



- Building resilience to complex and interconnected risks is crucial for EU prosperity and cohesion. Navigating future protracted and overlapping crises requires grasping interconnected drivers and embracing a comprehensive approach to climate risks.
- Climate storylines delve into alternative pathways that past climate extremes could have unfolded. By combining the robustness of forensic risk diagnostics with foresight techniques, storytelling climate risks advances risk anticipation and the efficacy of stress tests.
- Collaboratively designed and standardized storylines of climate risks, developed in partnership with risk modelers, public authorities, regulators and businesses, can significantly enhance climate intelligence to drive transformative change.



The EU has faced and effectively navigated through major political, economic, and structural crises. These experiences have propelled policy reforms, promoting strategic risk management and addressing concerns of solidarity, cohesion, social and environmental justice, and cross-policy integration. Risk and risk management assessments are increasingly built upon foresights, stress tests, and cross-border hazard scenarios to define strategic resilience goals. Transparent risk disclosure leverages the impact of the EU Green Deal, promoting informed decision-making and accountability.

The interplay of climate change and existing vulnerabilities holds the potential to trigger new humanitarian and environmental crises, in Europe and elsewhere, as well as exacerbate ongoing and reignite past crises. The EU is exposed to physical climate risks that manifest within its jurisdiction, including climate features striking elsewhere but propagated through multiple risk pathways. These pathways include financial channels, global trade and transportation, as well as the need for humanitarian and development assistance.



The storyline approach to climate risk assessment advanced in RECEIPT focuses on diagnosing individual extreme (high impact, low probability) events. In hindsight, it analyses past extremes, their drivers, and possible compounding factors. By modifying these factors, it envisions alternative ways extreme events might have unfolded, and assesses their amplified or attenuated impacts. In foresight, the analysis considers the impacts of climate change on likelihood and intensity. Attention is put on risk pathways that trace risk transmission, cascades, or spillovers across regions and sectors.

Storytelling of climate risks enhances understanding of risks and their pathways. It supplements probabilistic risk assessment, prioritizing resilience in face of major shocks and their ripple effects. Paired with foresight techniques, it combines forensic risk diagnostics' strength with advanced risk anticipation methods. Its proficiency in conducting thorough stress tests effectively bridges existing knowledge gaps. RECEIPT has showcased the potential of risk storylines across 50+ peer-reviewed articles and significant references in major policy reports.



Recommendations

The practice of climate risk assessment displays substantial variations across public authorities at different governance levels and entities mandated to disclose climate risk impacts on their operations. Identifying and aligning their purposes, common principles, assumptions, and scenario-driven methods holds potential to enhance transparency, comparability, and credibility of climate risk knowledge. A unified climate risk analytics framework and risk data registry can leverage a variety of sources, creating a shared pool of climate intelligence to facilitate transformative change. Collaboratively designed and standardized storyline scenarios with climate and risk modelers, along with regulators, should form a vital part of the registry.