

# Triple E Eligibility Criteria

Category: Heating and Electricity Provision

## ***Technology: Wind Turbines***

A Wind Turbine is defined as advanced equipment which converts the wind's kinetic energy into rotary mechanical energy, which is then used for electricity generation primarily for on-site use.

**Wind Turbine Systems are considered to include the following:**

A turbine and supporting structure, the primary element of the wind turbine system, but may also include control and energy storage systems.

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## Eligibility Criteria

In order to be included on the Triple E Product Register\*, a Wind Turbine must meet *all* of the relevant requirements listed below.

**Note:** Supporting documentation that clearly demonstrates Triple E compliance according to the conditions below will be required as part of the Triple E checking process. Detailed information on the types of documents accepted can be found in the separate Supporting Documentation guidelines.

\* Also known as the specified list as per the Finance Act

### ***Wind Turbine Systems- Specific Eligibility Criteria***

No.	Condition
1.	All equipment and/or components must be CE marked as required by the specific EU directive(s).
2.	Must have a rating for Microgen of less than 50kW. There are no upper size limits for other programmes within the Triple E
3.	The wind turbine must comply with, and have been tested according to, the appropriate European standard(s), or scientific equivalent, applicable to its size and type.
4.	Appropriate operating and maintenance manuals must be available for the end-user as part of the main contract of sale in order to optimise the achievement of any potential efficiency improvements.
5	Manufacturer approved masts for wind turbines must provide a minimum height from the centre of the hub vertically to the base plate or ground (whichever is lesser) of 6m.

----- *End of Triple E eligibility criteria* -----

*Please see next section for guidance on:*

- 1. Technical details required in product submission**
- 2. Supporting documentation required**

# Guidance on product details and supporting documentation

**NOTE:** *The following information has been provided for guidance purposes only in order to help you to provide (a) product details and (b) the required supporting documentation.*

*All information contained in this guidance document is subject to change without notice.*

## Technical information required in product submission

The following are the specific technical values required as part of the product submission for this technology:

### Product Name and Code

As part of the product submission a unique product name must be included. The unique product must have an associated unique product code.

### Rated Electrical Output

The rated electrical output in kW of the product is required as a value for the product submission. It must be entered as whole number only (do not include kW symbol). There should also be no spaces or full stops after the number submitted.

### Wind Speed to Achieve Rated Power

The speed at which rated electrical output is achieved must be included as part of the submission. It must be entered as the nearest whole number only and in metres per second (do not include units). There should also be no spaces or full stops after the number submitted.

### Wind Class

The EN 61400 defined wind class for which the turbine has been designed and certified for must be included as part of the submission. The value must be inputted as one or more of the following:

I, II, III, IV or S. There should also be no spaces or full stops after the value submitted.

### Rotor Diameter (m)

Diameter of the circle swept by the rotor blades.

### Turbine Hub Height – minimum (m)

Minimum height of the centre of the turbine hub vertically to the top level of the base-plate or ground (whichever is higher) using a turbine manufacturer approved mast.

### Turbine Hub Height – maximum (m)

Maximum height of the centre of the turbine hub vertically to the top level of the base-plate or ground (whichever is higher) using a turbine manufacturer approved mast. This is equal to *the turbine hub height – lower limit* when the turbine is only available with a single mast height.



## Supporting documentation required

Described below is the list of documents that are accepted as proof of compliance for the specific Wind Turbines & Ancillary Equipment conditions. Note that ancillary equipment is not included in the Microgen programme.

**Note: This information will only be requested AFTER you submit your product's basic details online**

### **Important Notes to Product Providers**

**Please ensure that you read the "Important Notes to Product Providers" section at the end of this document prior to submitting documentation.**

**Wind Turbine - Specific Eligibility Criteria**

(Applicable to all wind turbine system equipment)

No.	Condition	Supporting Documentation Requirement
1.	All equipment and/or components must be CE marked as required by the specific EU directive(s).	<p>Official and published manufacturer's technical data sheet or brochure that demonstrates CE marking compliance</p> <p><b>OR</b></p> <p>A copy of an official signed declaration on headed paper that confirms CE marking compliance.</p> <p>Official declarations should explicitly state the product for which CE marking is being confirmed (i.e. do not provide a letter simply stating general compliance with the relevant Triple E condition).</p> <p>Where a document is used to demonstrate conformance for a number of products or range of products, it should clearly specify each individual product covered by that document.</p>
2.	Must have a rating, for microgen only, of less than 50kW	Official and published manufacturer's technical data sheet or brochure that demonstrates proof of compliance with the requirements of the condition.

No.	Condition	Supporting Documentation Requirement
3.	The wind turbine must comply with, and have been tested according to, the appropriate European standard(s), <b>or scientific equivalent</b> , applicable to its size and type.	<p>Documentation must be supplied that demonstrates compliance with ALL of the following requirements.</p> <p><b>Design Standard Requirement</b> Accredited certification that demonstrates compliance with the design standard below.</p> <p><b>Performance Standard Requirement</b> Accredited certification that the equipment complies with the performance standard below.</p> <p><b><u>OR</u></b> Evidence of official testing by an accredited test lab carried out according to the principles outlined in the Performance standard below. Test reports should be of the format described in the 'Important Notes to Product Providers' section of this document.</p> <p>Accepted standards are:</p> <ul style="list-style-type: none"> <li>- Design: EN 61400-1 or EN61400-2 (for small wind turbines)</li> <li>- Noise: EN61400-11</li> <li>- Performance: EN61400-12</li> </ul>
4.	Appropriate operating and maintenance manuals must be available for the end-user as part of the main contract of sale in order to optimise the achievement of any potential efficiency improvements.	<p>A copy of an official signed declaration on headed paper which confirms that the appropriate operating and maintenance manuals are provided. Where applicable, information on the availability of technical documentation to download online should be given.</p> <p><b>NB:</b> A signed declaration is required to comply with this condition in all cases. Submitting copies of user manuals is not sufficient and not required by this condition.</p>

No.	Condition	Supporting Documentation Requirement
5	Manufacturer approved masts for wind turbines must provide a minimum height from the centre of the hub vertically to the base plate or ground (whichever is lesser) of 6m.	Official and published manufacturer's technical data sheet or brochure that demonstrates proof of compliance with the requirements of the condition.

## Important notes for product providers

### **General**

There should be a clear link between the product submitted and all supporting documentation. This will typically take the form of a *product code* or *product name* that can be cross-referenced between the submitted product and the relevant supporting documentation.

If product codes/names have been changed since publication of the supporting documentation, then you must provide official evidence of this with the supporting documentation supplied.

If there is any deviation from these requirements, the supporting documentation will not be considered adequate for the purposes of demonstrating compliance with the criteria conditions. This will in turn delay the submission and/or result in the product not being considered eligible.

Where the Triple E criteria or help documentation makes reference to compliance with appropriate rather than specific standards, the onus is on the product provider to ensure that the supporting documentation supplied references recognised standards that apply to the submitted product, i.e. the product must be covered under the scope of a recognised standard.

If it is subsequently found that any product submitted does not meet the performance or specification criteria, it will cease to be considered eligible for the Triple E register.

**Note:** When supplying the supporting documentation through the online process, you must ensure, when demonstrating compliance with the relevant condition, that the correct page number(s) of the document is referenced. When referencing more than one page number, add an explanatory note.

### **Test report**

A test report must include an outline of the complete test, including:

- √ Introduction
- √ Details on test conditions
- √ The specific model details of the product tested
- √ The steps taken in the test
- √ The results
- √ Graphical representations
- √ Conclusion

All documents should be on headed paper and the document should be officially signed off. **All documentation must be in English**, or include adequate translation.

### **Certification**

Where certificates are provided, all tests must be carried out by an organisation that is accredited by a national accreditation body, recognised via the European Cooperation for

Accreditation (preferred) or the International Accreditation Forum. **All documentation must be in English**, or include adequate translation.

### ***Scientific equivalence***

Some Triple E criteria conditions allow for scientifically equivalent tests and/or standards to be used.

If a product has not been designed, manufactured or tested to the specific European standard named, then documentation relating to an equivalent internationally or nationally recognised standard may be used, where the phrase '*or scientific equivalent*' is included in the Triple E condition or help documentation.

In such applications, the onus is on the product submitter to demonstrate satisfactory equivalence of the standards. Submissions which reference such supporting documentation may take longer to process. If the product provider does not provide satisfactory evidence of equivalence, then the product will not be considered eligible for the Triple E. **All documentation must be in English**, or include adequate translation.

**Note:** Where specific standards are cited in a condition or in the Triple E help documentation, then documentation demonstrating that the relevant products have been designed, manufactured or tested to these specific standards is preferred. Scientific equivalence is considered the exception rather than the norm.

### ***Representative testing***

Where test information is required for a range of technically similar products (e.g. configurations of one base product), then – in exceptional instances – a form of representative testing may be used provided an accredited laboratory endorses the testing for all products to be included.

Such testing is where only representative products are tested from a technically similar group or range of products. Representative testing may form an acceptable basis for supporting documentation if:

- A clear correlation can be demonstrated between the tested product and a technically similar non-tested product
- and*
- Such a correlation clearly demonstrates the compliance of the non-tested product

**Note:** Where representative testing is used for a group or range of products, if the tested or representative product is removed from the list of eligible products then all related products are also removed.