). The fund managers cast votes on these ETFs for all investors in accordance with the fund managers' own voting policies and processes.

Promoting responsible investing

Shifting the large institutional asset base towards sustainable investments would mark a big step forward in making the world more resilient. Swiss Re's brand promise "We're smarter together" is also applicable to responsible investing: We interact with policymakers and other market participants to promote ESG considerations in the investment process. As an example, we contribute to the European Commission's Technical Expert Group on Sustainable Finance by

participating in the development of climate transition and Paris-aligned benchmarks and reporting needs for ESG benchmarks.

As an active member of the OECD's long-term investor network, we also engage in the development of policy proposals with regard to sustainable infrastructure and ESG.

Knowledge sharing is another key aspect of promoting responsible investments. We offer all Asset Management employees various internal ESG training opportunities to ensure consistent know-how across the Group. Furthermore, we are in an ongoing dialogue with other industry participants to develop ESG as a standard investment approach.

In 2018, we launched the new publication "Responsible Investments – The next steps in our journey" to share our experiences about switching to ESG benchmarks after one year (see on the right). The publication builds on its predecessor "Responsible investments – Shaping the future of investing", released in 2017.

Swiss Re first formalised its commitment to responsible investing in 2007 by signing the UN Principles for Responsible Investment (PRI). In 2012, we signed the Principles for Sustainable Insurance (PSI), a further step to formally endorse our commitment to corporate responsibility. Both the PRI and PSI are taken into account within our comprehensive responsible investment framework. All PRI signatories are required to provide in-depth reporting on their responsible investment activities. For the third time in a row, we received the highest score for our overarching ("Strategy and Governance") approach to responsible investing in 2018. The reports are available on the PRI website at www.unpri.org/signatory-directory/

We also became a member of the ICMA Green Bond Principles in 2017. This reflects our view that the industry needs a more standardised responsible investing market environment with agreed definitions, standards, methodologies and best practices to move the long-term investor base further towards systematic ESG integration.

NEW PUBLICATION: RESPONSIBLE INVESTMENTS – THE NEXT STEPS IN OUR JOURNEY ▼



Investing responsibly makes economic sense. While significant progress has been made in the harmonisation of ESG-related methodologies and standards, there is still considerable improvement potential regarding the definition of standardised key metrics and the increase of the importance of ESG in financial analysis. As long as ESG criteria are not yet an integral part of all financial analyses, investors need to make an effort and actively integrate ESG considerations in their investment decisions.

www.swissre.com/our-business/managing-our-assets/responsible-investments-next-steps-in-our-journey.html

Exploring and shaping the **risk** landscape

We engage in regular dialogue with our stakeholders. By sharing expertise and know-how, we help society develop effective responses to key risks.

Our re/insurance solutions help our clients and partners cope with the risks they face. This in turn fosters stability and enables economic growth. But many of today's risks are complex and may threaten sustainable progress. To find effective, long-term responses to such risks, partners from the public and the private sector need to work together.

This is why we attach great importance to ongoing dialogue with our stakeholders. Drawing on the expertise from our core business, we identify key risk topics and take an active role in discussions about them. We share and exchange knowledge through many channels, eg our renowned publications including the *sigma* series, international dialogue platforms, events hosted at the Centre for Global Dialogue and cooperation with governments and

academic institutions. This exchange gives us valuable feedback and new insights for risk management and product development. Established in March 2017, the Swiss Re Institute plays a key role in our stakeholder dialogue (see page 44).

Risk knowledge topics

Combining insights from our own risk expertise and from our stakeholders, we identify topics that are relevant to our clients, the insurance industry and society as a whole. Sharing our insights is an important element of our stakeholder engagement.

In 2018, we refocused our stakeholder dialogue on the three risk knowledge topics shown on the right:

WEBSITE

You can find out more about our risk knowledge topics at: www.swissre.com/risk-knowledge.html



**Mitigating
climate risk**



**Building
societal resilience**



**Driving
digital insurance solutions**



These topics raise awareness of risks – both current and evolving – that we actually address with our solutions. In doing so, we tap the risk knowledge embedded across our company, in particular our three Business Units, Group Risk Management, Group Underwriting, Swiss Re Institute and Global Partnerships.

Mitigating climate risk

The effects of climate change and global warming are already evident and shaking up our risk landscape: warmer average temperatures, rising sea levels, longer and more frequent heatwaves and more weather extremes. These phenomena are quickly becoming the new normal and profoundly impacting our way of life, our health and our natural environment. A most urgent question we need to ask is not only how to tackle climate change, but also how we can best adapt and avert the most damaging consequences – in short, how to *mitigate climate risk*.

Our response

Swiss Re's main response to this challenge is to make societies more resilient to the growing risks of climate change and natural hazards. We do this in a number of ways.

With our re/insurance solutions, we can help communities and businesses get back on their feet quickly after a disaster and prepare them for more frequent and severe climate impacts.

We also offer solutions that support the transition to more sustainable, low-carbon energy systems by reducing the risk associated with renewable energy projects and making them more attractive to investors with re/insurance backing.

And we promote sustainable practices in our own operations to improve good stewardship and long-term performance. We have adopted an investment practice for our assets to consider environmental, social and governance (ESG) criteria in our investment decisions, among them climate-impacting industries. Limiting global warming is part of this effort, and we are reinforcing it by reducing our own fossil fuel footprint across our operations, investments and re/insurance offerings.

With the Top Topic *Mitigating climate risk* we want to connect the dots, and engage our audiences with our expertise and risk knowledge in this area.

Notable achievements in 2018

- We hosted the third annual Oasis conference in Zurich (see page 44). Oasis is a powerful modelling framework to help build a cost-efficient "view of risk" by building proprietary models or by accessing multiple models from various providers via the marketplace of cat models. It is offered as an open source platform and is free of charge, reflecting the willingness of the re/insurance industry to join forces and control rising costs.
- We launched a new product hub to better serve our corporate clients from the renewable energy industry. Corporate Solutions' Renewable Energy Industry Solutions suite offers clients a holistic, one-stop solution that covers risks along the entire value chain of a typical renewable energy project.
- We actively participated in the second Annual Insurance and Climate Risk conference in London and contributed to key sessions as discussants and panellists. The event gave a comprehensive overview of all the key issues that the industry currently defines as relevant to the topic of climate risk and reaffirmed our own strategy supported by the Top Topic *Mitigating climate risk*.

Building societal resilience

Technological and economic development, population growth, ageing populations and other societal trends are putting people and assets in jeopardy. Swiss Re's work in the areas of health and longevity, food security and infrastructure represents some of the ways we help *build societal resilience*.

Our response

Today, billions of people are either uninsured or underinsured for life and health risks. Health gaps are widening, such as those caused by our ageing populations or chronic illnesses like diabetes. At the same time, as the world population increases, so too must global food production. But climate change and soaring food prices pose a serious threat, not least to farmers and the agricultural industry. We share our knowledge, apply new technologies and partner with our clients to come up with innovative solutions to address these challenges.

Furthermore, economic growth depends on investments in infrastructure. However, the funding gap for both maintaining existing infrastructure and building new infrastructure is widening. As a re/insurer and long-term investor, we both underwrite the many projects needed – from transport infrastructure to urban spaces or renewable energy infrastructure – and we provide capital to infrastructure projects to help narrow the financing gap.

With our Top Topic *Building societal resilience* we connect the dots, and engage our audiences with our expertise and risk knowledge in these areas.

Notable achievements in 2018

- We launched a digital campaign around "modifiable risk" to coincide with World Diabetes Day, sharing our expertise and solutions aimed at improving the health of policyholders and ultimately prolonging lives.
- We continued to engage with stakeholders to advocate for the need for stronger standardisation in infrastructure investing, which will be crucial to closing the infrastructure financing gap and supporting economic growth – for example, through our participation at the World Bank Spring and Annual Meetings.
- Following months of extensive field work and data analysis, we shared key findings about the Asia Health Protection Gap across multiple markets, positioning our insights on the topic with the most relevant audiences (see the related expertise publication on page 44).

Driving digital insurance solutions

Our customers are seeking quick, intuitive and streamlined digital experiences in order to make their lives safer and healthier. This is a far-reaching phenomenon, and the demand for such services is affecting the entire insurance value chain. While it enables us to deliver value directly to our customers, technology also provides us with new opportunities to close existing and potential protection gaps, which often widen due to lack of affordability, awareness, trust or complexity.

Our response

Swiss Re's main response to these new opportunities is clustered under three proof points: big data/data analytics, the digital consumer and the digitisation of insurance.

At Swiss Re, our goal is to use data to promote better access to insurance. For example, good data can help streamline processes, which eventually leads to more customer-friendly access to insurance and increases the uptake of insurance products. It can also be used to filter out fraud, increase insurability and make prices fairer. Furthermore, the

efficient use of data allows us to get closer to risk and offer risk cover in a much more efficient manner. This will make insurance more affordable and can give even underprivileged people access to coverage. As a result, we will be able to offer risk cover to a greater number of individuals.

Secondly, end consumers now receive an increasing number of services online. They consequently expect a better experience when purchasing insurance; moreover, there are ample opportunities to help them become aware that insurance cover is available. Customer-driven digitisation is beginning to translate into new product offerings that are simple and easier to compare.

And finally, although insurance is a complex sector that involves substantial administrative duties, many of these duties can be digitised. Examples thereof include sales, underwriting and contract handling, as well as investment, finance and claims management. At Swiss Re, we can assist customers in simplifying the insurance value chain in all these areas.

With our Top Topic *Driving digital insurance solutions* we want to connect the dots, and engage our audiences with our expertise and risk knowledge in this area.

Notable achievements in 2018

- We co-sponsored a Human Centred Design study to develop a client risk journey for healthcare in Ukraine, Russia and Morocco. The study will provide consumer insights (risk diary) which will be linked back to the digital insurance value proposition for telecoms clients.
- We launched a digital campaign around the Top Topic *Driving digital insurance solutions* in developed markets in Europe and the US to raise awareness of Swiss Re's digital expertise and solutions.
- We continued to invest our expertise in helping people drive more safely. We partnered with BMW to develop an Advanced Driver Assistance Systems (ADAS) risk score algorithm, which will be available from 2019. The use of vehicles equipped with ADAS has the potential to reduce motor accident frequencies significantly.

DIGITAL RESPONSIBILITY

While creating new possibilities to deliver value directly to our customers and closing protection gaps (see above), the use of big data also raises questions concerning solidarity in society and the insurance principles of risk pooling. We seek to understand and proactively address the ethical challenges surrounding the digital transformation.

Various regulators around the world have started to evaluate the need for regulations on the topic of big data / digital ethics, or have even issued first guidelines. Swiss Re engages actively in the discussion with some regulators by way of feedback to consultations, by responding to regulatory questionnaires, by participating in industry groups, by writing articles and by participating in regulator-initiated discussion groups.

In 2018, we also continued our participation in a three-year research project on "dealing with ethical and legal big data challenges in the insurance industry", conducted by researchers at the University of Zurich and the University of Applied Sciences HTW Chur. The project receives funding from Switzerland's National Research Programme 75 on "Big Data" (www.nfp75.ch/en/projects/module-2-societal-and-regulatory-challenges/project-christen).

Firstly, the project analyses how re/insurers are affected by the ethical and legal challenges arising from the digital transformation and can address them. Secondly, it examines how legislation and regulations address them. Ultimately, the aim of the project is to propose an approach how to handle big data ethically in the re/insurance space.

In addition, we contributed to the publication "Big Data and Insurance: Implications for Innovation, Competition and Privacy", published by the Geneva Association (www.genevaassociation.org/sites/default/files/research-topics-document-type/pdf_public/big_data_and_insurance_-_implications_for_innovation_competition_and_privacy.pdf). The publication looks at three key concerns raised in the public debate: privacy, individualisation of insurance, and competition. With the use of five scenarios, it examines how facts-based regulation can achieve a trade-off between the benefits and risks of using big data.

For Swiss Re's commitment to data protection and privacy compliance, see pages 67 and 69.

Swiss Re Institute

Swiss Re has long been recognised as a knowledge leader within the re/insurance industry. We are convinced that a better understanding of the risks we all face supports the Group's vision of making the world more resilient.

It was in this spirit that we launched Swiss Re Institute in March 2017. Swiss Re Institute conducts and publishes superior risk research to drive better decisions and innovation in the re/insurance industry. Swiss Re Institute curates risk and market data to enable solutions that create value for clients and to guide the Swiss Re Group's strategic direction. Further, it builds and manages partnerships with world-class academic and research institutions (see examples on page 45).

Swiss Re Institute incorporates successful Swiss Re brands, such as the *sigma* publication series and the Centre for Global Dialogue. The Institute further acts as a coordination point for research-focused business lines within Swiss Re and from external partners.

Based on these activities, Swiss Re Institute supports Swiss Re's commitment to corporate responsibility. We help highlight emerging risk trends, engage in dialogue and provide capacity-building sessions and seminars to clients and other stakeholders in different parts of the world, and seek to identify sustainable risk solutions.

Highlights among our many conferences and publications of 2018 include:

WEBSITE
You can find more information about Swiss Re Institute at:
www.swissre.com/institute

SELECTED CONFERENCES OF 2018 ▼

Food for thought: The science and politics of nutrition

www.swissre.com/institute/conferences/food_for_thought_bmj.html



Oasis conference on probabilistic natural catastrophe modelling

www.swissre.com/institute/conferences/oasis-conference-2018.html



The intelligence behind artificial intelligence

www.swissre.com/institute/conferences/The-intelligence-behind-artificial-intelligence.html



SELECTED PUBLICATIONS OF 2018 ▼

Making a beeline for disaster? The decline of pollinators puts agriculture at risk

swissre.com/institute/research/topics-and-risk-dialogues/nutrition-and-agriculture/making_a_beehive_for-disaster-the-decline-of-pollinators-puts-agriculture-at-risk.html



Life underinsurance in the US: bridging the USD 25 trillion mortality protection gap

swissre.com/institute/research/topics-and-risk-dialogues/insurance-markets-and-risk-management/life-underinsurance-US.html



The health protection gap in Asia: a modelled exposure of USD 1.8 trillion

swissre.com/institute/research/topics-and-risk-dialogues/insurance-markets-and-risk-management/Health-protection-gap-in-asia-a-modelled-exposure-of-USD-1.8-trillion.html



Collaboration with (inter-) governmental and academic institutions

In recent years, we have collaborated with various (inter-)governmental and academic institutions both to promote effective approaches to sustainability challenges and to share our expertise on managing specific risks.

Our work with (inter-)governmental agencies to promote effective sustainability responses

- In Europe, we continued our engagement with regulators to highlight the important role insurers play in supporting the transition to a low-carbon, more resource-efficient and sustainable economy in line with the EU's 2018 Sustainable Finance Action Plan. For example, Swiss Re was selected to be part of the European Commission Technical Expert group, specifically to assist with the development of low-carbon benchmarks. We provided input to the European Commission's study on the role of insurance in weather- and climate-related disaster risk and their consultation to evaluate Member State action in response to the Climate Adaptation Strategy, and we participated in climate change focused regulatory roundtables hosted by national regulators (eg the UK PRA).
- In the US, we have maintained regular dialogue with the National Association of Insurance Commissioners (NAIC), principally on climate change and natural catastrophes.
- In the Asia-Pacific region, we are participating in an industry-wide working group with the Monetary Authority of Singapore to develop guidelines for sustainable insurance. And in Australia we are part of an industry-led stakeholder collaboration developing open-source standards for projecting future climate-related repair and replacement costs of buildings and infrastructure.

Our work with (inter-)governmental agencies to share risk management expertise

- With Global Partnerships, we have a team that works strategically with public-sector bodies to improve risk resilience:
 - directly with sovereigns or sub-sovereigns and their agencies, recently with the Pacific Alliance (Chile, Colombia, Peru and Mexico) to structure an earthquake cat bond, with the Federal Emergency Management Agency (FEMA) to create a reinsurance cover programme for its National Flood Insurance Program, as partner of the World Bank with the Philippine government to develop an earthquake and typhoon cover for exposed provinces, with the government and prefectures of two Chinese provinces to establish major natural catastrophe insurance schemes, and with the UK government as part of a programme set up to make flood insurance more affordable for homeowners;
 - with development agencies such as the United States Agency for International Development (USAID), the UK's Department for International Development (DFID), the Swiss Agency for Development and Cooperation (SDC), the World Bank, the Asian Development Bank (ADB), the Inter-American Development Bank (IADB) and the German Development Bank (KfW).
- We have regularly contributed to platforms such as the World Economic Forum, B20, G20 and G8 to share our insights on key risks, and have supported the United Nations Framework Convention on Climate Change (UNFCCC) process.



CONTENT IN THE 2018 FINANCIAL REPORT

For our participation in the Financial Stability Board's Task Force on Climate-related Financial Disclosures, see page 174.

Working with academic institutions

Through Swiss Re Institute (find out more on page 44), we build and manage partnerships with world-class academic and research institutions, guide Swiss Re's internal capital allocation and business steering processes and provide our stakeholders with cutting-edge risk research.

- We support the ETH Zurich Risk Center (www.riskcenter.ethz.ch/), which aims to advance a holistic, scientific approach to assessing and managing risks and educating a new generation of researchers;
- We support Oasis (oasislmf.org/), an open-source cat modelling platform free to use by anyone. It is owned by the re/insurance industry, with more than 40 re/insurance companies as members;
- With the Institute of Insurance Economics at the University of St. Gallen, HSG (www.ivw.unisg.ch/), we conduct industry-wide studies to better understand market dynamics.
- With the London School of Economics (www.lse.ac.uk) we conduct research on macro resiliency;
- With the University of Peking in Beijing (www.pku.edu.cn) we have carried out an economic analysis of poverty, insurance and resilience;
- We collaborate with the Cyber Policy Initiative, Stanford University (fsi.stanford.edu/cyber), which conducts research on cybersecurity, governance and the future of work.

Take a look at our website for further information on our collaborative projects: www.swissre.com/institute/partnerships.html

Reducing our footprint

We want to lead by example and work to minimise the environmental impact of our operations. Tackling our CO₂ emissions and reducing energy consumption are key targets across the Group.

As a knowledge company in the financial services sector, we do not cause large environmental impacts through our own operations. Nonetheless, we firmly believe it is important for a responsible company to minimise its environmental footprint, thus leading by example.

For our core re/insurance business, climate change represents a key topic. Reflecting this, we have been focusing on our own CO₂ emissions and energy consumption for many years. Our pioneering initiatives include the Greenhouse Neutral Programme and the CO_{you2} Programme. Both are now into their second cycles, running from 2013 to 2020.

Furthermore, we apply sustainability guidelines to our sourcing and construction activities. Extending our efforts beyond our company, we continue to play an active role in the Swiss Climate Foundation.

Management system and certification

We operate an integrated global management system at our Corporate Real Estate & Services (CRES) division, which interlinks quality and environmental management, and ensures that similar processes are seamlessly managed. Through a systematic, Group-wide reporting process, we monitor our environmental performance and implement appropriate improvement measures.

Environmental objectives and targets are defined centrally at our headquarters, but responsibility for implementing improvement measures also lies with the CRES departments in our regions and individual locations. Some of them define additional environmental targets that reflect specific local conditions and challenges.

Since 2015, our entire CRES division has been certified according to the ISO

14001 environmental management standard (www.iso.org), replacing the location-based approach previously used. This means that all our operations and employees are covered by an ISO 14001-certified environmental management system (EMS).

Complementing the ISO 14001 certification of our Group-wide EMS, we have achieved ISO 50001 certification for the energy management system of our main locations in the EU.

For our recently completed office buildings in New York, Zurich (Swiss Re Next) and Bangalore we have also received the Leadership in Energy and Environmental Design (LEED, new.usgbc.org/leed) certification, the most widely used green building rating system worldwide to evaluate the overall environmental performance of a building. In addition, we are committed to the principles of the 2000-watt society for our Campus Mythenquai in Zurich.

8.1%

Total reduction of CO₂ emissions per employee since 2013



WEBSITE

You can find out about our engagement in the Swiss Climate Foundation at: www.swissre.com/about-us/corporate-responsibility/footprint/partner-initiative-swiss-climate-foundation.html



WEBSITE

You can find out more about this commitment at: www.swissre.com/about-us/corporate-responsibility/footprint/2000-watt-society.html

CO₂ EMISSIONS PER EMPLOYEE (FULL-TIME EQUIVALENT, FTE), SWISS RE GROUP ▼

		2013 kg/FTE	2017 kg/FTE	2018 kg/FTE	Change in % since 2017	Change in % since 2013
Scope 1	Heating	378	264	244	-7.6	-35.4
Scope 2	Power ¹	824	651	584	-10.3	-29.1
Scope 3	Business travel	3 713	4 126	3 892	-5.7	4.8
	Copy paper	40	17	16	-5.9	-60.0
	Waste	50	34	33	-2.9	-34.0
	Water	12	12	11	-8.3	-8.3
	Technical gases	27	21	6	-71.4	-77.8
	Commuting ²	1 250	1 050	1 000	-4.8	-20.0
Total		6 294	6 175	5 786	-6.3	-8.1

1 Calculation based on a market-based approach taking into account the purchase of renewable energy instruments, with the exception of the UK, where the government requires companies to report an average grid factor (see table at the bottom for our reporting of emissions from electricity).

2 Commuting data are gathered biannually by means of a survey. The figures are rounded and fraught with considerable uncertainty.

UNDERLYING ENVIRONMENTAL DATA, SWISS RE GROUP ▼

		2013	2017	2018	Change in % since 2017	Change in % since 2013
Heating	kWh/FTE	1 931	1 286	1 190	-7.5	-38.4
Power	kWh/FTE	4 533	3 606	3 405	-5.6	-24.9
Energy intensity	kWh/FTE	6 464	4 892	4 595	-6.1	-28.9
Business travel	km/FTE	13 492	15 224	14 310	-6.0	6.1
Copy paper	kg/FTE	34	15	14	-6.7	-58.8
Recycling paper	%	71	64	65	1.6	-8.5
FSC label	%	96	94	96	2.1	0
Waste	kg/FTE	181	130	134	3.1	-20.4
Water	m ³ /FTE	16	16	14	-12.5	-12.5

INDIRECT EMISSIONS FROM PURCHASED ELECTRICITY, SWISS RE GROUP ▼

In line with the Scope 2 Guidance of the Greenhouse Gas (GHG) Protocol, we report the emissions associated with our electricity consumption according to both a location-based approach representing the CO₂ intensity of the grids where we operate and a market-based method taking into account emission reductions from instruments such as Renewable Energy Certificates (RECs) and Guarantees of Origin (GOs).

	Location-based total	Market-based total	Instrument types	Percentage kWh
	t CO ₂ e	t CO ₂ e		
Switzerland ¹	980	358	GOs	35%
US ²	8 437	244	RECs	24%
UK ³	6 134	6 134	GOs, residual	19%
			mix	
			RECs,	
Rest of the world ⁴	7 832	2 162	GOs, residual	22%
			mix	
Total	23 383	8 898		100%

1 All Swiss electricity producers are required by law to declare the quality and quantity of the electricity produced. Swiss Re buys 100% green labelled electricity (naturemade star).

2 In the US, we purchase green-e labelled Renewable Energy Certificates (RECs) for our total power consumption.

3 The UK government claims all green credentials of renewable electricity produced in the country. Even though over 80% of the electricity we consume in the UK comes with Renewable Energy Guarantees of Origin (REGOs), we report the same emission figures for location- and market-based approaches.

4 Our next biggest power consumption is in Slovakia and India, each with 3% of the Group's total.

Our Greenhouse Neutral Programme

Climate change has been a strategic priority for Swiss Re for some 30 years. It is a key topic for a re/insurer, because it leads to more extreme and more frequent weather events. Our strategy to tackle climate change rests on four pillars, one of which is our pledge to reduce our own CO₂ emissions (see page 16).

Our Greenhouse Neutral Programme is the principal means to achieve this goal. It combines two commitments: firstly, to reduce our CO₂ emissions per employee (full-time equivalent, FTE); secondly, to offset all the remaining emissions by purchasing high-quality emission reduction credits, thus making our company fully greenhouse neutral.

We originally launched the Greenhouse Neutral Programme in 2003 for a ten-year period. During that time, we gradually reduced our CO₂ emissions by 49.3% per employee (FTE) and compensated all the remaining emissions.



WEBSITE

You can read more about the first phase of our Greenhouse Neutral Programme at: www.swissre.com/about-us/corporate-responsibility/footprint/greenhouse-neutral-programme-first-phase.html

Goals and scope

Seamlessly continuing from the programme's first phase, we launched a second commitment cycle running from 2013 until 2020. However, after almost halving our CO₂ emissions per employee in the previous ten years, the potential for further reductions is now significantly smaller. Thus, our target until 2020 is to keep our CO₂ emissions per employee stable at the 2013 level. In view of our expansive business strategy, especially in high growth markets, we regard this as an ambitious goal.

RE100 AND EP100

At the end of 2018, approximately 94% of the power we purchased across the Group came from renewable energy sources. We are committed to raising this figure to 100%, which is why we helped establish the Climate Group's RE100 initiative in 2014 as a founding member.

The goal of this initiative is to unite the world's most influential companies in a shared commitment to use 100% renewable power by 2020. To achieve this, the RE100 group approaches policymakers and regulators at national and sub-national level to make renewable energy more available. RE100 grew substantially again in 2018 and now includes more than 160 of the world's largest companies. www.theRE100.org

Going beyond these collective efforts, we have recently started to build solar power plants at our own offices.

In 2016, we also signed up to the EP100 initiative, launched by the Climate Group (www.theclimategroup.org) and the Global Alliance for Energy Productivity (www.globalproductivity.org). This is a shared commitment by leading global companies to double their energy productivity or, in other words, to get more economic output from each unit of energy. www.theclimategroup.org/project/ep100/

Goals of our Greenhouse Neutral Programme until 2020:

- Maintain the emissions reductions we achieved between 2003 and 2013 regarding power consumption, heating and business travel;
- Fully offset the remaining emissions;
- Continuously reduce energy intensity (power consumption and heating) by 2% per year (kWh/FTE);
- Obtain 100% of power from renewable sources by 2020.

In the current cycle, the programme covers the following emission sources:

- Heating (Scope 1)
- Power consumption (Scope 2)
- Business travel, copy paper use, waste generation, water use, technical gases and employee commuting (Scope 3)

In 2018, our total CO₂ emissions per employee (FTE) decreased by 6.3% and were thus 8.1% lower than in 2013. We achieved this reduction mainly through a decrease in business travel and by further cutting power consumption at our business locations. Moving into more energy-efficient buildings, eg in New York and Zurich (Swiss Re Next), has been a key factor in this.

28.9%

Total reduction
of energy intensity
per employee
since 2013

Using renewable power

Purchasing power from renewable rather than conventional sources has been a principal measure of our Greenhouse Neutral Programme. Concluding a gradual build-up that started in 2005, we are now using 100% renewable power at all the Group's locations where it is available in reliable and trustworthy quality (ie at a total of 30 locations in Asia, Europe, North America and Oceania). This means that approximately 94% of our total power consumption came from renewable sources at the end of 2018.

To assess the quality of the renewable power available in individual locations and select suitable sources, we use a "minimum standard" that clearly states how we define renewable power and what requirements it needs to meet.

In particular, we pursue the following impactful green power options, with decreasing preference:

- Direct investments in our own solar plants (eg at Armonk, Swiss Re Next);
- Indirect investments via long-term virtual power purchase agreements from newly built plants (see page 49);
- Sourcing of high-quality renewable energy certificates (eg naturemade star in Switzerland and NaturEnergie in Germany).

Reducing energy consumption

In parallel with our switch to using renewable power, we have made continuous efforts to lower the actual amount of energy consumed per employee (FTE) or, in other words, to reduce our energy intensity. Through many small measures to improve energy efficiency and by concentrating back-office tasks in fewer and more energy-efficient buildings, we managed to cut our energy intensity by a total of 46.5% between 2003 and 2013.

For the current phase of our Greenhouse Neutral Programme from 2013 until 2020, our goal is to continuously reduce our energy intensity by 2% per year. At the end of 2018, the total reduction we had reached since 2013 was 28.9%. We partly achieved this by decommissioning existing office buildings and moving into more energy-efficient ones.



As part of our Greenhouse Neutral Programme, we are committed to covering 100% of our power consumption from renewable sources by 2020. Through a “virtual power purchase agreement” completed in 2018, we help fund the construction of a new wind farm in the US and get access to renewable energy supplies at steady prices.

Entering into a **virtual power purchase agreement (VPPA)**

Switching to renewable energy is a key measure we have taken to reach our emissions reduction goals. This is one of the reasons why we have helped launch the RE100 initiative as a founding member.

To date, Swiss Re has obtained its renewable energy mainly by purchasing Energy Attribute Certificates (EACs). These EACs are “unbundled”, meaning they are not linked to the actual creation of new renewable power generation capacity. As a result, unbundled EACs are no longer seen as having a sufficient environmental impact.

This is why we entered into a virtual power purchase agreement (VPPA) for the first time in 2018, partnering with Apple, Akami and Etsy. In this way, we want to secure high-quality EACs for the total power consumption of all our offices in North America.

A VPPA is a financial contract rather than a contract for physical power. Under it, Swiss Re will pay a developer a fixed price for a fixed amount of power produced by a renewable energy asset for a defined period of time. However, this power will never actually be delivered physically to our offices and we will not pay the strike price directly to the developer. Instead, the developer sells the energy from the project to the market at prevailing prices. When the variable market price is lower than the fixed VPPA price, we pay the difference to the developer – and the other way round when the market price is higher than the fixed VPPA price.

Such VPPAs combine an environmental benefit with a financial one. Firstly, a long-term contract with a fixed price for the electricity produced allows the developer to secure financing for the construction

of new renewable energy capacity. Our partnership with Apple, Akami and Etsy has helped secure financing for the Green River wind farm in Illinois, as well as giving us access to renewable energy produced at competitive prices.

Secondly, a VPPA allows for the hedging of variable energy market prices. When market prices increase, our offices will incur higher expenses but will receive funds (the difference between market price and fixed price) from the VPPA – and vice versa. As the fixed amount of power covered by the VPPA is equivalent to our expected total energy consumption in North America, shifts in energy prices should roughly balance out within this area.

The innovative character of the VPPA approach has been recognised by both peers and the media.

Reducing our footprint

We have also continued our efforts to create more flexible and modern office environments that offer our employees optimal working conditions while, at the same time, using space and resources more effectively. The spread of digital communication and devices makes it possible to work seamlessly across different locations and devices, creating the foundation for a more flexible and informal workplace set-up that encourages teamwork. At Swiss Re Next, for example, this open workplace concept is a key feature. Although further reducing our environmental footprint is not the primary driver of these efforts, their potential to lower the energy intensity of our locations is nevertheless substantial.

Minimising business travel

As a result of the substantial cuts we have achieved in CO₂ emissions from power consumption and heating since 2003, business travel easily constitutes Swiss Re's largest emissions source today. Since the business trips our employees take are ultimately driven by client needs, they are difficult to influence. However, we have taken several measures to reduce the need for business travel and to curb unnecessary business trips.

For a start, we have built up a dense network of video conferencing equipment across the Group. Recently, we replaced these facilities with state-of-the-art technology, which creates a real-time, life-size virtual meeting experience in specially designed rooms. By the end of 2018, we had a total of 159 video conference facilities worldwide. In total, we hosted 97 617 video calls in 2018, amounting to 70 249 hours.

We continuously monitor all travel budgets and collect travel data centrally. Furthermore, we introduced an internal carbon levy on air travel in 2014, which uses the "polluter pays" principle. It allocates the costs of the Voluntary Emissions Reductions (VERs) we need to buy to offset our CO₂ emissions to the Group's Global Functions in proportion to their respective share of air travel; previously they had been borne centrally by Group Finance. This internal price on carbon heightens awareness of travel costs among our managers and employees and creates a further incentive to reduce air travel, in addition to flight costs.

Despite these measures, the amount of kilometres travelled per employee and the associated emissions increased for a number of years, mainly driven by our continued expansion in high growth markets. After stabilising in 2017, the average total distance travelled by each of our employees decreased by 6.0% in 2018.

Paper, water and waste

We also calculate and compensate the CO₂ emissions from further sources along our supply chain (Scope 3), ie copy paper, waste generation and water use. The overview of all our emissions sources on page 47 shows, however, that these are less relevant in our business than other environmental impacts, which is why we have not set quantitative reduction goals for them.

Furthermore, it is difficult for us to influence water use and waste generation at locations where we rent office space. In the office buildings we own ourselves, though, we ensure that appliances meet high standards of water efficiency.

As paper use is more responsive to managerial action, we have taken a number of measures to reduce the average amount used by our employees in recent years. New IT solutions such as "pull printing" (which eliminates uncollected printouts), web-based collaboration and document management platforms have led to a significant decrease of paper use in

all our locations. Average paper use per employee fell by 6.7% in 2018, mainly as a result of ongoing digitisation and measures such as pull printing, leading to a total reduction of almost 60% since 2013.

Offsetting our remaining CO₂ emissions

The second commitment of our Greenhouse Neutral Programme is to compensate all CO₂ emissions we cannot avoid. For the seven emissions sources covered by it, we bought and retired VERs for a total of 75 794 tonnes of CO_{2e} in 2018.

We are keen to ensure that the VERs we buy are of a high environmental standard and have developed a set of criteria to select the projects generating certificates. In particular, we give priority to those which create strong social side effects and benefit the poorest regions. You can read more about a compensation project we selected in 2018 on page 51.

External verification of our CO₂ reporting

Ever since we first launched our Greenhouse Neutral Programme in 2003, we have disclosed our CO₂ emissions, their principal sources and relative performance over time. The method we use to calculate our emissions is based on the guidelines of the Greenhouse Gas Protocol, the most widely used emissions accounting standard (www.ghgprotocol.org/).

Before our emission figures are published, PricewaterhouseCoopers checks them to verify our calculations. Their complete assurance report for the whole Corporate Responsibility Report is included on pages 72–73.

75 794

Tonnes of CO_{2e}
compensated
in 2018



A farmer delivers cotton stalks to a biomass power plant in northwest China instead of burning them in the open field, thus helping to generate energy and avoiding CO₂ emissions. We support this project through the Voluntary Emissions Reductions we bought in 2018.

Turning cotton waste into clean electricity in northwest China

As part of our Greenhouse Neutral Programme, we compensate all the CO₂ emissions we have not been able to avoid. The projects we select for this purpose need to be of the highest quality and to benefit communities highly vulnerable to the consequences of climate change. Based on these criteria, in 2018 we supported the Gold Standard-certified Bachu Biomass Project in China's northwestern Xinjiang, the largest cotton-growing region in China.

Climate change-induced natural perils such as drought, hail, wind and low-temperature waves pose a threat to the thriving cotton production hubs of the Xinjiang region, including Bachu County. For that reason, Swiss Re delivered the first low-temperature weather index insurance programme for cotton production in Xinjiang in 2015. The scheme addressed the problem of reduced crop yields from cold weather not addressed by

traditional insurance products and provided coverage for about 840 hectares of cotton.

Next to extreme weather conditions, Bachu County faces further problems because power generation is predominantly coal-fired, leading to the release of greenhouse gases and other pollutants. Cotton farmers have further contributed to air pollution by burning cotton stalks, which they used to consider as waste, in the open field.

Thanks to the Bachu project, these cotton residues are now used as renewable fuel to fire a new biomass power plant. In this way, the project reaches several objectives at once: it reduces greenhouse gas emissions, improves air quality and makes the local power supply more stable.

Since its implementation in 2008, the project has mitigated 62 774 tonnes of CO_{2e} and generated an average of

79 200 MWh of renewable electricity annually – enough to power around 53 000 Chinese homes.

The project has also created a number of social benefits that increase the resilience of the local community.

As cotton stalks have turned from being seen as waste to a valuable by-product, selling the residue has allowed farmers to boost their combined income by up to USD 5 million per year. Furthermore, the combustion process at the plant creates ash that the farmers can use as fertiliser.

All in all, the Bachu project has created more than 100 jobs in the local communities. More than half of these positions are held by Turkic Muslim Uyghurs and other regional ethnic minorities, while a quarter of total project staff are women.

30%

Share of our tier 1 and 2 vendors included in the EcoVadis platform by end of 2018

(13% by the end of 2017)

Sustainability in our supply chain

As a re/insurance company, Swiss Re does not have an extensive supply chain. Our core business does not require us to buy intermediate inputs like a manufacturing company. However, to run our operations, we need a range of goods and services.

When we make these purchases, we apply general and individual criteria. In line with our overarching Group Sourcing Policy, we select suppliers that offer the best value for money, meet high quality standards and adhere to Swiss Re's Code of Conduct. As a signatory to the UN Global Compact, we are committed to honouring all its ten principles. Amongst other things, these prohibit any sort of discrimination or the use of child or forced labour, and require that the freedom of association and the right to collective bargaining be upheld.

We consider environmental criteria relating to materials and ingredients, production methods, recycling and waste. For some sourcing categories, we have developed "minimum standards" that further specify our requirements. Besides power (see page 48) and paper (see page 50), these cover cleaning services and agents, refrigerant agents and building materials.

When selecting new products and suppliers, we examine whether they comply with these requirements as part of the overall evaluation process. We take a fresh look at existing strategic suppliers in our periodic contract reviews, and we visit individual suppliers to inspect them onsite. Internally, we hold regular awareness trainings with our sourcing staff.

In 2016, we signed up for EcoVadis (www.ecovadis.com), a collaborative platform for sustainable supply chain management, which covers a wide range of screening criteria across the topics of environmental impacts, human rights, labour practices, ethics and sustainable procurement. This will allow us to assess the sustainability performance of our suppliers more systematically with the help of key performance indicators and to engage them in improvements. It also helps us reduce and manage potential sustainability risks in our supply chain.

We have been implementing the EcoVadis platform into our sourcing processes across all categories. For our tier 1 and tier 2 vendors, we have set ourselves the goal of including all of them in the platform by 2020. At the end of 2018, implementation was completed for 30% of these vendors.

2 924

CO_{you2} subsidies
granted to our
employees in 2018

(2 528 in 2017)

The CO_{you2} Programme

Tackling our carbon footprint is one of four pillars of our climate change strategy (see page 16). In 2007, we launched the CO_{you2} Programme because we wanted to make our commitment more tangible for our employees and help them become more aware of climate change. The programme offers subsidies for a range of investments through which our employees can reduce their private carbon footprints. To our knowledge, it was the first global corporate initiative of its kind at the time.

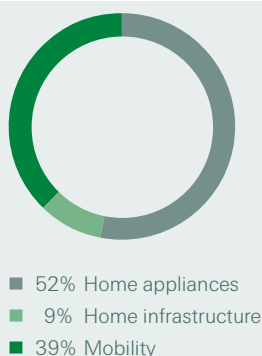
The investment options we offer for subsidies are clearly specified in the programme. Some of them are supported at all our locations, while others vary to account for regional differences in climate, living conditions etc. Our subsidies cover 50% of the investment amount up to a locally determined maximum allowance. All regular employees are entitled to apply and new employees can submit subsidy requests after three months following their hire start date.

In 2018, we granted a total of 2 924 subsidies spread across three product categories: home appliances, home infrastructure and mobility. Over the past five years, electricity-powered mobility has become more prominent, with 811 subsidies for e-bikes, e-motorbikes, e-cars and plug-in hybrid electric cars.

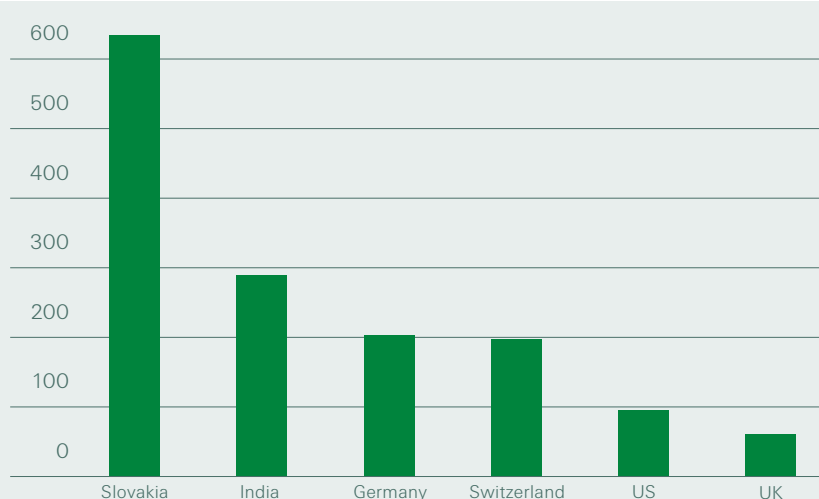
Amongst the larger Swiss Re locations, uptakes per employee were highest in Slovakia and India. Our office in Slovakia has witnessed particularly strong growth in recent years. Many new employees there have made use of the opportunity to claim subsidies, eg for highly energy-efficient fridges and washing machines as well as bicycles for their daily commute to work. In Europe, in general, mobility remains a popular category, with bicycles the most common type of subsidy.

In our Asian locations, energy-efficient home appliances were particularly popular. In the Americas region, both home appliances and home infrastructure subsidies were sought-after subsidy categories.

CO_{you2} PAYOUTS IN 2018, BY CATEGORY



NUMBER OF CO_{you2} PAYOUTS IN 2018, PER 1000 EMPLOYEES



Engaging our people

We are an organisation where diverse talents come together globally to apply fresh perspectives and knowledge to make the world more resilient.

Our vision is to offer our employees meaningful work with a clear purpose in an attractive and inclusive work environment. We aim to collaborate in the spirit of "Let's be smarter together", because we can maximise our full potential only if we work together. Our organisation is constantly looking for new ways to improve the wellbeing of society and prepare for the changing needs of the future, drawing on the know-how and experience of a diverse, multigenerational group of employees. We aspire to be a place where a flexible and inclusive culture is the norm and

where everyone can contribute. We are passionate about building an environment of trust, respect, collaboration and responsibility in which *how* we achieve results is every bit as important as *what* we achieve.

Swiss Re is a global company with a presence in all major markets and 30 countries. As of 31 December 2018, we employed 14 943 people (regular staff) from 116 nationalities: 60.9% work in Europe, the Middle East and Africa (EMEA), 24.2% in the Americas and 14.9% in the Asia-Pacific region.



WEBSITE

Find out more about working at Swiss Re at: www.swissre.com/careers.html

EMPLOYEE DATA, SWISS RE GROUP

	2016	2017	2018
Total headcount regular employees	14 053	14 485	14 943
Full-time*	12 689	13 101	13 510
Part-time*	1 364	1 384	1 433
Temporary employees	330	355	252
Turnover rate (incl. company sales)	9.7%	10.7%	12.2%
Voluntary	6.7%	7.2%	7.6%
Involuntary	3.1%	3.5%	4.6%
Average tenure regular staff (in years)	7.0	7.1	7.3

* For the years up to 2017, full-time employees had a working degree of 90% and higher. As of 2018, we report full-time employees as those working 100%.

The Swiss Re employee experience

Swiss Re has a clear People Strategy which sets out what we want to achieve in order to create an environment that enables each one of us to give our personal best. We regard our People Strategy as our “North Star”: It provides us with clarity and direction, it is embedded in everything we do and defines our ambition for the future of Swiss Re.

Four core themes bring our strategy to life:

- **Lead and develop:** We aim to be known in the market for both our technical expertise and our leadership capabilities. Our employees inspire and engage each other across all levels through honest, constructive and timely dialogue and feedback. We invest in the career development of our people, which we see as a shared responsibility, with leaders investing their time and resources and employees taking ownership to drive their development.
- **Empower and collaborate:** We empower and enable our people to make decisions and drive performance, while at the same time ensuring that we maintain the appropriate risk culture. We encourage all employees to work together and collaborate across organisational and geographical boundaries for the wider and ultimate benefit of Swiss Re.
- **Drive the business:** We envision that our employees operate with a truly commercial mind-set and accountability. They should all take accountability proactively and hold each other responsible for performance in terms of both results and behaviour. We ensure reward is fair and competitive, although this should not be the main reason why people want to work for our company.

- **Build for the future:** At Swiss Re, we embrace and build a diverse workforce that brings together the best of multiple generations, cultures, skill sets and thinking. Our aim is for our employees to live a flexible, inclusive and open culture where all perspectives are valued. We create meaning for our employees by connecting our work to the core purpose of our company.

Listening to our employees

We foster a culture of open dialogue and frequent feedback on all levels, where employees and managers engage in regular exchange as described in our Leadership and Personal Imperatives (see online version). In addition, once a year, we seek feedback from all our employees in a more formal manner through the Employee Engagement Survey (EES), which is run by our external provider Aon (www.aon.com). As in previous years, we again experienced a high response rate of 88% in 2018. Our Group Employee Engagement score was at 66% (three percentage points lower than in 2017) and was thus on a par with Aon's Global Finance&Insurance industry benchmark. The Engagement score is calculated based on how employees speak about their organisation, on their desire to work for it and their motivation to contribute to business success.

We are proud that our employees perceive a collaborative and inclusive culture across all Business Units, demonstrated by the following results of the EES:

- **Diversity & Inclusion:** 78% of surveyed employees strongly appreciate Swiss Re valuing diversity and having a collaborative, inclusive and friendly culture with high integrity (5% points above the Global Finance&Insurance industry benchmark). Learn more about our actions and initiatives in the section “Fostering an inclusive workplace for all” (pages 59–60).
- **Our Managers:** More than three quarters of our employees perceive that their line managers engage in an open and safe dialogue where the employees have the freedom to express their views and are encouraged to seek out innovative solutions (76%, which is 3% points above the industry benchmark).
- **Empowerment/Autonomy:** More than two thirds of our employees feel strongly that their opinions and ideas count and that they are given the flexibility to balance their work and personal life (overall score: 69%, which is 4% points above the industry benchmark).

Developing our employees

In a world where the ability to learn and adapt quickly is increasingly crucial, the effective development of our people and leaders is key for our enduring success. For this reason, we have continued to invest significantly in this area in 2018 by reinforcing our 70/20/10 approach to enhancing and upgrading our leadership development architecture. To read more about this, see the section “Investing in a strong leadership pipeline” below. The 70/20/10 approach advocates a shift from formal training or self-study (10% of development time) to actions that reflect “on-the-job experiences” (eg rotations and stretch assignments: 70%) and “learning from others” (eg mentoring, coaching: 20%).



ONLINE CONTENT

Information on “Embedding the behaviours we need for the future” is available at: reports.swissre.com/corporate-responsibility-report/2018/cr-report/our-people/the-swiss-re-employee-experience/embedding-the-behaviours-we-need-for-the-future.html

CLASSROOM AND INHOUSE E-LEARNING DATA, SWISS RE GROUP

	2016	2017	2018*
Total learning hours recorded	231 826	234 609	165 440
Learning hours per employee	15.3	15.0	11.0
Learning costs per employee (in USD)	1 024	919	513

* In 2018 we began changing Swiss Re's learning landscape with new tools and adopted a new learning philosophy that gives our employees access to bite-sized learning nuggets at their personal convenience. We no longer track these learning hours, which explains the significant drop from 2017 to 2018.

Investing in employee development and growth

Knowledge and skill requirements are changing faster than ever before, so we need to be prepared. As a risk knowledge business, getting the right capabilities to the right people at the right time is strategically important for the success of our individual employees as well as for the company as a whole. This is why we need to facilitate learning with content that is relevant and easy to find exactly when it is needed. A new online platform called MyResource introduced small bite-sized learning nuggets on many development topics allowing employees to maintain and control when and where they learn, thereby leading to more learning outside the classroom. We will continue this journey into 2019 with the launch of a new learning experience platform and access to a wider range of learning content available to all employees.

This development and the introduction of the Development Compass for Managers (see "Investing in a strong leadership pipeline" below) has led to a noticeable reduction in classroom and inhouse e-learning training hours. In 2018, our employees completed 165 440 hours of training overall, averaging 11 hours and USD 513 per employee. Formal training at Swiss Re combines technical, professional and

leadership skills training. We design our training internally or in collaboration with leading external partners and deliver it through our long-established Swiss Re Academy. Currently, we offer more than 1 000 different training courses. Our employees attend training in areas as diverse as underwriting, finance, sales and negotiation, leadership, diversity and inclusion, interpersonal skills, project management, office tools and language skills.

We recommend that client-facing employees invest at least two days per year in formal sales training. A total of 685 employees participated in sales training during 2018, with an average feedback score of 4.26 (out of 5). Reflecting our efforts in the area of employee development, we continue to outperform our industry peers in the social dimension of the prestigious Dow Jones Sustainability Indices, with Swiss Re top in human capital development (we scored 80% in this category versus the industry average of 39% and world average of 67%).

Investing in a strong leadership pipeline

We continue to strengthen the capabilities of our line managers and prepare them to meet the challenges of a rapidly changing environment. We have introduced a new leadership development architecture with a manager curriculum at every management level. Our Manager Curriculum is about accelerating the development of our line managers through targeted training, providing them with the skills and resources they need to lead, build and engage our people in the future.

As a result of the Manager Curriculum project we launched the Development Compass for Managers this year. This platform uses the latest digital tools to strengthen leadership expertise by providing access to thousands of resources that help our line managers continue to develop as leaders. The platform provides access not only to newly designed manager classroom training but also to online training in the form of corporate in-house MOOCs (Massive Open Online Courses). Known internally as DIALs (Digital Inter-Active Learning), they provide an interactive and innovative learning experience that equip line managers with the necessary management expertise that differentiates



Peter Vigliotti of our Learning & Development Americas team collects the STEVIE Gold Award we received for a newly introduced, innovative online learning platform.

STEVIE Gold Award and Brandon Hall Bronze Award



In 2018, Swiss Re won the STEVIE Gold Award in the area "Curated Training Platform of the Year – Managerial/Professional" with its programme "Development Compass for Managers: Revolutionising corporate learning at Swiss Re". The Compass integrates five systems and offers access to more than 2 000 resources, enabling line managers to develop without having to travel to attend a workshop.

Also in 2018, Brandon Hall awarded Swiss Re with the bronze award in the area Human Capital Management Excellence Awards. Swiss Re participated in the category "Best Unique or Innovative Learning Development Program" with its "Development Compass for Swiss Re's Line Managers: Applied Future of Learning and Corporate In-house MOOCs Revolutionising Management Training at Swiss Re".

us from our competitors. Close to 3 000 employees used the Development Compass in 2018.

To further equip our leaders with the necessary tools to lead us into the future, we developed an agile leadership model and have begun integrating it into our leadership development programmes. For senior leaders, we launched the new

CEO-sponsored Pathfinder Experience programme to build a community of change catalysts who will reinforce the agile, forward-looking principles mentioned above. We also developed the Explorer Programme for our leadership talents, which enables them to take on additional leadership responsibilities and to lead in an ambiguous and dynamic environment.

Managing performance

Our performance management approach supports our aim for a high-performance culture in which our individual and team goals, as well as behaviours, are aligned to our firm's purpose and business strategy. We want our employees to reach their potential and be fully supported in their work. Our Personal and Leadership Imperatives are fully embedded in our performance management approach, focusing on both *what* people achieve and *how* they achieve their goals. Including these behaviours in performance and feedback discussions allows for robust, future-focused conversations, better performance differentiation and transparent pay-for-performance.

Continuing from 2017 into 2018, we have widened our employee participation in the Performance Management pilot, where we are experimenting with the "rating-less" concept of Performance Management, in the process exploring more flexible, timely performance management approaches to strengthen Swiss Re's culture of continuous feedback/dialogue, recognition of achievement and personal growth and development. We are committed to continuing to improve our programmes and capitalise on digitisation where possible, as we build our feedback culture.



Award from TheJobCrowd – for the third year in a row

Our graduates@swissre programme has again won the JobCrowdAward – sixth place in the category "Top 100 Companies for Graduates to Work For" and first place in the category "Banking & Finance". This award was presented to us by TheJobCrowd (www.thejobcrowd.com), a popular graduate job review website in the UK.

To determine the ranking, our graduates were asked to complete a survey about working at Swiss Re. They were asked questions such as: What are the best things about your company? What attracted you to the company? How do you rate the work/life balance, training and ethical/environmental balance? The results from our graduates were overwhelmingly positive.

Engaging the next generation

We support employees at all levels to maximise their potential and are proud to offer various programmes to young adults moving into the workforce.



ONLINE CONTENT

You can find detailed information on how we engage the next generation at: reports.swissre.com/corporate-responsibility-report/2018/cr-report/our-people/engaging-the-next-generation.html

Fostering an inclusive workplace for all

We can only unleash the motivation and creativity of our employees if they can all be who they are and feel included. Our business success depends on our ability to create and sustain an inclusive culture – one that builds diverse teams, encourages fresh perspectives and brings innovative thinking to create smarter solutions for our clients. A commitment to inclusiveness is therefore fundamental for our organisational performance and for reaching the goals set out in our People Strategy.

Promoting an inclusive culture

We know that our employees' lives and experiences are unique and we believe in championing that uniqueness. Uniqueness in leadership, in thought, in fact in every way we work together and live our values. A key aspect of our People Strategy is to prevent stereotyping of individuals based on any dimension of diversity. The philosophy of managing and attracting diverse talent is fully embedded in our development offering for new and existing managers.

Swiss Re is committed to providing an equal and safe work environment for LGBTI+ (lesbian, gay, bisexual, transgender, intersex) employees, and our global "Together with Pride" employee network is a signatory to the United Nation's Free & Equal Standards of Conduct to tackle discrimination against LGBTI+ people. The network has opened new local chapters in Germany, Brazil, Canada, India, Mexico and Slovakia, and now comprises over 1 000 allies and LGBTI+ employees. The Switzerland chapter had an official opening event with a keynote speech from the Group CEO in June, followed by the Swiss Re Next building lighting up in rainbow colours to honour Pride Month.

The network hosted a global event about being transgender in the insurance industry to acknowledge National Coming Out Day in October. Working together with HR and our leaders, the terms "gender identity" and "gender expression" were added to the equal treatment section of our Code of Conduct in 2018. A gender-neutral language policy was also introduced and made available to all staff.

Achieving gender equality at Swiss Re

Swiss Re is a signatory to the United Nation's Global Compact and deeply committed to the United Nation's Sustainable Development Goal #5: "To achieve gender equality and empower all women and girls". At Swiss Re, we believe that increasing gender balance in leadership is a strategic imperative that is critical to our future business success.



During Pride Month in June 2018, we lit up our Swiss Re Next headquarters in rainbow colours for one week, manifesting our support for the LGBTI+ community.



WEBSITE

Find out more about diversity & inclusion at [swissre.com](https://www.swissre.com/about-us/diversity-inclusion-in-Swiss-Re.html) at: www.swissre.com/about-us/diversity-inclusion-in-Swiss-Re.html

WOMEN IN MANAGEMENT POSITIONS, SWISS RE GROUP (IN %)

	2016	2017	2018
Total workforce	46.9	47.3	47.9
Executive/senior management positions*	22.9	23.3	24.5
All management positions*	32.9	33.3	34.2

* "Executive/senior management positions" comprises the management levels of Director/Senior Vice President upwards.
 "All management positions" refers to Vice President and above.

We recognise that women continue to be underrepresented at executive/senior management levels, and our Group Executive Committee (Group EC) members are committed to closely monitoring the talent flows in their businesses and locations to actively improve the situation. We are focused on increasing the number of women who join Swiss Re at all levels, ensuring

diverse candidate slates as well as diverse selection panels. "Gender Promotion Ratio" is a key internal performance metric for each of our Group EC members: comparing the ratio of female promotions into middle management and above with the ratio of women in the "donor pool". Whilst we are doing well here, we recognise the need to work on other measures to address imbalances in the gender composition of our workforce.

In 2018, we continued to build on initiatives started the year before, such as the global female sponsorship initiative designed to build a strong female pipeline for impactful leadership positions. Over 60 women are currently paired up with an executive sponsor, including all Group EC members.

In March, we acknowledged the International Women's Day by engaging all major locations in a dialogue on Gender Intelligence®: the social norms on gender, how they demonstrate at the workplace and what inclusive behaviour looks like.

We have been included as a member of the 2019 Bloomberg Gender-Equality Index (GEI, www.bloomberg.com/gei), which underscores our strong commitment to gender-related topics and an inclusive work environment.



We regard increasing gender balance in leadership as a strategic imperative and have launched concrete initiatives to do so.

“If we are to make the world more resilient, we need everybody to be able to bring their true selves to work and to be fully engaged. I am an ally to our LGBTI+ community and am committed to ensuring that they do not feel marginalised or under-represented alongside all other communities at Swiss Re.”

Christian Mumenthaler, Group CEO

EMPLOYEE HEALTH DATA

Sick leave days, Switzerland regular staff

	2016	2017	2018
Number of employees	3 267	3 214	3 119
Number of employees who have recorded absence due to illness	1 809	1 683	1 635
Average number of sick days	7.9	8.7	8.7

Caring for the wellbeing of our employees

A healthy mind is as important as a healthy body. We offer free, locally available Employee Assistance Programmes, through which our employees can get confidential, impartial and professional assistance on issues of a personal or work-related nature.

Pathways, our Mental Health Network, was launched in the UK in 2017. The network's mission is to allow employees to bring their whole selves to work; to allow them to feel accepted and included and to reduce the stigma surrounding mental health issues. In February 2018, the network expanded to Zurich, our headquarters and largest office location. Training and awareness sessions have been at the core of our work since the launch.

Across the globe, we also continued to hold various local events on topics such as work stress, mental health and awareness training. For example, in Hong Kong we held a Wellness 360 Week that hosted a series of events to help our employees focus on their physical and mental wellbeing as well as on their personal growth. In Australia, we organised meditation sessions and keynote presentations with external experts who spoke on fostering a healthy mind and the importance of sleep. To help our people stay fit, we provide onsite fitness centres and classes, for instance in Switzerland and Bangalore.

Owning the way we work

At Swiss Re, we seek to enable everyone to reach their full potential, as individuals and as teams. We align our working environments and methods with evolving social trends and challenging market conditions. We appreciate the ever-changing working preferences of different cultures, generations and personalities.

Our trademarked programme, Own the Way You Work, is a cultural change initiative which gives managers and employees autonomy to decide how, when and where work is carried out in compliance with the applicable laws, rules and regulations of their particular region. Yet there is more to agile working than having flexible hours and managing them. We have enriched our vision for the way we work at Swiss Re with cutting-edge technology and flexible workplace solutions. These shape an ambitious and creative company culture, where everyone performs at their best, individually and collectively.



ONLINE CONTENT

You can find information about how we support parents at: reports.swissre.com/corporate-responsibility-report/2018/cr-report/our-people/caring-for-the-wellbeing-of-our-employees/being-a-parent-at-swiss-re.html

Employee relations

Many of our locations have active employee groups. These employee representatives play an important part in the company's success by contributing valuable perspectives and by helping to identify employment-related challenges. These bodies are elected by local employees and have clearly defined information and consultation rights. Although there are significant local differences in the applicable legislation, their rights typically concern: working conditions, benefits, reorganisation and restructuring, redundancies, and disciplinary actions and conflict cases.

At our Zurich headquarters, where almost a quarter of our total workforce is employed, we work closely with the Personnel Committee (PECO). Representing the interests of all Zurich employees, PECO aims to create and maintain a positive working environment. It is involved in changes or adaptations to the General Working Conditions or other important policies, such as the Social Plan. PECO also seeks to ensure the de-facto equality of men and women, and places special emphasis on the challenges faced by employees with family obligations.

In the UK, these activities are covered by the Employee Liaison Group (ELG), and at our Munich office we have a works council with clearly defined codetermination rights in several areas. Our smaller branches in Europe (eg in France, Italy, Luxembourg and Denmark) also have works councils or staff delegates, depending on the size of the branch and local regulations.



ONLINE CONTENT

You can find information about our Alumni Network at: reports.swissre.com/corporate-responsibility-report/2018/cr-report/our-people/employee-relations/alumni-networks.html

Rewarding our people

Swiss Re is committed to having a compensation framework that is balanced and performance-oriented, and which aligns the interests of both shareholders and employees.

Our compensation framework is designed to attract, motivate and retain the qualified talent the Group needs to succeed globally and to create a tangible link between performance and pay. The aim is to provide compensation that is competitive in local labour markets and to ensure that our employees focus on delivering outstanding results while supporting appropriate and controlled risk-taking.

For most employees, total compensation comprises base salary and the Annual Performance Incentive (API), which is linked to both individual and business/company performance.

Swiss Re has several incentive programmes that reflect the long-term nature of our business: both the Value Alignment Incentive Plan (VAI) as the deferred part of the API and the Leadership Performance Plan (LPP) aim to reward sustained business performance rather than short-term results. This helps align shareholder and employee interests more closely. The VAI applies to employees who have a total API in excess of a defined threshold, and the LPP is awarded to our senior management and select key employees.

We also encourage our employees to own Swiss Re shares by providing opportunities to participate directly in the long-term success of the Group through the Global Share Participation Plan.

The balanced compensation package is generally complemented by competitive pension plans and other employee benefits. Such benefits include, for example, the Continuous Contribution Award, which recognises the loyalty, commitment and continuous contribution of our employees by offering them opportunities at defined milestones to enjoy additional paid time-off. Health

benefits and financial protection in case of ill health are also an important part of many of our packages. We provide medical, life and disability insurance in excess of state provisions in several locations. Furthermore, we support employees in accumulating retirement benefits to supplement any state provisions.

In addition, the CO_{you2} Programme continues to offer our employees subsidies for a range of environmentally friendly technology investments they want to make in their private lives (see page 53).

Further information on Swiss Re's approach to compensation and benefits can be found in our 2018 Financial Report (pages 142–171).

Ensuring good corporate governance and compliance

Our governance standards and procedures apply throughout the Swiss Re Group.

Corporate governance

Our Board of Directors closely monitors corporate governance developments globally, with a particular focus on trends in Switzerland, the US and the European Union. Institutional investors, in particular, are increasingly focused on greater transparency and greater accountability to shareholders on a broad range of corporate governance issues. Expectations of boards are

shifting considerably, with the clearest example being the increased demands of shareholders for more meaningful and more frequent engagement with management and boards of directors. A key trend in engagement efforts is in the area of environmental, social and governance (ESG) matters.

Our Board of Directors is in a regular dialogue with our shareholders and welcomes the valuable feedback on our governance framework.

In our Corporate Responsibility Report, we highlight key elements of Swiss Re's corporate governance, in particular with respect to its structure, the independence of the Board of Directors, conflicts of interest procedures and shareholder rights.

SWISS RE'S CORPORATE GOVERNANCE ADHERES TO

- the SIX Swiss Exchange's Directive on Information Relating to Corporate Governance (including its annex) of May 2018;
- the principles of the Swiss Code of Best Practice for Corporate Governance (Swiss Code) of September 2014, issued by *economiesuisse*, the Swiss business federation; and
- the Swiss Financial Market Supervisory Authority (FINMA) provisions on corporate governance, risk management and internal control systems.

Swiss Re's corporate governance furthermore complies with applicable local rules and regulations in all jurisdictions where it conducts business.



CONTENT IN THE 2018 FINANCIAL REPORT

Comprehensive information on Swiss Re's corporate governance is available in the 2018 Financial Report on pages 98–141.

Swiss Re's corporate governance framework

Swiss Re Ltd's Board of Directors has the ultimate responsibility for the success and for delivering the sustainable interests of Swiss Re Ltd (SRL) and the Swiss Re Group within a framework of effective and prudent controls. It is responsible for the overall direction, supervision and control of SRL and the Group. It has delegated the management of SRL and the Group to the Group Executive Committee (Group EC). This structure maintains effective mutual checks and balances between these top corporate bodies.

SRL's Articles of Association (AoA) define the legal and organisational framework of SRL as the Group's holding company. The SRL Bylaws define the governance framework of SRL and the Group, including the responsibilities and authorities of the Board of Directors, Chairman, Vice Chairman, Lead Independent Director, Board committees, Group EC, Group CEO and of the other individual Group EC members including the Regional Presidents, as well as the relevant reporting procedures.

As determined by applicable law and the AoA, the Board of Directors has inalienable and nontransferable responsibilities and authorities. The Board of Directors has established five Board committees, which support the Board in fulfilling its duties. The Board of Directors has delegated certain responsibilities, including the preparation and execution of its resolutions, to the Chairman's and Governance Committee, the Audit Committee, the Compensation Committee, the Finance and Risk Committee and the Investment Committee.

Independence of the Board of Directors and conflicts of interest procedures

The SRL Bylaws stipulate that at least three quarters of the members of the Board of Directors must be independent. Independence is defined in line with best-practice corporate governance standards. To be considered independent, a Board member may not be, and may not have been in the past three years, employed as a member of the Group EC, or by any subsidiary of the Swiss Re Group or may not have a material relationship with any part of the Swiss Re Group (either directly or as a partner, director or shareholder of an organisation that has a material relationship with the Swiss Re Group) other than serving as an independent board member in any subsidiary. In addition, the Board of Directors agrees on other criteria that disqualify a Board member from being considered independent, taking into consideration provisions of applicable law, regulations and best practice.

In particular, each of the Board members must annually confirm that he or she: has not been employed by the company in any capacity within the last five years; has not accepted or has a family member who accepted any payments from the company or any subsidiary of the company in excess of USD 60 000 during the current fiscal year or any of the past three fiscal years; is not a family member of an individual who is, or during the past three years was employed by the company or by a subsidiary of the company in any capacity; is not (and is not affiliated with a company that is) an adviser or consultant to the company or a member of the company's senior management; is not affiliated with a significant customer or supplier of the company; does not have any personal services contract(s) with the company or a member of the company's senior management; is not affiliated with a not-for-profit entity that receives significant contributions from the company; has not been a partner or employee of the company's external auditor during the past three years and that he or she does not have any other conflict of interest that the Board of Directors determines to mean he or she cannot be considered independent.

All the members of the Board of Directors meet our independence criteria with the exception of our Chairman. As a full-time Chairman, he is not considered independent. In addition to the independence criteria applicable to Board members in general, additional independence criteria apply for members of the Audit Committee.

The members of the Board of Directors are also subject to procedures to avoid any action, position or interest that conflicts with an interest of SRL or the Swiss Re Group or gives the appearance of a conflict. Each member must disclose any conflict of interest relating to a matter to be discussed at a meeting, as soon as the member becomes aware of the conflict, to the Chairman. The respective member must not participate in the discussion and decision-making involving the interest at stake. The Chairman informs the Board of Directors of the existence of the conflict and it is reflected in the meeting minutes. Each member must disclose any conflict of interest generally arising to the Group Chief Legal Officer or in his absence to the Group Chief Compliance Officer in line with the standards and procedures set forth by the Personal Conflicts of Interest Instructions.

Shareholders' participation rights

Shares

All shares issued by SRL are fully paid-in registered shares, each with a par value of CHF 0.10. Each share carries one vote. There are no categories of shares with a higher or limited voting power, privileged dividend entitlement or any other preferential rights, nor are there any other securities representing a part of SRL's share capital. SRL cannot exercise the voting rights of treasury shares.

Voting right restrictions, statutory group clauses and exception rules

There are no voting right restrictions and no statutory group clauses (other than the limitations on nominee registrations) in place. Therefore, there are no procedures or conditions for cancelling restrictions and no rules on making exceptions to them. Accordingly, no such exceptions were granted in 2018.

Statutory rules on participating in the General Meeting of shareholders

Owners, usufructuaries or nominees entered in the share register as having voting rights on a specific qualifying day determined by the Board of Directors are entitled to one vote per share held at the General Meeting of shareholders.

SRL's Articles of Association allow any shareholder with voting rights to have his or her shares represented at any General Meeting of shareholders by another person authorised in writing or by the Independent Proxy. Such representatives need not be shareholders.

Business firms, partnerships and corporate bodies may be represented by legal or authorised representatives or other proxies, married persons by their spouses, minors and wards by their guardians, even though such representatives are not shareholders.

Changes of control and defence measures

SRL has not put in place any specific measures to defend against potential unfriendly takeover attempts. SRL's AoA neither contain an "opting up" nor an "opting out" provision. The Board of Directors believes that the company's best protection is a fair valuation of its shares, and that the efficiency of a free market is preferable to artificial obstacles, which can have a negative impact on the share price in the long term.

By adhering to the highest standards, we ensure behaviour across the Group that is compliant and demonstrates integrity.

Compliance: Code of Conduct

Our Code of Conduct (Code) is one of the key documents governing the management of risks and driving the culture within our company. It sets the framework and defines the basic compliance and integrity principles we adhere to globally. The Code is built on the five Swiss Re values, which guide us in making responsible decisions and achieving results using the highest ethical standards: integrity, team spirit, passion to perform, agility and client centricity.

The Code also offers practical guidance and examples for deciding the appropriate course of action and solving ethical dilemmas. It further sets out how all employees should react when they observe a possible breach of the principles in the Code. All employees are obligated to uphold both the letter and spirit of the Code, policies, standards and the Group's corporate governance principles in their daily business activities, and to respect and obey applicable laws and regulations in all jurisdictions where we do business.

We regularly review and update the Code to reflect changes in regulations and principles. The Code was overhauled in 2016 to include real-life examples and clearer guidance for day-to-day business situations. In 2018, updates were made to the Code including an update to reflect Swiss Re's commitment to diversity and inclusion.

The Code is supported by detailed policies and standards that document Swiss Re's requirements in line with applicable laws and regulations. It is available to our employees in eight languages: English, French, German, Italian, Japanese, Portuguese, Slovak and Spanish.

OUR CODE OF CONDUCT



files.swissre.com/codeofconduct/index.html

Policies

Our Code addresses the following key compliance topics under two headings, "Our responsibility towards one another and Swiss Re" and "Our responsibility towards our business partners and society":

Our responsibility towards one another and Swiss Re

- Business information and information technology
- Communication
- Conflicts of interest
- Diversity & inclusion and fair and equal treatment
- Fraud
- Health, safety and security
- Intellectual property

Our responsibility towards our business partners and society

- Bribery and corruption
- Data protection
- Inside information
- Fair competition
- International trade controls and economic sanctions
- Licensing and permanent establishment
- Money laundering
- Sustainability and human rights

Below we present additional information on some key topics in the Code:

Bribery and corruption

The Code addresses our position on bribery and corruption. It clearly states that “we conduct business fairly without accepting or offering benefits intended to improperly influence decision-making”.

The Code is supported by our Global Policy on Financial Crime and our Global Standard on Anti-Bribery and Corruption, which emphasise that bribery, facilitation payments and hospitality where the giver is not present are always prohibited. For gifts, hospitality, sponsorships and charitable contributions, the policy and standard specify the correct procedures to be followed, including dealing with public officials and requesting approval in the gift and hospitality register.

Data protection

We could not work successfully with our business partners, clients and individual consumers around the world without maintaining their trust regarding the data they provide to us. The Code highlights that we need to handle personal data with the greatest care and use it only for legitimate business purposes.

Our Data Protection Compliance Framework, with a global policy as well as local standards, addresses our commitment to protecting personal data and respecting privacy rights across our operations. We use internationally recognised data protection and privacy principles that ensure compliance with a complex and constantly changing set of laws and regulations, and we provide proper training and awareness sessions to our employees. Procedures for reporting security incidents and notifying on data breaches are established.



WEBSITE

You can learn more about our global approach to data protection and privacy at: www.swissre.com/about-us/data-protection-brochure.html

We also contribute thought leadership on data protection by conducting expert sessions during insurance industry events and by hosting events through the Swiss Re Institute that look at the future of regulations, new technologies, digitalisation, cross-border data processing, big data and innovation in life and health insurance. We offer additional information about our global data protection and privacy approach on our public website.

Money laundering

The Code draws attention to the risk of becoming involved in money laundering and emphasises the importance of due diligence.

Our Anti-money Laundering Standard sets out in detail key requirements and guidance in relation to our anti-money laundering and counter terrorism financing efforts, including due diligence obligations concerning “know your counterparty”, counterparty and politically exposed persons (PEP) screening and the reporting of any suspicious activities.

Sustainability and human rights

The Code includes our formal commitment to sustainability and human rights, providing a guiding principle for our efforts to act as a responsible company.

Whistleblowing

Swiss Re is strongly committed to maintaining a culture in which employees feel free to voice their concerns and report suspected misconduct. Accordingly, Swiss Re explicitly prohibits any retaliatory action be taken against employees who report suspicions of misconduct in good faith.

There are several ways in which alleged violations of the Code can be reported, both by internal and external sources. For our employees, the options are described in the Code and include an external, independently operated whistleblowing hotline, which can be used anonymously (where legally permitted). Our whistleblowing hotline is also available to externals via our public website. The hotline includes translation services into numerous languages and is available globally.

All investigations of alleged Code violations involving either an employee or external contractor are handled by the Investigation Coordination Process (ICP). ICP, managed by the Compliance function, serves as a central coordinating unit across all Swiss Re offices globally and ensures that all investigations are handled in a consistent and fair manner. If, following an investigation, the allegations are substantiated, ICP will issue recommendations regarding any appropriate disciplinary or non-disciplinary actions that should be taken and oversees the actions to ensure fairness and consistency across the Group.

Misconduct cases are systemically presented and discussed with executive management, as well as with legal entity boards as part of the reports to board audit committees. In 2018, ICP cases reflected the following indicators:

- The predominant channels for reporting ICP cases were through internal reporting directly to the Compliance department, line managers and members of the Human Resources team that were referred to ICP;

- The large majority of ICP cases were related to theft of company property and misappropriation of assets through fraudulent acts;
- In total, 65% of investigated cases of alleged misconduct were confirmed with respect to one or more of the allegations in question;
- Disciplinary actions from substantiated investigations have been taken in 60% of the cases. The relatively low percentage of such actions should not be considered on a de-facto basis as an indication of weakness in culture. It is important to note that each investigation is fact- and circumstance-specific. There are certain criteria where disciplinary actions are generally delivered, eg where existing employees are found to have engaged in intentional misconduct. However, situations involving unintentional breaches will be considered substantiated, but may not result in disciplinary action.

Training

All new permanent and temporary employees joining Swiss Re must undergo mandatory eLearning training on the Code, focusing on ethical behaviour in accordance with the principles of the Code and its relationship to Swiss Re's values. Completion of the training is tracked and instances of non-completion are escalated until resolution.

All permanent and temporary employees also complete a periodic Code of Conduct Acknowledgement.

We deliver global eLearnings to remind and increase understanding of our key compliance risks and policy requirements. Last year, global eLearnings were delivered on Data Protection and International Trade Controls and Economic Sanctions. We also conducted global eLearnings for all our employees on the following compliance risks over the period from 2015 to 2018:

- Anti-bribery and corruption
- Anti-money laundering and terrorist financing
- Conflicts of interest
- Data protection
- Fraud

In addition, local compliance officers regularly provide needs-based training on compliance risks tailored to their respective locations and/or areas of business.

Training on Code topics falling outside the Compliance mandate is managed similarly by the responsible functional areas.

In 2017, we enhanced the mandatory training escalation process for all Compliance Group-wide eLearnings to enable timely completion of assignments. Employees not complying with their mandatory eLearning assignments on time without valid reasons are subject to potential disciplinary action. For 2018 we achieved over 99% completion of all mandatory eLearning assignments including new hire and refresher training.

Validity for third parties

Third parties representing Swiss Re – such as consultants, intermediaries, distributors and independent contractors – should be carefully selected and need to comply with the Code and relevant policies. When we work with such third parties, we provide them with information about the relevant requirements and, in the event of any infringements, take appropriate action, up to and including terminating a contract.

Policy governance

A Policy Management Tool serves as a central place for finding Swiss Re policies and standards. Eight Global Policies contain more detailed principles all employees have to be aware of, supporting the principles set out in the Code. Where necessary, underlying Global Standards are in place to provide additional detail on the specific requirements.

Providing transparency

On some specific topics, we provide transparency by publishing full policies or statements on our website.

Data Protection and Privacy Compliance at Swiss Re

www.swissre.com/about-us/data-protection-brochure.html

Swiss Re Modern Slavery Act Transparency Statement

www.swissre.com/about-us/modern-slavery-statement.html

Swiss Re Tax Policy

www.swissre.com/about-us/tax-policy.html

Swiss Re's Policy Engagement

www.swissre.com/about-us/corporate-responsibility/transparency/policy-engagement.html

The Swiss Re Foundation

Empower the community and build resilience

Who we are

The Foundation reflects Swiss Re's social and humanitarian values. We partner with social entrepreneurs, aid organisations, researchers and Swiss Re employees and clients to help communities increase their resilience.

Our initiatives address the causes and effects of risks in four areas – climate, natural hazards, water and society – both in emerging and developing countries and in regions where Swiss Re has offices.

Our core goals:

Empower communities to become more resilient to risk and adapt to a changing natural and social environment

Contribute to promoting social welfare, protecting the environment and enhancing quality of life near Swiss Re locations

Engage Swiss Re employees as local volunteers and as expert consultants in our global programmes

Boost impact by teaming up with private and public partners that share our goals and complement our expertise

Earn the respect of our stakeholders, creating measurable value for society and for Swiss Re



WEBSITE

You can find detailed information about the Swiss Re Foundation at:
www.swissrefoundation.org



The Swiss Re Foundation and The Nature Conservancy (TNC) have developed the first training programme for coastal dwellers who want to help conserve the coral reefs that shield their communities from erosion, flooding and storms. We are piloting the approach on Mexico's Caribbean coast near Cancún, a hub of tourism and fishing as well as home to the endangered Mesoamerican reef.

ACTIVITY REPORT

The Swiss Re Foundation in 2018

For reefs to protect coasts, humans must protect reefs. With The Nature Conservancy, the Swiss Re Foundation is helping people on Mexico's Caribbean coast preserve and restore their reef for generations to come.



What we respond to

Threats to:

- Health
- Security
- Prosperity
- Opportunity

What our priorities are

- Climate
- Natural hazards
- Water
- Society

Who we support

- Social entrepreneurs
- NGOs
- Academic institutions that help communities increase their resilience

Where we help

- In emerging and developing countries
- In regions where Swiss Re has offices

Independent Assurance Report on the Swiss Re **Corporate Responsibility Report 2018**

To the Executive Management of Swiss Re Ltd, Zurich ("Swiss Re")

We have been engaged to perform a limited assurance engagement on the consolidated CO₂ emissions reporting and Corporate Responsibility topics and sections disclosed with the 2018 Swiss Re Corporate Responsibility Report ("CR Report 2018") as well with the 2018 Swiss Re Financial Report.

Scope and subject matter

Our limited assurance engagement focused on the following data and information disclosed in the CR Report 2018 and Financial Report 2018 of Swiss Re and its consolidated subsidiaries, for the financial year ended 31 December 2018:

- The management and reporting processes with respect to the consolidated CR reporting as well as the control environment in relation to the aggregation of data and information;
- The organizational measures and internal key controls in place at the corporate level regarding aggregation of information obtained from the subsidiaries and reporting functions;
- The consolidated data and information disclosed in the CR Report 2018 in the sections "Creating solutions for sustainability" on pages 18–25, "Extending our risk intelligence" on pages 26–33, "Being a responsible investor" on pages 34–39, "Exploring and shaping the risk landscape" on pages 40–45, "Reducing our footprint" on pages 46–53, "Engaging our people" on pages 54–62 and "Compliance: Code of Conduct" on pages 66–68;
- The consolidated CO₂ emissions 2018 (Scope 1, 2 and 3 in adherence with the Greenhouse Gas Protocol) in the tables of the CR Report 2018 entitled "CO₂ emissions per employee (full-time

equivalent, FTE), Swiss Re Group" on page 47, "Underlying environmental data, Swiss Re Group" on page 47 and "Indirect emissions from purchased electricity, Swiss Re Group" on page 47 in the CR Report 2018 covering the reporting period from 1 October 2017 to 30 September 2018;

- The retirement of 75 794 tonnes of CO_{2e} (CO₂ equivalents) described on page 50 of the CR Report 2018.
- The consolidated data and information disclosed in the Financial Report 2018 in the "Climate-related Financial Disclosures (TCFD)" on page 174 and their sections "Climate governance" on page 175, "Climate strategy" on pages 176–181, "Climate risk management" on pages 182–183, "Climate metrics and targets" on pages 184–189.

Criteria

The management reporting processes with respect to the corporate responsibility reporting 2018 were assessed against the internal and external policies and procedures as set forth in the following:

- "Internal Environmental Performance Indicators for the Financial Industry" published by the Verein für Umweltmanagement in Banken, Sparkassen und Versicherungen e.V. (VfU) published in 1997 and 2011;
- "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition) published in 2004 by the World Resources Institute and the World Business Council for Sustainable Development;
- DEFRA Guidelines to DEFRA/DECC's GHG Conversion Factors for Company Reporting. AEA for the Department of Energy and Climate Change (DECC) and the Department for Environment, Food and Rural Affairs (DEFRA);

- The framework document "Environmental Performance Indicators (EPI) Reporting at Swiss Re", version 1.1 from December 2015 including Annex; and
- The defined internal guidelines, by which CR data and information are internally gathered, collated and aggregated.

Inherent limitations

The accuracy and completeness of CR indicators are subject to inherent limitations given their nature and methods for determining, calculating and estimating such data. Our assurance report should therefore be read in connection with Swiss Re's internal guidelines, definitions and procedures on the reporting of its CR performance.

Swiss Re's responsibility

The Executive Management of Swiss Re is responsible for both the subject matter and the criteria as well as for selection, preparation and presentation of the selected information in accordance with the criteria. This responsibility includes the design, implementation and maintenance of related internal control relevant to the calculation of the CR indicators that is free from material misstatement, whether due to fraud or error.

Our responsibility

Our responsibility is to express a limited assurance conclusion on the CR indicators based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (revised), "Assurance Engagements other than Audits or

Reviews of Historical Financial Information”, and, in respect of greenhouse gas emissions, with the International Standard on Assurance Engagements 3410, “Assurance Engagements on Greenhouse Gas Statements”, issued by the International Auditing and Assurance Standards Board. These standards require that we plan and perform this engagement to obtain limited assurance about whether the identified CR indicators are free from material misstatement.

A limited assurance engagement undertaken in accordance with ISAE 3000 (revised) and ISAE 3410 involves assessing the suitability in the circumstances of Swiss Re’s use of applicable criteria as the basis for the preparation of the CR data and information, assessing the risks of material misstatement of the CR data and information whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of CR data and information. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. The procedures selected depend on the assurance practitioner’s judgement.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Summary of work performed

Our assurance procedures included the following work:

- **Evaluation of the application of Swiss Re’s CR reporting guidelines**
Assessing whether the methodology applied by Swiss Re is in line with the reporting criteria;
- **Interviews and management inquiry**
Evaluating the CR reporting and underlying performance indicators by performing analytical procedures and interviewing selected key contacts to assess whether the internal Environmental Performance Indicators Reporting guidelines and CR guidance were consistently applied by the selected locations; Performing enquiries of personnel responsible for internal CR reporting and data collection at the Swiss Re corporate level to evaluate the reporting and aggregation process and to assess its appropriateness;
- **Reconciliation of CO₂ emissions data**
Reconciling the CO₂ emissions data for energy consumption, business travel, copy paper, waste, water, technical gases and commuting and CR data and information to the data used for the internal CR emissions reporting of the selected locations;
- **Assessment of the key figures**
Performing tests on a sample basis of evidence supporting selected CR data and information (natural catastrophes and climate change, the commitment to the UN, sensitive business transactions referred to sustainability experts, responsible investments, energy consumption for heating and electricity, business travel data, sustainable supply chain data, HR data and information, diversity and inclusion, development & training) to assess their completeness, accuracy, adequacy and consistency;

■ **Review of the documentation**

Reviewing the relevant documentation on a sample basis, including Swiss Re’s CR-related policies, the management of reporting structures, the documentation and systems used to collect, analyse and aggregate reported CR data and information;

■ **Assessment of the processes and data consolidation**

Reviewing the appropriateness of the management and reporting processes for CR reporting; and assessing the processing and consolidation of data at Swiss Re’s Group level; and

■ **Review of verified emission reductions**

Reviewing the retirement of 75 794 tonnes CO_{2e} verified emission reductions (VER) according to the Gold Standard.

We have not conducted any work on data other than outlined in the subject matter as defined above. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our assurance conclusions.

Conclusion

Based on our work described in this report, nothing has come to our attention that causes us to believe that the CR data and information outlined in the scope and subject matter section has not been prepared, in all material aspects, in accordance with Swiss Re’s internal policies and procedures.

Zurich, 14 March 2019

PricewaterhouseCoopers AG

Dr. Marc Schmidli Konstantin Meier

Memberships, commitments and index listings

Listed here is a selection of Swiss Re's most important memberships, commitments and index listings with regard to corporate responsibility.

Memberships and commitments

CDP

CDP is an international, not-for-profit organisation providing the only global system for companies and cities to measure, disclose, manage and share vital environmental information. CDP works with market forces to motivate companies to disclose their impacts on the environment and natural resources and take action to reduce them.

www.cdp.net

Chief Risk Officer Forum

The CRO Forum is a group of professional risk managers from the insurance industry that focuses on developing and promoting industry best practices in risk management. The Forum consists of Chief Risk Officers from large multinational insurance companies.

www.thecroforum.org

ClimateWise

ClimateWise is the global insurance industry's leadership group driving action on climate change risk. The group leverages the insurance industry's expertise to better understand, communicate and act on climate risks.

www.cisl.cam.ac.uk

Clinton Global Initiative

Established in 2005 by former US President Bill Clinton, the Clinton Global Initiative (CGI) convenes global leaders to devise and implement innovative solutions to some of the world's most pressing challenges.

www.clintonfoundation.org

FSB Task Force on Climate-related Financial Disclosures

The Financial Stability Board (FSB) is an international body that monitors and makes recommendations about the global financial system. Its Task Force on Climate-related Financial Disclosures (TCFD) has developed voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders.

www.fsb-tcfd.org

Insurance Europe

Insurance Europe is the European re/insurance federation. Through its 34 member bodies, the national insurance associations, Insurance Europe represents all types of insurance and reinsurance undertakings, eg pan-European companies, monoliners, mutuals and SMEs.

www.insuranceeurope.eu

International Risk Governance Council

IRGC is an independent organisation whose purpose is to help the understanding and management of global risks that impact on human health and safety, the environment, the economy and society at large.

www.irgc.org

Klimastiftung Schweiz (Swiss Climate Foundation)

The Swiss Climate Foundation is a non-profit foundation that directly champions the cause of climate protection in Switzerland, helping to fund small and medium enterprises that are proactive in their approach to reducing CO₂ emissions. Swiss Re is one of the foundation's members and is sponsoring its managing director.

www.swiss-climate-foundation.ch

Öbu ("Ecologically conscious enterprises" network)

Öbu is a Swiss think tank for sustainability and management topics. It carries out projects focusing on corporate and economic policy, and promotes experience-sharing among its members.

www.oebu.ch

Principles for Responsible Investment (PRI)

The PRI is the world's leading proponent of responsible investment. It works to understand the investment implications of environmental, social and governance (ESG) factors and to support its international network of investor signatories in integrating these factors into their investment and ownership decisions.

www.unpri.org

Principles for Sustainable Insurance

Launched at the 2012 UN Conference on Sustainable Development, the UNEP FI Principles for Sustainable Insurance (PSI) serve as a global framework for the insurance industry to address environmental, social and governance risks and opportunities.

www.unepfi.org/psi/

RE100

The Climate Group is partnering with CDP to encourage the world's most influential businesses to join RE100 and commit to going 100% renewable. The aim is for at least 100 companies to make a global 100% renewable commitment with a clear timeframe for reaching their goal.

www.theRE100.org

Swiss Sustainable Finance

Swiss Sustainable Finance (SSF) strengthens the position of Switzerland in the global marketplace for sustainable finance by informing, educating and catalysing growth. Currently SSF unites 90 members and network partners from financial service providers, investors, universities and business schools, public sector entities and other interested organisations.

www.sustainablefinance.ch

The Geneva Association

The Geneva Association is a leading international insurance think tank for strategically important insurance and risk management issues. It identifies fundamental trends and strategic issues where insurance plays a substantial role or which influence the insurance sector.

www.genevaassociation.org

UNEP Finance Initiative

UNEP FI is a global partnership between UNEP and the financial sector. Over 190 institutions, including banks, insurers and fund managers, work with UNEP to understand the impacts of environmental and social considerations on financial performance.

www.unepfi.org

Selected index listings and ratings

MSCI AAA rating (May 2018)



Dow Jones Sustainability Indices, Silver Class



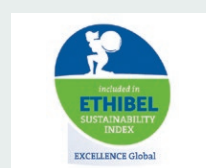
Bloomberg Gender-Equality Index



ECPI Indices



Ethibel Sustainability Index (ESI), Excellence Global



Euronext Vigeo index: World 120



FTSE4Good Index Series



ISS QualityScore, Environmental & Social



ISS-oekom, Prime investment status



Contact details

Contact address

Sustainability, Emerging and
Political Risk Management
Martin Weymann
Telephone +41 43 285 9555
Martin_Weymann@swissre.com

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Swiss Re Ltd
Mythenquai 50/60
P.O. Box
8022 Zurich
Switzerland

Telephone +41 43 285 2121
Fax +41 43 285 2999
www.swissre.com

