Micro Wind

futurum
Renewable Energy Systems

A familiar site across the UK and a real option for domestic and commercial properties whether it be small scale generation or a slightly larger wind turbine installed on an estate - wind power is without doubt one of the best technologies for electrical generation and return on investment.

HOW DOES WIND POWER WORK?

As wind blows the blades turn, which generates kinetic energy that is turned into a usable form of electricity, which you can use throughout your property instead of taking electricity from your energy supplier. The stronger the wind the more electricity is produced.

HOW MUCH ELECTRICITY CAN I GENERATE?

A small wind turbine could generate between 1,000kW - 2,000kW per year (assuming an average wind speed of 7m/s) and a bigger turbine will generate around 20,000kW per year. A well sited turbine will produce electricity everyday and night of the year. To be effective, you need an average wind speed of no less than 5m/s, ideally between 6-10m/s.

Surplus energy can be stored in batteries for a calm day. Alternatively you can opt to make more money by selling excess electricity back to the electricity distributor and be paid an export tariff under the governments FiTs scheme.

WHERE CAN WIND TURBINES BE FITTED?

Small scale wind turbines can be roof or mast mounted - however it is essential that the location chosen is free from obstructions. Wind turbines work most efficiently where there is a constant source of direct wind - so the turbine needs to be mounted as high as possible and as far as practical away from any obstacles that could interrupt a steady airflow. Small domestic wind systems are particularly suitable for use in remote locations where mains electricity is unavailable.

The size of the turbine can vary from small scale - suitable for large homes, which have a blade diameter of approximately 2m to medium sized turbines standing 20m - 30m high.

Some local authorities do require planning permission prior to installation and you should check with your local planning officer.

COST, SAVINGS & MAINTENANCE

Costs for a roof mounted micro wind system are about £12,000. Larger mast-mounted systems cost around £30,000.

If generating 1,200kW per year of power you would benefit from approximately £250 of annual FiT's payments. If generating 20,000kW of power you would benefit from approximately £4500 of annual FiT's payment.

Wind power benefits from the Feed-in-tariff scheme (FiTs), which is a government incentive that pays you for every unit of electricity generated AND for any surplus energy exported

Maintenance checks are necessary every few years with a well-maintained turbine lasting over 20 years. Where no electricity network is available batteries may need to be used to store the electricity. Typically they have a life of between 6 and 10 years.

ARE THERE ANY RESTRICTIONS TO THE FiTs PAYMENT?

To qualify for the FiTs payments the system you install must be certified under the MSC (Microgeneration Certification Scheme) and the installer must also be MCS registered. MCS are the regulatory body which ensures consistency and quality. Your property must also have an energy rating in band D or above. Your Futurum representative can provide you with a FREE energy performance certificate.

HOW CAN YOU BE SURE OF THE QUALITY OF THE INSTALLER AND PRODUCTS?

All Futurum installers are registered and where required certified under the Microgeneration Certification Scheme (MCS) and we are bound by the REAL Assurance Consumer Code which is your guarantee of best advice and high standards of service. Details of these requirements can be found at www.realassurance.org.uk

If you have any further questions or queries please contact the Futurum team on **01305 755700** or email us at **sales@futurumltd.co.uk**