

INPRESSIONS



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CENTRAL ASIA CASE STUDY

Aim: To work with decision-makers to improve understanding of the indirect impacts of global climate change. Specifically, to identify the ways in which climate change in Central Asia under highend scenarios will create indirect impacts for Russia and China, as well as the EU, and to explore how the EU could proactively address these risks via its external functions (including climate negotiation, trade and development aid).



Theme: Climate risk pathways across several sectors that create adaptation interdependencies between countries.

Context: The ex-Soviet Central Asian states lie in a strategic position in the heart of Eurasia, and control highly contested resources including energy (oil and gas), food (e.g. wheat), fibre (e.g. cotton) and trans-boundary rivers. Climate change will pose significant risks to this region: changing glaciers and rainfall patterns will challenge trans-boundary water management; flash floods could damage critical energy infrastructure; and drought may threaten wheat and cotton production. This could give rise to "spillover" effects for the EU, including climate-induced migration, impacts on global commodity prices and supply chains, and security issues.

Methods

- socio-economic > Developing climate and scenarios by extending the new RCP-SSP architecture Central Asia: scenario in innovation in the use of this architecture for concurrent scenario assessments across multiple regions.
- \succ Novel application of climate impacts and risk adaptation include assessment for to transboundary ('indirect') impacts between countries and regions.
- \succ Application of wind-tunnelling techniques to

Main outcomes

- \succ A set of integrated, participatory, high-end climate and socioeconomic scenarios covering global and regional scales, and the interaction between different regions under a range of futures.
- Improved understanding of the climate-sensitive links between countries and regions, such as energy flows, agricultural exports, transboundary river basins – and dependent economic sectors, human security, 'hard' security and geopolitics.

stress-test EU policy options in the context of indirect climate impacts.

PARTNERS

- Stockholm Environment Institute SYKE
 - Prospex

- \triangleright Novel science-based testing of European geopolitical, humanitarian and economic strategies in relation to Central Asia, China and Russia under future high-end scenarios.
- \triangleright A set of transition pathways that offer options for harmonising European foreign policy and adaptation strategies.
- > Contribution to the central knowledge network and Information Hub to support mutual learning and enhance decision-makers' capacity to take up the project's recommendations.

For further information see <u>www.IMPRESSIONS-project.eu</u> or contact: Central Asia case study leader: Magnus Benzie, Stockholm Environment Institute, <u>magnus.benzie@sei-international.org</u> Project co-ordinator: Dr. Paula Harrison, Environmental Change Institute, University of Oxford, paula.harrison@ouce.ox.ac.u