Hydroelectric Plants Replace Fossil Fuels

In the southwest of China, four small run-of-river power plants are being constructed. The clean power generated is fed into the power grid and replaces power from the combustion of fossil fuels. At the same time, the project creates local jobs.

The project includes the construction and operation of four run-of-the-river power plants in rivers Qu, Tongdao und Yangxi in the Hunan province, southwest China. The clean electricity from renewable energy sources is fed into the power supply system of the Central China Power Group (CCPG) and replaces a part of the power production produced on the basis of fossil fuels. In this way, greenhouse gas emissions are reduced.

175 GWh energy have been produced since the project has started which equals the total yearly energy demand of some 38,000 Swiss households.

Moreover, the construction of the hydroelectric power plants supports the development of the local economy, and additionally improves the local power supply and helps to overcome the power scarcity in the region. In order to prevent possible negative effects of the water power utilization on the soil quality and vegetation, corresponding water and soil conservation measures are taken after the construction of each hydroelectric power plant.

The project brings money to the villagers and the economic situation has improved. A good road has been built and I can easily transport my oranges to the nearby town.

Farmer from a Miao-Dong family
For the local population, formerly farmers, the hydroelectric power plants create permanent employment. The jobs created during construction and operation increase the income of the local population and support the development of agriculture for the disadvantaged local population. The residents of the surrounding villages were actively involved during the development phase. Also, the project has built roads and bridges and sponsored the new irrigation system for the local village which has improved the living conditions in the region.

And have a look at more pictures on myclimate-Facebook!

**Impacts and benefits achieved so far:**

- 231'712'577 kwh electricity produced
- 196'864 tons of CO₂ reduced
- 66 jobs generated

The project is located in a county in a mountainous region where 16 ethnic minority groups live. 61% are Miao and Dong people.

The four turbines inside the power station. Technical rooms can be seen on the left side.