

Serhat Hydro Power Plant

Developed by



Supported by



European Investment Bank



PROJECT DESCRIPTION

The plant is a run off river with 8.89 MWe installed capacity. Its configuration is with 2x4.45 MWe horizontal axis Francis turbines. The plant is expected to produce 24.21 GWh/year which corresponds to the demand of over 11 thousand households. The energy produced will save emissions amounting to 13,243 tCO₂/year.



CARBON FINANCE

The Project Sponsor is not considering carbon finance.



ENVIRONMENTAL AND SOCIAL KEY ISSUES

- Potential pollution/contaminant emissions during construction activities;
- Water biota impacts;
- Use of forest area;
- Cumulative impacts with other HEPPs and with power connection line;
- Stakeholder engagement.



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 compounds;
- Biota status monitoring during operation phase and installation of fish protection device;
- Implementation of a replantation plan;
- Overall impact with power transmission line construction should be duly assessed;
- New stakeholder involvement is required to involve and inform the stakeholders and to reduce the risk of conflicts while ensuring good public relations.

GENERAL INFORMATION	
Project Location	Giresun Province
Technology	Hydroelectric Power Plant
Plant Capacity	8.89 MWe
Annual Energy Production	24.21 GWh/year
Annual CO ₂ Reduction	13,243 tCO ₂ /year
TIME SCHEDULE	
Start of Construction	August 2013
Expected Commercial Operation	March 2015
FINANCIAL PARAMETERS	
Total Project Cost	USD 24,268,698
MidSEFF Loan	USD 14,047,915
Payback Time	8.7 years
Internal Rate of Return	7.8 %