



Press Release  
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## **Construction begins for Hong Kong's first wind turbine on Lamma Island**

Construction works for Hong Kong's first commercial-scale wind turbine will commence in mid-February, while plans are also in hand to turn the site on Lamma Island into an education corner for wind power and other forms of renewable energy.

The Hongkong Electric Company Limited (HEC) said that site formation at the Tai Ling site will be carried out after which a 46-meter high wind turbine will be erected together with a high-voltage distribution pillar.

The new plant will blend in with the local environment with a careful choice of color scheme, while trees and scrubs will also be planted in the site area to minimize landscape and visual impact.

Manufactured in Germany, the 800-kW wind turbine will have an automatic set-up and can generate electricity when wind speeds are in the range of 3 to 25 meters per second. With commissioning scheduled for early 2006, the wind turbine is expected to produce 1GWh of electricity a year.

HEC's Chief Engineer (Projects), Mr. Cheung Nai-yik, said the turbine is highly reliable and requires the least maintenance. Power output will be optimized as the turbine is adjustable to wind direction, while a braking system will be activated during emergency to bring the turbine to a standstill safely.

"The commencement of site works marks an important step towards the development of renewable energy in Hong Kong," he said.

"HEC's wind turbine project may be small in scale but yet important since it enables us to gain practical experience in operating a wind turbine which may be useful to the development of larger-scale renewable energy projects in Hong Kong," Mr. Cheung noted.

"We have overcome many technical and environmental difficulties of the project and hope that construction works will progress smoothly so that green power will be made available to our customers early next year," he said.

The Company, a keen supporter of renewable energy development, will also set up an education corner at the site with the display of information panels to promote public understanding on wind power and other forms of renewable energy.

Connected to the existing grid, the future wind turbine plant will be monitored by remote control by duty personnel at Lamma Power Station. The wind potential assessment at Tai Ling indicates sufficient wind energy to operate the turbine 89% of the year.

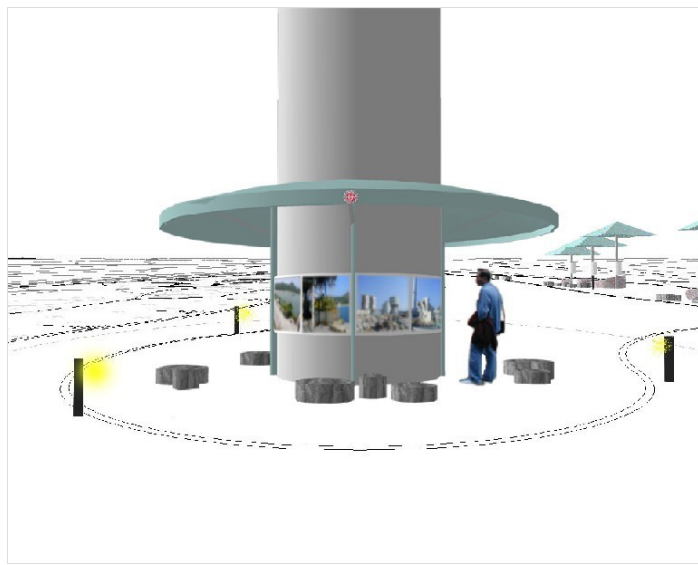
Technical data for wind turbine at Tai Ling:

Rated Power	800kW
Rotor Diameter	50m
Hub Height	46m (the height of a 15-storey building)
Cut-in Wind Speed	Approx. 3m/s
Wind Speed at Nominal Power	14m/s
Cut-out Wind Speed	25m/s
Survival Wind Speed	65m/s
Rotor Speed	15rpm – 24 rpm
Total Weight	Approx. 80 tonnes

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The future HEC wind turbine plant at Tai Ling, Lamma Island and the planned education corner for renewable energy.