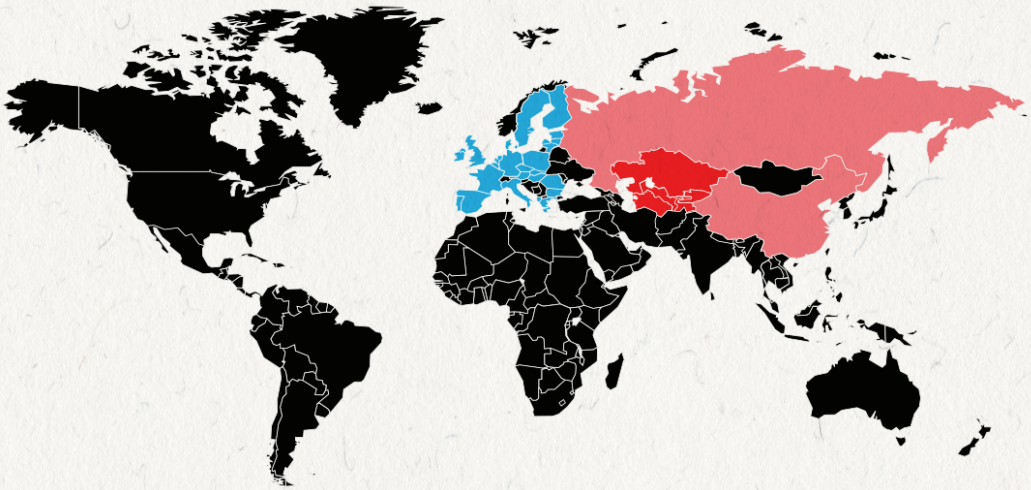
POLICY BRIEF | INTERACTIONS BETWEEN EUROPE AND CENTRAL ASIA

INTEGRATED SOLUTIONS TO ADDRESS HIGH LEVELS OF CLIMATE CHANGE

This case study considered the implications for Europe of high levels of climate and socio-economic change outside the EU, focusing on the five post-Soviet Central Asian republics of Kazakhstan, Turkmenistan, Uzbekistan, Tajikistan and Kyrgyzstan, which lie in a highly strategic position in the heart of Eurasia. The natural environment in this region is rich but fragile, and the impacts of climate change are poorly understood. Future developments here will have profound implications for the wider region, including Russia, China and the European Union. A set of scenarios describing changes in Europe and Central Asia have been co-developed with stakeholders, to re-think EU strategy in this strategically important region.



We considered how changes in the five Central Asia republics (dark red) would affect – and be affected by – developments in in Russia and China (light red) and how Europe (blue) could respond.

Key Findings

- **Central Asia is highly vulnerable to climate change**, which could destabilise the region because of its delicate resource interdependencies and growing tensions. Stakeholder-led scenarios offer a powerful tool for exploring future risks and opportunities in a data-poor but strategic region like Central Asia under conditions of deep uncertainty.
- **The EU will have to adapt to climate changes beyond its borders** as well as at home. However, the EU's current Central Asia Strategy is not robust to a range of different plausible futures in the region; it does not take proper account of the way in which external actors might respond to changes in Central Asia, particularly under conditions of extreme climate change.
- **Climate change offers an unlikely opportunity to build regional resilience.** Achieving a new regional transboundary water sharing agreement would be a positive "tipping point", unlocking huge potential for adaptation and mitigation. Also, external interest in connecting Central Asia to markets in China and Europe could boost adaptive capacity in Central Asia.

What are the impacts and risks in a future above 2°C?

By 2100, average temperature increase in Central Asia will be 50% higher than the global average: a staggering +5.1°C under RCP8.5. The frequency and magnitude of extreme weather events (heat, precipitation and droughts) will increase.

Impacts on water are critical. Glaciers are already shrinking but may reduce by 60% or more by the end of the century, increasing peak river flows. Flows in the two main catchments - Amu Darya and Syr Darya – are predicted to increase by 5-8% this century and up to 20-30% in springtime. Changes to run-off in the "water tower" of Central Asia will literally and metaphorically cascade down into other sectors and systems. The risks depend critically on the extent to which agreement

can be reached to build dams, regulate flows and optimise trade-offs between energy production (in winter) and irrigation (in summer). These dynamics are poorly modelled, but impacts on food security and agricultural exports could be severe. Cotton production could decrease between 11% and 23% by 2050; wheat production might experience significant losses or even productivity gains of up to 10% if irrigated and optimally managed. Limiting climate change to below 2°C also poses risks to oil and gas exporting regimes like Kazakhstan, Turkmenistan and Uzbekistan. Leaving Central Asian fossil fuels in the ground, which would be necessary to meet the goals of the Paris Agreement, would change the EU's interests in Central Asia, which are currently influenced heavily by energy.

What are the transformative solutions?

The EU's 2016 Global Strategy aims to address fragility in Central Asia by building "state and societal resilience", but EU diplomacy has a limited reach and competes with "regional cooperative orders" such as the Eurasian Economic Union and the Shanghai Cooperation Organisation. However, the EU has competitive advantages including high capacities and credibility on education, environment, private sector, trade, rural development and health. The EU is viewed as particularly strong in regulatory design – principally for private sector governance, trade facilitation, quality control, training and research and development. These strengths could help to address two potentially transformative solutions to Central Asian challenges.

Transboundary water governance	Reaching agreement on how to manage transboundary water is extremely challenging, but would create positive ripple effects for adaptation across borders and sectors in Central Asia, from energy to food to health and regional trade.
Regional connectivity	Connecting Central Asia internally and to its neighbours, via sustainable versions of China's Belt and Road Initiative, could boost stability and development and support climate resilient societal transformations.

Policy Recommendations

- **Continue to pursue a regional approach**, in addition to bilateral agreements, working with other partners in Central Asia to support transformations towards a sustainable future.
- **Conduct a thorough needs assessment** of Central Asia stakeholders to inform the Central Asia Strategy. Align long-term objectives with short-term priorities of Central Asian republics, including job creation and stimulating investment, accepting that trade-offs will be necessary.
- Launch a new "**European Energy Diversification Initiative**" for a phased transformation to clean energy economies in Central Asia, featuring a catalogue of activities and providers from Europe.
- **Improve data, monitoring and access to finance** for meeting environmental challenges in Central Asia, particularly by making better use of climate change instruments at the EU and global level.
- **Raise the profile, ambition and coordination of water diplomacy** in Central Asia with China and other countries in the region (e.g. Afghanistan and Pakistan). More debate is needed on the overlap between EU and China's interests in Central Asia, and the impact on local people.
- Build on the **EU-China Connectivity Platform** as a mechanism for linking the trans-European transport network (TEN-T) with China's Belt and Road Initiative in Central Asia. The EU should be more proactive in complementing China's hard infrastructure ambitions with its expertise on soft infrastructure to facilitate trade and sustainability.
- **Prepare strategic responses** to the plausible, undesirable, futures in which Europe becomes further marginalised in Central Asia. This should be used to assess EU willingness to engage in more transformative action in Central Asia that helps people there to define their own sustainable future.

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