Uzbekistan: Sustainable Hydropower Project

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<tr>
<th>Project Name</th>
<th>Sustainable Hydropower Project</th>
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<tr>
<td>Project Number</td>
<td>50130-001</td>
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<tr>
<td>Country</td>
<td>Uzbekistan</td>
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<td>Project Status</td>
<td>Active</td>
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<td>Project Type / Modality of Assistance</td>
<td>Technical Assistance</td>
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<tr>
<td>Source of Funding / Amount</td>
<td>TA 9236-UZB: Sustainable Hydropower Project</td>
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<td></td>
<td>Technical Assistance Special Fund</td>
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<td>Asian Clean Energy Fund under the Clean Energy Financing Partnership Facility</td>
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**Strategic Agendas**
- Environmentally sustainable growth
- Inclusive economic growth

**Drivers of Change**
- Governance and capacity development
- Knowledge solutions
- Partnerships
- Private sector development

**Sector / Subsector**
- Energy - Large hydropower generation

**Gender Equity and Mainstreaming**
- Some gender elements

**Description**
1. The project will construct three new run-of-river small-sized hydropower plants (HPPs), and provide capacity development for mini/micro HPPs development in the Republic of Uzbekistan. The three sub-projects are selected based on technical and economic viability, and prioritized in the national investment program. The project will contribute to increasing renewable energy and access to reliable energy, and building capacity for sustainable clean energy development.

2. Uzbekistan economy grew by 8% in 2015, averaging 8.2% for 2005-2015. The Government of the Republic of Uzbekistan is pursuing an industrial growth and export-led development strategy and sustainability of the power sector will be critical to support Uzbekistan's development vision. However, the power supply growth, based on 13,500 MW installed generation capacity, remained only at 2% on an average for 2011-2015 due to the need for rehabilitation and replacement of existing old and inefficient power generation units and a lack of investment to expand the generation capacity. The growing demand-supply gap may soon become a critical challenge for the national welfare and economic growth.

3. Uzbekistan is one of the most energy and carbon intensive countries in the world. Thermal power, primarily based on natural gas and steam turbine technology with an average efficiency of 32%, contributes 85% of total power generation, consuming 12 billion cubic meters or 20% of the gas produced in Uzbekistan per annum. This results in (i) missed opportunities for higher value gas exports, (ii) limited system reliability and inefficient load management; and (iii) limited diversification of electricity generation mix vulnerable to long term climate change and unavailability of natural resource. Aware of the need, the Uzbekistan's energy policy has been shifting toward an emphasis on the improvement of energy efficiency and deployment of renewable resources with a target of doubling the share of renewable energy by 2030.

4. With developed capacity of 1,800 MW out of 12,000 MW hydropower potential in Uzbekistan, hydropower accounts for only 11% of total electricity generation capacity. The hydropower facilities are outdated and require considerable investment in modernization for the efficient use of existing water resources. Harnessing the hydropower potential of 650 rivers, irrigation canals and reservoirs will contribute to improving the sustainability of the energy sector in the country. There also exists the potential of local enterprises and organizations to manufacture mini/micro hydropower equipment and facilities. Recognizing this, the government of Uzbekistan recently approved a new program on hydropower sector development for the period of 2015-2019 where the government plans to allocate around $896 million in modernization of hydropower generation facilities and construction of new HPPs in the country with support by the international financial institutions.

5. The Asian Development Bank (ADB) supports energy efficiency and renewable energy projects in Uzbekistan. Lessons from these projects include the need for continued support for project preparation and project readiness, close coordination with the project executing agency on procurement, and need for continued engagement for sector reforms, all of which are addressed under this project. All key sector reforms and institutional improvements are under way with ADB support: the International Financing Reporting Standards and the International Standards on Auditing have been introduced to strengthen financial management capacity; key performance indicators have been introduced; law on renewable energy has been drafted; capacity development activities to strengthen safeguards and gender consideration are under implementation. The sector has been sustainable with cost/recovery tariff; however, further works are necessary to strengthen service delivery and promote private sector participation.

6. The proposed project is aligned with ADB's strategy for Uzbekistan which focuses on energy efficiency and reliable power supply and directly supports the government's policy to modernize and diversify the electricity generation through renewable energy resources. The government requested for stand-alone sovereign lending for the proposed project considering that it is a strategic public asset that is best implemented through turnkey contracts.

**Impact**

**Project Outcome**

**Description of Outcome**

**Progress Toward Outcome**

**Implementation Progress**

**Description of Project Outputs**

**Status of Implementation Progress (Outputs, Activities, and Issues)**

**Geographical Location**
- Nation-wide, Qashqadaryo, Samarkand, Tashkent
Summary of Environmental and Social Aspects

Environmental Aspects

Involuntary Resettlement

Indigenous Peoples

Stakeholder Communication, Participation, and Consultation

During Project Design

Stakeholders’ consultations through community meetings, discussions and interviews will be conducted to share information about the proposed project and to get views from stakeholders on their expectations.

During Project Implementation

Consultation and Participation plan to be prepared during PPTA

Business Opportunities

Consulting Services

A consulting firm has been engaged to conduct feasibility studies, technical, economic, financial due diligence, and prepare safeguard reports. The firm is also tasked to assist the executing agency in preparing bid documents.

Responsibility

Responsible ADB Officer
Kim, Seung Duck

Responsible ADB Department
Central and West Asia Department

Responsible ADB Division
Energy Division, CWRD

Executing Agencies

Joint Stock Company Uzbekenergo
Mr. Ulugbek Mustafoev, Chairman of the Board, Uzbekenergo
6 Istiklal Street Tashkent, 100000, Uzbekistan
Joint Stock Company Uzbekhydroenergo
22 Navoi Street, Tashkent, Uzbekistan, 100011

Timetable

Concept Clearance
- 

Fact Finding
- 

MRM
- 

Approval
22 Nov 2016 

Last Review Mission
- 

Last PDS Update
28 Sep 2018

TA 9236-UZB

Milestones

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<th>Signing Date</th>
<th>Effectivity Date</th>
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<td>22 Nov 2016</td>
<td>15 Dec 2016</td>
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<td>28 Feb 2018</td>
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Project Page

https://www.adb.org/projects/50130-001/main

Request for Information

http://www.adb.org/forms/request-information-form?subject=50130-001

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