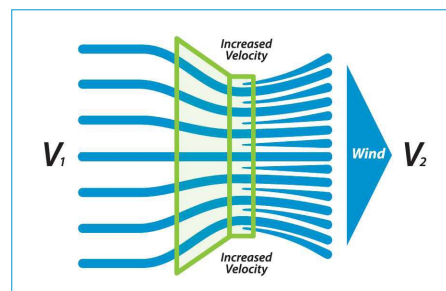


## how the windcube® works

The WindCube® generates electricity by running its motor backwards using an impeller (the opposite of a propeller), eliminating the need for a gearbox. This lowers the cost of ownership because the gear box is the source of most of the maintenance problems and failures on conventional wind turbines.

The WindCube relies on the “wind tunnel” effect known in physics as the Bernoulli Principle. As wind encounters the WindCube shroud, it becomes concentrated, creating increased velocity and in turn, more power. At an average wind speed of 7 meters per second (about 15 miles per hour), the WindCube will generate about 160,000 kilowatt-hours per year (kWh/yr) of electricity.



### Rotor Blades

The airfoil design is optimized to take full advantage of the shroud and produce the maximum amount of kilowatt-hours. The design of the rotor blades is designed for maximum lift, efficiency and structural integrity.

### Braking System

The aircraft-style braking system has two internal brakes for high winds and maintenance. The redundant braking system is internally monitored by the WindCube’s intelligent software. The WindCube’s braking system can also be remotely managed by both the end-user and the Green Energy Technologies support staff.

### Yaw Capability

The yaw system moves the WindCube into prevailing winds, taking full advantage of your wind resource via Green Energy Technologies’ onboard PLC and customized software. At wind speeds greater than 40 mph, the yaw system moves the WindCube away from the prevailing winds and activates the braking system. The uniquely designed bearing requires minimum lubrication and preventive maintenance.

### Inverter

The WindCube’s grid-tie inverter system feeds energy of the same wave shape and frequency as supplied by the electrical distribution system. The inverter is IEEE 1547 compliant and UL 1741 certified.