



The Global Reinsurance Forum (GRF) endorses The Geneva Association's recent research report Anchoring Climate Change Risk Assessment in Core Business Decisions in Insurance (genevaassociation.org)

The Global Reinsurance Forum (GRF) is a representative body for the global reinsurance industry, currently consisting of 12 leading global reinsurers represented at chairman or chief executive officer (CEO) level. The main objective of the GRF is to promote a stable, innovative and competitive worldwide reinsurance market. The members of the GRF are AXA XL, Gen Re, Hannover Re, Lloyd's, MAPFRE Re, Munich Re, Partner Re, Renaissance Re, RGA, SCOR, Swiss Re and Toa Re. Collectively, GRF members account for more than 65% of global net reinsurance premiums.

Climate change is a defining challenge of our time. Its societal implications are manifold, ranging from physical and economic risks to changing business models and climate-induced migration. The global reinsurance industry has been vocal about climate change and started to explore this phenomenon as early as in the 1970s, accumulating extensive data, knowledge and experience over the past five decades.

Reinsurers play an important role in helping societies adapt to climate change. They assume a portion of the financial burden of those affected by natural disasters, allowing them to return to their daily lives more quickly after a loss event. This role is particularly relevant for emerging and developing countries which are most vulnerable to natural catastrophes. In addition to assuming underwriting risk, reinsurers also engage in a number of other activities and support measures that enable and promote adaptation to climate change. For example, they share information and provide education to raise awareness of natural catastrophe risk in both the public and private sector. They also assist in designing policy measures to incentivize the development of private sector risk transfer solutions (e.g., through conducive accounting and taxation rules) as well as of Public-Private Partnerships, such as catastrophe pools.

In addition to risk-reducing insurance solutions geared towards loss prevention and adaptation to climate change, reinsurers also act as enablers of climate-friendly and sustainable technologies to support the transition to a low-carbon economy. With their risk knowledge, technical expertise and product development capabilities, reinsurers are instrumental in pushing back the frontiers of insurability and hence facilitate the breakthrough of greener technologies.¹

In order to better understand the implications of climate change risk for their own organisations, several reinsurers have started dealing with the impact of climate change on their book of business. Some were using a simple realistic disaster scenario (RDS) for a number of scenarios in order to evaluate the probable financial implications for their companies. This effort included the

¹ https://www.grf.info/publications/value-of-reinsurance



quantification of the additional claims reinsurers would have to face assuming that scenarios predicted for 2050 were to happen in the next year. Some of the scenarios used were of proprietary nature, others based on those formulated by The Network of Central Banks and Supervisors for Greening the Financial System (NGFS).

In addition to stress tests, some reinsurers closely investigate the future impact of climate change on natural catastrophe models and adjust them accordingly. Ultimately, those modified models are not only the basis for the natural catastrophe part of climate change stress tests but are also used on a daily basis for pricing and accumulation control.

Against this backdrop of a long record of assessing and managing climate change risk, the GRF endorses the recent Geneva Association research report Anchoring Climate Change Risk Assessment in Core Business Decisions in Insurance (genevaassociation.org). For insurers, too, there is a growing need to better understand the impacts of climate change-related risks and opportunities on their business model. Mandatory regulatory requirements for climate change risk disclosure are imminent. Furthermore, following the announcement of the International Financial Reporting Standards Foundation (IFRS) at COP26 about the establishment of its International Sustainability Standards Board (ISSB), the development of global baseline standards for sustainability reporting with a focus on climate change is underway.

Based on decades of experience in understanding, modeling and managing climate change-related risks, across a large number of perils and regions, some reinsurers are well positioned to support insurance companies' efforts to build the internal capacities for framing and producing decision-useful forward-looking climate change risk information. As highlighted in The Geneva Association report, any effective approach will need to consider physical, transition and litigation risks and their interactions at different time horizons across both sides of the balance sheet, as well as interactions across business functions, to assess the materiality of risks and develop potential actions to address them.

While Property & Casualty (P&C) insurers have started their exploratory journey on each side of the balance sheet, for Life & Health insurers more research is required to assess the materiality of climate change to their underwriting exposures including longevity, mortality and morbidity. In this area as well, based on their global risk expertise, reinsurers can play an important role in advancing climate risk assessment for insurers.

The research report proposes a 10-step template for designing business use cases. Insurers should start simple, by exploring the impacts of each climate change risk type (physical, transition and litigations risks), considering two time horizons (short-term and long-term) on each side of the balance sheet. As part of the design and implementation of the business use cases, insurers should seek to identify metrics to measure and monitor the risks and the impacts of company responses to manage them.

The research report also highlights the need to explore further the use of scenario analysis, for example in order to test the resilience of an insurer's business model to climate change-related risks, including in extremely adverse climate change conditions. A realistic starting point is to investigate a range of qualitative "What if" questions.



Even though over the past three decades, P&C reinsurers have provided leadership in natural catastrophe risk modelling and pricing using probabilistic methods, quantitative approaches to climate change continue to evolve in parallel with overall climate science. This reflects the fundamental uncertainties associated with the transition over the long-term horizon. For this reason, it is important to use qualitative scenarios to look at climate change-related risks holistically, across all lines of business, including both sides of the balance sheet and capturing transitional, physical and litigation risk.

As regulatory requirements for climate change risk assessment and disclosures appear to be imminent in the next few years, we recommend regulators to consider the limitations of quantitative scenario analyses. Whilst quantitative scenario analyses are very useful to assess physical risks on short-term horizons, they remain - with present modelling capabilities and tools - too uncertain to be used on longer time horizons for prudential regulatory purposes as well as for informing today's business decisions, especially as risk assessments for a distant future cannot single out climate change as a risk driver. For instance, the built environment will have changed dramatically from the status quo, with different exposures and vulnerabilities. There will be new adaptation and mitigation measures in place. Other macro risks such as disruptions to global energy markets and their socio-economic implications also contribute to making long-term quantitative risk assessments unreliable. Therefore, longer-term scenarios are most effectively captured by qualitative what-if type analyses. Qualitative scenario analysis helps raise risk awareness and steer high-level strategic business and investment decisions despite fundamental uncertainties and data gaps.

In summary, climate change is increasingly at the heart of forward-looking, scenario-based risk assessment in insurance. Climate change highlights the need for an integrated approach to assessing physical, transition and litigation risks. Promoting consistency in the assessment and management of climate change-related risks will be important for insurers to address those risks more efficiently and effectively and to drive greater climate action by policyholders and other stakeholders.

The GRF member companies stand ready to engage with insurers and other stakeholders, in an effort to harness climate change risk assessment for climate change risk adaptation and mitigation.