



## Paris in Practice: Understanding the Risks and Uncertainties A TRANSrisk Project Dissemination Event

Tuesday 6<sup>th</sup> November 2018

Host: SPRU, Science Policy Research Unit, University of Sussex Business School  
*Square Conference Centre, Ravenstein Entrance, Rue Ravenstein 2, 1000 Brussels*

The EC Horizon 2020 funded TRANSrisk project invites you to one of our final dissemination events: “Paris in Practice: Understanding the Risks and Uncertainties”, in Brussels on the 6<sup>th</sup> November.

This event will explore how countries of the European Union and beyond can meet Paris Agreement targets, with help of a better understanding of the risks and uncertainties this transition entails at both national and local levels. We will present new tools and techniques that can help develop robust, effective climate policy.

Risks and uncertainties relate to the possible consequences of climate policies for our economies, environment and society, as well as the risk that climate solutions cannot be implemented due to unforeseen constraints. While risks and uncertainties affect all areas of policymaking, the sheer scale of the transition needed to hit 2050 climate targets means that even unlikely risks and small uncertainties can have an enormous impact on the success of a low carbon transition.

Understanding and mitigating risks and uncertainties is therefore of key importance to effective, robust, climate policy. The same holds for potential opportunities or co-benefits of climate policies. These can help accelerate adoption of climate measures, but which are equally surrounded by uncertainties about who will benefit, how and when.

TRANSrisk’s work has spanned the globe, with 14 country case studies focusing on relevant technologies in the context of each country’s national policy goals.

Our work has included:

- Developing techniques to identify (and mitigate) risks, uncertainties and opportunities when scaling up climate solutions in low carbon transition pathways.
- Creating user-friendly desktop modelling tools for exploring ‘what if’ scenarios.
- Understanding the potential for a range of low carbon technologies: from photovoltaics to geothermal energy.
- Exploring the potential of energy efficiency and behaviour change measures.
- Developing novel research techniques that co-ordinate the use of stakeholder input with energy, economic and environment models, allowing more robust modelling of climate policy scenarios and socially acceptable climate solutions.

Our results will help inform more effective climate change policy, which is directly relevant for implementation of the Paris Agreement. Not only does the TRANSrisk toolbox support countries in formulating Nationally Determined Contributions (NDCs), it also helps to scale up the ambitions of future NDCs, in support of the Global Stocktake.

Please RSVP with your name, position and organisation to [transrisk@sussex.ac.uk](mailto:transrisk@sussex.ac.uk). If you are unable to attend, please feel free to share the invitation with colleagues.



TRANSrisk has received funding from the European Union’s Horizon 2020 Research and Innovation Programme under grant agreement No 642260



10:30 - 11:00	<b>Registration, Coffee and Exhibition</b> <i>Room 313-315</i>
11:00	<ul style="list-style-type: none"> <li>• <b>Introduction to TRANSrisk (Jenny Lieu, SPRU)</b> <i>Room 300</i> An overview of TRANSrisk’s work, including a summary of TRANSrisk’s case studies and the economic sectors they have explored.</li> </ul>
<b>Morning Session: Exploring Risk and Uncertainty in Climate Policy</b> <i>Room 300</i>	
<p>The transition to a low carbon Europe means enormous changes to almost every part of the economy and the lives of hundreds of millions of people. Pathways for these changes face significant risks and contain large numbers of uncertainties. Understanding these risks and uncertainties, including at the local level, is a vital part of robust climate policy making, and in TRANSrisk we have worked to build knowledge and create new analytical frameworks. This morning session will explore the practical application of our work.</p>	
11:20 – 12:30	<ul style="list-style-type: none"> <li>• <b>Understanding Risk and Uncertainty in Climate Policy Making (Susanne Hanger-Kopp and Oscar van Vliet, ETH Zurich)</b> TRANSrisk has developed new techniques and frameworks to understand risks and uncertainty as part of robust climate policy making – how can we minimise risks and maximise opportunities for our economies, environment and society?</li> <li>• <b>Panel: Risk and Uncertainty in the European Energy Transition (Chair, Gordon MacKerron; Discussant Zsolt Lengyel)</b> Our panel will explain how risk and uncertainty have been explored in TRANSrisk’s European case studies, and explore (along with the audience) the main risks and uncertainties facing the EU’s 2050 climate targets. <ul style="list-style-type: none"> <li>• <b>Social Risks (Alev Sorman, BC3).</b> Public attitudes towards low carbon technologies can either accelerate or hold back their deployment - if the public support a technology, or benefit from it, they is far more likely to be successful. How can low carbon pathways be carefully designed to gain public support and minimise the risk of large-scale objections?</li> <li>• <b>Technical Risks (Stefan Böbner, SEI).</b> Technical risks may manifest when a technology is insufficiently adapted to a particular geographic area or user needs, or when a technology has unforeseen negative impacts on (for example) human health or the local environment. How can these risks be identified and mitigated before they become a problem?</li> <li>• <b>Economic and Market Risks (Andreas Tuerk, Uni Graz).</b> Adoption of low carbon production processes can require huge investment, a considerable risk for the organisations involved. How can these risks be minimised?</li> <li>• <b>Policy and Spatial Planning Risks (Eise Spijker, JIN).</b> Energy transitions require political champions, but in an unsettled financial and political environment long-term political support can be hard to achieve. Moreover, scaled up low carbon technologies often require significant amounts of land, requiring careful and inclusive spatial planning.</li> </ul> </li> <li>• <b>Introduction to the Afternoon Session (Wytze van der Gaast, JIN)</b> An introduction to the tools and techniques to be explored in the afternoon session.</li> </ul>



TRANSrisk has received funding from the European Union’s Horizon 2020 Research and Innovation Programme under grant agreement No 642260

<b>12:30- 13:30</b>	<b>Lunch, Exhibition and Discussion</b> <i>Room 313-315</i>
<b>Afternoon Session: New Tools for Climate Policy Making</b> <i>Room 300</i>	
<p>TRANSrisk has produced a number of new tools to assist policy development. Our tools combine the detailed expertise of sector stakeholders with the predictive power of computable models. Models generally provide a useful means of projecting the impacts of decisions we make now. They can also calculate the impact of a range of different possible futures, as an indication of possible risks of climate policy for the economy and society. However, subtle 'human' factors can prove very difficult to model. Conversely, whilst stakeholder input can provide detailed sector pictures, including where barriers and inefficiencies exist, it can lack predictive power. This afternoon session will explore our tools that combine both areas to offer uniquely useful perspectives to policy making communities.</p>	
<b>13:30 – 14:15</b>	<ul style="list-style-type: none"> <li>• <b>Modelling Tools for Non-Specialists (Marek Antosiewicz, IBS, and Alexandros Flamos, UPRC)</b> Economic modelling tools offer enormous predictive power, however the need for specialist knowledge and long model run times can limit their application in the policy making process. The session will present TRANSrisk's fast, user-friendly tools that can be used to quickly explore 'what if?' scenarios.</li> <li>• <b>Stakeholders in the Policy Process (Wytze van der Gaast, JIN)</b> Stakeholders hold expert insights into the sectors policy makers are seeking to change. TRANSrisk has developed new techniques and principals for extracting this knowledge, which will be presented in this session.</li> <li>• <b>An Integrative Approach to Policy Support Tools (Haris Doukas, NTUA)</b> TRANSrisk has developed a new scientific framework for supporting climate policymaking, by integrating computer-modelling frameworks with other decision support tools. This session will present the unique strengths of this integrative approach, along with applications in selected TRANSrisk case studies.</li> </ul>
<b>14:15</b>	<b>Small group breakout sessions and technical 'hands on' sessions' with tools</b>
<b>15:30</b>	<b>Final Remarks</b>



TRANSrisk has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 642260

## The TRANSrisk Case Studies

TRANSrisk's work is based on 14 country case studies, as summarised in the table below. Many of our case study leaders will be on hand during the event and happy to talk through some of the details and findings of their work.

Country/Region	Sector covered	Case study leader
1. Austria	Decarbonising the iron & steel and electricity supply sector	University of Graz
2. Canada	Oil sands	SPRU, University of Sussex
3. Chile	Renewable energy and energy poverty	Pontificia Universidad Católica de Chile (CLAPES UC)
4. China	The building sector	SPRU, University of Sussex
5. Greece	Solar power and the building sector	National Technical University of Athens (NTUA) and University of Piraeus Research Centre (UPRC)
6. India	Solar and wind power	SPRU, University of Sussex
7. Indonesia	Biogas for electricity and cooking	Stockholm Environment Institute (SEI)
8. Kenya	Geothermal and charcoal	Stockholm Environment Institute (SEI)
9. Netherlands	Solar PV and integrated manure management	JIN Climate and Sustainability
10. Poland	Power sector	Institute for Structural Research (IBS)
11. Spain	Solar and wind power	Basque Centre for Climate Change (BC3)
12. Sweden	Road freight transport	Stockholm Environment Institute (SEI)
13. Switzerland	Renewable energy and nuclear phase out	ETH Zurich
14. UK	Nuclear power	SPRU, University of Sussex

To find out more about the TRANSrisk project please see our website – [www.transrisk-project.eu](http://www.transrisk-project.eu). This event is based on two books: "Narratives of low-carbon transitions: Understanding risks and uncertainties" and "Understanding risks and uncertainties in energy and climate policy: Multidisciplinary methods and tools towards a low carbon society", to be published in 2019 by Routledge and Springer respectively.



TRANSrisk has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 642260