Project Description

The Tuy Phong wind project consists of 20 wind turbines of 1.5 MW each, supplied by Fuhrlaender. It spans an area of around 500ha. The construction of the first phase with 5 wind turbines started in 2008 and was finished in September 2009. In a second phase, the wind farm was extended by another 15 wind turbines. It was connected to the grid in 2012. To transmit the power to the national grid about 1.5 km of 110 kV transmission lines have been built. In a planned third phase, the wind farm will be extended to 120 MW.

The wind farm produces an estimated 85 GWh of electricity per year, which is purchased by EVN at a price of 7.8 US Cents/kWh. By using this clean source of energy about 57,167 tons of CO_2 emissions are avoided annually.

The investment for the wind farm is USD 52 million. USD 15.6 million has been provided as equity by the Vietnam Renewable Joint Stock Company (REVN).

Project Location



The Phu Lac wind farm is located in Binh Thuan Province in Vietnam.

Binh Thuan province has an advantageous 192 kilometres coast line, with abundant wind resources. The average wind speed of the province is estimated to be around 6.8 meters per second at 60 meters above ground.

Geographical coordinates: Northern latitude: 11° 12' 36"

Eastern longitude: 108° 40' 37"

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Project Key Facts

Location	Onshore: Tuy Phong Commune, Binh Thuan Province
Project Developer	Vietnam Renewable Energy Joint Stock Company (REVN)
Equity Investor	Vietnam Renewable Energy Joint Stock Company (REVN)
Debt Investor	Vietnam Bank for Agriculture and Rural Development (Agribank), guaranteed by Landesbank Baden-Wuerttemberg (LBBW)
Total Investment	USD 52 million
(Debt/Equity ratio)	(70/30)
Engineering, Procurement, Construction (EPC)	Wind farm design: CTV (France), HCE (Germany) Turbine: Fuhrlaender (Germany) Sub-station: ABB (Sweden)
Status	In operation

Technical Information

Manufacturer	Fuhrlaender, formerly Germany
Turbine type	FL MD 70/77 (x15) - 1,2MW
Total capacity	30.0 MW
Power production	85 GWh
Hub height	85 m
Towers	UBI Towers, Vietnam
Rotor diameter	77 m
Total height	122 m
Cut-in/cut-out wind speed	3,5 m/s - 20m/s



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On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ)