



CONERGY

Reference Project | Stand Alone Wind System

Tesco Lotus 'Green Store', Thailand

Conergy was selected as the renewable energy partner for Tesco Lotus, the leading hypermarket chain store in Thailand. The project was part of Tesco Lotus green effort called "Green Store", which involved the development and installation of a stand alone wind system on location of their flagship store in central Thailand.

Three sets of small wind turbine with supporting towers as high as 24 metres were successfully installed within two weeks. The total energy output for this installation is expected to be 9,825 kWh per year, providing a reduction in CO₂ emissions of about 5.2 tons per year. Energy generated from the wind system provides electricity for illuminated parking lots, mobile phone charging stations and car tyres air compressor pumps.

Challenges

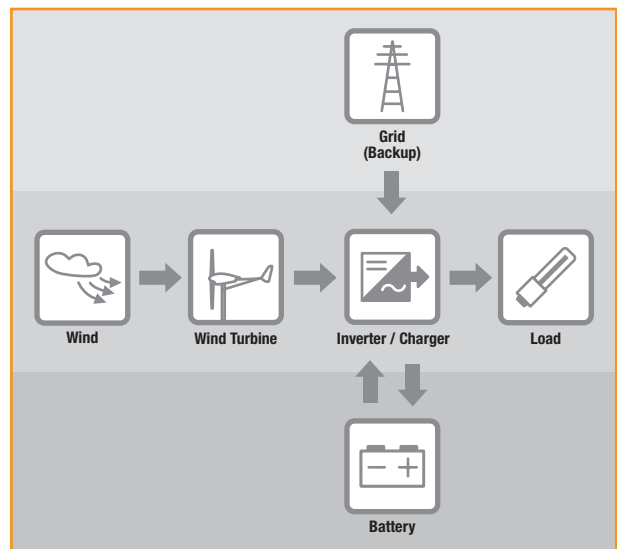
- | The Conergy team of engineers deployed extra safeguards throughout the entire project as the installation site was located at the shopping mall vicinity, in an area with high vehicle and shopper traffic
- | The installation was successfully completed within 2 weeks, in time for the store's official opening ceremony

Our Solution

- | Storm-proof wind turbines were used in the system, providing guarantee against extreme weather condition
- | Conergy's professional engineers were engaged in all aspects of the project; from planning and designing to installing the towers and wind turbine using the safest and most reliable techniques and equipment

Benefits

- | A robust and reliable system which provides uninterrupted power supply 24/7, 365 days a year
- | Weather resistant equipment to provide protection from rain, lightning and extreme weather conditions
- | Provide an enhanced shopping experience to Tesco customers with more green facilities using clean energy



Data

Date	January 2008
Location	Nakhon Pathom Province, Central Thailand
Type of System	Stand alone wind system with grid backup
Capacity	18 kWh (3 sets of wind turbine)
Model	Conergy 6 AC (3 units at height 18 m, 21 m and 24 m respectively)
Battery Type	12 V AGM VRLA lead-acid
Inverter	3 phase bidirectional dual mode inverter

TESCOLOTUS-PP-ENG-0804

WIND ENERGY