# Lost in Model Comparison: Distilling Integrated Storylines for **Comprehensive Yet Comprehensible Regional Climate Risks**

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#### Introduction

Lost in model comparison? Large model ensembles, often leave regional decision-makers overwhelmed. We introduce a framework to distil many ensembles into a comprehensive yet comprehensible set of integrated climate and socio-economic storylines. By taking a meteorological, hydrological and socio-economic perspective, we distil the uncertain ensemble of multi-sectoral systems into plausible, and actionable direct and cascading risk storylines. This helps identify robust risk priorities under deep uncertainty, turning complex ensemble outputs into clearer guidance for strategic regional planning.

## Case

Estonia

Latvia

Lithuania



## Results



## Methods





- Integrated Risk Approach Essential: Integration of climate scenarios, socioeconomic storylines, and cascading impacts provide a comprehensive understanding of complex risk, revealing factor interactions.
- Robust Priorities for Adaptation: Cross-scenario analysis identifies robust high-risk areas and sectors, offering a strong basis for priorities in adaptation planning despite future uncertainty.
- Globally Applicable, Locally Focused: Used open data and tools, making the methodology applicable across diverse regions worldwide to generate targeted insights for adaptation planning where local resources might be limited.



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Conclusion



