

VOLUNTARY EMISSION REDUCTION PROJECT
KARGILIK 24 MW HYDROPOWER PLANT, TURKEY



PROJECT DESCRIPTION



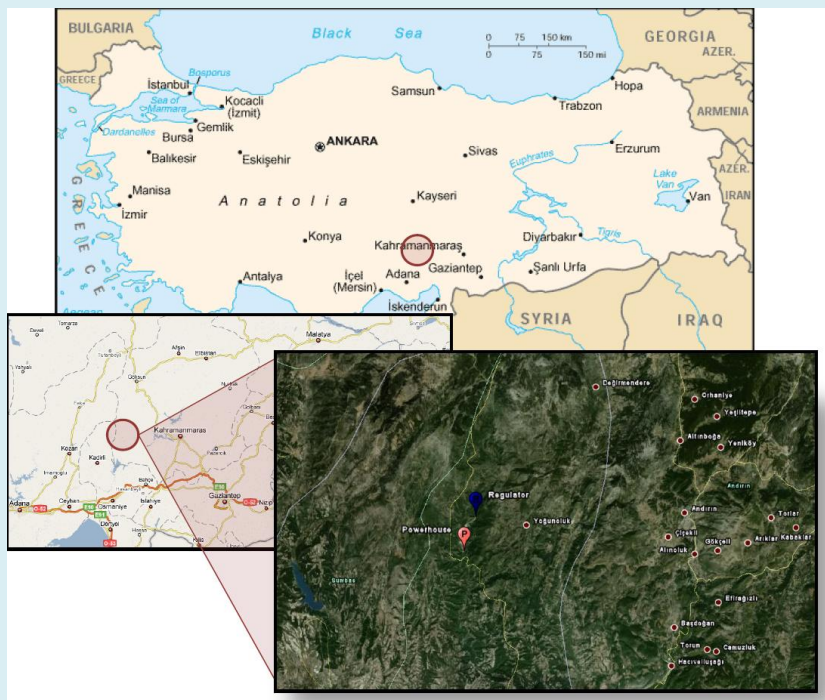
Children of the gardener employed by the project visit the garden after school

PROJECT DESCRIPTION

The *Kargılık 24 MW Hydropower Plant, Turkey*, is a low-impact hydropower project located in Kahramanmaraş province, south-eastern Anatolia. Total installed capacity of this greenfield project is 24 MW_e, consisting of 2 turbines with an estimated net power supply to the grid of 71,000 MWh per annum, corresponding to an annual emission reduction of 43,717 t carbon-dioxide. The project is in implementation since April 2005.

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.

The purpose of this voluntary emission reduction project is to generate power in an efficient, clean, reliable and sustainable way with utmost respect on social and environmental reflections. It makes use of the water flow of the Keşiş River to generate electricity from this renewable source and feeds it to the national grid.



Muzaffer Çeribaş
Tractor Operator

“The project has created new jobs during construction and operation. I am living in the nearby Bulgurkaya Village and we benefit from the project. We did not face with any adverse environmental impact and the local community supports the project.”





HIGHLIGHTS of PROJECT

Installed Capacity	2 x 12 MW
Location	South-Eastern Anatolia, Turkey
Type	Grid Connected Hydropower Plant Electricity Generation from Renewable Sources
Standard	Voluntary Emission Reduction Project Voluntary Carbon Standard (VCS) 2007.1
Verified Emissions (VCUs)	2008 Vintage: 34,556 t CO ₂ -eq
Project Owner	Tektug Elektrik Uretim A.S.
Carbon Consultant	Mavi Consultants
Greenhouse Gas Targeted	CO ₂

CONTRIBUTION to SUSTAINABLE DEVELOPMENT

The project owner, Tektug Enerji, only invests in renewable energy projects in the less-developed regions of Turkey.



The project owner has planted **4,900** trees at the project area voluntarily (mostly almond and chestnut saplings).

BENEFITS of the PROJECT

The project contributes to local sustainable development by:

- Replacing fossil fuel consumption, associated CO₂ emissions and air pollutants
- Providing various employment opportunities (both during construction and operation) to local people
- Developing local economy by purchasing land from local land owners with premium prices
- Improving electricity supply quality in the region
- Providing various voluntary benefits to local communities
- Technical training to employees
- Know how and technology transfer to a less-developed region, where income per capita is lower than the country averages.



Figure 1. Local employees responsible of planted (almond) trees



Figure 2. Planted peach tree



Figure 3. Project is well-integrated into its surroundings