

Climate Change Scenarios for Insurers



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EIOPA¹ provided guidance on running climate change materiality assessments and using climate change scenarios in the Own Risk and Solvency Assessment (ORSA) process in mid-2022. However, the timing coincided with a particularly busy period for many European insurers, as their main focus over the last 2 years has been on the implementation of the new accounting standard, IFRS 17.

As the dust begins to settle on accounting issues, we thought it would be a good idea to revisit the climate change guidance, which is consistent with international commitments under the Paris Agreement to limit global temperature increases to well below 2°C and pursue efforts to limit it to 1.5°C. Whilst this guidance is aimed at Solvency II insurers, the same principles can also be applied in other areas where there is less guidance available.



Importance of Climate Change Risk Management

Climate change represents a significant risk to the insurance and reinsurance sectors. The increasing frequency and severity of climate-related events can have a material impact on underwriting processes, asset values and overall business strategies. As global temperatures rise, both physical and transition risks increase, potentially leading to higher underwriting risks and asset devaluation.

Overview of the Guidance

The guidance builds on the framework established by EIOPA's 2021 Opinion on integrating climate change risk scenarios into the ORSA. It includes supervisory expectations for forward-looking management of climate risks and detailed steps for incorporating these risks into the ORSA. However, few insurers currently perform comprehensive, long-term quantitative analyses of climate change risks. This guidance aims to bridge the gap between regulatory expectations and current practice, by providing structured methods for both materiality assessment and scenario analysis.

¹ The European Insurance and Occupational Pensions Authority

Materiality Assessment

The detailed approach to materiality assessments helps insurers identify and evaluate their exposure to climate-related risks. Key aspects covered include:

- **Physical Risks:** Direct impacts from climate events such as floods, storms, heatwaves and rising sea levels. The assessment involves identifying vulnerable regions and understanding how these physical risks could affect insured assets and liabilities.
- **Transition Risks:** Indirect impacts from the transition to a low-carbon economy, including regulatory changes, shifts in market demand, technological advancements and changes in consumer behaviour. The guidance emphasises assessing how new policies, carbon pricing and evolving technologies might affect the company's investment portfolio and underwriting processes.

Insurers are encouraged to analyse both short-term and long-term impacts of these risks and integrate their findings into their ORSA report. This ensures a comprehensive view of how climate change might affect their risk profile and business strategy.

Climate Change Scenarios

For material risks identified, the guidance outlines a robust scenario analysis framework. Insurers should consider at least two long-term climate scenarios:

- **Below 2°C Scenario:** A scenario where global temperatures increase by less than 2°C. It involves evaluating the potential impacts of stringent climate policies, rapid technological innovation and significant changes in energy systems.
- **Above 2°C Scenario:** A scenario where global temperatures increase by more than 2°C. It includes assessing the physical impacts of more severe weather events, increased frequency of natural disasters and the resultant economic and social disruptions.

The guidance provides step-by-step instructions on defining these scenarios, translating them into specific climate change risks and quantifying the potential financial impacts. It also highlights the importance of using both qualitative and quantitative data to enhance the accuracy and reliability of the scenario analysis.

Practical Examples and Tools

To facilitate implementation, the guidance includes practical examples using "dummy" life and non-life companies. There are also tools and templates to support the systematic analysis of climate-related risks and their integration into the ORSA process.

Conclusion

The guidelines provide a clear pathway to identify, assess and mitigate climate-related risks. This will help insurers to enhance their resilience to climate change, ensure regulatory compliance and contribute to global efforts in mitigating climate impact.

For more information on how BWCi can help you manage climate-related business risks, please contact **Clair Le Poidevin** (clair.lepoidevin@bwcigroup.com) or **Jonathan Kemp** (jonathan.kemp@bwcigroup.com).