

Wind Turbine



- A wind turbine uses energy in the wind to move its propellers and produce power.
- The wind makes the generator revolve, producing electricity.
- The electricity produced is usually AC power and the speed the propellers spin decides the voltage.
- This voltage is varying up and down, and so cannot connect to your house directly.
- The voltage gets converted to DC power through a rectifier, which gets connected to a battery bank.
- The battery keeps the voltage of the windmill locked to the battery voltage and so now we have a steady even DC voltage.
- An inverter can be connected to the battery to produce household AC power 220v 50hz, steady electricity.
- One last important piece is a controller and dump load. These are used to keep the turbine working properly.
- The larger the rotor area the more power a turbine produces, so this is an excellent rule of thumb for comparing turbine power output.