



Generating Clean Electricity and Contributing to Climate Change Mitigation Goals: The Rogun Hydropower Plant, Tajikistan



Sustainable Development Goals Addressed



Organization, Institution or Company
Ministry of Energy and Water, Government of Tajikistan (Project Management Group for Energy Facilities Construction under the President of the Republic of Tajikistan)
Location of project site, Country
Rogun, Republic of Tajikistan
Brief narrative description of objective/project/activity/initiative
<p>In Tajikistan, decision making on energy and water falls under the authority of the Ministry of Energy and Water Resources of the Republic of Tajikistan. The country relies primarily on hydropower for its electricity generation.</p> <p>Tajikistan is building the Rogun Hydropower Plant which will be the biggest hydropower plant in Central Asia. The Rogun plant is planned to include six hydraulic units with a capacity of 600 MW each and the total capacity of 3,600 MW. Its average annual electricity generation is expected to exceed 17.0 billion kWh per year. Its first unit was launched in 2018 and the second one was commissioned in September 2019.</p> <p>The Rogun hydropower complex is designed as a multi-purpose dam for generating electricity, regulating water, and reducing the risk of floods and droughts. The Rogun HPP will produce sufficient environmentally friendly and clean electricity to fully satisfy Tajikistan’s electricity demand. It will also generate enough electricity to export to neighbouring countries which presently use mostly fossil fuels for electricity.</p> <p>In 2014, the World Bank approved a package of US\$ 526.5 million in grant and credit financing for the Central Asia South Asia (CASA) Electricity Transmission and Trade Project which will interconnect the electric power supply systems of Tajikistan, Kyrgyzstan, Afghanistan and Pakistan.</p>
Economic, environmental and climate benefits, challenges, and lessons learned
<p>In Central Asia, some parts of the sub-region are rich in water resources, but poorly endowed with conventional energy from fossil fuels; whilst other parts of the sub-region are rich in energy resources but suffer from a chronic shortage of water for agriculture and human consumption. The Governments of Central Asia sub-region actively participate in the relevant international and sub-regional consultative mechanisms with a view to coordinate the planning, development, and maintenance of the national and regional water and energy infrastructure and the day-to-day management of the energy and water resources.</p>

The Rogun Plant represents a sustainable water and energy solution contributing to global mitigation goals and regional adaptation objectives. It will provide a valuable contribution to the reduction of the CO₂ emissions in the region.

In addition, the Plant will help to create new jobs and businesses improving the social and economic situation in Tajikistan and neighbouring countries and supporting the sustainable development goals.

Additional information: website addresses and contacts

Ministry of Energy and Water, Government of Tajikistan <https://www.mewr.tj>

Project Management Group for Energy Facilities Construction under the President of the Republic of Tajikistan (2014): Techno-Economic Assessment Study (TEAS, Phase II), Summary, (June 2014) <http://www.energyprojects.tj/images/pdf/iteoen.pdf>

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World Bank Group 2014: Final reports related to the proposed Rogun HPP
<https://www.worldbank.org/en/country/tajikistan/brief/final-reports-related-to-the-proposed-rogun-hpp>

and Baker Tilly Tajikistan, Resettlement Audit of Flooding Zone of Rogun HPP, Stage I:
<http://documents.worldbank.org/curated/en/639941545322964729/pdf/133125-RP-P147617-PUBLIC.pdf>

World Bank Group (2018): Tajikistan Country Economic Update 2018 - Rogun HPP – Potential Resource for Building Human Capital
<http://pubdocs.worldbank.org/en/624741547182513272/Tajikistan-CEU-Fall-2018-FINAL.pdf>



Photos from Ministry of Tajikistan and World Bank