

# Renewable Energy Project



## Damao Wind Power Project

This project generates clean energy from 40 new wind turbines in China.

### Standard

Gold Standard (GS)

### Country

China

## About your project

Located in Inner Mongolia, these 40 new wind turbines have a total capacity of 50MW of clean electricity which is delivered to the North China Power Grid. The project reduces CO<sub>2</sub> emissions by displacing electricity which would otherwise have been drawn primarily from fossil fuel fired power stations.

The Gold Standard requires project developers to hold two rounds of stakeholder consultations: one before construction and one at the time of operation. As such, local residents, businesses, schools, governments and not-for-profits were engaged with, resulting in strong support for the project.

Beyond the climate change benefits, the project will create around 20 long-term jobs and over 100 temporary employment opportunities during construction. Throughout the first five years, employees will receive substantial training to ensure optimal operation and maintenance of the project. The turbine foundations, transmission cables and materials for building access roads have all been sourced locally, helping to strengthen the region's economy. To support the local communities, the project developer collaborated with the local government on a joint initiative placing qualified English teachers into schools.

To comply with the Gold Standard's requirements, the project's sustainable development benefits must be monitored, including the success of the language training programme and the number of people employed to maintain the turbines. To ensure the environmental impacts are minimised, the soil is also monitored regularly by an ecological institute.



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

## About wind power

Wind is an abundant energy resource which can be used to generate clean electricity through wind turbines. The energy in wind flowing through the turbines spins large propeller-like rotor blades. In turn, this rotates a shaft which is connected to an electrical generator which converts the kinetic energy of wind into electrical energy. The output of a wind turbine depends on the turbine's size and the wind's speed through the rotor blades. These blades range from around 30 to 90 metres in diameter and the supporting towers are roughly the same size in height. The power generated by utility-scale turbines varies from 100 kilowatts to as much as five megawatts. Larger turbines are grouped together into wind farms, providing bulk power to the electrical grid which is sent through transmission and distribution lines to homes and businesses.



## How carbon offsetting helps the project

It is expensive to develop and operate renewable technologies and that is where carbon finance can play an important role. Wind power projects like this one are not required by law and often have to overcome financial and technological barriers to realise implementation. Carbon finance provides an additional revenue stream helping to make these projects an attractive and viable option. In this case, the incentives from carbon finance are enabling the development of a wind project to generate clean energy.

The reductions in CO<sub>2</sub> emissions achieved by this project are incremental to 'business as usual' and measured by an independent verifier to internationally recognised standards. These are bought as carbon credits by clients of The CarbonNeutral Company to neutralise their own emissions.

### Verification:

This project is being verified under the Gold Standard.



### Project area co-ordinates:

The project is 30 kilometres to the Northwest of Bailingmiao town, Damao County, Baotou City, Inner Mongolia Autonomous Region of People's Republic of China. It is located at latitude 41°51'39" North and longitude 110°12'52" East.