

Wind Farm - Taiwan

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This project involves the development of a 103.5MW onshore wind farm in western Taiwan, the largest of its kind on the island. The project consists of 45 wind turbines, each with a capacity of 2.3MW. The electricity generated will be fed into the Taiwanese electricity grid. Therefore the emission reductions from the project activity will come from the avoidance of CO₂ emissions from fossil fuel use at the national electricity grid.

Background

Taiwan is a densely populated country with only limited natural resources and therefore needs to import as much as 98% of its energy needs in the form of coal, oil and natural gas. Only 0,7% of the energy is generated through wind turbines. The extremely low price for electricity makes it almost impossible to implement renewable energy projects. In order to do so, additional funding like carbon funding is required.

Sustainable development

- Taiwan's dependency on energy imports is reduced: approximately 400,000 barrels of oil need not be imported each year!
- 67,000 households will be provided with green electricity
- Jobs are created during the construction and operational phase
- The wind farm is situated on former industrial land, far away from residential areas, using pioneering technology



Additionality

The biggest obstacle facing the development of renewable energy in Taiwan is the fact that the island has one of the lowest electricity prices in the world. As a result renewable technologies, such as wind and solar, have difficulty being economically viable due to the low rate of return on the investment. However, the additional revenue stream created by the selling of carbon credits enables the project to be commercially viable.



Key facts about the Project

Name:	InfraVest Changbin Wind Farm Project
Type:	Grid connected renewable electricity generation
Owner:	InfraVest GmbH
Location:	Changua County, Taiwan
Emission reductions:	250,935 tCO ₂ / year
Status:	Operational
Start:	November 2007
Standard:	Gold Standard
Type of credits:	GS-VERs
Verifier:	SGS
VERs contracted by CNG:	500,000 (2008 - 2011)
Portfolio	2008/09

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Climate Neutral Group is committed to tackling climate change by funding projects that result in emission reductions (registered as "carbon credits"). In order to ensure that your carbon offsets are of the highest quality we only source carbon credits that meet our strict project principles.

Selection Criteria

Before Climate Neutral Group accepts a project into its portfolio it must fulfil the following criteria:

- ☉ Demonstrate that the carbon financing is essential for the project ("Additionality")
- ☉ The carbon credits delivered have to be verified by a third party accredited by the UN
- ☉ The project should contribute positively to sustainable development by benefitting local communities (for example through access to energy services, increased employment and health benefits).
- ☉ In order to promote a more sustainable future we source carbon credits from different project types:
 - Renewable energy (wind, solar, hydro, biomass)
 - Energy efficiency
 - Fuel switching
 - Waste to energy
 - Forestry (reforestation, afforestation and avoided deforestation)



Independent verification

To ensure the credibility of our offset projects all emission reductions (carbon credits) used have been checked by an independent third party (the "verifier") accredited by the UN, which include SGS, TUV Nord and DNV. The verifier is responsible for:

- ☉ Checking the amount of emissions which will be avoided or removed
- ☉ Monitoring this over the lifetime of the project
- ☉ Issuing a "Verification Report" which states the actual amount of emissions avoided or removed (and thus the amount of carbon credits generated)

Even though verification is an additional cost to us we always choose to have it done. We do this in order to provide security to our customers that their CO2 emissions are offset with certified carbon credits.

Independent registration

Our carbon credits are registered at the Triodos Climate Clearing House (TCCCH). This verified register records which customers' CO2 emissions have been neutralised and guarantees that one carbon credit is used only once.