

**Low Speed Wind Turbine, SLG is Optimized Remote Area Power Systems,
Wind Turbines, Sales, Consultation & Training**



The Low Speed SLG Wind Turbine

Eighty percent of the world's landmass has winds of less than 5 meters per second (m/s). This resource is now exploitable for grid-connect power.

specifically for the purpose of working in such low wind regimes for the grid-connect market. The SLG makes economical, efficient and effective wind power a reality to low wind areas that require distributive generation (grid boosting), mini-wind farms, irrigation, or modular grid expansions.

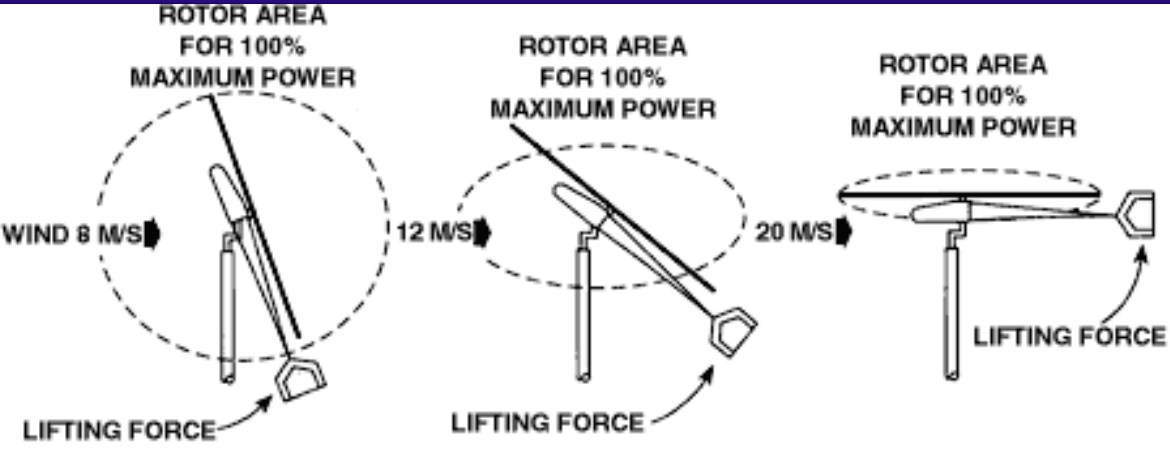
SLG wind turbines are designed to function optimally in low wind speeds based on a unique and patented [function principle](#). Field data show that these wind turbines can generate more energy than any other wind turbine with the generator of the same size. SLG wind turbines are rated at 4.5 m/s wind speed and they operate in a wide range of 2.5 m/s to 12 m/s wind speeds.

The SLG is microprocessor-controlled using in-house proprietary software. With Synergy's patented function principle, the SLG can be customized for optimal performance to suit the wind regime of any given site.

With its simple design, the SLG wind turbine is easy to install and maintain requiring only basic infrastructure and manpower. The system can be transported at low cost to remote areas, and erected with ease by simple ground based winches. Furthermore, the simple design also means that Synergy can transfer the technology and build the wind turbines in many countries utilizing local materials and manufacturing capabilities.

KEY FEATURES:

- Patented technology and advanced proprietary control software
- Operates in low wind speeds where most other competitors cannot
- Simple design, easy and low cost to transport, install and maintain
- Possibility of technology transfer for local manufacturing
- Custom optimization available

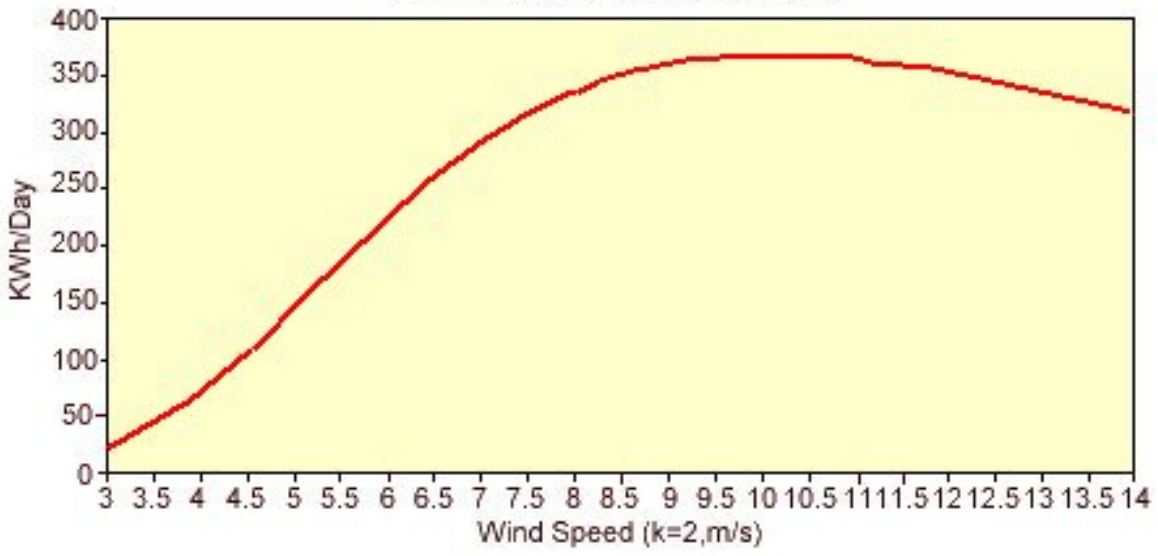


SLG'S PATENTED TECHNOLOGY

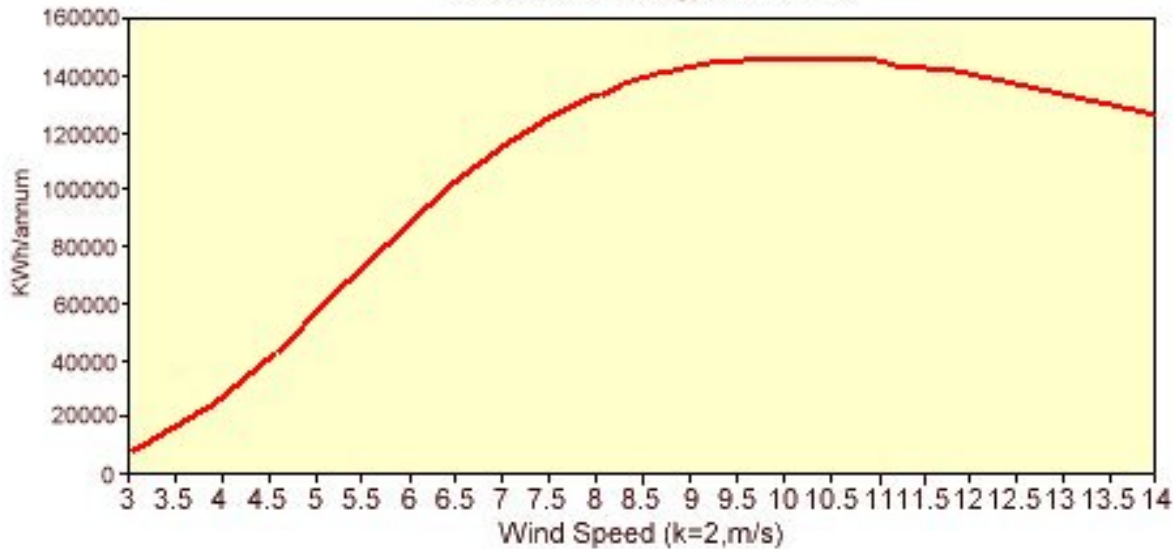
The variable axis function allows the rotor blade area to adjust to all mild to wild wind conditions. Therefore, longer blades can be used to capture more of the potential energy from the wind.

The following charts illustrate the energy delivery on a daily and annual basis of the SLG. Actual field data in Utah, USA were used in the compilation.

SLG Daily Energy Production



SLG Annual Energy Production



Power Curves were derived by Windward Engineering in the U.S.

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PATENTED TECHNOLOGY

A large rotor area at low wind speed allows production of energy when conventional fixed axis wind turbines produce little or none.

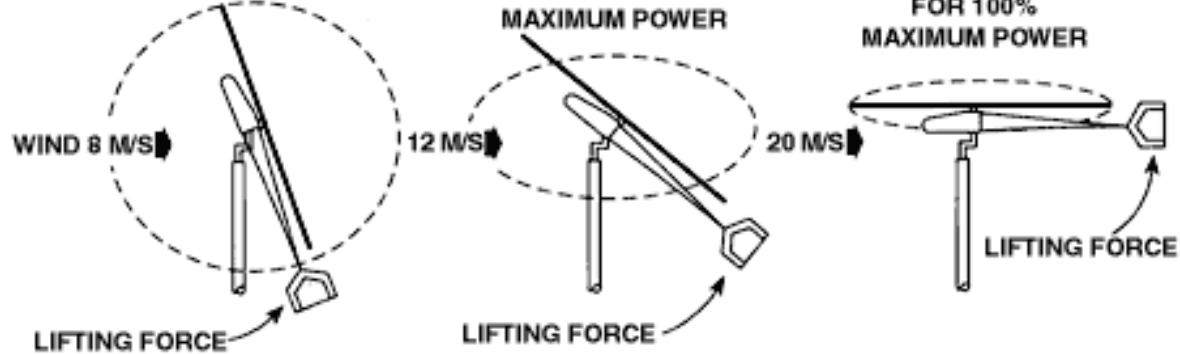
A small rotor area at high wind speed allows safe operation and **continued power production** when conventional fixed axis wind turbines furl down. The Synergy wind turbine does not furl down.

Varying rotor area according to wind speed

**ROTOR AREA
FOR 100%
MAXIMUM POWER**

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The ability to vary the rotor area allows the use of rotor blades up to five times the size of rotor blades of similar rated conventional turbines. These rotor blades capture more energy at low wind speeds.

At a wind speed of 4.5m/sec the SLG wind turbines produces 200% more energy per unit of installed cost than the conventional fixed axis wind turbine.