

CURE WHBHS

Wind Turbine Project

Classmates United in Restoring the Environment

Contact our Alternative Energy Coordinator:

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Overview

As a breezy ocean-side town, we have access to not only the sunny beaches, but the gentle winds. An opportunity we would like to take in the direction of alternative energy is the demonstration wind power for Westhampton Beach Schools. The high school and middle school are already host to 55kW of photovoltaic solar energy, which was fundraised in part by CURE and the district. With this project we are looking to not only continue spread our support of alternative energy to the elementary school, but also provide the students and community with a visual of our future with sustainable energy.

Goals

1. Raise \$35,000 to purchase and install Wind Turbines.
2. Install 3 Wind Turbines at the elementary school.
3. Make this is a local community project, funded by Westhampton's clubs, organizations, and individuals.

Milestones

As of right now, we have in our fund \$3,413.21. We need to raise \$31,586.79

Specifications

Where: On/ by the elementary school buildings

What: Vertical Wind turbine by the company Windspire.

Windspire *Series IV 1200 Turbine*

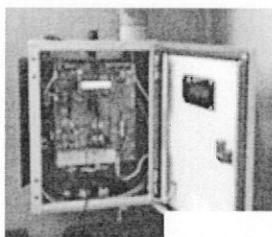
Custom Designed for installation, both residential and off grid. The 1200 model can be configured to match any site and wind conditions. With three different blade designs and sizes, the ability to custom laser cut spreader arms, we can build and fine tune a turbine specific for your project. A 10 ft. ground mount is standard, custom roof mounts available.

Specifications

- ▣ **Rated Power Output** – 1000 watts to 1600 watts.
- ▣ **Annual Production** – estimated at 2100 KWH @ 12.5 MPH average wind speeds
- ▣ **Voltage Output** – Single Phase 240 split
- ▣ **Turbine Performance Characterizes** – Multiple Trim Adjustments
- ▣ **Cut In Wind Speed** – 8 to 12 MPH
- ▣ **Slow Down Wind Speed** – 28 to 35 MPH
- ▣ **Cut Out Wind Speed** - 40 MPH
- ▣ **Survival Wind Speed** – 110 MPH to 130 MPH Depending on tiers and foundation.
- ▣ **Rotor Diameter** - Adj. from 4.5 to 5 ft.
- ▣ **Height** - 30 ft. Standard / 23 ft. High Wind
- ▣ **Weight** -500 - 990 lbs.

Optional:

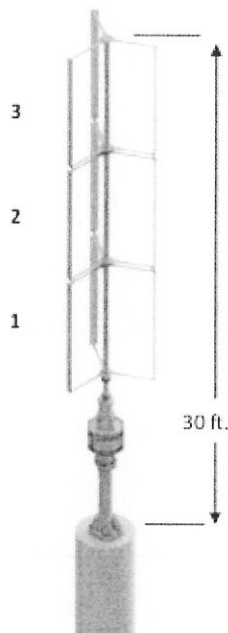
Computerized / Programmable Controller - Inverter



Custom Designed

New for 2017

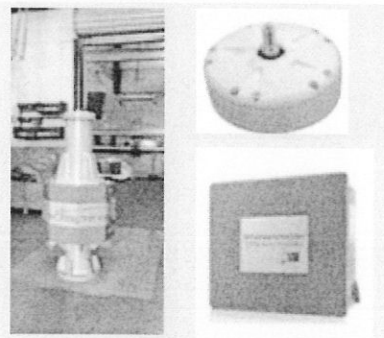
Available in 1, 2 or 3 tiers of blades



The Windspire 1200 comes with the exclusive Windspire **EASY-TILT** up and down base pole feature. This can make the install and maintenance easy. Optional leverage pole is available.



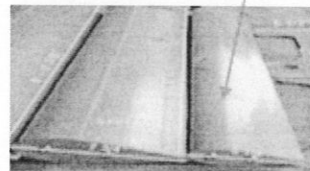
The Heart of the turbine is a special designed 3 phase generator. Taking years to develop, tested and built exclusively for Windspire. Rated to 1600 watts.



The Brains of the Series IV 1200 is the controller. This special designed cabinet, houses all of the components for the turbine and also has a stop switch. This combination unit is designed for "plug and play" and easy to install. LED and computer monitoring.

Wind Blade Choices

*Medium to Heavy Wind
6 to 9 Lift Blades 5"*



*Light Wind
3 to 6 Push Blades 8" to 12"*



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