

## **Response to the 2006 Energy Review Our Energy Challenge**

Wind turbines only supply electricity when the wind is blowing, or not blowing too hard, so their intermittent, unpredictable output must be backed or shadowed at all times with a secure, controllable supply of mainly fossil-fuelled electricity which emits more carbon dioxide (CO<sub>2</sub>) and must be included in the cost of wind power. New and upgraded connections to the National Grid must also be included in the cost of wind power. The rate of electricity consumption is rising all the time so the proportion of renewables (mainly wind) needed to meet the government's target for 2010 will necessarily be considerably higher by then.

The UK has 1563.65 MW total installed operating capacity of wind power.  
(<http://www.britishwindenergy.co.uk/ukwed/index.asp>)

Their rated average output of electricity is approximately 25% (DTI, 2004 & 2005) of installed capacity therefore their combined total average output of electricity is about **400 MW**

The Anglesey Aluminium Metal Ltd. Factory needs **250 MW** of a secure, continuous, controllable supply of electricity 24 hours of every day.

So the factory would require over half the total output of electricity from all the wind plant in the UK which would still have to be matched with a secure supply of electricity.

A power cut of six hours or more would destroy the factory and it would not be economic to rebuild it.

The factory directly employs **570 people** and **70 full-time contractors** working continuous shifts nights and days. (*AAM Ltd., Educational Guide, September 2005*)

The reduction of CO<sub>2</sub> emissions should be the real target – not the ruination of the countryside with monster machines which are little more than a cosmetic exercise to be seen to be 'green'.

In Denmark, which has an economy heavily dependent on the export of wind turbines, Flemming Nissen head of development at West Danish generating company ELSAM (one of Denmark's largest energy utilities), has commented :-

**“Increased development of wind turbines does not reduce Danish CO<sub>2</sub> emissions.”**

Dr Helmut Alt, chief science economist of the German utility RWE, has said that:

**“Even if the wind failed to blow for no more than one hour a year we can't afford to shut down existing plants”** - and Germany has over 16,000 wind turbines.

Here are five extracts from **“Tilting Against Windmills”** (*Reader's Digest, August.2003*, citing engineers and experts in Denmark and Germany, where they have much greater experience of operating wind energy :-

- 1) Henning Rasmussen, Danish engineer, **“When the wind arrives one or two hours later than forecast, we get nothing and we have to ask our neighbours to rescue us.”** This means Danes often use nuclear power from Sweden and Finland. When there's too much wind, surplus power is given away.  
**“A couple of years ago, we even had to pay Sweden to take it” says Rasmussen. “It was crazy! ”**
  
- 2) Gundolf Dany, chief engineer at Aachen. **“Until we invent a way of storing huge amounts of electricity, wind energy can never be relevant to our future,”** the extra cost of “balance ” power in Germany is about €500 million a year. Throttled back or idling, however, power plants are more polluting, like a car stopped at a traffic light. **Gundolf Dany and other engineers report that windmills have an insignificant impact on pollution reduction and in some cases even increase it.**  
This fact strikes at the heart of wind energy's promise. It explains why not one power station has yet been replaced by the thousands of windmills already operating.  
Of course to fit in with variations of supply, power plants have to throttle back so they produce less electricity which drives up their running costs. And even when idling, they are still polluting.’
  
- 3) ‘Niels Gram of the Danish Federation of Industries. **“In green terms windmills are a mistake and economically they make no sense . . .”**
  
- 4) ‘Jytte Kaad Jensen, chief economist for Eltra, Denmark ’s biggest electricity distributor. **“In just a few years we ’ve gone from some of the cheapest electricity in Europe to some of the most costly.”**
  
- 5) ‘Aase Madsen, an MP who chairs energy policy in the Danish parliament, is emphatic: **“For our industry it has been a terribly expensive disaster.”**

Our European neighbours are now finally admitting, from bitter experience, that there are huge problems with windpower. It would be irresponsible indeed to ignore these lessons. Unfortunately there are far too many influential people who have been strong proponents of the wind industry but are now reluctant to admit they could have been mistaken. Status, jobs and political correctness have been put way above concern for the environment.

Tolstoy knew all about that when he wrote: "I know that most men, including those at ease with problems of the greatest complexity, can seldom accept even the simplest and obvious truth if it be such as would oblige them to admit the falsity of conclusions which they have delighted in explaining to colleagues, which they have proudly taught to others, and which they have woven, thread by thread, into the fabric of their lives"

A single jumbo jet, flying from London to Miami and back every day, releases the climate-change equivalent of 520,000 tonnes of CO<sub>2</sub> a year . This means that a daily connection between Britain and Florida costs three giant wind farms (George Monbiot, *The Guardian*, 26th April 2005). Each one would be the size of the Cefn Croes wind power station – the largest in the UK. Plans are already afoot to extend our airports in anticipation of the doubling of air traffic by 2050. Yet, aviation is the only industry not covered by the Kyoto

Protocol which requires countries to cut their fossil fuel emissions.

The Right Hon Neil Kinnock, the first patron of Country Guardian, summed it up in his speech to oppose a wind power station at Newbridge, Gwent in 1994:-

“Wind power is always going to be an additional source of power, an extra cost of provision, never an alternative. It doesn't deserve the title of 'alternative' because it is simply a surplus on top, by its very nature. . . . this will not be so much be a farm for making energy out of wind as a farm for making a lot of money out of the taxpayer.”

Nothing has changed - CO2 emissions are still rising at an average of 1.5% a year. Plus, huge subsidies and hidden costs, gleaned from the unsuspecting taxpayer, create a false market which props up the wind industry and lines the pockets of the developers to the detriment of the environment. The headline on the cover of German weekly journal *Der Spiegel* (29 March 2004) described it as 'The Windmill Madness . . . from the dream of environmentally friendly energy to the highly subsidized devastation of the landscape.'

E.ON Netz stated in 2005 :-

“Dependence on the prevailing wind conditions means that windpower 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 windpower capacity must be permanently online in order to guarantee power supply at all times”

E.ON have also stated “changing every light fitting in all 20m households in the UK to energy-saver bulbs would result in a reduction on fuel bills of around £4.8bn – **the cost of building 64 offshore wind farms, 53 biomass power stations, or 14 gas-fired power stations.**” (*Let there be light – efficiently*, *Guardian*, 23/03/06)

If the wind industry gets its way, our ancient skylines will be transformed into miles of restless horizons – gigantic turbines with rotating, flickering blades silhouetted against the sky and casting a tangle of long, moving shadows over the ground. All peace and tranquillity gone and 'spirit of place' utterly destroyed along with our tourist industry.

When many of the wonderful varying landscapes of Europe are reduced to a depressing and uniform regiment of huge industrial units tourists will be seeking to escape from such despoiled areas – in fact, they already are so doing.

Our climate does not attract tourists for swimming and sunbathing. Our historical and rural heritage has always been the main attraction and the wonderful opportunities to walk, ride or and climb in magnificent landscapes – the very essence and soul of our country.

It is to be hoped that our decision-makers will realise that posterity will not thank them for degrading our unique rural heritage for a technology that is already regarded as a fad past its sell-by-date except for the purpose of milking fat subsidies.

**Good planning is about balance.** The irreparable ecological damage, loss of amenity and distressing divisions within communities caused by commercial wind turbines far outweigh any benefit of their insignificant and unreliable contribution to our energy needs.

The tiny, intermittent output of electricity and the negligible CO2 savings cannot possibly justify the huge sacrifice of that most finite resource - our unspoilt and unrenovable countryside. It is our duty to protect our rural heritage for present and future generations from such gross and unnecessary industrialization. The alternative will be a national disaster – no less.

A Kelly,  
Chairman, Country Guardian

21<sup>st</sup> April 2006