

## Eclectic Energy Micro Wind Systems

### Frequently asked questions:

**Q. How much power can the StealthGen Micro Wind System produce?**

- A. This is very dependent on the quantity and quality of the wind resource at your site. The higher the average wind speed at your location, the more power will be produced. Output from a single turbine at an open site with 5 m/s average wind speed should be over 400 kW hours annually. At a 6 m/s site, this would be close to 700 kW hours. At sites with average wind speeds below 3.5 m/s, yields from the system are likely to be under 200 kW hours annually, and alternative technologies such as photovoltaic panels may be preferable. Good wind sites should be as open and obstruction-free as possible. For this reason, rural and semi-rural sites are usually more productive than urban areas. A typical UK family home uses around 10 kW hours of electricity per day. The StealthGen might meet 15% of this demand at an open 5.5 m/s wind site.

**Q. How can I assess my renewable resource?**

- A. Wind speed data for the UK is available via the internet. Visit [www.est.org.uk](http://www.est.org.uk) – this site offers representative wind speed data by postcode area. Alternatively, low cost sensors are now available which will measure and record the wind and solar resource at your property. This enables the most accurate prediction of the yields from any site.

**Q. How noisy is the turbine?**

- A. StealthGen turbines were specifically designed to operate in close proximity to people. The rotor blades rotate relatively slowly, which means the turbines are nearly silent in operation and vibration free.

**Q. How is the electricity used?**

- A. The StealthGen can feed electricity directly into the ring main of your house via an electronic device called a G83 inverter. The electricity is used within the home to supplement electricity flowing in from the grid.

**Q. Can I sell excess power back to the power company?**

- A. When there is a limited electrical demand within the house, any surplus wind power will simply flow back to the grid. If you wish to be paid for this, you will require an export meter and an export tariff rate agreed with your power company.

**Q. What are feed-in tariffs?**

- A. Feed-in Tariffs, or 'FiTS', have been introduced by the government as a financial incentive to encourage the wider adoption of micro generation technologies. Micro wind generation is paid at 21 pence for each kW hour produced, regardless of whether the power is exported or used by the householder.

**Q. How much maintenance does the system need?**

- A. The StealthGen is designed to be as 'fit and forget' as possible. It should not require regular maintenance, and has a design service life of 20 years.

**Q. Do I need planning permission to install a turbine on my house?**

- A. Yes, at the moment planning permission is required. Most planning authorities have a positive attitude to environmental technologies and you should find them helpful and supportive.

**Q. Who can install the system for me?**

- A. A network of specialist installation companies is being established to provide professional installation. Their work is certified, enabling you to be confident that the mechanical and electrical integrity of the installation conforms to the highest industry standards.



*StealthGen*