

CLIMATE AND ENVIRONMENTAL RISKS IN THE INSURANCE SECTOR



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Growing recognition of sustainability risks in the insurance and IORP sectors

Sustainability risks are increasingly recognized by the European insurance sector, as they can materially affect the business activities of insurance undertakings, for example, through investment losses related to stranded assets or increased insured losses caused by more frequent and extreme weather conditions.

EIOPA's assessments started in 2018 with the EU-wide insurance nat-cat stress test exercise. Besides enhancing its stress test framework on climate change related risks,¹ EIOPA recently published a sensitivity analysis on transition risks² and several studies focusing on physical risks related to climate change.

The expected increase in frequency, severity and correlation of weather-related events will put significant pressure on non-life insurers, particularly regarding property-related lines of

business.³ Consequently, premium levels are expected to increase, thereby exacerbating the already substantial climate insurance protection gap and its potential macro-economic implications.⁴

Climate change adaptation is key to maintaining the future availability and affordability of non-life insurance products that provide coverage against natural catastrophes.⁵ EIOPA's report on impact underwriting shows that while insurance undertakings are making progress in implementing climate-related adaptation measures in their insurance products, the European insurance market overall appears to be at a relatively early stage in this regard.⁶

One of the main challenges for supervisors and the insurance industry to assess and manage sustainability risks relates to the availability of data and loss models. Comprehensive open-source data is needed to improve the accuracy of the risk assessments, in conjunction with open-source models integrating forward-looking climate considerations. In this context, EIOPA developed the "CLIMADA-app", a user interface to facilitate the use of the CLIMADA open-source catastrophe model.⁷ A thematic article published in the June Financial Stability Report discusses the key findings obtained using this tool. If no adaptation or mitigation measures are taken, climate change could significantly increase river flood risk across Europe over the coming decades, with larger losses expected in northern Europe than in southern regions.⁸

The European Commission mandated the ESAs to conduct a one-off climate risk scenario analysis in cooperation with the ECB and the ESRB, aiming to assess the resilience of the EU financial system and its ability to fund the transition towards EU targets on greenhouse gas emissions. The cross-sectoral exercise will be based on end-2022 balance sheet data, and will include two adverse but plausible scenarios that could affect the financial system over the period up to 2030.

EIOPA recently conducted its first climate stress test for the European occupational pensions sector. The results showed a sizeable drop in the value of assets (12.9%) in the context of a disorderly transition scenario, indicating that IORPs have a material exposure to transition risks.

Solvency II, as a forward-looking risk-based framework, can effectively enable insurers

to manage sustainability risks alongside other prudential risks. Many of the existing prudential tools for risk measurement and mitigation can be applied to address sustainability risks as well. For instance, EIOPA's application guidance on climate change materiality assessments and climate change scenarios in the ORSA illustrates how climate-related materiality assessments and scenario analysis of climate risks can be incorporated in this existing prudential tool, not only in the short term, but also in the long-term.⁹ EIOPA is currently evaluating the potential for a dedicated prudential treatment of sustainability risks,¹⁰ and is initiating the re-assessment of the standard formula for natural catastrophe risk in Solvency II.

The regulatory landscape is continuously evolving to effectively address sustainability risks.

Supervisors and the insurance sector in the EU have shifted their focus to sustainability risks. It remains essential that the insurance sector continues to evolve ensuring that future challenges are appropriately addressed.

1. EIOPA (2022): *Methodological principles of Insurance stress testing – Climate change component.*
2. EIOPA (2020): *Sensitivity analysis of climate-change related transition risks.*
3. EIOPA (2022): *European insurers' exposure to physical climate change risk and (2022): FINANCIAL STABILITY REPORT.*
4. ECB and EIOPA (2023): *Staff Paper on Policy options to reduce the climate insurance protection gap.*
5. EIOPA (2022): *EIOPA's dashboard identifies the European natural catastrophe insurance protection gap.*
6. EIOPA (2023): *Pilot Exercise on Impact Underwriting.*
7. EIOPA: *Open-source tools for the modelling and management of climate change risks.*
8. EIOPA (2023): *FINANCIAL STABILITY REPORT.*
9. EIOPA (2022): *Application guidance on climate change materiality assessments and climate change scenarios in ORSA.*
10. EIOPA (2022): *Discussion Paper on the Prudential Treatment of Sustainability Risks.*