Transitions Pathways and Risk Analysis for Climate Change Mitigation and Adaptation Strategies

TRANSrisk
TRANSITION PATHWAYS AND RISK ANALYSIS FOR CLIMATE CHANGE POLICIES

TRANSrisk

Aim – Methodology - Results

Presentation Outline

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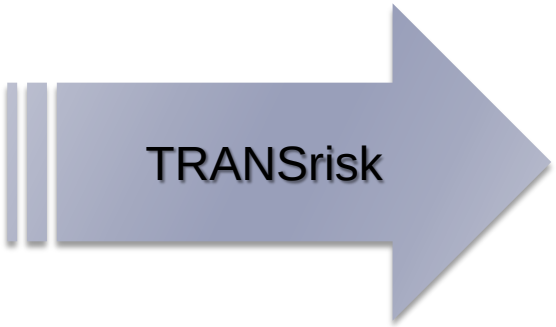

- ✓ Background
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- ✓ Objectives
- ✓ Methodological Framework
- ✓ Target Groups
- ✓ Expected results
- ✓ How to Contact us

BACKGROUND

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A Roadmap for moving to a competitive low carbon economy in 2050

COM (2011) 112 - Ambitious EU policy goals (80% emissions reduction below 1990 levels by 2050, through domestic reductions alone).

IPCC report, March 2014

"The world is ill-prepared to address the risks of climate change resulting from vulnerability, exposure, and overlapping hazards triggered by climate events".

Meet the Challenge:

High degree of uncertainty in models concerning future climate evolution and its impacts & models assessing costs & benefits associated with different mitigation pathways.

Public acceptance of low-carbon (technology) options.

Urgent need to understand **costs** and **risks** associated with **climate change**, and risks, uncertainties and co-effects related to different **mitigation pathways**

TRANSrisk Overview (1/2)

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- **Title:** Transitions pathways and risk analysis for climate change mitigation and adaptation strategies (TRANSrisk)
- **Funding:** European Union's Horizon 2020 Research and Innovation Programme (H2020)
- **Started:** September 2015
- **Duration:** 36 Months
- **Coordinator:** SPRU, Science Technology Policy Research, University of Sussex
- **Participants:** 12
- **Contract Number:** H2020-SC5-2014-2015/642260

TRANSRISK OVERVIEW (2/2)

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Who we are

SPRU - Science Technology Policy Research, University of Sussex	**UK**
BC3 - Basque Centre for Climate Change	**ES**
CE - Cambridge Econometrics	**UK**
ECN - Energy Research Centre of the Netherlands	**NL**
ETH Zurich - Swiss Federal Institute of Technology (funded by Swiss Gov't)	**CH**
IBS - Institute for Structural Research	**PL**
JIN - Joint Implementation Network	**NL**
NTUA - National Technical University of Athens	**GR**
SEI - Stockholm Environment Institute/ University of York	**SE, KE**
UniGraz - University of Graz	**AT**
UPRC - Association of Bulgarian Energy Agencies	**GR**
CLAPESUC - French Environment and Energy Management Agency	**CL**

OBJECTIVES

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TRANSrisk aims to **innovatively transform** the way in which climate change policy pathways are developed:

Create a **novel assessment framework** for analysing the costs and benefits of transition pathways while considering risks and uncertainties.

Design a **decision support tool** to assist policy makers to include risk assessments when designing policy and policy mixes.

Assess **low emission transition pathways** that are technically & economically feasible & socially & environmentally acceptable.

Bring together **quantitative** models and **qualitative** approaches, focusing on participatory consultations with stakeholders.

Target Groups

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Engagement Processes

Workshops

Conferences

Interviews

- Structured
- Semi-structured

Surveys & questionnaires

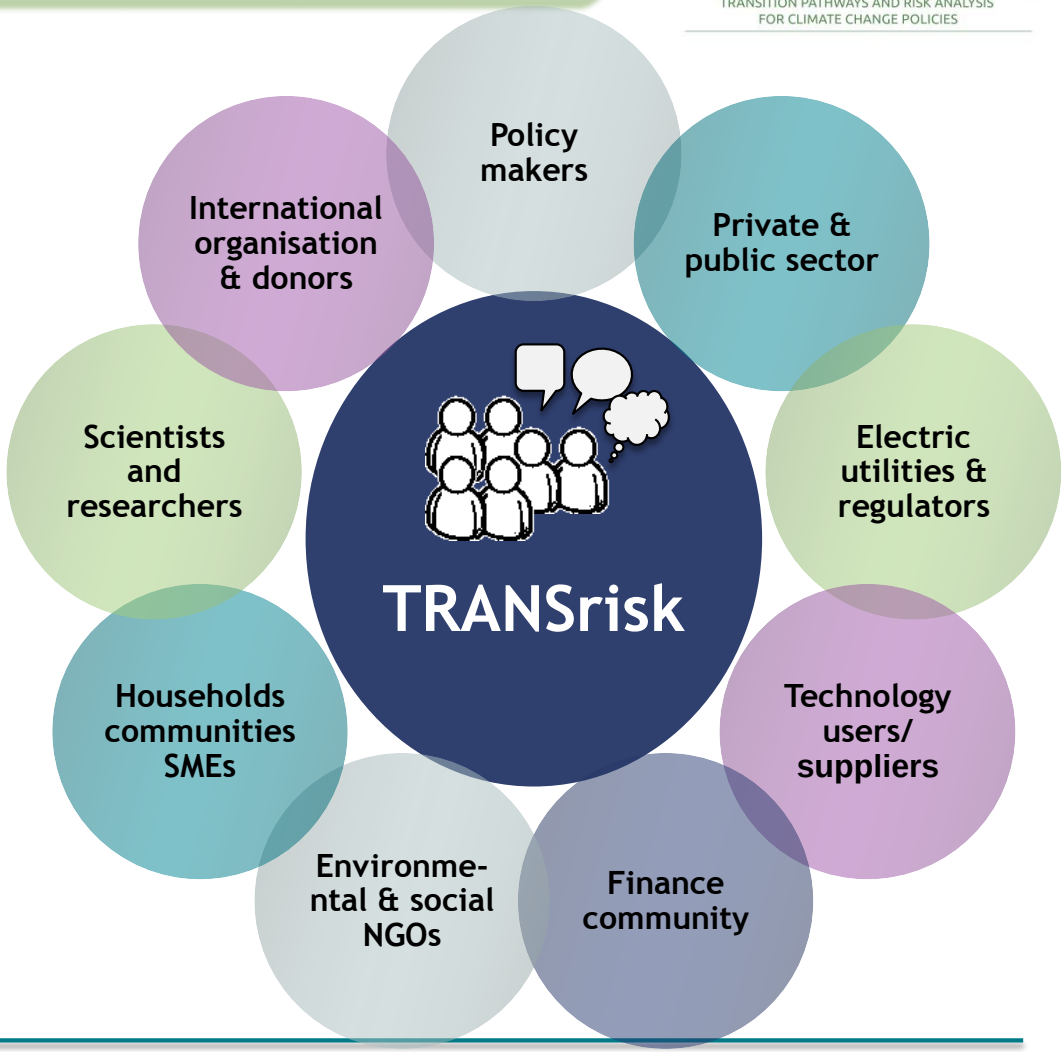
Multi-criteria Decision Analysis

Market Mapping

Cognitive Mapping

Participatory modelling

Delphi



METHODOLOGICAL FRAMEWORK (1/3)

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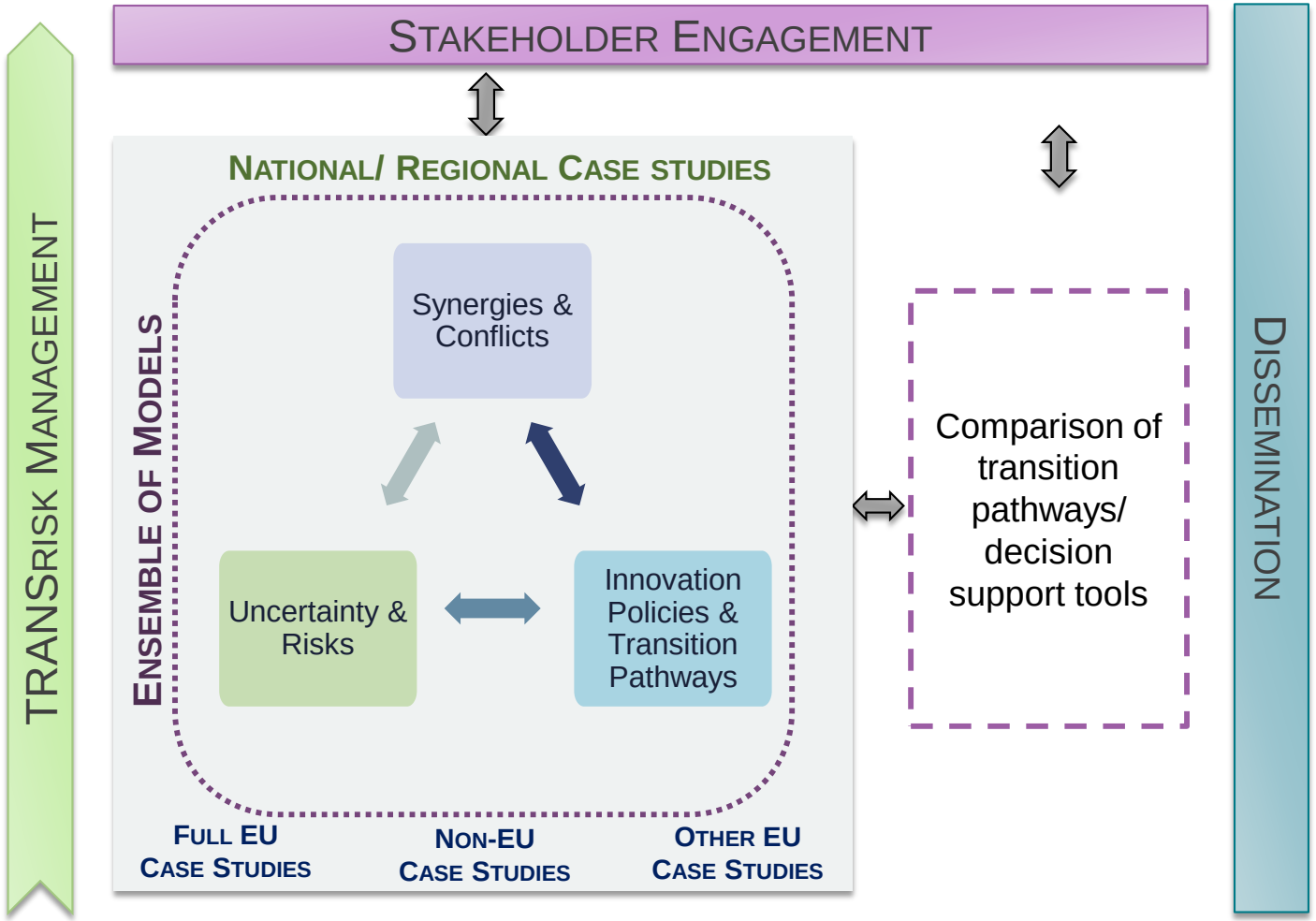

METHODOLOGICAL FRAMEWORK (2/3)

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Stakeholder Engagement

- ✓ Help formulate assumptions for quantitative models to assess synergies, conflicts, and risks of transition pathways.
- ✓ Link quantitative & qualitative inputs – outputs.

Synergies, Conflicts & Participatory Scenario Development

- ✓ Explored between different energy system pathways and other societal objectives.
- ✓ Co-benefits of low-emission pathways, including changes in the energy mix, energy efficiency, or other resource constraints.

METHODOLOGICAL FRAMEWORK (3/3)

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Innovation Policies & Transition Pathways

- ✓ Involvement of multiple actors.
- ✓ Examination of existing policies, cultures, and habits across multiple sectors.

Assessing Uncertainties & Risks

- ✓ Risk of a particular policy approach in reducing emissions.
- ✓ Health, safety, food-supply & security risks associated with particular technologies.
- ✓ Economic risks of policy approaches.

Expected Results

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TRANSrisk expects to have an impact across the policy, business, social and academic sectors:

- ✓ Provide insights on mitigation pathways across multiple sectors and geographical areas - 15 case studies in the EU as well as Canada, Chile, China, India and Indonesia.
- ✓ Provide decision makers with a non-specialist "tool box" to assess and evaluate the socio-economic costs & benefits of mitigation options.
- ✓ Facilitate EU and global climate policy goals such as the implementation and review of the EC's "Roadmap for moving to a low-carbon economy by 2050".
- ✓ Contribute to major international scientific assessments (e.g. IPCC).

How to Contact us (1/2)

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Visit our Website:

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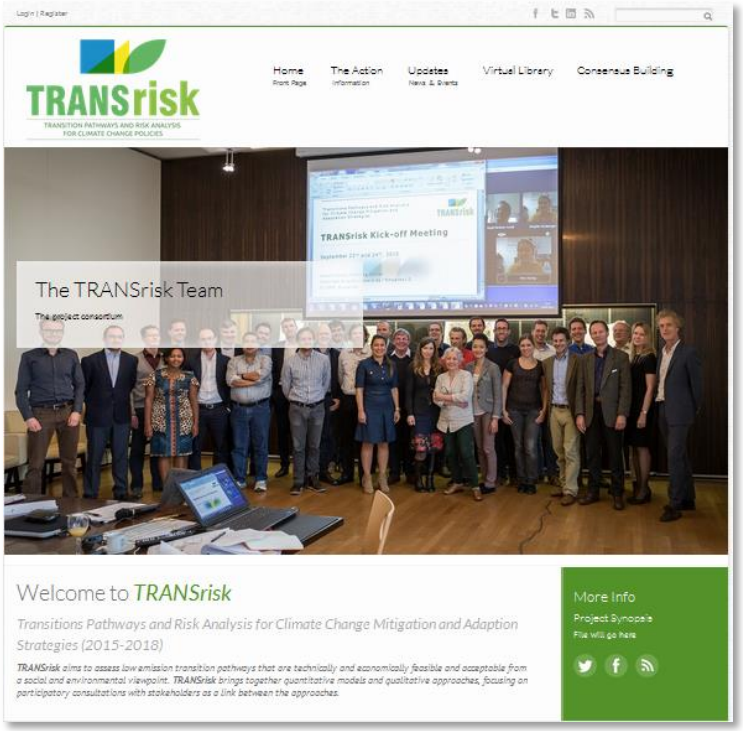

How to Contact us (2/2)

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Contact Details

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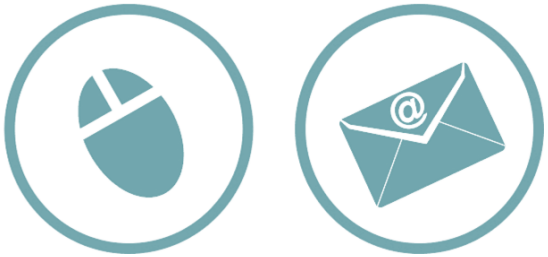

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Thank you!