CAWEP
CENTRAL ASIA WATER & ENERGY PROGRAM

Central Asia Water and Energy Program

PHASE 4

Regional cooperation can avert the looming water-energy crisis in Central Asia

THE CHALLENGE

Central Asia is facing critical shortages of water and energy. These shortages could lead to conflicts that threaten lives, livelihoods, and national development.

Climate change has made the water cycle more volatile, has increased the intensity of floods and droughts, and is causing glaciers to shrink. Countries are competing for limited resources to meet the needs of their growing populations and economies. The interconnected, transboundary nature of Central Asia's energy and water challenges means that a crisis in one country is felt beyond its borders.

Cooperating on water and energy security, in the context of a changing climate, is therefore an urgent priority for countries in the region.

REGIONAL COOPERATION HAS GAME-CHANGING POTENTIAL

Central Asia's significant shared infrastructure complemented by shared natural resources such as rivers provides a strong basis for countries to invest in joint management of water and energy.

Collective investment in regional water and energy projects has game-changing potential. For example, major hydropower projects such as Rogun and Kambarata will help to balance water supply for countries' irrigation needs, while overcoming the problem of intermittent energy supply from solar and wind. Such projects can catalyze greater cooperation, improve regional energy connectivity, and enhance resilience to climate risks.

Climate change and the construction of the **Qosh Tepa canal** in Afghanistan could significantly decrease water supply and increase water variability in Central Asia.

Irrigated agriculture accounts for about **20%** of gross domestic product in the region—but without adaptation, crop yields could decline by **30%** by 2050.

Insufficient cooperation on regional water-energy resources poses risks to food security, human and environmental health, economic development, and political stability, and could cost countries more than **$4.5 billion** per year.

Increased regional energy trade alone could generate economic benefits of up to **$6.4 billion** by 2030.

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THE BENEFITS OF COOPERATION

Determined action to expand renewable energy, particularly hydropower, will enhance energy security, reduce air pollution, and support national climate commitments. For example, the Kambarata hydropower project will more than double the Kyrgyz Republic's energy output, enable expanded regional electricity trading, and meet the downstream water needs of Uzbekistan and Kazakhstan.

Updating regional water-sharing arrangements with an eye to the future and explicit links with energy will give countries a legally binding platform to optimize the use of their limited natural resources. Aligning national priorities with regional solutions will build trust that cooperation on water and energy offers substantial benefits for all.

Strengthening the capacity of regional institutions, digitalizing their systems, and expanding their mandate will enable improved data management, integrated decision-making, and more effective planning, monitoring, and operations. These institutions are the best vehicles for discussing how to boost energy trade in Central Asia and strengthen integrated water-energy management for regional economic growth and climate resilience.

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THE ROLE OF CAWEP

CAWEP provides a platform for high-level political and technical dialogue on water, energy, and climate cooperation in Central Asia. It supports the development of data-driven regional approaches and innovative analytics to promote investments, sector reforms, systems modernization, and institutional strengthening.

TRACK RECORD

- Since 2009, CAWEP has facilitated **23** water, energy, and environmental investments worth **$3.78 billion**.
- Phase 3 catalyzed almost **$1.6 billion** in new Bank-funded investments, convened many technical knowledge exchanges, and provided technical assistance to more than **25** national institutions.

PHASE 4 WILL FOCUS ON:

Broadening the evidence base on the economic outcomes of regional water-energy management, with a focus on sustainable win-win approaches and practical solutions.

Strengthening regional institutions to enable better data management and integrated decision-making on water and energy.

Convening regional dialogue to update water-energy agreements in order to maximize regional economic gains.

Facilitating regional investments in climate-resilient initiatives, such as scaling up electricity trade and connectivity and improving water-use efficiency.

Enhancing climate resilience and just-in-time activities, such as disaster risk management, in the water and energy sectors at regional and subregional level.