REGIONAL MECHANISMS FOR THE LOW-CARBON, CLIMATE-RESILIENT TRANSFORMATION OF THE ENERGY-WATER-LAND NEXUS IN CENTRAL ASIA

(Project brief)

NEXUS Project

Through the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety a multi-year regional project is proposed to operationalise the energy-water-land nexus through robust economic and financial analytical work to identify nexus opportunities and demonstrate the business case for cooperation around nexus issues at the regional and national levels.

The project will pave the way for countries to modify planning processes and adopt a whole-of-government approach to addressing the nexus in light of climate change. It will:

- develop tools to increase private sector involvement in nexus-related investments;
- provide mechanisms to quantify and manage the trade-offs that are inherent to nexus projects, promoting integration of policy, technology, and investment for climate-resilient transformation; and
- design a pilot financing mechanism to promote uptake of investment in the nexus.

Led by the OECD in cooperation with UNECE, EBRD and SIC ICWC, the project will commence a Preparatory Phase mission to each country in Central Asia to meet with key stakeholders and scope work packages in Q3/4 2021. The main project will be launched in 2022 and have a duration of 4 years.

To set the scene for this work, a high-level regional dialogue to discuss the benefits of regional cooperation around the energy, water, land-use nexus will be organised as part of the Preparatory Phase.

Opportunity of adopting the NEXUS approach

In light of the rapidly changing climate of Central Asia, regional cooperation on the energy, water, land-use nexus has potential to boost resource security, provide economic gains, improve the
environment and increase the well-being of citizens. Cooperation can also support the region’s adaptation to climate change including response to natural disasters. In addition, regional cooperation can ease access to international financing because of lower risk of stranded assets and maladaptation and higher returns on investment.

Studies indicate\(^1\) that insufficient transboundary cooperation leading to agricultural losses, inefficient electricity trade and lack of access to finance in the region could amount to more than US$ 4.5 billion per annum (or 1.6 % of the regional GDP) while the World Bank estimates that floods annually affect around 950,000 people and cause US$ 4.7 billion of economic losses in the region. Economic and financial analysis under the IKI project will generate more knowledge in this area, quantifying the opportunities for cooperation in the region.

**Background to the NEXUS**

There has been increased interest in the “nexus” between energy, water and land and the challenge of delivering energy, water and food for all citizens in a sustainable and equitable way. The “nexus approach” moves beyond traditional sectoral thinking in order to achieve security and sustainability of all resources. The need to address this nexus has become more urgent due to climate change that is expected to have important impacts in the Central Asia region, challenging previous assumptions on the security of these natural resources in the coming years as well as the emission reduction pledges made under the Paris agreement.

The nexus approach stems from the realisation that energy, water, agriculture and natural ecosystems exhibit strong interlinkages and that under a traditional sectoral approach, attempting to achieve resource security independently, often endangers sustainability and security in one or more of the other sectors. Under the nexus approach, interlinkages, for example, the relationship between water for energy or water for agriculture, synergies and trade-offs are analysed, with the aim of identifying optimum solutions, fostering resource security and efficiency, and reducing impacts and risks from climate change.

\(^1\) Adelphi and CAREC, 2017. Rethinking water in Central Asia - The costs of inaction and benefits of water cooperation