

# Busting the wind energy myths



As the sector has grown, wind power has attracted a number of myths – commonly-held beliefs that have no foundation in reality. The five main myths about wind energy are presented below, along with a basic explanation of why they are just misconceptions.

## 1 “Wind power is a niche-technology”

Wind energy accounted for over 7% of the EU's electricity demand (2012) that will be up to 17%, in 2030 up to 50%.

Wind energy makes a difference to the European job market: while EU unemployment rose by 9.6% between 2007 and 2010, jobs in the wind sector increased by 30%.

Wind energy also helps the EU economy: the industry's growth was twice that of the EU's GDP overall in 2010.

Wind energy reduces pollution and emissions. Unlike fossil fuels, it emits no particles that are dangerous for human health. For every kWh of wind energy used, approximately 696g of CO<sub>2</sub> will be avoided. In 2011, wind energy avoided the emission of 140 million tonnes of CO<sub>2</sub> in the EU, equivalent to taking 33% of the EU's car fleet off the roads.

## 2 “Wind power is expensive”

Wind energy is becoming competitive with fossil fuels. Taking into account the fuel and CO<sub>2</sub> costs, wind energy costs less than the energy generated by coal and gas and is considerably cheaper than nuclear. With a higher carbon price and the right market design, onshore wind could compete with those technologies.

Wind energy is free while the EU's oil and gas import bill in 2012 is estimated at €470 billion – 3.4% of the EU's GDP. This bill has increased by €200 billion over the past three years.

Globally, \$88 bn a year are spent subsidising renewable energy – while fossil fuels receive subsidies of \$523 bn a year.

“Fuels [are] still receiving four times the level of subsidies [as renewable energy]”, European Commission said in 2011 (in the Communication: “Renewable Energy: Progressing towards the 2020 target”).

In the past, no electricity generating technology has been developed, introduced and become competitive without initial support.

## 3 “Wind power is unreliable”

Wind is variable, but predictable. Wind farm sites are chosen after careful analysis of wind patterns. This enables a forecast of output to be made - information which can be made available to the network operators who will distribute the electricity.

The power grid operator constantly matches the electricity generation available to electricity demand. No power plant is 100% reliable, and the electricity grid is designed to cope with power plants shutting down unexpectedly, and times when the wind is not blowing.

In Denmark, approximately 26% of electricity demand is already supplied by the wind, without any problem in managing the electricity system.

## 4 “Wind power is bad for the environment”

The operation of wind power does not produce harmful emissions or any hazardous waste. It does not deplete natural resources, nor does it cause environmental damage through resource extraction, transport or waste management.

Wind farm developers are required to undertake an Environmental Impact Assessment to ensure that the potential effects on the immediate surroundings, including fauna and flora, are carefully considered before construction is allowed to start.

Wind power's overall impact on birds, bats, other wildlife and natural habitats is extremely low, compared with other human (and feline) –related activities. Buildings, cats and vehicles for example are a much bigger threat – and bird protection NGOs recognise climate change as the single biggest threat to bird species.

## 5 “Wind power is bad for health”

The most audible sound of wind turbines is a light swishing – and usually the wind itself is louder. Noise levels from turbines meet WHO recommendations for residential areas.

Wind energy emits no particles, unlike fossil fuels, which severely affect human health.

There is no evidence that the audible or sub-audible sounds including infrasound emitted by wind turbines have any direct adverse physiological effects.

