

WWF-UK policy position on wind power

RENEWABLE ENERGY

Alongside significant improvements in energy efficiency, the development of renewable energy is one of the main ways of reducing carbon dioxide emissions and thereby addressing the threat of climate change. The UK government has a target to generate 10 per cent of electricity from renewable energy by 2010. Scotland is aiming for 17.5% by 2010 and 40% by 2020.

WWF is committed to promoting renewable energy as the replacement for fossil fuel combustion and nuclear generation, and the foundation of a climate-friendly low carbon economy. WWF-UK believes that a well-managed approach to the expansion of renewable energy has the potential to provide truly sustainable energy for the UK. Careful siting and operation of renewable energy projects can ensure that impacts on biodiversity are minimised and that they are integrated well within the local environment.

WIND POWER

Wind power is a key renewable energy source for the UK. It is competitive with conventional generating technologies and the UK onshore wind resource is very large – it is estimated that wind could provide at least 20% of the UK's current electricity consumption¹. WWF-UK supports the expansion of the wind industry and is keen that this substantial resource potential is more fully exploited. As a mature renewable energy technology, the development of wind power over the next ten years will be very important to progress sustainable energy in the UK and take forward solutions to climate change.

ENVIRONMENTAL IMPACT

In general, and compared to other energy sources, the environmental impacts associated with wind power are small. During operation, no CO₂ or other atmospheric pollutants are emitted, and once dismantled, no dangerous waste is left behind. As long as the development of wind farms is managed sensitively, and framed within general steps towards sustainability in society at large, they pose no fundamental sustainability problems.²

Habitats and wildlife

Wind turbines can have an impact upon wildlife only if sited in the wrong place and should be kept away from important bird nesting areas and bird migration routes. There may be some habitat destruction during construction, but this can be mostly replaced after construction and the overall land take will not exceed 5 per cent of the total development land area.

The significance of any impacts depends on the type of species and habitat involved, but studies have shown that sensitive bird species will avoid the area and that the effects on successful reproduction for bird species living and breeding in the vicinity of the wind farm were negligible.³ Research, particularly by the RSPB, has also indicated that in the UK wind turbines have no measurable effect on bird mortality. It has also been shown that strikes are highly unlikely to occur during good visibility conditions and in poor visibility birds are less likely to

¹ New and Renewable Energy: Prospects for the 21st Century - Supporting Analysis, ETSU/ DTI March 1999

² See for example, 'Renewables in Power Generation: Towards a Better Environment', ETSU 1998

³ A Review of the Possible Impacts of Wind Turbines on Birds and Other Wildlife, Crockford 1992

be in the vicinity of the turbines. Furthermore, it has been found that most birds tend to fly over or around the turbines.⁴

WWF believes that proposals for wind farm developments within nature conservation areas will need to be very carefully considered. A proposed development should not cause adverse effects on the integrity or conservation objectives of statutory international and national sites.⁵

VISUAL IMPACT

The visual and landscape effect of wind turbines is the issue causing greatest concern with regard to wind farm development. However, not everybody considers wind turbines to have a negative visual impact. Whether it has a negative aesthetic impact or a positive aesthetic effect is determined according to personal taste. In addition, the way in which a wind development is thought of can change depending upon the circumstances under which it is developed, and the degree to which local communities feel involved in the decision-making process.

Although opinions on aesthetic issues are very important to local communities and their quality of life, they are difficult to equate with the fundamental risks that continued fossil fuel use and nuclear power pose to natural systems and society at the global, regional and local level. It is important to bear in mind that the impacts of climate change, due to fossil fuel use, will have a significant effect upon the biodiversity and landscape of the UK.

WWF believes that the visual presence of wind turbines within our landscape and townscape will not have a negative impact upon the country as a whole – on the contrary, we embrace the expansion of wind power across the UK and the positive symbol of clean and sustainable energy that this will bring. WWF believes that all land areas should, in principle, be available for wind turbine development, although it is very unlikely that any such development would be approved in any area designated specifically for landscape reasons, such as a National Park. Nonetheless, all individual wind developments should be considered on an individual basis with a local environmental assessment and full involvement of the local community.

To minimise any potential environmental or visual impacts of wind farms the following guidelines can help:

- Involvement of the local community and information dissemination at all stages of the design, development and construction stage to help maximise the benefits of the wind farm development to the community.
- Direct community benefit - perhaps through co-operative ownership - either financial or through electricity supply to increase the acceptance of the wind farm development in the local area.
- During siting consider the local community, local topography, scale and design of wind farm and height and type of turbines.

⁴ Blood Hill Wind Farm; Renewable Energy Case Study, ETSU 1995, Birds and Wind Turbines: Can They Co-exist? ETSU 1996b

⁵ *Wind Farm Development and Nature Conservation*, WWF-UK, RSPB, English Nature, BWEA, 2001