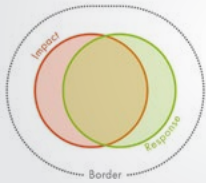


A) CONVENTIONAL ASSESSMENT



B) CROSS-BORDER ASSESSMENT



## Report No.(449)

# Transboundary Climate Risks for the Island of Ireland (TCRII)

Authors: Conor Murphy, Kevin Leonard, Rory Moore and Stephen Flood.

## Identifying pressures

Transboundary climate risks (TCRs) cross national borders. They are associated with climate change impacts that propagate through different pathways to affect other countries and regions and result from climate change adaptations made in one or more countries having repercussions for others. These emerging climate risks are poorly studied, even though they could have significant impacts on a national scale. The Transboundary Climate Risks for the Island of Ireland (TCRII) project undertook a literature review and worked with stakeholders to identify approaches for the assessment of TCRs and synergies that can be leveraged on an all-island basis. The findings informed recommendations for better accounting for these emerging risks, to realise the national climate objective of achieving a climate-resilient economy and society by 2050.

## Informing policy

The island of Ireland is one of the most open economies in the world for trade and finance. While this openness has helped to generate significant wealth and improve living standards, it has also created vulnerabilities associated with being small, open and highly globalised. The Transnational Climate Impacts Index ranks Ireland 68th among the countries most vulnerable to TCRs globally. The island's open economy, trade and finance links make it among the most vulnerable to the impacts of climate change on international trade. Coupled with this, the cross-border dimensions of climate change impacts and climate action for the island of Ireland increase the importance of collaboration across jurisdictions.

## Developing solutions

Through our analysis, seven risk pathways for understanding and adapting to transboundary climate risks (TCRs) were identified, namely the trade, biophysical, people, geopolitical, psychological, finance and infrastructure pathways. While considering TCRs is relatively new in international policy, Ireland is starting from an advantageous position, with numerous cross-border and international institutions already in place to utilise and learn from. Work with stakeholders highlighted the importance of adopting the above risk pathways as a framework for managing TCRs and the critical need for interdisciplinary research, leveraging existing cross-border institutions and relationships, involving the private sector, international collaboration and developing guidance on evaluating and prioritising TCRs. Planning for and adapting to TCRs is critical for ensuring Ireland's resilience to climate change. Assigning responsibilities for managing TCRs and collaboration and research are essential for building adaptive capacity across all risk pathways.

