



***EVIDENCE TO THE HOUSE OF COMMONS
WELSH AFFAIRS SELECT COMMITTEE
FOR THE
ENQUIRY INTO ENERGY POLICY FOR WALES***

Welsh Affairs Committee, House of Commons, 11 October 2005

The Welsh Affairs Committee is undertaking an inquiry into Energy in Wales. The inquiry will focus on the cost, cleanliness, efficiency and sustainability of existing energy sources in Wales, including nuclear, wind, gas, oil and coal, and will consider the merits of newer forms of energy provision, including tidal, solar, bio-mass and geothermal sources. The inquiry will also consider the UK Government's policy, and its approach towards the development of both traditional and innovative sustainable energy production in Wales.

This is the written evidence from the Wildland Network submitted to the Welsh Affairs Committee, November 2005. The enquiry started taking oral evidence in November and will continue on into the new year.

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Executive summary

Energy developments in rural areas, particularly in the uplands, across areas of wildland, have drawn the Wildland Network into discussions on energy policy. The impact of wind turbines on the landscape and environment is in direct conflict with the values of wildland and other scenic areas. Sustainability demands that policies take full account of environmental, social and economic factors, and do not have an adverse impact on other policy areas. Energy policy cannot be considered in isolation, and costs to other parts of the economy must be taken into account in decision-making.

Wildland is a finite resource that has intrinsic value in its own right and provides society with very valuable benefits. We recommend that further study is needed to identify and where possible quantify these values. We also recommend that these values be taken into consideration in all policy affecting these areas, including energy.

The Government's *Energy White Paper* has been criticised for focussing excessively on wind energy. It is evident that a more balanced and considered approach to renewable energy is required. While wind energy has a role in Wales' energy programme, turbines should be sited where they support rather than conflict with the local economy. To this end, we recommend that wind turbines are sited only in industrial areas close to the demand for energy, and that rural areas are safeguarded against further wind developments.

The National Grid electricity distribution network also has an adverse impact on landscape, and is responsible for huge losses of energy. We recommend that energy generation is localised or 'distributed', reducing these problems and encouraging energy solutions tailored to local needs and resources.

Decisions on energy provision in Wales should rest with National Assembly for Wales, not the Department for Trade and Industry. Planning decisions on wind turbine developments should rest with local planning authorities, not the Department for Trade and Industry.

We call for a moratorium on further wind energy developments in rural areas, pending the results of further studies into the value of wildland and alternative energy strategies. We recommend that no further wind developments be permitted in the Cambrian Mountains.

Wildland Network

1. The Wildland Network is a network of individuals and organisations. Our aims, through research, advice, encouragement and education, are: to promote the recognition and appreciation of wild land; to protect and conserve the qualities of wildness; and to promote the establishment of complete ecosystems on a large scale. We have topic discussion groups and a general news and information service via a website and email. We hold two to three meetings per year to discuss aspects of wildland, with site visits to examples of wildland projects. Examples of current areas of work that members are involved in are: mapping wildland areas in UK; assessing the value of wildland to society; assessing the potential for species reintroductions. Website at www.wildland-network.org.uk

Wildland

2. There is no strict definition of wildland, and it is accepted that wildland is a subjective concept associated with people's response to certain areas of land. Qualities that are generally considered important are: large area; sense of remoteness; absence of signs of human activity; absence of infrastructure; naturalness of vegetation; presence of wild animals. Scientists at the Geography Department, University of Leeds have developed an online wilderness mapping tool which can be used to map wild areas in Britain by applying weightings to a set of factors¹.
3. In the UK, many areas valued for wildland qualities may not have all of these qualities, for example spruce plantations may be present or the vegetation may be subject to unnatural levels of grazing by sheep. However, such areas are still highly valued for their sense of remoteness and lack of built infrastructure.
4. Moreover, recent changes in farm subsidies and the economics of forestry are providing huge opportunities for enhancements of the vegetation patterns in the British uplands, with consequent improvements of the landscape and biodiversity attributes of these areas.
5. Wildland does or has the potential to provide far-reaching benefits to society. The following list is not exhaustive: flood prevention and water quality improvement, carbon sequestration, tourism and recreation, wildlife, health benefits, education, fishing, hunting. Some of these can provide substantial and ongoing economic opportunities to local communities, and provide social benefits to communities over a very large catchment. Wildlands are in fact a national resource.
6. Despite these considerable benefits, wildland is being eroded. It is a finite and irreplaceable resource, that needs to be valued, protected and promoted.

¹ See www.ccg.leeds.ac.uk/teaching/wilderness/

7. **We urge the UK and Wales governments to make sure wildland areas are valued and protected so that society can take full advantage of the special qualities of these places and so that new opportunities for improvements are fully realised and appreciated. We recommend that a study is commissioned by government to identify and where possible to quantify the benefits of wildland.** The Wildland Network can contribute some expertise in this.

Sustainable energy provision

8. Sustainability is enshrined in the constitution for Wales. We wish to draw attention to this principle in the provision of energy. The following quotes are taken from the National Assembly for Wales' definition of Sustainable Development: "people and communities are at the heart of sustainable development"; "decisions in each field of policy take account of effects and proposals 'in the round', not just in the field in question"; "policies and programmes are designed in an integrated way so that they are mutually reinforcing and evidence based"; "decisions about the short term should not be contradictory to long-term aims". It is clear that large-scale wind developments in rural areas conflict with some of the central tenets of Sustainable Development.
9. We are concerned that the wind industry has preferential access to government and is unduly influencing policy. For example a senior adviser at the Department for Trade and Industry is also a leading member of the British Wind Energy Association. This is leading to energy policy heavily biased in favour of wind, and suffocating intelligent debate on alternative approaches. **Decisions on energy policy for Wales should rest with the National Assembly for Wales, not the Department for Trade and Industry. The principles of sustainable development should be applied to energy policy.**
10. All rural landscapes in Wales are a fundamental part of our heritage and culture, and many are internationally important assets. People define themselves by their relationship with the landscape. Scenic landscapes, whether designated or otherwise, are as much a part of our cultural heritage as our best loved buildings. They deserve the same level of protection of their aesthetic qualities. Large-scale wind turbine developments in rural locations conflict fundamentally with the preservation of the visual qualities of the landscape and deprive us of the character and heritage of the Welsh landscape, and destroy a fundamental characteristic of wildland.
11. Currently, decisions on individual wind developments in Wales are taken by the Department for Trade and Industry. Rural developments impact profoundly on the landscape and heritage of Wales, in areas that are net exporters of energy, for the benefit of English consumers. It is politically unacceptable that these decisions are being taken in London. **Planning decisions on all wind energy developments should be devolved to local planning authorities which are best placed to make decisions on the siting of developments and the value of local landscapes. These decisions should not rest with the Department for Trade and Industry.**
12. The National Grid distribution network has inherent inefficiencies, resulting in the wastage of over 60% of generated power. The Parliamentary Office of Science and Technology recommends decentralising the National Grid. Localised or 'distributed' generation has the potential to make massive energy savings, and to bring control and benefits of energy generation and distribution to a more local level. It also creates better opportunities for smaller scale and innovative generating systems and the use of technologies appropriate to local areas. The recent report from the House of Lords Select Committee on Economic Affairs, *The*

*Economics of Climate Change*², quotes costs of carbon emission reducing technologies (para 81): in the long term, distributed generation is one of the cheapest options, with zero net cost over the cost of grid electricity. The National Grid also has an unacceptable adverse impact on the landscape and inherent risks for public health. **We recommend that decentralised or distributed generation be adopted as part of Wales' energy strategy.**

Climate change and energy policy

13. We call into question the current almost exclusive emphasis on wind power as an approach to tackle climate change. There is a role for wind power, but there appears to be an uninformed and unwise desperation in the rush to develop wind turbines, no matter how adverse the effects of poor siting.
14. The Kyoto Protocol concentrates almost exclusively on carbon emissions targets. The Lords Select Committee received evidence that this policy is ineffective (para 122). They heard that current targets will make little difference to rates of warming, and that it is unrealistic to expect that stronger targets will be workable. The Lords Select Committee recommends that the 'beyond Kyoto' negotiations focus more on strategies of adaptation to climate change, which can be more cost effective than mitigation, and technological innovation to provide long-term solutions to our energy needs.
15. The Lords Select Committee criticises the Government's *Energy White Paper* for placing undue emphasis on just one technology, wind energy, when there is a wide range of potential technologies for reducing carbon emissions (para 83). Even full implementation of onshore wind power across the UK would only diminish carbon emissions by 3%, which is negligible, and this is assuming that the wind energy displaces other energy generation, which is not the case to date, nor is it expected to be.
16. The problems of relying on wind energy are well reported. The intermittency of supply (25% capacity last year) means that there is a limit to how much wind energy can feed into the grid, which has a limited capacity to deal with the peaks and troughs of energy input. As the proportion of wind energy increases, the system is put under greater strain and the net cost of using the technology increases.
17. Other generating capacity is required to back up times of low wind. To quote from a 2005 report from E.ON Netz, a company that operates wind turbines, "Wind energy is only able to replace traditional power stations to a limited extent. Their dependence on the prevailing wind conditions means that wind power has a limited load factor even when technically available. It is not possible to guarantee its use for the continual cover of electricity consumption. Consequently, traditional power stations with capacities equal to 90% of the installed wind power capacity must be permanently online in order to guarantee power supply at all times."³ The report demonstrates that the current policy expectations for wind energy in the UK are unrealistic.
18. In order to cope with the dramatic fluctuations in wind energy input, and with concentrations of wind generating facilities far from the main demand, the Grid network needs to be greatly expanded. This entails further unacceptable impacts on the landscape and public health, as well as considerable costs. We repeat our earlier recommendation, that in contrast to Grid

² House of Lords Select Committee on Economic Affairs, *The Economics of Climate Change* 2005.

³ E.ON Netz, 2005. *Wind Report*. See http://www.eon-netz.com/EONNETZ_eng.jsp

Or see R.E.F. summary of report at <http://www.ref.org.uk/images/pdfs/eon.2005.REF.pdf>

expansion, generating capacity should be located locally to demand, and that distributed generation should replace the National Grid. Siting of generating capacity must be considered in this context.

19. According to E.ON, the ‘capacity credit’ of wind power (the degree to which it can obviate the need for conventional power) is only 8%. Given that power stations built to back up wind power incorporate ‘embodied energy’, the savings in carbon emissions from use of wind power are further reduced. Added to this, no fossil fuel power stations in UK have yet been decommissioned as a result of the construction of wind turbines. Without this actual displacement of fossil fuel, wind power cannot be said to reduce carbon emissions at all.
20. The problems highlighted in the previous four paragraphs, and the experience of E.ON, show that it is very misleading to pretend that wind energy will prevent the building of nuclear capacity or reduce the need for gas and coal stations. It cannot be considered as an alternative to other generating capacity, and at best is merely a supplement. Its contribution to climate change mitigation is roughly zero.
21. Moreover, the turbines and their associated infrastructure, including the expanded Grid network, present a wholly unacceptable impact on the landscape. We provide evidence on the importance of the landscape for society above. If a key objective of government funding is to reduce carbon emissions, wind power represents a waste of scarce resources. Much greater focus is needed on alternative strategies and technologies, for example energy saving and other renewable energy technologies. **We recommend that the UK and Welsh Governments review the policy of promoting wind energy. We suggest that wind turbines can provide a useful energy supplement locally in industrial areas, and that siting should be limited to industrial sites. There should be a presumption against wind turbines in rural locations.**

Wildland and the rural economy in Wales

22. The Welsh Assembly Government’s planning guideline TAN8⁴ maps a set of Strategic Search Areas targeted for massive wind power developments. An overwhelming majority of the responses to the draft consultation document were opposed in principle to the siting of wind turbines in rural areas. Despite this response, the Assembly chose to ignore the clear public opinion demonstrated by their own consultation exercise, and publish the final TAN8 almost unchanged. Moreover, the assessment that produced the SSAs did not take landscape and biodiversity into consideration, apart from looking at designated areas, mainly National Parks. A proper strategic assessment would have started by questioning the need for the wind developments, rather than assuming the outcome beforehand. The principle and the detail of the Strategic Search Areas therefore have no political mandate.
23. One of the Strategic Search Areas, Area D Nant y Moch, is within the Cambrian Mountains Environmentally Sensitive Area (ESA). A lot of public money has been invested in the area over the last 20 years or so, to enhance the landscape and biodiversity of the area. The building of power stations across the area will destroy ‘goods’ already paid for out of the public purse.
24. The Nant y Moch area is also the subject of a well-established project to enhance the landscape and biodiversity attributes of the area, for the benefit of the nation and to provide a quality setting for tourism and recreation activities, therefore supporting a sustainable local economy.

⁴ <http://www.wales.gov.uk/subiplanning/content/tans/tan08/newtan8/tan8-e.htm>

Despite the clear conflict of interests, and representations to the TAN8 consultation, Nant y Moch has remained a Strategic Search Area.

25. The whole of the Cambrian Mountains, including the Nant y Moch area, were identified for National Park status in 1936 and proposed in the initial list of potential national parks in 1947. The Countryside Commission presented an Order for designation 1973, which was turned down by the Secretary of State, apparently for political reasons⁵. In making the Order, the Countryside Commission considered the landscape to be of national significance: "...cut by deep wooded valleys and gorges, their rolling moorlands are colourful at all seasons and are one of Britain's loveliest and most attractive countrysides....attracting discerning visitors in increasing numbers who appreciate that this 'spirit of Wales' is the equal in beauty of many existing national parks". There is currently a proposal to make the Cambrian Mountains an Area of Outstanding Natural Beauty.
26. **Given the longstanding recognition of the obvious quality of the landscape in the Cambrian Mountains, and the interest and value it has as a national asset, we recommend that no further wind power developments be permitted in the Cambrian Mountains.**
27. Wildland projects in the UK and abroad illustrate how tourism and recreation set in areas of high environmental and landscape quality bring real and lasting benefits to local economies. Wind energy developments make almost no positive contribution to local economies, and damage the qualities that are the truly valuable assets of an area. Within Wales, this is demonstrated very clearly in the Cambrian Mountains. A study of the expected socio-economic benefits of the wildland project in Nant y Moch area is anticipated early next year. Local Authorities are currently bidding for funds to invest in the economic regeneration of the Cambrian Mountains, using the enhanced landscape and biodiversity attributes of the area as a setting for the economic activities. Both of these initiatives depend entirely on preserving and enhancing the beautiful and wild landscapes in the area, and will be severely compromised, even made impossible, by further industrialisation by wind turbines.
28. A survey on visitor attitudes to areas with wind developments was conducted in Scotland, and provides some very sobering evidence for tourism in Wales. The survey asked whether respondents would go to another unspoilt part of the world instead of going to the Highlands and Islands of Scotland, should the area be subject to wind developments on a significant scale. Of 4,670 mailed, 1,643 responded. 91.4% replied yes. 2.9% replied no, but are against wind farms. 5.7% replied no⁶.

Conclusions

29. **We recommend that energy policy in Wales abandon the current focus on wind turbines sited in rural areas. We call on government to commission studies into two policy areas: evaluating the benefits of wildland; and reviewing energy provision in Wales to establish a policy based on the principles of sustainable development, with better informed, long term solutions. We call for an immediate moratorium on the building of rural wind power developments, pending the results of these studies.**

⁵ See Cambrian Mountains Society website for more details, www.cambrian-mountains.co.uk

⁶ Neil Birnie, Wilderness Scotland www.wildernessscotland.com Personal communication.