Monkwith Wind Farm Public Exhibition April 2009

EnergieKontor

Myth 1: Turbines are taking over the countryside

- ✓ There are now some 2,353 turbines in 203 locations.
- ✓ Generating 10 per cent of UK electricity from renewables by 2010 could mean an increase by around another one and half times the current number.
- ✓ Less than 1/20,000th of the UK (800–1,200 hectares) would be used for foundations and access roads.
- ✓ Land between turbines can still be used for farming or natural habitat.

Myth 2: Turbines are a health hazard

- ✓ Wind generation produces no emissions, harmful pollutants or waste products.
- ✓ In 25 years of wind generation, with 68,000 turbines now worldwide, there are no significant reports of health issues. This includes Denmark, whose turbine density is 30 times that of the UK.
- ✓ The DTI (now BERR) has commissioned an independent study in response to public concerns about low frequency noise. This concluded that there is no evidence of health effects arising from infrasound or low frequency noise generated by wind turbines. (Source: Hayes McKenzie report on Noise arising from Wind Farms).
- ✓ However, vibration levels 100 metres from turbines are a factor of 10 lower than the safety requirements for modern laboratories.
- ✓ Each development requires a noise assessment which can be validated by the Environmental Health Officer.

Myth 3: Wind farms keep tourists away

- ✓ The University of St Andrews recently (12 Dec 2005) carried out research at several wind farms in the Scottish Borders and in Southwest Ireland. Tourism is economically important in both regions and they are renowned for their scenic beauty, so the prospect of an upsurge of wind farms was a cause for concern. However, Dr Charles Warren of the School of Geography and Geosciences established that, although people expected a range of negative impacts, these fears were not realized.
- ✓ In most cases, people found that their worries about landscape impacts and noise were unfounded, with surprising numbers even finding the wind farms a positive addition.
- ✓ These findings might seem unusual but, in fact, the consistent conclusion of all similar surveys is that large majorities of people living near wind farms like them.

Myth 4: Wind produces little power

- ✓ Myth 7: Wind produces little power
- ✓ A single 1.8-megawatt turbine can produce enough power for 1,000 homes
- ✓ Existing wind projects generate enough for nearly half a million homes.
- ✓ The average UK wind farm will pay back the energy used in its manufacture within three to five months – more quickly than coal and nuclear plants.
- ✓ Over its lifetime, a wind farm will repay this energy 50 times over.
- ✓ The geographical spread of wind farms minimises the loss of generation when the wind stops in any one location.

Myth 5: Wind energy will not help climate change

- ✓ Producing 10 per cent of electricity from renewables in 2010 could cut carbon emissions by 2.5 million tonnes a year.
- ✓ Wind generation produces no carbon emissions.
- ✓ Every unit of energy generated by wind doesn't need to be generated by carbon-producing sources.
- ✓ Any emissions savings lost through use of fossil fuel back-up will be minimal to 2010.
- ✓ Wind is part of a range of measures to tackle climate change, alongside other renewables and energy efficiency.

Myth 6: Projects are forced through with no regard for local concerns

- ✓ Ministers have made it clear that wind farms should only be located in the appropriate place and that local concerns should be listened to.
- ✓ All wind farm proposals are subject to a strict planning process, addressing environmental, visual and community impacts.
- ✓ Local planning authorities consider onshore proposals up to 50 megawatts (the vast majority of applications to date).
- ✓ The planning framework facilitates renewable energy, while maintaining safeguards for landscape and nature conservation.
- ✓ It does not impose targets or developments on local authorities.
- ✓ For applications over 50 megawatts, local authorities can trigger an independent public inquiry if they object.
- ✓ The public can participate in the planning processes and their views are taken into account at every stage.
- ✓ Projects not meeting planning requirements are refused consent.
- ✓ About a third of all applications are refused.

Myth 7: Wind farms are unpopular

- ✓ Surveys undertaken by the DTI (now BERR) and other organisations show broad support for the expansion of renewable energy.
- ✓ A recent survey (May 2006) of awareness and attitudes towards renewable energy has discovered that public support for renewables remains high. The DTI (now BERR) commissioned GfK NOP Social Research to conduct a quantitative research project to explore awareness and attitudes to renewable energy amongst the general public in Great Britain, and determine influences on their opinions of this subject. The survey revealed that 85% of the general public support the use of renewable energy, 81% are in favour of wind power and 62% would be happy to live within 5km (3 miles) of a wind power development. Solar, Wind and Hydro-electric were the most recognised sources of renewable energy (90%, 82% and 82% respectively). A survey conducted by Mori for EDF Energy showed 72% of people supported wind farms, and was the favoured choice of Britons to fill the energy gap in the future.
- ✓ Another survey for BBC Scotland has suggested that more than half of adults in Scotland favour renewable energy sources like wind power to supply future needs. Of the 1007 people who responded to the survey, 52% saw renewable energy sources like wind, tidal, solar and wave power as the "preferred method of meeting future energy demands in Scotland". The survey also found that 21% preferred gas, 15% opted for nuclear and 6% saw a long-term future for coal.
- ✓ Interestingly many independent surveys found that people with first hand experience of living near to a wind farm were more in favour than those who had no experience.

Myth 8: Wind farms devastate house prices

- ✓ A study by the Royal Institution of Chartered Surveyors (RICS) 7 suggests that wind farms do not impact on residential property values in a uniform way.
- ✓ Results suggest that wind farm development reduces property values to some extent but prices begin to recover after wind farms have been up and running for two years.
- ✓ A significant minority of surveyors (40%) reported no impact from wind farm developments on residential property values.
- ✓ Evidence suggests that those living nearest to wind farms are their strongest advocates.

Myth 9: Turbine blades threaten bird populations

- ✓ Applications for consent for wind farms submitted to the BERR are accompanied by an Environmental Impact Assessment that includes details of the likely impact of the project in question on the environment and wildlife, among other things. In considering an application, the Department will consult with a range of stakeholders, including the statutory advisers on nature conservation, as well as others with an interest in the project. This ensures that decisions on whether to grant consent for a wind farm are considered in the light of the best available information about its likely impacts.
- ✓ The Department has established a Research Advisory Group to fund research into the impact of wind farms on the environment. This has included a joint study with wind farm developers and Defra to collect data on the distribution of sea birds in the three strategic offshore wind farm areas, the results of which will inform decisions on the grant of consent for wind farm projects in those areas.
- ✓ The Royal Society for the Protection of Birds (RSPB) make clear that the available evidence suggests that appropriately positioned wind farms do not pose a significant hazard for birds. The RSPB's conclusion is supported by a report last year for the Swedish State Energy Authority, which found that only 14 of the total 1.5 million migrating seabirds that each year passes two wind farms at Kalmarsund in south east Sweden are at risk of being killed.
- ✓ Projects like the Black Law windfarm demonstrate that, if properly sited, such developments not only produce zero emissions, but can also have a positive impact on the environment. The RSPB make clear that the Black Law windfarm, on the site of an abandoned opencast coal mine, represents an exciting opportunity to deliver real biodiversity benefits through habitat management.
- ✓ In any case, the likely impact on wildlife must be kept in context. A paper in Nature, by a large group of scientists including one from the RSPB, indicated that in sample regions covering about 20% of the Earth's land surface - 15% to 37% of species (not just birds) will be committed to extinction as a result of mid-range climate warming scenarios by 2050.

Myth 10: Onshore wind is being promoted at the expense of other renewables

- ✓ Myth 10: Onshore wind is being promoted at the expense of other renewables
- ✓ The Government has committed £500 million to develop longer-term renewables, such as offshore wind, wave and tidal, solar, biomass and community projects.
- ✓ Onshore wind is currently the most economically viable renewables technology with scope for expansion, but it will increasingly operate as part of a renewables mix as other technologies come on line.
- ✓ The UK is already the world's second-biggest offshore wind generator. Plans for further offshore wind farms represent the world's biggest expansion of renewable energy.