



Sustainability action · Project Renewable Energy and Energy Efficiency

Huóshuǐ Grouped Small Hydropower

Clean energy for remote mountain communities

The Rural China Grouped Small Hydro Project consists of a group of 95 small-scale hydropower plants which generate clean renewable electricity across rural south western China. The project contributes to mitigating greenhouse gas emissions by generating hydroelectric power rather than burning coal and makes a substantial difference to the lives of local communities.

Project

The plants are all small-scale, ranging in size from 0.1 to 10 MW capacity. They use a 'run-of-river' design, which means they are able to utilise the power of the rivers with no significant environmental or social impacts. The plants supply renewable electricity to the Southern and Central China Power Grids, which are heavily reliant on power from burning coal.

This project helps meet China's growing demand for power with clean, renewable energy. Combined the hydropower plants

prevent approximately 700,000 tonnes of greenhouse gases from entering the atmosphere each year. The cost of building small-scale hydropower plants in remote locations is a significant barrier to their construction. These projects would not have been financially viable without the extra revenues from carbon credits.

In addition, carbon credits are used to fund social initiatives identified and implemented with the support of the local communities and NGO's. Projects like disaster relief funds, installing composting toilets, agricultural and education programmes are implemented in cooperation with local organisations. Agricultural workshops on growing fruit trees and other sustainable crops offer increased income opportunities for local farmers.

The overall outcomes for these isolated multi-cultural communities reach far beyond economical and environmental success. Education, jobs, social infrastructure, and educating workshops on agriculture practice provide important benefits.

Checklist	Additionality and permanence	3 rd party verified	Transparency	Annual CO ₂ -reduction	Social and environmental benefits	Marketing material
Project 300 494	According to the rules of the VCS and Social Carbon Standard	By TÜV Rheinland	Provided by Markit Environmental Registry	700,000 tCO ₂ e	As documented in our database	High resolution pictures and videos available



Location

The hydropower plants are spread across four provinces, in some of the least developed areas of China. 67 of them are located in Chongqing Municipality, 9 in Yunnan Province, 13 in Sichuan Province and 6 in Guizhou Province.

Project achievements

Socio-economic impact

- Jobs for locals have been created both in construction and maintenance of the power plants, with training on the job and health care benefits.
- Agricultural workshops are offered to local farmers according to their needs as expressed in stakeholder meetings, e.g. on growing fruit trees and sustainable crops. In addition, free tools and an agricultural library with books and DVDs are provided by a local NGO and funded by carbon credits.
- Local roads and access to community infrastructure is improved.
- Availability of clean energy reduces the need for open fireplaces in households and thus reduces respiratory diseases.
- The project contributes to a sustainable economic development in the region and improves grid stability.

Environmental impact

- Reducing the need to collect firewood leads to less deforestation and soil erosion.
- The local air quality is improved and pollutants such as sulphur dioxide and nitrogen oxide are reduced.

