MAVI CONSULTANTS
SUSTAINABILITY MANAGEMENT

VOLUNTARY EMISSION REDUCTION PROJECT

KALEALTI 15 MW HYDROPOWER PLANT, TURKEY

by

TEKTUĞ
ELEKTRİK ÜRETİM A.Ş.

PROJECT DESCRIPTION

VCS VOLUNTARY CARBON STANDARD

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PROJECT DESCRIPTION

The *Kalealtı 15 MW Hydropower Plant, Turkey*, is a small scale hydropower project located in Osmaniye province, southern Anatolia, in one of the lesser developed regions in Turkey. Total installed capacity of this greenfield project is 15 MW_e, consisting of 2 turbines with an estimated net power supply to the grid of 51,640 MWh per annum, corresponding to an annual emission reduction of 31,796 tons of carbon-dioxide. The project is in implementation since November 2006.

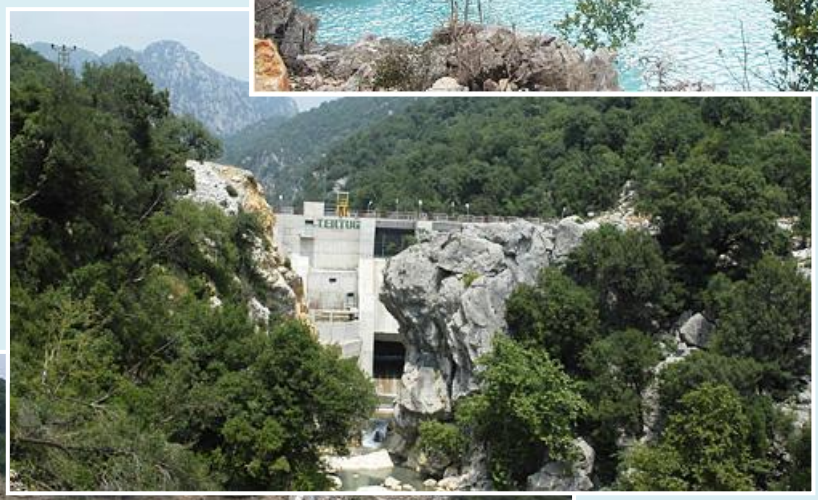
The purpose of this voluntary emission reduction project is to generate power and reduce emissions in an efficient, clean, reliable and sustainable way with utmost respect on social and environmental reflections. It is a run-of-river type project with a small reservoir and contributes to local sustainable development in various ways.

This renewable energy project is developed according to the VCS 2007.1 voluntary standard. It helps reducing greenhouse gas emissions stemming from fossil fuel combustion and fighting global warming. It reduces carbon dioxide emissions by partially substituting the electricity supply of fossil fuel fired power plants in Turkey.

Project Location

Fikri Ispir
Neighborhood Headman

"The project has created new jobs during construction and operation. Local people are satisfied and are not mistreated in any way. The project owner has committed its resources for our community projects and we benefit from the project."



HIGHLIGHTS

Installed Capacity	15 MW
Location	Southern Anatolia, Turkey
Type	Grid Connected, Small Scale Hydropower Plant Electricity Generation from Renewable Resources
Standard	Voluntary Emission Reduction Project Voluntary Carbon Standard (VCS) 2007.1
Verified VCUs	2006: 660 $tCO_{2\text{-}eq}$ 2007: 21,611 $tCO_{2\text{-}eq}$ 2008: 22,572 $tCO_{2\text{-}eq}$
Project Owner	Tektug Elektrik Uretim A.S.
Carbon Consultant	Mavi Consultants
Greenhouse Gas Targeted	CO_2

CONTRIBUTION to SUSTAINABLE DEVELOPMENT

BENEFITS of the PROJECT

The project contributes to local sustainable development by:

- Replacing fossil fuel consumption, associated CO_2 emissions and air pollutants.
- Providing employment opportunities to local people: Roughly 150 -mostly local- people during construction and several others during operation.
- Improving electricity supply quality in the region.
- Supporting the neighbour fishery and recreation area.
- Providing various voluntary benefits to local communities.
- Know how and technology transfer to a less-developed region.

Pomegranate trees planted by the project owner

"DO NO HARM" ASSESSMENT

- Local stakeholders are consulted and informed about the project during the design of the project. The project is supported by local residents and authorities.
- Local people are compensated fairly for land purchases.
- Risky areas are fenced to prevent accidents and drowning of animals.
- Public or local communities do not report any adverse environmental or social impact.
- The by-passed river basin is located on a rocky area and there are no farmlands or critical ecosystems which are affected from the project. The project maintains the flow (more than legally required) in the river and mimics natural flow patterns.
- The Project has not caused any involuntary relocation.

CSR Activities by Tektug:

- **5,500 trees** are planted at the project area voluntarily. A local gardener is employed for maintaining the plantations.
- A **bridge** is built at the project region, which also serves local people. This bridge replaces the old bridge, which could not be used when river water level rises, thus improving local transportation infrastructure.