

UK wind research blows away myths

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The most extensive study yet of the UK's wind resource has found it to be the best in Europe, underlining its ability to make a significant contribution to our energy needs.

The research, conducted by Oxford's Environmental Change Institute for the Department of Trade and Industry, analysed hourly wind speed records collected by the Met Office at 66 locations across the UK since 1970.

The key findings are:

- The UK has the best wind resource in Europe. The recorded capacity factor for onshore wind energy in the UK is 27 per cent, greater even than in Germany (15 per cent) and Denmark (20 per cent) where wind farms are currently most widespread.
- Availability of wind power in the UK is greater at precisely the times that we need it – during peak daytime periods and during the winter.
- The UK wind resource is dependable. The likelihood of low wind speeds affecting 90 per cent of the country would only occur for one hour every five years.
- The chance of wind turbines shutting down due to very high wind speeds is exceedingly rare – high winds affecting 40 per cent or more of the UK would occur in around one hour every 10 years and never affect the whole country.

Energy Minister Malcolm Wicks said: 'This

research is a nail in the coffin of some of the exaggerated myths peddled by opponents of wind power.

'Put simply, wind energy in the UK could be greater than that in Germany and Denmark. Wind in the UK is there when we need it most and we must continue our efforts to harness its potential for our future energy mix'

Graham Sinden, author of the report, said: 'The UK wind resource offers a reliable source of electricity that is not only low carbon, but reduces the UK's reliance on imported fuels. By examining such extensive wind records from throughout the UK, we can be very confident that the study identified both long-term trends and the most extreme wind conditions the UK will experience.

'The key to understanding the benefits of wind power for the UK rests with understanding the resource itself. The evidence shows that UK wind power delivers more energy at times of peak demand, and that claims that calm conditions regularly occur throughout the UK in winter are without foundation.'

An Executive Summary as well as a full copy of the report, 'Wind Power and the UK Wind Resource' can be obtained online at www.eci.ox.ac.uk/renewables/ukwind

Source: University of Oxford

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