

# THE STRAND WIND PROJECT SUSTAINABLE TOWNSVILLE



Toyota Prius Hybrid Car



Ropatec wind-rotor



Ross Creek & Castle Hill



Stormwater quality



Townsville Strand

## What is the Strand Wind Project?

The Strand Wind Project is an educative and tourism sustainability icon for Townsville. Key elements of the project include a 'vertical axis wind turbine' powered by twin wind-rotors, and an interpretative system.

## What is the purpose of the Strand Wind Project?

The purpose of the Strand Wind Project is to educate the public about wind power, a form of renewable energy. Through the interpretation system it will be possible for the public to view local weather information and power output from the wind turbine. Schools will be able to download wind and power data from the Strand Wind Project web-site. This web-site will demonstrate the Strand Wind Project to the world. See weblink.

## How big is the wind turbine?

The vertical axis wind turbine stands 8.6 metres from the ground to the top. The twin wind-rotors are 4.5 metres high and sit on top of a 4 metre tower. The wind-rotors are 3.3 metres wide, and the tower section is 600mm in diameter.

## Is the wind turbine cyclone-proof?

The wind turbine is cyclone-rated.

## How fast do the wind-rotors spin and do they make noise?

At full speed the wind-rotors will turn at 90 revolutions per minute and operate silently.

## Is the wind turbine a solution for greenhouse emissions in Townsville?

Wind turbines and other small-scale renewable energy devices (such as solar photo-voltaics) can reduce greenhouse emissions. However, in urban areas with a mains connection, these systems do not currently compete financially with Queensland mains power.

## How much power will the wind-rotors produce?

The wind-rotors are designed to produce a maximum of 6kW of electrical energy. It is calculated to produce on average 16kWh per day, about enough electricity to power an average Townsville home.

[www.soe-townsville.org/strandwindproject](http://www.soe-townsville.org/strandwindproject)



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