Kyrgyz Republic: Uch-Kurgan Hydropower Plant Modernization Project (formerly Energy Sector Project)

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Uch-Kurgan Hydropower Plant Modernization Project (formerly Energy Sector Project)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Number</td>
<td>49240-002</td>
</tr>
<tr>
<td>Country</td>
<td>Kyrgyz Republic</td>
</tr>
<tr>
<td>Project Status</td>
<td>Approved</td>
</tr>
<tr>
<td>Project Type / Modality of Assistance</td>
<td>Grant Loan</td>
</tr>
</tbody>
</table>

**Source of Funding / Amount**

- **Grant**: 0643-KGZ: Uch Kurgan Hydropower Plant Modernization Project (formerly Energy Sector Project)  
  Concessional ordinary capital resources lending / Asian Development Fund  
  US$ 40.00 million
- **Loan**: 3778-KGZ: Uch Kurgan Hydropower Plant Modernization Project (formerly Energy Sector Project)  
  Concessional ordinary capital resources lending / Asian Development Fund  
  US$ 60.00 million
- **Loan**: 8354-KGZ: Uch Kurgan Hydropower Plant Modernization Project (formerly Energy Sector Project)  
  Eurasian Development Bank  
  US$ 45.00 million

**Strategic Agendas**
- Environmentally sustainable growth
- Inclusive economic growth
- Regional integration

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

**Sector / Subsector**
- Energy
  - Energy efficiency and conservation
  - Energy sector development and institutional reform
  - Large hydropower generation

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

**Description**
The proposed project will replace ageing electrical and mechanical equipment for power generation and transmission at the Uch-Kurgan hydropower plant (HPP) in the Naryn River cascade and undertake silt and sedimentation removal which hinders the proper operation of hydromechanical equipment of the HPP. This will:

1. Increase the availability of clean hydropower for domestic use and potential export to Uzbekistan and Kazakhstan,
2. Enhance the integrity of hydromechanical structures and ensure safe and optimal reservoir operation,
3. Contribute to multiyear water supply management from the Naryn River cascade, which is essential for downstream agriculture mainly in Uzbekistan.

**Project Rationale and Linkage to Country/Regional Strategy**
The Kyrgyz Republic is rich in hydropower resources, which potentially can generate about 150 terra watt-hour (TWh) electricity per year of which only 10% has been exploited so far. For 2018, about 80% of its 3,920-megawatt (MW) electricity generation capacity is from hydropower, and the rest comes from two combined heat and power plants in Bishkek and Osh. Most of the country’s hydropower generation comes from the Naryn River cascade, which is the powerhouse of the Kyrgyz Republic; its six HPPs produce 92% of the country’s hydropower supply. The Toktogul HPP built in 1975 is the largest of the six plants with 1,200 MW of generation capacity, and the Uch-Kurgan HPP built in the early 1960s is the oldest; the other four plants are relatively new. Uch-Kurgan is 271 km southwest of Bishkek, near the Uzbekistan border.

**Impact**
Operational performance of Kyrgyz Republic power sector improved (Concept for Development of Energy Sector of The Kyrgyz Republic 2030)

**Project Outcome**

| Description of Outcome | Hydropower generation from Naryn River cascade improved |

**Progress Toward Outcome**

**Implementation Progress**

| Description of Project Outputs | Uch Kurgan HPP facility modernized  
EPP’s commitment to operational sustainability and diversity reinforced |

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

**Geographical Location**
Nation-wide
Summary of Environmental and Social Aspects

Environmental Aspects
An environmental assessment was conducted in accordance with ADB’s Safeguard Policy Statement (SPS 2009). Anticipated environmental impacts of the project are related to construction and rehabilitation of dam structures. The project complies with public disclosure and consultation requirements. An initial environmental examination (IEE) including an EMP was prepared and disclosed on 26 Sep 2018. The IEE will be updated by the EA as needed.

Involuntary Resettlement
During the project preparation stage, it was confirmed that all the civil works will be implemented within the confines of the existing Uch-Kurgan HPP where no land acquisition or livelihood impacts will occur and that all the lands for sediment disposal sites are public lands. Public consultation was conducted in August 2018 and Grievance Redress Mechanism was prepared which will be functional once the project is approved.

Indigenous Peoples
Any of the project components will neither impact any community of indigenous people, groups, or ethnic minorities nor interfere with their territories, livelihoods, customary properties, or natural / cultural resources.

Stakeholder Communication, Participation, and Consultation
During Project Design Stakeholder consultation was conducted during project design especially during the IEE preparation.
During Project Implementation Stakeholder consultation and participation will be promoted throughout project implementation.

Business Opportunities
Consulting Services Consulting services under the project includes: (i) Project Implementation Consultant; EPP PIU individual consultants; EPP women Engineers program; and external audit.
All consultants will be recruited according to ADB’s Guidelines on the Use of Consultants (2013, as amended from time to time). External auditing and public information program consultants will be selected using least-cost selection (LCS). PIU support consultant will be recruited using individual consultants selection (ICS).

Procurement Procurement packages will include: (i) Dredging equipment and related services; (ii) Civil structure repair and dam monitoring system; and (iii) Electromechanical generation equipment and hydraulic steel structure.
All procurement of goods and works will be undertaken in accordance with ADB’s Procurement Guidelines (2015, as amended from time to time).

Responsible ADB Officer Sohail Hasnie
Responsible ADB Department Central and West Asia Department
Responsible ADB Division Energy Division, CWRD

Executing Agencies
OJSC Electric Power Plants
326 Jibek Jolu Prospect,
Bishkek
Kyrgyz Republic

State Committee for Industry, Energy and Subsoil Use of the Kyrgyz Republic
GEOAGENCYKG@GMAIL.COM
Erkindik Avenue,
2 Bishkek, 720740

Timetable
Concept Clearance 19 Apr 2017
Fact Finding 16 Jul 2018 to 27 Jul 2018
MRM 15 Oct 2018
Approval 26 Mar 2019
Last Review Mission -
Last PDS Update 26 Mar 2019

Grant 0643-KGZ

<table>
<thead>
<tr>
<th>Approval</th>
<th>Signing Date</th>
<th>Effectivity Date</th>
<th>Closing</th>
<th>Original</th>
<th>Revised</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 Mar 2019</td>
<td>-</td>
<td>30 Jun 2025</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Financing Plan

<table>
<thead>
<tr>
<th>Project Cost</th>
<th>Total (Amount in US$ million)</th>
<th>Date</th>
<th>ADB</th>
<th>Others</th>
<th>Net Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative Contract Awards</td>
<td>40.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| ADB | 40.00 | 26 Mar 2019 | 0.00 | 0.00 | 0% |
| Counterpart | 0.00 | | | |
| Cofinancing | 0.00 | 26 Mar 2019 | 0.00 | 0.00 | 0% |
**Loan 3778-KGZ**

<table>
<thead>
<tr>
<th>Approval</th>
<th>Signing Date</th>
<th>Effectivity Date</th>
<th>Closing</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 Mar 19</td>
<td>-</td>
<td>-</td>
<td>30 Jun 2025</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financing Plan</th>
<th>Loan Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (Amount in US$ million)</td>
<td>Date</td>
</tr>
<tr>
<td>Project Cost</td>
<td>75.00</td>
</tr>
<tr>
<td>ADB</td>
<td>60.00</td>
</tr>
<tr>
<td>Counterpart</td>
<td>15.00</td>
</tr>
<tr>
<td>Cofinancing</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Loan 8354-KGZ**

<table>
<thead>
<tr>
<th>Financing Plan</th>
<th>Loan Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (Amount in US$ million)</td>
<td>Date</td>
</tr>
<tr>
<td>Project Cost</td>
<td>45.00</td>
</tr>
<tr>
<td>ADB</td>
<td>0.00</td>
</tr>
<tr>
<td>Counterpart</td>
<td>0.00</td>
</tr>
<tr>
<td>Cofinancing</td>
<td>45.00</td>
</tr>
</tbody>
</table>

**Project Page**

https://www.adb.org/projects/49240-002/main

**Request for Information**

http://www.adb.org/forms/request-information-form?subject=49240-002

**Date Generated**

15 September 2019

ADB provides the information contained in this project data sheet (PDS) solely as a resource for its users without any form of assurance. Whilst ADB tries to provide high quality content, the information are provided "as is" without warranty of any kind, either express or implied, including without limitation warranties of merchantability, fitness for a particular purpose, and non-infringement. ADB specifically does not make any warranties or representations as to the accuracy or completeness of any such information.