Protecting our climate

Renewable Energy Projects

Longwangtan Hydro Power Project

This project constructing a run-of-river hydro power station in Guizhou Province, south west China. The project displaces electricity generated by fossil-fuel power plants. When established, the projected emission reductions of circa 48,000 tCO_2 equivalent between 2006 and 2008, verified and certified to the Voluntary Carbon Standard.

Technology partner
ClimateBridge

Country
China

About your project

This project is located in the relatively poor and undeveloped province of Guizhou, China. The run-of-river facility has a total capacity of 15MW and supplies electricity to the southern power grid. This clean energy displaces electricity that is mainly generated by fossil-fuel power stations.

The development of renewable energy supplies in China brings local as well as global benefits. Most electricity in China is generated using coal, and with this comes local atmospheric pollution and issues around the disposal of fly ash.

The project brings benefits to the region, however, over and above lower carbon emissions. There were temporary job opportunities, for example, during the construction period and 20 permanent jobs during the operation time. Because it is local and a reliable supply, the project also stabilises the supply of electricity which enables people to plan more effectively – which is better for quality of life and business.

These images have been provided by individuals working with the project partners

Bravington House, 2 Bravington Walk, Regent Quarter, Kings Cross, London N1 9AF
T +44 (0)20 7833 6000 F +44 (0)20 7833 6049 email info@carbonneutral.com www.CarbonNeutral.com

How carbon offsetting helps the project

The most common form of power in China is produced from burning fossil fuels like coal. It can be expensive to operate technologies that are not common practice – and that is where money from carbon offsetting helps. Energy generated from older, more polluting technologies can be displaced by using cleaner, renewable technologies – in this case hydro power. The reductions in CO_2 emissions achieved by a project are measured by an independent verifier to internationally recognised standards, and bought as a 'carbon credit' by clients of The CarbonNeutral Company to 'neutralise' their own emissions.

To be eligible to sell carbon credits, projects have to pass 'additionality tests' – tests which show that the project would not have happened in the normal course of events.

In this case, the key point was:

- to show that the project was not financially attractive without money from carbon financing: the project uses internal rate of return (IRR) to assess the financial viability of the project against acceptable benchmarks used for similar projects in the region. The project compared the IRR with and without carbon financing and found the IRR without carbon financing to be much lower than the benchmark

Verification

This project is verfied to the Voluntary Carbon Standar (VCS). A copy of the verification report and further details can be found within the project registry of CarbonNeutral.com.

Project area co-ordinates:
108 52 E / 25 53 N