

De-bunk the myths

Misinformation and myths about wind power are often spread by people who want to oppose wind farms. Here we look at 5 of the most common myths, and give you the facts to counter them. See the FAQs section if your favourite myth isn't here.

Myth 1. Wind turbines spoil the landscape

Fact: This is a highly subjective issue. Being visible is not necessarily the same as being intrusive. While some people express concern about the effect wind turbines have on the beauty of our landscape, others see them as elegant and beautiful, or symbols of a better, less polluted future. The landscape we inhabit is largely human-made and it evolves over time. In comparison to other energy developments like nuclear, coal and gas power stations, or open cast mining, wind farms have relatively little visual impact. Nevertheless sites within Areas of Outstanding Natural Beauty (AONBs) or National Parks are unlikely to be appropriate for large wind farms.

The increased utilisation of renewable energy and greater use of wind power will mean that we will have more of these structures visible in our townscape and landscape in the future. But all the organisations supporting this web site believe that wind energy is one of the most environmentally benign ways of producing the electricity we need to power our daily lives. If we don't switch to cleaner forms of energy, climate change will severely and irrevocably alter much of our landscape as well as the animal and plant life it contains.

Myth 2. Wind turbines kill lots of birds

Fact: Monitoring of existing wind farms suggests that with sensitive siting there is no adverse effect on bird populations. The RSPB supports wind power, and has said that from its own studies at three wind farms in Wales, "the scale of bird strike does not seem to be of serious concern", and that wind turbines will have little effect on birds outside their main migration routes.

For example, The 9 harbour-wall turbines at Blyth are in a busy bird area. Of the bird flights through the wind farm, only 1 in 10,000 have resulted in a collision. This translates to 1-2 collisions per year per turbine. To put the issue into perspective, every year more than 10 million birds are killed by cars in the UK.

Developers should contact specialists such as the RSPB and conduct thorough analysis of the risk to birdlife as part of the environmental impact assessment of the wind farm proposal. With rigorous environmental impact assessments (EIAs) and thorough monitoring wind power can be deployed without significant detriment to birds (and other wildlife).

For more information about wind power and nature conservation issues, including birds, see the report from RSPB, WWF, English Nature and BWEA: "Wind farm development and nature conservation" - <http://www.bwea.com/pdf/wfd.pdf>

Myth 3. Tourists hate wind farms

Fact: There is no evidence to suggest that wind farms deter tourists, indeed many wind farms are themselves tourist attractions. For example, the UK's first commercial wind farm in Cornwall received 350,000 visitors in its first 8 years of operation. An energy centre was opened at the site in 2001 and received 50,000 visitors in its first year. In Swaffham, Norfolk, tourists queue to climb the wind turbine tower to the viewing platform at the top.

In Scotland, a Mori poll was undertaken in 2002 regarding wind farms in the Argyll area. 80% of tourists said they would be interested in visiting a wind farm if it were open to the public with a visitor centre.

In Denmark, many tour agencies run boat trips to take visitors to see the offshore wind farm at Middelgrunden, near Copenhagen.

Myth 4. Wind turbines are noisy

Fact: Modern turbines are actually very quiet! Thanks to advances in wind turbine technology, well designed, well sited turbines can be quiet enough to cause no disturbance to people living just a few hundred metres away. At these distances, any noise they do make is usually drowned out by the natural noise of the wind itself in the trees and vegetation. To protect nearby residents from any undue disturbance, proposals to install wind turbines are required to meet strict noise standards.

Having read exaggerated claims in the press, people visiting wind farms are often surprised at how quiet they actually are. The Scottish Executive public opinion survey is one of several demonstrating that concerns about noise are often unfounded. Before construction of the Scottish wind farms studied, 12% of people living near the sites thought that the turbines would cause a noise nuisance, but after construction, when people had experience of the wind farm operating, only 1% thought they were noisy.

*For more information: see the BWEA fact sheet on noise
<http://www.bwea.com/ref/noise.html>*

Myth 5. Wind power isn't reliable

Fact: Yes it is. There is actually a lot of confusion about the reliability of different sources of electricity. No power stations are able to operate all the time without stopping. Many so-called reliable sources such as nuclear plants suffer from unexpected 'outages' when reactors must be shut down, often at short notice, for essential safety maintenance. Unreliability of this kind is far harder to deal with than the intermittency of wind power, as the amounts of electricity involved are generally much higher. By comparison the variation in output from wind farms distributed around the country is scarcely noticeable. A great advantage of wind power is that the available wind resource is much greater during the colder months of the year, when energy demand is at its highest. And the wind will never stop blowing everywhere in the UK at once!

At present the National Grid can be operated effectively and economically with up to 20 per cent of the electricity capacity being provided by variable energy sources such as wind. At the levels being considered over the next few decades for wind energy

production, such variability can easily be accommodated by the grid system. It is true that we could never rely on wind turbines alone to provide for all our electricity needs. But there are storage technologies we can use, such as pumped storage hydro power schemes (where water is pumped up-hill, thus acting like large batteries for the electricity system). In future, hydrogen offers a potential way of storing electricity from wind power. Excess wind power can be used to produce hydrogen through electrolysis, and then hydrogen can be turned back into electricity using a fuel cell, as and when it is needed.

The UK is the windiest country in Europe, so we have a massive resource waiting to be used. And in the future, all our electricity could come from a mix of complementary renewable sources – balancing wind power with wave, tidal, solar and biomass.

For more information: see the BWEA factsheet “What happens when the wind stops blowing”

<http://www.bwea.com/ref/stop.html>

Plus: Here is how the inventor of one of the first wave power machines answers that question:

<http://www.thescotsman.co.uk/letters.cfm?id=440882003>