

# Enguri Hydro power Plant Rehabilitation project

<b>Country:</b>	GEORGIA
<b>Project Number:</b>	4304
<b>Business Sector:</b>	Energy Eurasia
<b>Notice Type:</b>	STATE
<b>Environmental Category:</b>	B
<b>Target Board Date:</b>	11 Dec 2019
<b>Status:</b>	In Exploratory, Pending Concept Review
<b>PSD Disclosed:</b>	02 Oct 1998

## Project Description

The Project aims to make improvements to Enguri HPP to alleviate critical power shortage in Georgia at a low cost and to enhance the environmental benefits of the Enguri Hydro Power Plant facility.

The Project generally aims at

- increasing the availability of non-polluting renewable energy in the country; and
- improving operational safety of the Enguri power facility.

## Project Objectives

The loan extension proposed for consideration in the fourth quarter of 2017 will be targeting further improvements to the reliability and operational performance of the Enguri power plant through a rehabilitation programme for the Enguri headrace tunnel and penstock. The Project will also finance rehabilitation of Enguri switchyard, Vardnili II spillway gates, Enguri river diversion weir and access road, together with implementation of sedimentation management plan and improved operational procedures to promote resilience to climatic variability and climate change.

## Transition Impact

Good

The Project will enable the country to enhance production of the most economic source of electricity in the Georgian context. It will also contribute to the balancing of the Georgian electricity system and supports the market operation.

The extension is in line with the Bank's Green Economy Transition (GET) Approach and will deliver 'Green' transition impact, with (i) strong climate change mitigation benefits through increasing the energy efficiency of a major hydropower plant, and (ii) strong climate change adaptation benefits through supporting the development of climate resilient infrastructure by strengthening the regulatory environment for hydropower operations on a river basin level.

## **Client Information**

### **GEORGIA SOVEREIGN**

The Borrower is Georgia that will on-lend to Engurhesi Ltd, a state-owned special purpose company that owns and operates Enguri HPP.

## **EBRD Finance Summary**

USD 114,489,000.00

Total financing of EBRD including the extension under consideration is USD 105.0 million.

Loans were arranged in 1998 (USD 38.7 million), 2006 (USD 10.0 million) and 2010 (EUR 20.0 million) for the initial rehabilitation of the facility with co-financing provided by the European Union, the Japanese Government, KfW, EIB and the Government of Georgia.

The next phase of the Project will be covered with a loan extension for up to EUR 28.0 million with possible co-financing from the European Commission and the Government of Georgia for the remaining project cost.

## **Total Project Cost**

USD 223,828,892.00

The project cost for the extension project are estimated at EUR 35 million which will bring total project cost for all phases financed by the Bank to EUR 160 million (USD 182.2 million).

## **Environmental and Social Summary**

This Project was initially classified as B/1, requiring an analysis of the main impacts associated with the Project and an environmental audit of the existing facilities. These were carried out by international consultants as part of the project preparation.

The currently considered loan extension is categorised B (2014). The rehabilitation of components of the Enguri hydropower scheme as well as the management of the reservoir sediments are expected to be associated with environmental or social impacts that can be readily addressed.

The environmental and social (E&S) due diligence of the 4th phase of rehabilitation of Enguri hydropower scheme was undertaken internally. The proposed works are not subject to an Environmental Impact Assessment under the Georgian legislation.

The main E&S risks or issues that were identified during the due diligence are: (i) the occupational health and safety risks associated with the rehabilitation of penstocks and tunnels (works at height in confined spaces with significant water infiltrations), (ii) the sustainability of the long term solution

that will be adopted for sediment management, and (iii) the contextual risks triggered by the fact that works will need to be implemented on both sides of the administrative boundary line.

An environmental and social action plan (ESAP) was prepared and agreed with Engurhesi, in order to address the identified E&S risks.

The Project has been structured to meet EBRD PRs.

A greenhouse gas assessment was undertaken and the Project, through the reduction of losses and the head gains, is expected to result in an increase of production by 250GWh, corresponding to the displacement of 83.25 tCO<sub>2</sub> equivalent/year according to EBRD's greenhouse gas assessment methodology.

## Technical Cooperation

TC funds of EUR 450,000 for the "Enguri Hydrology Initiative" for river basin coordination and data sharing among public and private sector hydropower operators, promoting improved operational procedures for dam safety and power generation in light of increasing hydrological variability due to the impacts of climate change.

## Company Contact Information

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## Business opportunities

For business opportunities or procurement, contact the client company.

## General enquiries

EBRD project enquiries not related to procurement:

Tel: +44 20 7338 7168; Fax: +44 20 7338 7380

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## Public Information Policy (PIP)

The PIP sets out how the EBRD discloses information and consults with its stakeholders so as to promote better awareness and understanding of its strategies, policies and operations.

[Text of the PIP](#)

## Project Complaint Mechanism (PCM)

The EBRD has established the Project Complaint Mechanism (PCM) to provide an opportunity for an independent review of complaints from one or more individuals or from organisations concerning projects financed by the Bank which are alleged to have caused, or likely to cause, harm.

Any complaint under the PCM must be filed no later than 12 months after the last distribution of EBRD funds. You may contact the PCM officer (at [pcm@ebrd.com](mailto:pcm@ebrd.com)) or the relevant EBRD Resident Office for assistance if you are uncertain as to the period within which a complaint must be filed.