

Guide to Renewables



Wind Power

How does it work?

Wind passes through and rotates the blades (usually 2-3) of a turbine. The rotation of the blades drives a generator either directly or via a gearbox (generally for larger machines) to produce electricity. The electricity can either link to the grid or direct to individual properties.

What are the benefits?

- Source of energy is free and clean
- Well established and proven technology
- One of the most cost-effective renewable technologies
- Significant potential
- Can help contribute to reducing Carbon Dioxide (CO₂) emissions from properties
- Can be used at various scales from domestic stand-alone schemes to larger projects serving schools and business parks
- Government grants available

When and where is it suitable?

Turbines can start operating with wind speeds of 4-5metres/second although the higher the wind speeds the more power produced.

For information on wind speeds in your area visit the Department for Business, Enterprise & Regulatory Reform (BERR) (see web link) and type in 'windspeed database' in the Search box. You will need to know the grid reference of your location.

You will need to apply for planning permission for a wind turbine. You will need to take into account other considerations including your property (Listed and/or in a Conservation Area), your neighbours (noise and visual concerns), the townscape and/or landscape setting and any local wildlife interests. Please contact the Council's Development Control Section (e-mail: planning.applications@tmbc.gov.uk Tel: 01732 876230) for further advice. You will also need to consult the Council's Building Control Section (e-mail: building.control@tmbc.gov.uk Tel: 01732 876305).

Further detailed technical advice, including information on typical costs:

- **Centre for Alternative Technology**
http://www.cat.org.uk/information/info_content.tpl?sku=info_is_renewables/
Tel: 01654 705950
- An Eco-Centre providing practical advice and free information on wind power
- **Energy Saving Trust (EST)**
www.energysavingtrust.org.uk
Tel: 0800 512012
- a non-profit organisation providing general advice on wind power (click on 'Generate your own energy' tab on their home page) and technical advice for the development industry professionals (type 'Planners Pack' in the search box)
- **Department for Business, Enterprise & Regulatory Reform (BERR)**
www.berr.gov.uk
Tel: 0207 2155000
- find out the average annual windspeeds in your area by typing in 'windspeed database' in the search box
- **Low Carbon Buildings Programme**
<http://www.lowcarbonbuildings.org.uk>
Tel: 0800 9150990
- find out about available grants
- **British Wind Energy Association (BWEA)**
www.bwea.com
Tel: 0207 6891960
- BWEA is the trade and professional body for the UK wind and marine renewable industries
- **London Renewables Toolkit**
www.london.gov.uk
Tel: 0207 9834000
The Greater London Authority has produced a useful toolkit for planners, developers and consultants (type 'London Renewables' in the search box)
- **Creative Environmental Networks (CEN)**
www.cen.org.uk
Tel: 0208 6836694
- not for profit organisation providing technical advice on wind power (click on 'Developer Support' and select 'Renewable Energy')
- **Kent Energy Centre**
www.kentenergycentre.org.uk
Tel: 0800 3586669
- not for profit organisation offering free and impartial advice on wind power (click on 'renewable energy solutions')

If you have difficulty reading this leaflet and would like the information in another format, please call 01732 876266 or email ldf@tmbc.gov.uk.