

Engaging in dialogue with our stakeholders



2020 highlights:

- Co-organised and held a four-part virtual event series on “Sustainability Leadership in Insurance”.
- Devoted several editions of our renowned *sigma* series to sustainability-related topics.
- Continuously shared information on COVID-19 through a dedicated portal on our website.
- Conducted a pioneering study on ecosystem services and biodiversity.
- Produced several publications in cooperation with external partners.

Effectively addressing sustainability challenges requires working in partnership. We engage in regular dialogue with our stakeholders to exchange insights and advance viable solutions.

We engage in regular dialogue with our stakeholders. By co-creating knowledge and sharing expertise, we help society advance effective responses to key risks and challenges.

Our re/insurance solutions help our clients and partners manage the risks they face. This in turn fosters stability and enables economic growth. However, 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. For this reason, we attach great importance to engaging in an active dialogue with our principal stakeholders, which include:

- Clients: cedents, brokers, corporates, government entities, multilateral organisations, non-governmental organisations (NGOs)
- Financial community: investors/shareholders, rating agencies, shareholder associations, stock exchanges
- Employees
- Political and legal entities: multilateral organisations, governments, regulators, standard-setting boards
- Civil society: general public, NGOs, academia

Our role as a risk knowledge company and ultimate risk-taker in society means that we have an intrinsic interest in pursuing productive dialogues with our stakeholders. Drawing on the expertise from our core business, we identify key risks and take an active role in discussions about them.

Collaboration with (inter-) governmental and academic institutions

[See website](#)

We share, exchange and co-create knowledge through many channels, eg our publications, international dialogue platforms, and client and partner events, as well as cooperation with governments, nongovernmental organisations, and academic institutions. Swiss Re Institute plays a key role in our stakeholder dialogue (see box on the right).

Our focused efforts give us valuable feedback and new insights for risk management and product development, sharpening our understanding of key perils and sustainability issues. The three 2030 Sustainability Ambitions of our Group Sustainability Strategy provide an important focal point for these efforts.



Mitigating climate risk and advancing the energy transition



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In the Sustainability Report we present summaries of selected activities in 2020. More information on these and other activities can be found on our website.

Swiss Re Institute

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

Swiss Re Institute plays an essential role in achieving this objective. It conducts and publishes superior risk research to drive better decisions and innovation in the re/insurance industry. It curates risk and market data to enable solutions that create value for clients and to guide the Group’s strategic direction. It acts as a coordination point bundling all research activities across Swiss Re and works with selected partners to explore the future of risk coverage, assess changes in the risk landscape and act as a catalyst for industry change.

The cutting-edge risk knowledge generated in this way is shared through publications, client programmes and conferences. Swiss Re Institute incorporates successful Swiss Re brands such as the *sigma* publication series, the annual SONAR report (see page 43) and the Centre for Global Dialogue.

Based on its mandate and key activities, Swiss Re Institute supports the Group’s commitment to sustainability. It helps identify emerging risk trends and fosters dialogue with our clients and other stakeholders to advance sustainable risk solutions.

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“Sustainability Leadership in Insurance” event series

In collaboration with the UNEP FI Principles for Sustainable Insurance (PSI) we co-organised a conference addressing key aspects of “Sustainability Leadership in Insurance”. Against the backdrop of the COVID-19 crisis, it was rescheduled as a series of four virtual events held between May and August 2020. It examined how the re/insurance industry can help pave the way for a more sustainable world post-crisis. A year earlier, we had helped organise a similar event focusing on the role of investing.

Setting the agenda for the series, its first event brought together the chief executives of UNEP and Swiss Re and other senior figures with an international audience. The discussion focused on the full implications of the pandemic. While the immediate priority has been to slow its spread and protect people, emphasis was placed on the fact that 60% of all known infectious diseases in humans – and 75% of all emerging ones – are zoonotic. Never before have there been so many possibilities for pathogens to pass from wild and domestic animals to humans. We need to embrace the lesson that deteriorating ecosystems undermine societies’ resilience. The re/insurance industry can and must be part of reinforced efforts to address habitat and biodiversity loss, along with climate change.

[See website](#)

The second event of the series then looked at how to effectively tackle sustainability risks in underwriting. Two key notions were advanced during the debate: that an integrated, broad-based risk management approach is superior and that sustainable business is good business in the long term. This means that the sustainability agenda really is at the heart of commercial activity. Building on the insights of the first event, it was reiterated that we face a dual challenge: climate change and biodiversity loss. While climate change has been at the top of the agenda in recent years, participants agreed that the financial sector needs to do more to address biodiversity risks. Fittingly, the event served as a launch pad for a report produced jointly with the WWF on spatial finance.

Report: Conserving our common heritage

In cooperation with the WWF, Swiss Re Institute published a report on how the newly emerging concept of spatial finance can help protect World Heritage Sites (WHS). Spatial finance uses geospatial observational data (geographical information systems, GIS) combined with machine learning to assess potential impacts of financing and re/insurance decisions on specific areas, both of a long-term and short-term nature.

Spatial finance thus enables financial service providers to add a geo-spatial layer to their risk management systems and due-diligence processes, and steer their decisions accordingly. This is an important step forward because almost half of all WHS host some sort of economic activity with potentially damaging ecological consequences. Recognising and avoiding such impacts will help preserve biodiversity.

See WWF/Swiss Re Institute 2020: Conserving our common heritage. The role of spatial finance in natural World Heritage protection. Also see www.wwf.org.uk/what-we-do/projects/nature-and-spatial-finance, and <https://spatialfinanceinitiative.com/>, initiated by the Oxford University Sustainable Finance programme.

[See website](#)

In the third event, the focus switched to the UN Sustainable Development Goals (SDGs) and the re/insurance industry's contribution to them. While many of its products and services already support the SDGs, efforts will need to be further strengthened. It was argued that an industry-wide roadmap would create additional momentum. Contributions and discussions then turned to important elements of such a roadmap, identifying consistent frameworks for impact measurement, increasing transparency and innovation utilising digitisation. For all of them, partnerships among multiple stakeholders were said to be vital. To make progress towards these goals, an initiative led by the UNEP FI PSI to develop Insurance SDGs was formally launched at the event.

UNEP FI PSI-led collaborative initiative to develop Insurance Sustainable Development Goals

Through this United Nations-backed alliance, leading re/insurers have committed to supporting the achievement of the SDGs by 2030 via their insurance portfolios through a set of Insurance Sustainable Development Goals (iSDGs). The alliance will: map existing re/insurance products and solutions and how they already support the SDGs, identify gaps where new products and solutions are needed, and assess potential trade-offs between positive and negative contributions.

The fourth and final event of the series put the spotlight on climate change, specifically on how re/insurers can align their businesses with the Paris Agreement. While many have already made significant progress on transitioning their investments, the participants agreed that now is the time to manage climate risks in their re/insurance portfolios more systematically. Three main topics emerged in this context. Firstly, the industry needs more innovation, developing products and services that really incentivise climate risk mitigation. Secondly, the large variations between different real-economy sectors mean that a reliable methodology is required to measure the (mis)alignment of a specific portfolio with the 1.5°C target of the Paris Agreement. A technical paper published by the Chief Risk Officer (CRO) Forum on carbon footprinting methodologies is an important step in that direction. Thirdly, given these challenges, close cooperation with clients, but also with governments, regulators, scientists and other stakeholders, was regarded as essential to achieve real progress.

CRO Forum publication "Carbon footprinting methodology for underwriting portfolios"

This report is the result of an industry-wide effort to summarise options, challenges and opportunities that re/insurance companies face in the process of assessing the carbon footprint of their liability portfolios. It discusses different carbon footprinting methodologies that may be applied to underwriting portfolios. The general methodology presented in the paper proposes an estimation based on company- and industry-specific carbon intensity information, allowing hotspots to be identified and comparisons to be made across liability and investment portfolios. In 2020, we started to apply the methodology to our direct insurance portfolio (see page 38).

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sigma 2/2020: Natural catastrophes in times of economic accumulation and climate change



Every year, we devote an issue of our renowned *sigma* series to analysing the previous year’s natural catastrophes and sharing insights we have recently gained through our research. Issue 2/2020 focused on the impact that population growth, urbanisation and economic development on the one side and climate change on the other have on expected natural catastrophe losses.

While such losses had been relatively benign in 2019, our *sigma* issue underlined that the combination of socio-economic factors and climate change will lead to increased losses from weather events in the future, causing a major threat to global resilience.

It notes that the ways in which increasing temperatures change natural catastrophe risks are not fully understood due to the short observational history of records. In fact, it could take decades to collect the necessary proof points for an exact

quantification of these effects. However, failure to take immediate action could lead to climate systems reaching irreversible tipping points and possibly jeopardise insurability, especially in areas with high asset concentrations.

Nevertheless, Swiss Re Institute believes that weather risks remain insurable if adequate adaptation action is taken. Importantly, re/insurers need to constantly adapt their modelling to this dynamic risk landscape by incorporating socio-economic developments, the latest scientific research on climate change and the status of local mitigation measures. In other words, models must be adapted before events, not afterwards.

Jointly with the publication of this *sigma* issue we organised a media roundtable to discuss our research on natural catastrophes and Swiss Re’s climate strategy.

[See website](#)



SONAR 2020 report: special features on net-zero emissions

The need to quickly move towards net-zero emissions poses a significant challenge for all players involved, changing existing risks and creating new ones for the re/insurance industry. This is why we included two special features in the 2020 edition of our yearly SONAR report, our principal means of sharing our assessment of key emerging risk trends.

“Moving to a low-carbon future”

The first of the two special features discusses how re/insurance can help mitigate risks posed by the move towards net-zero emissions in four sectors (energy, construction and manufacturing, transport, forestry and agriculture). It also draws attention to some of the general obstacles (eg long-term price dynamics, competition between different innovations) and unintended consequences (eg uneven social impacts, questions of justice and fairness, political resistance) entailed by such a large-scale transformation. It will cause significant trade-offs, gains and losses which need to be adequately monitored and balanced.

[See website](#)

“Locking it up – carbon removal and insurance”

The second feature describes the different carbon removal solutions available – nature-based, technological, hybrid – and looks at some of the upsides and downsides of these approaches. For example, solutions requiring the use of natural resources (land and water) will be in competition with food and fodder production and will take time to develop. Technological solutions, on the other hand, will require less land, but large amounts of renewable energy. They are more capital-intensive and have higher operating expenditure.

[See website](#)

You can find more information on SONAR on pages 42 – 43, and on our own net-zero commitments on pages 37 – 39, 50, 62 – 63.



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Renewable energy: new power for Africa's economy and insurance markets



As part of our efforts to advance sustainable energy sources, Swiss Re Institute launched an expertise publication looking at the current state and prospects of the renewables sector in Africa. With projections for strong economic growth in the longer term, increasing populations and urbanisation, demand for power is expected to grow substantially in future.

Africa has a vast renewable energy potential, and hydropower forms an important part of the power mix today. However, the more environmentally friendly, modern renewable energy technologies, such as solar or wind, have the lowest penetration of any region globally.

This report argues that renewable energy technologies (RETs) will experience a huge boost in the future, for three reasons: global efforts to decarbonise the economy, digitisation enabling decentralised business models and the competitive costs of production of RETs, which will likely fall further. Based on predictions by the

International Energy Agency, we estimate total investment in RETs in Africa to reach between USD 250 billion and USD 1 trillion in the next 20 years.

Meeting this demand for investment will require a much stronger involvement of the private sector. There still remain some important challenges to this, such as political uncertainties and unstable or insufficient regulatory policy frameworks, which need to be addressed.

For their part, re/insurers can play an important role in de-risking private investments against financial and physical risks. This includes traditional risk transfer solutions (property, engineering, marine, liability) as well as non-traditional ones, which provide hedges against volatile production levels or price swings. It will be important for local insurance sectors to build up the necessary skills.

[See website](#)



COVID-19: lessons learned and the way forward



The COVID-19 pandemic has caused widespread lockdowns, travel restrictions, business interruption and social distancing. Our financial strength, combined with our powerful research and data capabilities, has enabled us to support our partners during these difficult times. It is how we have been fulfilling our vision of helping to make the world more resilient.

As part of our ongoing dialogue with stakeholders, we have been sharing information on many aspects of the pandemic, ranging from research insights through analysing economic implications to making recommendations for the post-pandemic era. Most of this information can be accessed in the special section "COVID-19: lessons learned and the way forward" at www.swissre.com.

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Food for Thought 2020: The science and politics of nutrition

The food/agriculture/health nexus is a focus area within our 2030 Sustainability Ambition of “Building societal resilience” and a research priority of Swiss Re Institute. Nutrition has a significant impact on chronic diseases like diabetes and obesity, yet there is great controversy about what actually constitutes a healthy diet.

To help resolve such disagreements and drive good science and research in the nutrition space, in 2018 Swiss Re Institute started a partnership with The BMJ, a renowned UK-based medical journal. Through the partnership we sponsored a series of landmark articles by leading nutrition researchers and held an initial Food for Thought conference in Zurich.

Building on the success of this first cooperation, Swiss Re Institute and The BMJ partnered again in 2020, repeating the format of articles and conference. Because of the COVID-19 pandemic, the event had to be transformed into a fully virtual event. On 29 and 30 June, some of the most influential voices in the area of nutrition and health gathered online to discuss the biggest challenges in the field, review progress since 2018 and set the agenda for future research and policymaking.

Sessions focused on: shifting from treatment of diabetes to reversal, guidelines of salt consumption, the impact of nutrition on mental wellbeing, promoting health in the wake of COVID-19, and improving nutritional research and conflicts of interest.

[See website](#)



Expertise publication: Biodiversity and Ecosystem Services – A business case for re/insurance



In recent years, the world has made considerable progress in understanding the impact of climate change. There is, however, less understanding of the impact of biodiversity on our lives and the economy, although it is just as important.

Biodiversity and Ecosystem Services (BES) underpin our daily lives and many of our products and services, from water and food to countless other resources. An estimated 55% of global GDP is moderately or highly dependent on BES at present, yet a study by Swiss Re Institute reveals that a staggering one-fifth of countries globally already exhibit weakened land ecosystem services on more than one-third of their territory.

Understanding the extent and impact of this decline and the associated risks is key to minimising further damage. This is why Swiss Re Institute has created the BES Index. Bringing together masses of data and research, it provides a detailed, kilometre-by-kilometre view of the state of biodiversity and ecosystem services in any given location.

The index for the first time gives the re/insurance industry the possibility to incorporate BES data into their risk assessment, thus helping to preserve BES, which are vital to societies’ resilience and a sustainable future.

The need to maintain the strength of ecosystems has become especially apparent during the COVID-19 pandemic. One of the largest potential reservoirs of future zoonotic diseases is in the rainforests of our world, but through accelerating deforestation we are making swift inroads into these habitats. Linked with soaring globalisation and urbanisation as well as risky nutrition patterns, this is creating high-speed routes for future pandemics directly into our major cities.¹

Thus, as COVID-19 shows the potential cost of disrupting the delicate balance between humans and nature, it could become a sentinel.

[See website](#)

¹ IPBES (2020). Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services. IPBES secretariat, Bonn, Germany.



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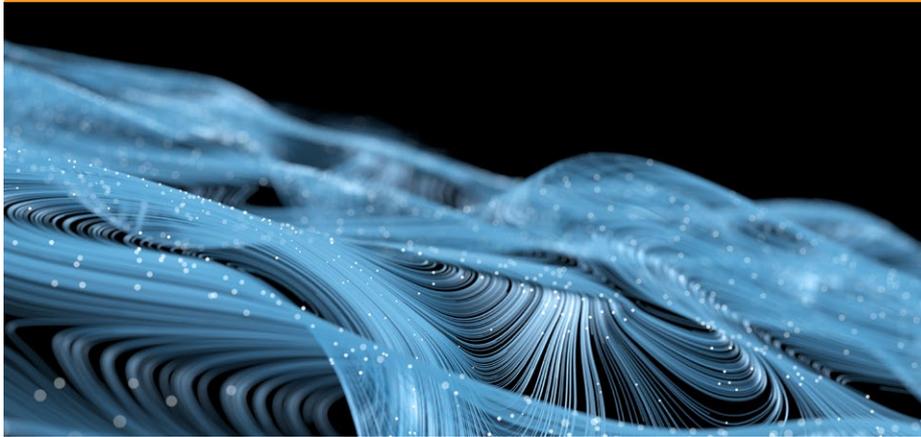
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sigma 1/2020: Data-driven insurance: ready for the next frontier?



Led by digitally based technologies, the face of insurance is changing rapidly. The first of our *sigma* editions published in 2020 set out to explain what this means for the industry and to present a potential roadmap for progress.

The digital age has brought an explosion of heterogeneous data from different sources and platforms, which can be used to broaden the reach and boundaries of insurability. As the insurance value chain becomes more digitally connected and disaggregated at the same time, re/insurers will be able to gain better insights into customer segments and partners.

In the short term, consumers of digital insurance offerings will likely continue to be young, educated people with higher levels of income. Being able to choose from a vast amount of newly developed apps, they will raise expectations on how such products are delivered. Over time, innovative digital insurance options will then become increasingly available for all customer groups, making income and education less relevant factors for purchasing decisions.

Based on advanced analytics capabilities, insurers will be able to develop a detailed and more granular understanding of different customer needs and preferences, and thus offer flexible, optimised protection offerings. This will go hand in hand with two further important developments: moving from a traditional product-focused sales approach to one that is geared to customers' broader life-time needs, and optimising interaction across a diverse range of customer touch points.

As a result, consumers will be able to interact via digital channels and to access relevant protection products and services. According to *sigma*, ongoing incremental adoption of digital technologies will thus broaden the scope, accessibility and cost-effectiveness of insurance, helping to close the protection gap.

[See website](#)



Machine intelligence in insurance

Our *sigma* edition 1/2020 provides a comprehensive overview of the changes that digitisation will enable in the re/insurance industry, including affordable and accessible products. We shared more information on this process in other contributions, also discussing some of the challenges lying ahead.

For example, in the article "Why data and machine intelligence will become the new normal in insurance", authors from Swiss Re Institute drew attention to the increasing importance of personalisation and the need to get this right. A potential pitfall is to assume homogeneity across specific groups and to develop solutions based on superficial group characteristics. What will be paramount, in contrast, is to tailor services and online experiences to individuals rather than groups.

Care must also be taken if vulnerable groups are to be reached as soon as possible, for example people in lower income brackets or with chronic mental health conditions. If efforts focus too much on millennials, who currently constitute the majority of digital consumers, there is a risk that vulnerable groups are not represented and visible in the data on which customer surveys are based. Products will then not be adapted to their specific needs.

[See website](#)

Later in 2020, Swiss Re Institute published a *sigma* edition on "Machine intelligence in insurance" (5/2020). This looked at a key challenge surrounding the transformation to digital insurance: the lack of quality data and data engineering which has so far prevented the insurance industry from fully harnessing advances in machine intelligence. The *sigma* authors argue that this is not because the data are not available, but that they are not being curated, transformed and processed adequately. Addressing this shortcoming will require a major effort to build up the necessary data architecture.

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