

Developed by



European Bank
for Reconstruction and Development

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PROJECT DESCRIPTION

The plant is a run off the river type based on a 2x8.40 MWe Kaplan type turbines configuration with a total 16.80 MWe production. The plant is expected to produce 56.60 GWh/year equivalent to cover the demand for over 25 thousand households. The energy produced will allow saving around 30,904 tCO₂/year.

CARBON FINANCE

The Project Sponsor considered applying for carbon financing and is in the process of selecting the project developer

ENVIRONMENTAL AND SOCIAL KEY ISSUES

- Potential pollution/contaminant emissions during construction activities;
- Water biota impacts;
- Use of agricultural area;
- Stakeholder engagement.
- Seismic Zone

MITIGATIONS/SUCCESSFUL IMPLEMENTATION

- Supervision of the construction activities by environmental, social and health & safety experts to avoid, prevent, minimize and monitor potential adverse impacts on the affected social and environmental compounds;
- Biota status monitoring during operation phase;
- Installation of fish protection device to avoid fishes entering the communication channel to the power house;
- The client is received Agricultural Permit in order to use agricultural areas for electricity production purposes;
- Stakeholder involvement is required to involve and inform the stakeholders and to reduce the risk of conflicts with ensuring good public relations.
- During the design of civil structures foundations the effective ground acceleration coefficient will be taken as 0.40 as required by Turkish Earthquake Regulations.

GENERAL INFORMATION

Project Location	Kırıkkale Province
Technology	Hydroelectric Power Plant
Plant Capacity	16.80 MWe
Annual Energy Production	56.60 GWh/year
Annual CO ₂ Reduction	30,904 tCO ₂ /year

TIME SCHEDULE

Start of Construction	April 2013
Expected Commercial Operation	July 2015

FINANCIAL PARAMETERS

Total Project Cost	EUR 34,153,739
MidSEFF Loan	EUR 20,660,744
Payback Time	9.34 years
Internal Rate of Return	11.58 %