

PRELIMINARY SITE ASSESSMENT

Do I have a suitable wind resource?

Use the BERR wind speed database to check the annual average wind speed (AAWS) at 10 metres above ground level in your area. [BERR Wind Speed database](#).

Instructions on how to use the database are available on the BWEA site. *It is important to note that the BERR database works on estimates with an approximation area of 1km. You should be aware that it does not take in to account other factors such as trees, hills, dips and other obstructions. Therefore although BERR is useful as a guideline, it may not necessarily reflect the true annual average wind speed at your site.*

- An annual average wind speed of 6m/s or greater is excellent
- An annual average wind speed of 4.6m/s to 6m/s or greater is good
- If your site has a 4.5m/s or less it may be worth considering other types of renewable energy. Please contact us to discuss your needs further

Are there any local obstructions?

Are there any obstacles, buildings, trees etc that might obstruct the wind flow to my turbine?

Your TAEC Turbine wind turbine should be sited above the height of any local obstructions.

- If there are no obstructions, then this is ideal
- If there are obstructions at the height of, or above the turbine, then you need to decide if they are too close... As a general rule of thumb: The obstruction should be 10 times as far as it is higher than the turbine. *e.g. If the obstruction extends 10m above the TAEC Turbine, then it should be 100m away.*

Siting your TAEC Turbine

When choosing a location to install the TAEC Turbine it is important to put it as high up as possible on the prevailing wind side of your property.

- The Distance from the turbine to the grid connection or off-grid storage should be reasonably short to minimize power loss over lengthy cables.
- You need an area of clear ground at least 5m x 5m available ideally on the windward side of your property.

Once you have identified the best location, you need to ensure that we are able to access it using a powered access platform or crane. Locations that are hard to access can often incur extra cost for the hire of specialist

access equipment. (See standard installation specification - for more details)

You also need to consider where to put the electronic control system. The electronic control system will go inside your building and provides readouts about how much electricity your TAEC Turbine wind turbine has generated. It looks very much like a large BT roadside cabinet and is about 95cm tall, 60cm wide and 30cm deep.

The electronic control system needs to be connected to both the TAEC Turbine wind turbine and the distribution board of your electricity supply.

What about the Base?

It is important to determine that the site base will be structurally suitable for the installation of a TAEC Turbine. During the site assessment, we will assess the structural suitability of the proposed site. As a rule of thumb:

The following issues need to be considered:

- Depth of soil for excavation
- Area available
- Routing of Cables
- Housing of control equipment
- proximity to neighbouring property

Planning, neighbours and your local environment

- It is still necessary to seek planning permission for wind turbines and regulations from council to council vary, so please consult your local planning office.
- Inform your neighbours of your plans. Give them as much detail about the TAEC Turbine as possible.
- The RSBP have data that show that there is no evidence that wind turbines impact on bats or birds, however when deciding where to site a turbine, care should be taken that to ensure that the turbine is not sited on a flight path to a bird nest or bat roost.