

# Small Wind Electric Systems

1 kW



Can I use wind energy to power my home? This question is being asked across the country as more people look for affordable and reliable sources of electricity.

## How Do Wind Turbines Work?

Wind is created by the unequal heating of the Earth's surface by the sun. Wind turbines convert the kinetic energy in wind into mechanical power that runs a generator to produce clean electricity. Today's turbines are versatile modular sources of electricity. Their blades are aerodynamically designed to capture the maximum energy from the wind. The wind turns the blades, which spin a shaft connected to a generator that makes electricity.

The benefits of small wind are three-fold. The use of renewable energy helps protect our environment, secure our domestic energy needs and lower our energy bills.

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**Protecting our Environment:** The planet is getting hotter and we need to ditch our dependence on dirty, polluting fuels as quickly as possible. Renewable energy is clean, green and sustainable; generating power renewably helps to reduce our carbon footprint.

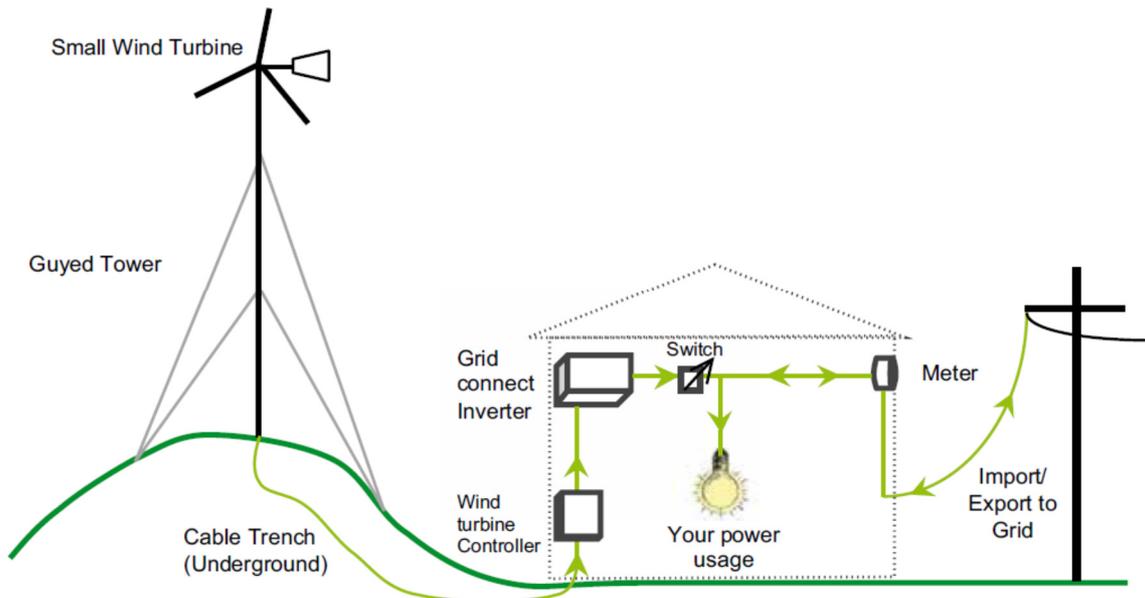


**Securing our domestic energy needs:** India has a rich wind resource; tapping into this helps us to maintain security of our energy supply. This helps us to be more independent of foreign imports of oil and gas.



**Lowering energy bills:** Oil and gas prices continue to rise worldwide, having an effect on the energy bills we pay at home. Once installed, your Small Wind system will generate a significant amount of free electricity and you benefit from lower bills!

Type	Horizontal Axis Upwind
Number of Blades	4
Blades Material	CFPR
Rated Power	900 Watts
Rated Wind Speed	≈ 12 m/Sec
Operating Wind Speed	3-18 m/Sec
Rotor Diameter	2.15 meters
Directional Control	Tail Vane
Over speed protection	Dump load
Generator	Multi Pole PMG
Drive train	Direct drive
Tower	Guyed tilt type
Tower height	10-30 meters



***Small Wind Turbine System Component***

**For more information contact:**

**Dr. Gurmit Singh**

**Email: [mail@gurmitsingh.net](mailto:mail@gurmitsingh.net)**

**Website: [www.gurmitsingh.net](http://www.gurmitsingh.net)**

**Mobile: =91-9811980116**

Designed and developed by: