TRANSrisk

TRANSITION PATHWAYS AND RISK ANALYSIS
FOR CLIMATE CHANGE POLICIES

Policy Briefs

Policy Brief #8

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Risks and Policies: Part 2 - Insights on addressing risks in general policy making processes

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Key Points

- Insight 1: When developing new policies to support low carbon technologies, policy and stakeholder interactions in the wider policy mix across different sectors should be evaluated to avoid contradictions in meeting environmental objectives.
- Insight 2: High-level climate policy agenda should address the social and economic needs and priorities of local stakeholders to reduce barriers to a low carbon transitions or inadvertent negative impacts on vulnerable groups.
- Insight 3: Effective monitoring and evaluation are essential for policy learning and can help to (re)design more effective low carbon policies and reduce unintended negative outcomes on society and the economy.
- Insight 4: Policy experimentation can help reduce risks of new policies that support low carbon technologies by providing dedicated spaces for learning before scaling up the policy and technology at the national level.

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1 Considering risks more generally in the policy process

Contextualising risk is essential to understanding local problems and barriers and to (co)develop a feasible pathway with stakeholders[1] that address the needs and priorities at the local level while addressing wider climate goals. In the TRANSrisk projects, case studies were carried out by researchers across fourteen countries who engaged with stakeholders[2] throughout the research process. These country contexts are discussed more specifically in a book[3] and TRANSrisk According to our case study results, policy risks were the most remarked on risk category[4]. The key policy risks that were described across the countries included: a lack of complementary policies, poor implementation, conflicting policy mix, weak policy monitoring & enforcement, changes to supporting polices that lead to market destabilisation, poor coordination across policy institutions and misalignment across governance levels (see Risks and Policies Part 1: Learning about risks in transition pathways across different contexts).

Considering these policy risks, this brief will provide insights into addressing risks more generally in the policy process *before* implementing a low carbon transition pathway. These insights might also help to limit the impact of existing risks in the pathways already implemented.

Insight 1: When developing new polices, interactions in wider policy mix should be considered to avoid contradictions

Our risk analysis highlights the importance of low carbon policies as a means to address business, social-economic, and environmental and risks, as each low carbon technology is associated with a dedicated policy as well as a wider policy mix. Most policy mixes are not deliberately created, but rather emerge as part of the rather ad-hoc policy process. When new policies are introduced to promote a new low carbon technology, they enter into an existing policy mix and co-exist with policy instruments that may contradict the aims of the new policy. Climate policies therefore not only require an understanding of their own impacts, but also how individual policies interact with other policies and stakeholders, which could lead to unintended policy implementation risks.

Lack of complementary policies promoting renewable energy and energy efficiency technologies was the most cited risk category. These include a lack of corresponding technical guidelines, complementary supporting building codes, and implementation policies. Moreover, insufficiently detailed policies to follow up/and or support wider climate or energy policy objectives and targets were mentioned. Where policies do exist, stakeholders pointed at policy interactions, so the effect of one policy (instrument) is negatively affected by the existence of a conflicting policy (instrument). For example, a subsidy and preferential policy for fossil fuel production counteracts with a policy to promote renewable energy (e.g. subsidies Liquefied petroleum gas (LPG) in Indonesia, subsidies for oil and gas in Alberta).

Multiple interactions across institutions and governance levels within a policy mix can also inherently increase the risk of policies not meeting its intended objectives. There can be competing interests across different policy institutions and governance levels that may be challenging to reconcile. Part of the challenge is understanding how the wider policy mix could impact the policy instrument implemented. For instance, a solar power subsidy that promotes solar parks becomes less effective if the most suitable areas are destined to be used for agricultural production, as per regional spatial planning (as identified in the Dutch case study on solar PV). Thus, one policy related to renewable

[1] Stakeholders include those that impact a pathway or can be impacted by a pathway (e.g. technology providers, industry alliances, end-users, decision makers involved in the policy process, experts, NGOs, end-users and citizens.)
[2] Over 189 stakeholders were contacted through interviews and over 720 through workshops across the 14 case studies.
[3] Hanger-Kopp S, Lieu, J, Nikas A (2019). "Transitions narratives towards a Low-Carbon Future: Assessing Risks & Uncertainties". Routledge, London.
[4] Compared to the other risk categories that include: technology, environmental, business (financial impacts on firms across the technology value chain), economy-wide (general economy related all activities), socio-economic (well-being of individuals/household)with links to livelihood activities), societal, and political risks

energy generation may cut across other policy areas and sectors and increase the risk of conflicting policies. Another example includes fossil fuel subsidies that are a direct competition to renewable energy technologies.

Addressing and mitigating these risks requires careful policy design, whereby climate actions are both supported by climate policy instruments and are embedded in broader social, (local) environmental and economics agendas. This requires integrated policy packages. It also requires building social acceptance via stakeholder involvement in the policy process. This should take place at all levels necessary: from individual communities to a national level. Climate policy design should therefore rely on a combined approach where quantification of impacts and trade-offs is coupled with inclusive, participative assessment of core stakeholders in the desired low carbon transition.

Insight 2: High-level policy agenda to address local stakeholder needs and priorities

Policy development involves framing the problem or issue to be considered in the policy agenda. The policy agenda for climate change can be set at the international level, as seen in the Paris Agreement and the UN Sustainable Development Goals, or at the national level via the Nationally Determined Contributions (NDCs). But often the priorities and interests at the lower levels, including the subnational or community level, are not included in the national climate policy agenda.

In TRANSrisk, our case study results revealed that many actors were not driven by high level climate goals. In fact, a mismatch between wider national goals and local goals often lead to the poor acceptance of policies supporting low carbon technologies and/or behavioural changes. These created risks in the form of barriers in a low carbon transition pathway. Our case study results also show that there is a poor diversity of voices across all governance levels, which limited the understanding of how polices positively and negatively impacted stakeholders. Therefore, one means of addressing risks is to include the concerns of diverse stakeholders across different governance levels. Aside from including the mainstream concerns, the needs and priorities of women, as well as other minority or vulnerable groups', should be well understood *prior to* designing a policy. When addressing complex issues of sustainability or climate change at the (sub)national level, dedicated time should be spent engaging a varied group of stakeholders.

Meaningful engagement with a diverse group of stakeholders can help to better understand the core problems and potential risks and how these impact different groups. A consultation process can include collecting public opinions through on-line surveys or in person. For stakeholders located in remote areas, dedicated efforts can be made to arrange consultations to reduce the barriers of public consultation. The results from the consultation processes then need to be sufficiently *included* in policy development. Properly resourced working groups can help represent the needs and priorities of diverse stakeholder groups, and also help to balance influences from powerful lobbying groups.

Insight 3: Monitoring and evaluation are essential for policy learning and can help to (re)design more effective policies

Monitoring activities is essential in order to provide the data and information needed to evaluate progress and to enforce regulations. The information collected during monitoring activities can help to learn from good and bad practice and to support policy redesign or the development of new complementary policies. Monitoring activities may also help to identify local practices that might influence the implementation of a policy/technology in different regions. Adjustments can then be made based on the monitoring and evaluation process, for instance, providing additional technical support, improving communication processes or providing supplementary training and education programmes.

Before new policies are implemented, an evaluation of the existing policy mixes across the key affected policy areas and sector should be carried out to identify potentially conflicting (or supporting) policies. While not all policy conflicts can be eliminated across sectors, changes to the policy design may help to minimise the impact of conflicting policy mixes.

Policy redesign can occur as part of a regular evaluation process and mainstreamed into the policy making process. For instance, when addressing fuel poverty, a negative outcome of a carbon tax policy redesign, as seen in the Chilean carbon tax, may consider how to reallocate revenues from carbon

taxes to support households facing fuel poverty. Policy redesign can reduce the unintended negative impacts or barriers to implementation by making the necessary adjustments when unanticipated issues arise; but revisions in policies can also create new risks when changes to existing policies destabilise markets as seen in the Greek and Spanish renewable energy sector. Thus, policy redesign should be carried out with caution and changes should be consulted with stakeholders most impacted by the revision. The appropriate actions can then be carried out to reduce the impacts of the policy changes.

Insight 4: Policy experimentation can help reduce risks of new policies

When new policies are formulated to support new low carbon innovations, policy experimentation can provide a space to implement test policies that are not yet well formulated or when there is no previous experience. Having a dedicated space to experiment can reduced risks of policies failing when implemented at the national level.

Polices can be tested through pilot programmes at a small scale within a region or country in order to have a better understanding of the potential policy outcomes. While policy experimentation is not typically a part of the conventional policy making process, experimentation can be valuable when there are high uncertainties and risks in selecting policies to address a problem not well understood. Policies may be applied in one or more subnational areas to test how stakeholders (e.g. businesses and end-users) respond to a proposed policy. The experimentation allows for learning and to adjust policies based on the experience gained.

Policies can also be tested at the project level, for instance applying different feed-in tariffs for projects based on a case-by-case context. The experience gained across the projects provided the needed data to set differential wind power tariffs-rates across the country. Voluntary schemes can also be a form of policy experimentation. For instance, voluntary accreditation schemes based on standards developed by industry can also help to understand how industry and end-user stakeholder respond to more stringent environmental standards (e.g. voluntary carbon emissions trading schemes).

Providing a dedicate space (e.g. with defined experimental zones, or at the project, community or sub-national level) and allowing time for policy experimentation, may help to avoid much large risks of cancelling policies already rolled and having knock-on impacts on the economy. Scaling back or retroactively cancelling policy support mechanisms has had knock on impacts on markets across Europe and has influenced investor confidence and led to job losses. Thus, when policy makers are uncertain of how a policy may be implemented, policy experimentation within a restricted space may be a valuable tool that can significantly reduce the risks and uncertainties of new policies by limiting the negative impact of policies to dedicated spaces. Positive lessons then can be replicated and later scaled up.

2 Final remarks

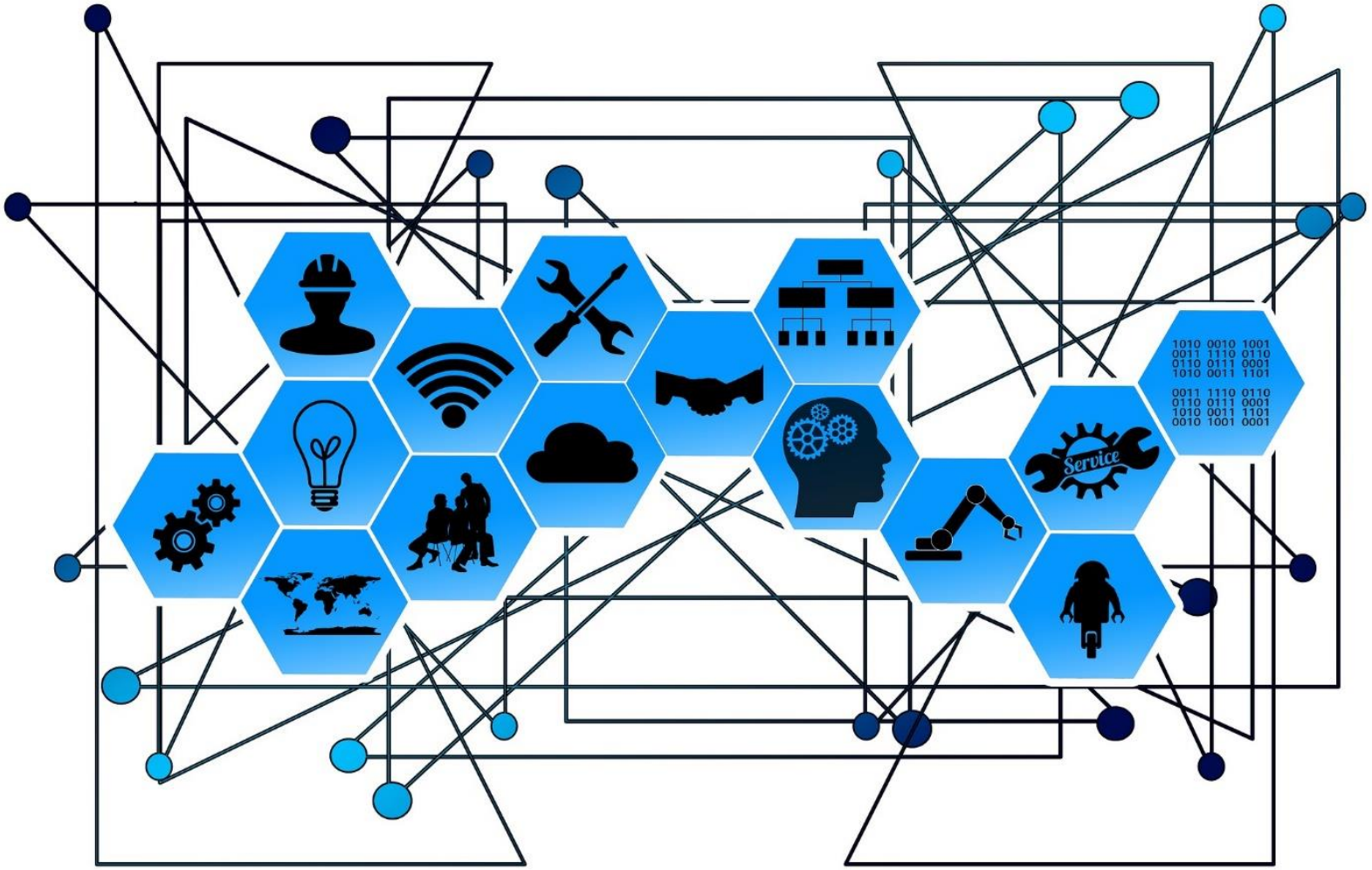
Considering risks, in policy mixes and throughout the policy making process, is important in reducing barriers and negative impacts when supporting low carbon technologies. This policy brief discusses four key areas to reduce risks in the policy process:

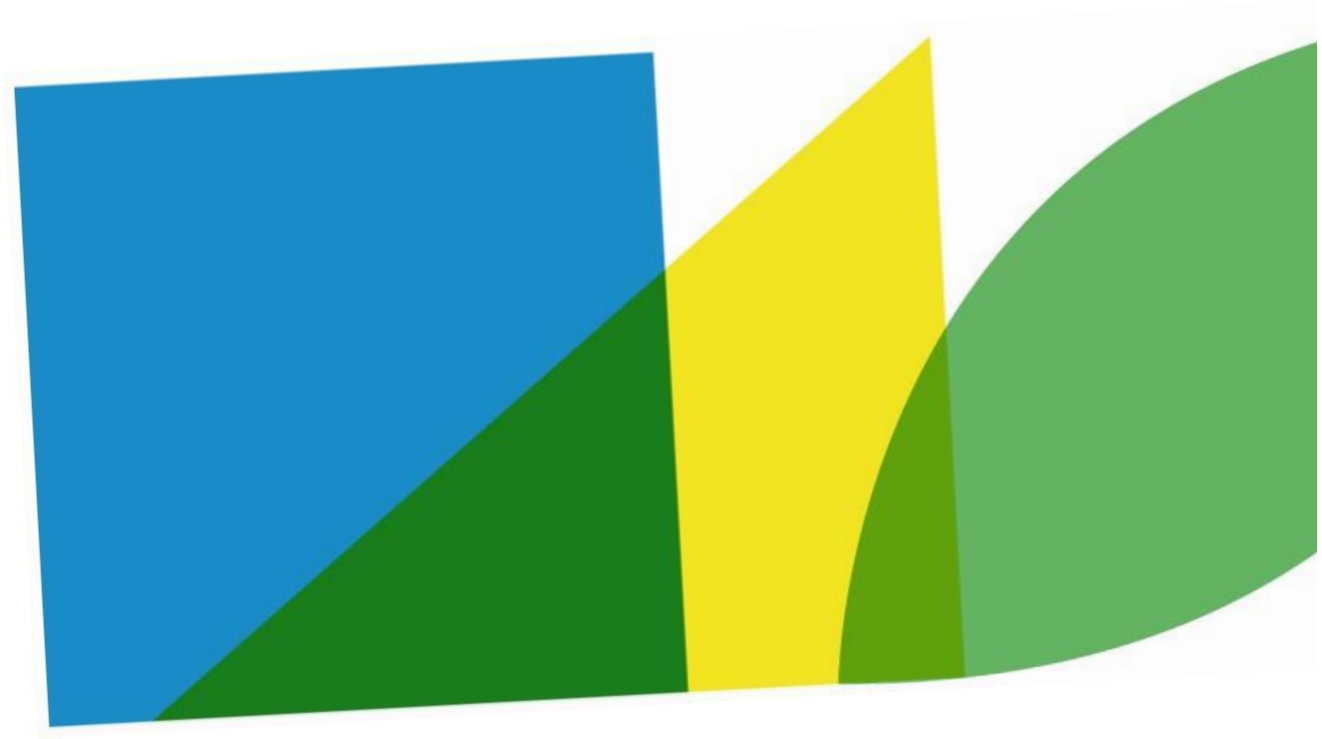
1. When considering the design of new policies, the wider policy context should be considered to avoid policy contradictors that create barriers to a low carbon transition pathway or result in negative outcomes in society and the economy. Conflicting policy objectives can occur due to interactions with existing policies and stakeholders across the market value chain.

2. Understanding how stakeholders may respond to a policy or policy mix requires meaningful stakeholder engagement across different governance levels, which helps to link local needs and priorities with wider national climate agenda.

3. When the new polices are implemented, a barrier often cited is the lack of adequate monitoring and evaluation which is essential for policy learning. Policy learning helps to revise policies based on good and bad practices and can reduce unintended negative outcomes on stakeholders.

4. Finally, policy experimentation can help reduce risks of new policies by providing a dedicated space to test new ideas and to encourage policy learning, which can better support the scaling up new low carbon policies.





MORE INFORMATION

There is more information on this work, and on TRANSrisk as a whole, on our website

www.transrisk-project.eu

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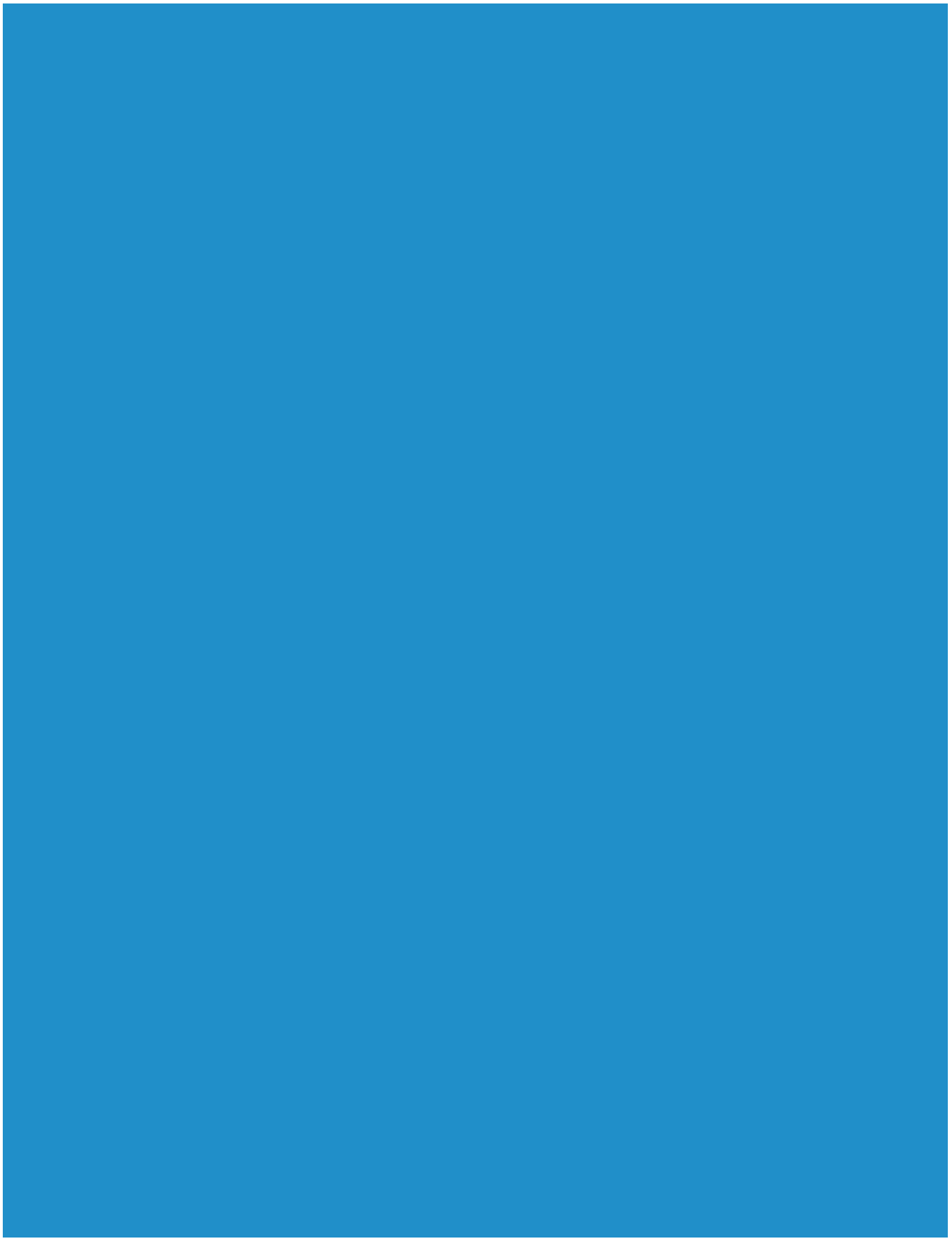

About TRANSrisk

TRANSrisk is studying the **risks and uncertainties** within **low carbon transition pathways**, and how transitions can be implemented in ways that are **technically, economically** and **sociably** feasible. The project's objective is to produce a new assessment framework, and an accompanying **toolbox, for policy makers**.

TRANSrisk's unique approach sees us combining **economic computer models** with **input from people working in the area of study ("stakeholders")**. Models provide a useful means of predicting the future impacts of decisions we take now, but **factors such as political opinion and public acceptability** are very difficult to predict via a purely numerical approach. TRANSrisk is using **stakeholder input** to feed our models, and is presenting the results **back to stakeholders** to see how this affects their views.

14 country case studies lie at the core of TRANSrisk's work. To fully understand the range of transition pathways our **case studies encompass the globe**, as presented in the adjoining map. In alphabetical order they are: **Austria, Canada, Chile, China, Greece, India, Indonesia, Kenya, the Netherlands, Poland, Spain, Sweden, Switzerland and the United Kingdom.**

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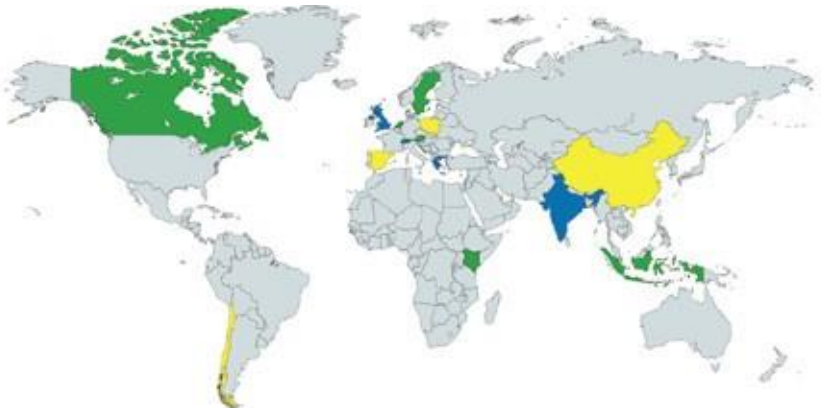

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The team behind TRANSrisk is a knit partnership of 12 leading universities / research institutions, based in the EU, Switzerland, and Chile.