

Common wind-power myths refuted

Myth 1: Wind power is free of CO₂ emissions

Wind power's 'clean, green' image is spun from the fact that it is emissions-free *at the point of generation*. Honest CO₂ auditing must allow for construction and, as electricity cannot be stored, any increases in emissions from the back-up plant needed to support a randomly fluctuating supply.

Electricity demand does not rise and fall in line with the ability of wind turbines to supply it. Back-up, which is essential, is supplied by gas or coal-fired plant. When wind-powered turbines are generating, the emissions from this back-up plant go up because it runs less efficiently, much like a car riding its clutch. An accepted figure is about 20 per cent.

Emissions from turbine manufacture and erection are, on normal soils, relatively low. However, where turbines are built on peatlands (as on many Scottish sites), construction inevitably leads to extensive habitat damage. This triggers the release of much of the CO₂ stored in the peat, a process that will continue well beyond the operational life of the site.

The effect can be estimated using the developers' data – see Hall M J, *A guide to calculating the carbon dioxide debt and payback time for wind farms*. For example, much of the Whitelee site near Glasgow, with a 25-year operational life, is being built on deep peat. A peat-sensitive audit suggests that it could be 17 and perhaps even as long as 35 years before it begins to cut emissions.

Our latest briefing paper *Carbon savings and wind power on Lewis* (visit our conference stall or www.viewsofscotland.org) explains how 'payback time' for these projects could be negative.

Myth 2: Those living nearest wind farms are their strongest advocates

Survey conclusions become significantly distorted when they are paraphrased. The data in the poll report on which the claim is based say no such thing. Ninety per cent of the 'strongest advocates' lived more than 12 miles from any wind-power development. (*Public Attitudes to Windfarms*, MORI Scotland for Scottish Executive Social Research, January 2003.)

In reality, opinion polls that conclude such support have invariably been commissioned by a vested interest and were conducted a long time ago at sites with a few small turbines where the majority of those questioned did not live near enough to a site to be troubled by it.

Myth 3: Wind turbines do not deter tourists

Four years ago, a wind-industry poll conducted in Argyll claimed that wind turbines would not deter tourists from returning to the area. Sixty per cent of those questioned apparently concurred – but they also said that they had never actually seen any of Argyll's wind-power developments. In contrast, a quarter of tourists questioned in a poll for VISITSCOTLAND, shown mock-ups of proposed sites, said they would be unlikely to return to areas of Scotland where wind turbines had been built.

Myth 4: Wind power can replace nuclear power

It cannot. Even the wind-power industry now admits that the two technologies play incompatible roles in electricity generation.