



Sustainability action · Project Renewable Energy and Energy Efficiency

Gansu Anxi wind farm, China

At the time of its construction in 2007, Anxi was the largest wind farm in Gansu Province. It has contributed to economic development, development of the wind power sector and avoidance of fossil fuels use in the region.

Project

Anxi Gansu wind farm has a nominal power capacity of 100.5 MW. The wind farm comprises 134 wind turbines with a capacity of 750 kW each. It was one of the first in China to be constructed entirely using domestic technology.

All the turbines were manufactured by Goldwind Science & Technology Co. Ltd., the largest manufacturer of wind turbines in China.

The wind farm supplies approximately 230'145 MWh of electricity per year to the North West China regional power grid. This grid covers five provinces (Gansu, Shaanxi, Qinghai, Ningxia Hui Autonomous Region and Xinjiang Uygur Autonomous Region).



Location

The wind farm is located north of the town of Anxi, in the northwest part of Gansu Province in Western China. This area is part of the Gobi desert. It lies on the ancient Silk Road linking China with Europe. The province has a large population of minority peoples, which are often victim of earthquakes and droughts. Wages in this part of China are still low, with average family incomes less than \$2,000 per year.

Project achievements

Socio-economic impact

- **The project provides enough clean energy to power over 241'000 households** (assuming the average household size of 3.67 in Gansu province and average electricity consumption of 3'493 kWh per capita in China).
- **Construction of the wind farm provided over 100 local jobs and more than 30 permanent employees during the operation period.** Salaries provided were above typical farming wages in the area. In addition, employees have received training in both technical aspects of the wind farm and health and safety.
- **The project has donated financial resources to enable a new local school** to be established named "Hope School". Currently, more than 650 children are enrolled. The project thus enables more local children to receive an education.

Environmental impact

- The project reduces over 225'000 tCO₂ per year. It leads to significant reductions in the release of air pollutants, including sulphur dioxide (SO₂), nitrogen oxides (NO_x) as well as other particulates that are typically associated to the burning of fossil fuels.
- Operation of a wind farm uses significantly less water than the equivalent fossil fuel sized plant. This is an issue of increasing importance in the desert regions of western China.



Checklist Project 301712

Commercial Operation Date

Turbines commissioned between 1 July and 26 October 2007

Total capacity

100.5 MW

Estimated Annual Electricity Generation

230'145 MWh

Quality Assurance and Verification

Annual audit by PWC

Annual electricity verified by Perry Johnson Registrars

Transparency

RECs listed in GoldPower Register (<http://goldpower.net/goldpowerregister>)

Underpinning carbon credits retired in Gold Standard Market Registry

Marketing material

High-resolution pictures available

Reportability

Meets GHG Protocol Scope 2 Guidance criteria

GoldPower credentials projects certified by



GoldPower credentials reportable under



thesouthpolegroup.com/renewable_energy

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