

## Proposed Wind Farm at Gartree

***“Far from being ‘free’, wind is one of the most expensive ways of generating electricity yet devised. Without an almost 100 per cent subsidy, unwittingly paid by all of us through our electricity bills, no one would dream of building giant wind turbines in Britain, because their cost is not remotely competitive”*** Christopher Booker, Daily Telegraph

***“....wind turbines should not be built within 1.5 miles of people's homes. Let it be understood, however, that there will still be health and quality of life problems caused by wind turbines beyond this radius”.*** Dr Nina Pierpont MD PhD

Foxton Parish Council fully supports the development of energy generation from renewable sources. With this in mind, we have undertaken an investigation into the proposal to build a 4-turbine wind farm at Gartree and the following are our principal findings. For those who want more information a detailed analysis follows, along with references and internet links.

Our findings have been both surprising and disturbing; we have concluded that the proximity of the current proposal could have detrimental effects on health, wildlife and property values. If, like us, you conclude that onshore wind farms are **not** appropriate, especially for this area, you must act now – please contact any representative listed at the end of this document.

A further disturbing fact is that a document prepared partly on behalf of HDC has identified more potential sites, in addition to those already being considered, very near Foxton – farmland between here and the A6, Glooston, Laughton, Saddington, Thorpe Langton and Theddingworth [32].

### Summary of Findings

- |  |                                     |
|--|-------------------------------------|
| 1. Use of wind energy does not mean that conventional power stations can be removed, they must remain as backup for periods of low or high wind, meaning the reduction in emissions is very much less than claimed and could actually cause an increase in greenhouse gas emissions from individual conventional stations. [1] & [11]. | <input checked="" type="checkbox"/> |
| 2. Wind farms only make a profit because of subsidies that are raised on our electricity bills. Those who can't afford to invest in a 'cooperative' will simply be worse off as they will be paying higher electricity costs. (A "Reverse Robin Hood Syndrome").   | <input checked="" type="checkbox"/> |
| 3. Onshore wind farms can have a significant detrimental impact on the value of property in the area [23].   | <input checked="" type="checkbox"/> |
| 4. Wind turbines are extremely visually intrusive - they are simply massive pieces of industrial machinery located in the countryside. This area of Leicestershire is particularly beautiful.  | <input checked="" type="checkbox"/> |
| 5. Health problems have not been adequately investigated. Headaches, sleep loss, nausea, anxiety, depression, stress and tinnitus are symptoms associated with the low frequency noise from wind farms less than 1 mile away [8], [9] and [23].  | <input checked="" type="checkbox"/> |
| 6. The flicker caused when the sun shines through the rotors can be psychologically disturbing.  | <input checked="" type="checkbox"/> |
| 7. Turbine blades can interfere with television reception and radar.   | <input checked="" type="checkbox"/> |
| 8. The Midlands is an area of relatively low wind, so is generally unsuitable for wind farms. [4].   | <input checked="" type="checkbox"/> |
| 9. Noise travels further in undulating countryside such as South Leicestershire. The low-frequency and thudding noise from wind turbines can cause sleep deprivation and stress. [8] & [9].  | <input checked="" type="checkbox"/> |
| 10. The rotors on turbines kill birds. They cause bats to die from haemorrhaging [22]. They can make horses nervous. No-one knows what effect they have on wildlife generally or habitat.  | <input checked="" type="checkbox"/> |
| 11. Wind Farms can make money for those who invest in a cooperative, while subsidies continue.   | <input checked="" type="checkbox"/> |
| 12. Wind Farms can be very effective if deployed offshore.   | <input checked="" type="checkbox"/> |
| 13. It is possible for Wind Farms to reduce CO <sub>2</sub> emissions.   | <input checked="" type="checkbox"/> |
| 14. Wind Farms produce little waste and are relatively safe.   | <input checked="" type="checkbox"/> |

## Introduction & Overview

There are proposals to build 6 or more wind farms along the south Leicestershire /Northamptonshire border, along a corridor running between Lutterworth and Market Harborough / Naseby. One of these wind farms is planned for land adjacent to Airfield Farm, on the ridge above Lubenham, near the prison. This would be built by Energy4All as a cooperative venture - funded, they claim, from local investment.

It is believed that other landowners near the proposed site are considering adding more turbines as a commercial venture if the plan goes ahead. In addition, a document prepared partly on behalf of HDC has identified several other potential sites very near Foxton, – farmland between here and the A6, Glooston, Laughton, Saddington, Thorpe Langton and Theddingworth [32].

Foxton Parish Council believes it is important that all residents are as well-informed as possible about the proposed wind farm. To this end we have undertaken as much research as possible in the time available to produce this leaflet.

We hope to arrange a public meeting in November, to be attended by experts in various relevant fields – we will let you know the details at a later date.

We are led to believe that Energy4All may be applying for planning permission around Christmas/New Year, which will reduce the consultation time available for objections. Those of you who would like to be alerted when the application is submitted can send your email address to [margaretwright@talk21.com](mailto:margaretwright@talk21.com).

The following abbreviations are used below:

<b>CERN</b>	Conseil Européen pour la Recherche Nucléaire (European Council for Nuclear Research)
<b>CPRE</b>	Council for the Protection of Rural England
<b>DBERR</b>	Department for Business, Enterprise and Regulatory Reform (new name for DTI)
<b>DTI</b>	Department for Trade and Industry
<b>FPC</b>	Foxton Parish Council
<b>NAO</b>	National Audit Office
<b>OFGEN</b>	Office of Gas and Electric Markets
<b>REF</b>	Renewable Energy Foundation
<b>WHO</b>	World Health Organisation

### Wind Farms are a Safe Green Energy Alternative Aren't They?

The first reaction of most people is that wind farms must be a good thing. Globally, we are consuming oil, gas and coal far too quickly and these finite natural resources are beginning to run out. This is rapidly becoming a crisis because of the increasing demands from the newly emerging economies such as China and India who are naturally aiming for standards of living comparable to western nations.

However, provision of electricity and other forms of power is a very complex problem with overwhelming effects on both the environment and ecology. Unfortunately, many of these effects are not clearly understood and hence any decisions made now may have very bad long-term consequences.

FPC has concluded that:

- In general, onshore wind farms are not an effective solution to the energy problem from environmental, climate or economic points of view.
- In particular, the proximity of the turbines to Foxton and other habitations could produce detrimental effects on local house prices and health, the latter both generally and especially in the prison. Visual intrusion, noise and loss of open space will severely affect the amenity value of the area. We also believe that any loss of wildlife will reduce quality of life and have an unwelcome impact on a much larger area.
- The proximity of the turbines to each other may cause problems of turbulence. This could decrease efficiency and increase the risk of damage to rotors.
- Many other forms of sustainable energy are preferable – subsidy of photovoltaic solar panels, wave/tidal energy, offshore wind farms, investment in nuclear fusion research, currently being undertaken at CERN (this is the safe, waste-free alternative to the current nuclear fission reactors). These should all be undertaken in parallel with compulsory, subsidised home/office insulation.

Wind turbines have a huge impact on the surrounding areas. The ones at Gartree will be very large (125m high, compared to the usual 70-100m) and benefits are doubtful.

We believe that DBERR is currently consulting on banding the subsidies for renewables, with the aim of giving the greatest rewards to the most efficient systems. This should be finished in 2009 and could mean that onshore wind farms receive less. In the meantime any that are approved by OFGEN (regardless of whether they are built) will have some level of subsidy guaranteed – this explains the current rush to apply.

We hope the following information will help you formulate an opinion on whether having one or more wind farms in the near vicinity will be a good thing or a bad thing.

All the bodies that have contributed to the documentation we have consulted are fully supportive of reducing greenhouse gas

## Foxton Parish Council Investigation into the Proposed Gartree Wind Farm

emissions and increasing electricity generation from sustainable sources, as does FPC.

As far as possible we have tried to use independently financed research papers to put this report together. The most valuable of these being:

- The Royal Academy of Engineering – “The Costs of Generating Electricity”
- The Centre for Policy Studies - “Wind Chill”.
- The Renewable Energy Foundation – “Energy Policy”.
- Barbara J Frey & Peter J Hadden - “Noise Radiation from Wind Turbines Installed Near Homes: Effects on Health”

The government sponsored “Wind Power in the UK” was also used and other references are listed at the end.

We have used information from Denmark, which has many years of experience in wind generated electricity.

We have tried to be impartial in our research, but this has been very difficult. Whilst some environmental bodies officially support wind farms, subject to major conditions, the main proponents we have found, besides the government, are the council, developers and landowners, whose motives seem to be more driven by the potential to make profits from subsidies provided by all energy consumers.

We have quoted facts in good faith and to the best of our ability, but time has been short. If you wish to check anything we advise that you refer to the documents cited. In addition, a search of the internet will bring up a proliferation of documents written from both sides of the argument.

### Conclusions

- 1. Onshore wind farms have few ‘green’ credentials.** In general, onshore wind farms are not an effective solution to the energy problem from environmental, climate or economic points of view.
- 2. Detrimental effect on health, property and wildlife.** In particular, the proximity of the turbines to Foxton and other habitations could produce detrimental effects on the comfort and enjoyment of local homes and on health (both generally and especially in the prison). Visual intrusion, noise and loss of open space will severely affect the amenity value of the area generally. We also believe that any loss of wildlife will reduce quality of life and have an unwelcome impact on a much larger area.
- 3. Turbulence and Noise Pollution.** The proximity of the turbines to each other may cause problems of turbulence, this could manifest as general noise pollution over a wide area with the possibility of rotor damage.
- 4. Many other forms of sustainable energy are preferable** – subsidy of photovoltaic and hot water solar panels, wave/tidal energy, offshore wind farms, investment in nuclear fusion research. These should all be undertaken in parallel with compulsory, subsidised home/office insulation.
- 5. Profit and loss.** This is a cooperative venture giving **profit** to landowners, developers, energy companies and those with capital to invest provided they push the venture through before the government’s review of its subsidy policy is completed. However, significant financial **loss** is likely to be suffered by home owners in Foxton as well as the communities of Gartree and Lubenham.

## Disadvantages

### 1. Emissions

*"I was asked to open the windfarm at Delabole. At that time nobody was talking about a gigantic programme, getting 15 or 20 per cent of the country's energy from wind turbines. It was a kind of nice green gesture. I think, now that I know as much as I do, I wouldn't have touched it with a bargepole .... we face devastating consequences from climate change and putting up a few wind turbines will not address the problem.... the actions by the Government have been reminiscent of something out of the comic science fiction novel The Hitchhikers' Guide to the Galaxy".*

**Dr James Lovelock, Fellow of the Royal Society, Companion of Honour, inventor of the electron capture detector and proposer of the well-respected "Gaia" theory, that the earth is a self-regulating, living system. [21]**

In Denmark, during 2004, wind accounted for 20% of total electricity production but supplied only 6% of consumption. This happened because wind farms produced a surplus at periods of lowest demand. Denmark exported 84% of its wind-generated electricity to Norway, at a financial loss. The Norwegian electricity system uses carbon-free hydro power, so the effect of CO<sub>2</sub> emission reduction from Danish wind farms was nullified. There is no facility for the UK to export excess wind-generated energy.

Although claims are made by the industry that wind farms will reduce the number of power stations required, Denmark, which has the highest

percentage of wind farms, has not found this to be the case as, due to the variable/gusting nature of wind, all their existing power stations are needed in calm weather. Indeed, the Danish experience has shown that they cannot reach their agreed targets except by buying in nuclear and fossil-fuel generated electricity from Sweden and Germany – thus passing the buck.

Very little of England has sufficient, reliable wind to generate electricity constantly and there is no means of storing electricity – it can only be used directly as it is generated. This means that conventional power stations must be retained.

There is also evidence that due to the cyclic input of wind power electricity some types of power stations run inefficiently and, as they are ramped up and down, actually burn more fossil fuel than if on a steady load, reducing the apparent carbon dioxide saving. Although

denied by the manufacturers, two recent studies have confirmed this. [1] & [11].

### 2. Costs and profits

*"Far from being "free", wind is one of the most expensive ways of generating electricity yet devised. Without an almost 100 per cent subsidy, unwittingly paid by all of us through our electricity bills, no one would dream of building giant wind turbines in Britain, because their cost is not remotely competitive."*

**Christopher Booker, Journalist, Daily Telegraph, 13th Sept 2008 [17]**

*"Wind farms are an expensive way of generating sustainable energy according to a study from Germany, the world's leading producer of energy. The report which may have ramifications for the UK's rapidly growing wind farm industry, concludes that instead of spending billions on building new wind turbines, the emphasis should be on making houses more energy efficient".*

**Luke Harding, Journalist**

Contrary to popular opinion (and despite manufacturers' claim that the price is comparable to gas-generated electricity, but dearer than coal or nuclear) although wind is free, utilising it to generate electricity is extremely costly. 70%, approximately, of the income from wind farms actually comes from subsidies (ref: joint document, currently being updated by REF and CPRE). This subsidy, currently running at £1 billion a year and due to

increase, is passed on to our electricity bills and impacts on the poorest members of society.

The Midlands has less reliable wind than other areas in the UK [4]. Hence,

without massive subsidies (which double the price of electricity from all distributors), wind generated power would not be economically viable.

An independent report [10] has concluded that the cost of electricity in Denmark, where wind energy forms a higher proportion than anywhere else in Europe, is actually double that of the UK and the dearest in Europe, even allowing for the fact that surplus energy is exported. As stated previously, Denmark has exported large amounts of its wind-generated electricity to Norway at a loss.

Current government policy means that all renewable sources of electricity receive the same amount of funding. This has resulted in energy companies going for the least costly option – onshore wind farms rather than the most effective, thus diverting funding away from better forms of renewable sources that would probably permanently reduce the number of conventional power stations, which wind energy cannot.

Energy4All is selling the development as an investment opportunity. All who invest should be aware that the economics don't stack up without subsidy – currently provided by a system called the “Renewables Obligations” (RO) and Climate Change Levy (CCL). This scheme is highly dependent on Government policy which can change - the chance of this will increase if a change in government occurs.

The DTI (now called DBERR) is currently reassessing the distribution of subsidies with a view to ensuring the biggest subsidies go to the most effective alternative energy sources. This could have a major impact on the expected profits made from wind farms.

If you cannot afford to, or do not wish to, invest all you get is the extra electricity costs.

In an REF report [2], the conclusions from an NAO report are summarised:

*“1. Onshore wind is very significantly over subsidised. The NAO says that...we can conclude that the subsidy stream is in excess of needs by at least 33%. [5]*

*2. The Renewables Obligation is a very expensive way to save CO<sub>2</sub>. [6]*

*3. The RO is faulty in that it does not distinguish between technologies of varying merits. [7]*

*These observations are correct in REF's view. We note in particular that the excessive subsidy offered to onshore wind development has drawn developers even to sites where the wind resource is very weak, and the environmental impact severe. It is very much to be hoped that the NAO's criticisms will be absorbed by the DTI in their review of the Renewables Obligation, and that corrective measures will be taken.”*

### 3. Effect on House prices

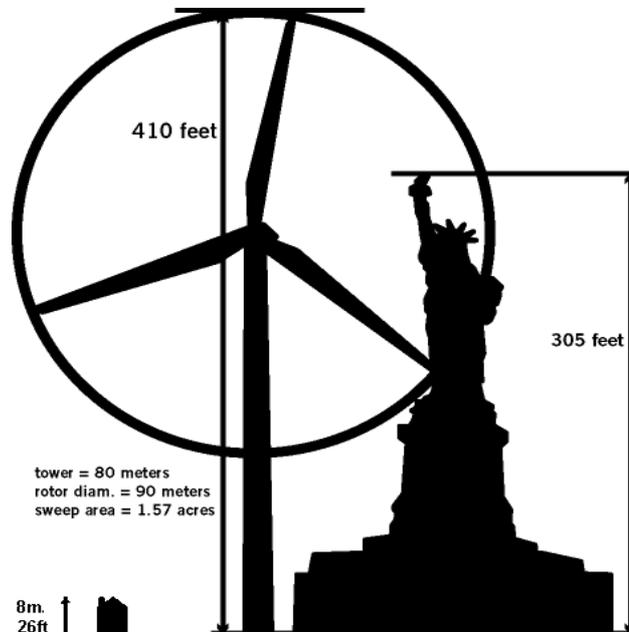
A court ruling in Lincolnshire in July 2008 [25] has acknowledged that a £170,000 house

**930m (0.6 mile)** away from a turbine is now effectively valueless as it cannot be sold. The distance from the proposed wind farm to the nearest houses in Gartree is **650m (0.4 mile)** and to the nearest in Lubenham **700m**.

### 4. Visual Impact

The wind in the Midlands is generally less than elsewhere in the UK [4]. This means that turbine rotors need to be bigger and higher than elsewhere.

The ones proposed for Gartree are bigger than any others in England (defined as “large” in section 5) except at Whittlesea. To gain the most benefit from the wind the turbines are sited on ridgelines and due to their size will inevitably be highly visible. With at least 5 other sites proposed, this represents a massive impact on the local countryside. Energy4All have given the following figures: 125 metres or 410ft high to tip of blade



(Most turbines are 70–100m high). This is 34% taller than the Statue of Liberty, which stands at 305ft. The rotor is 90 metres diameter (288 feet), sweeping out an area of 1.5 acres. To put this in context, the average 2 storey house is around 8 metres or 26ft high.

It is also important to remember that the electricity has to be transported from the farm to the national grid. We assume that this would be over-ground using electricity pylons but permission for the transmission lines is being applied for separately and later. This would make it impossible for any application for pylons to be treated independently.

**Where will any pylons go – near your house or your village school? No planning permission applied for yet – why?**

### 5. Health

*“...wind turbines should not be built within 1.5 miles of people's homes. Let it be understood, however, that there will still be health and quality of life problems caused by wind turbines beyond this radius”.*

**Dr Nina Pierpont MD PhD Fellow of the American Academy of Paediatrics and Yale Scholar - Expert in behavioural paediatrics and behavioural ecology and Researcher on the health risks posed by wind farms.**

*“... we are satisfied that there are cases of individuals being subject to near-continuous*

## Foxton Parish Council Investigation into the Proposed Gartree Wind Farm

*noise during the operation of the turbines, at levels which do not constitute a statutory nuisance or exceed planning conditions, but which are clearly disturbing, unpleasant and may have some psychological effects."*

**The conclusion of the Welsh Affairs Select Committee after investigating wind farms. [23]**

The following are quotes from The Noise Association [23]:

*"People...have been complaining of health problems since the construction of the wind farms near their homes....The range of symptoms mentioned by complainants includes headaches, sleep disturbance, anxiety, depression, stress, vertigo and tinnitus."*

*"It would be prudent that no wind turbines should be sited closer than 1 mile away from the nearest dwellings. This is the distance the Academy of Medicine in Paris is recommending, certainly for the larger turbines and until further studies are carried out."*

*"For some people the impact of turbines can be overwhelming."*

*"The noise can be a particular problem in rural areas where background noise levels are low."*

**The Gartree turbines would be sited 700m (0.4 mile) from properties in Lubenham, 650m from Gartree and 1350m (0.8 mile) from Foxton. Note the minimum recommended distance of 1 mile by the Noise Association.**

### **Low frequency noise**

Low frequency noise is part of the noise emitted by wind turbines and is often not audible i.e. it cannot be heard but, rather, is felt. It travels through brick walls It can cause parts of the body to vibrate at certain frequencies and is responsible for some of the ill health symptoms associated with proximity to wind turbines. These can be permanently damaging. [26] This element of noise is not measured by wind farm developers, nor is it part of the planning requirements. **This means that noise from turbines can be in contravention of the WHO guidelines [26], [30] and [31].** This is also a particular problem as the pain threshold and audible threshold of low frequency noise are close together and sensitivity to it can vary greatly between people [23].

Migraine sufferers are particularly susceptible to the noise and flicker generated [26].

A study in the BMA journal [8] concludes that there is statistically significant evidence that perception of, and annoyance from, wind

turbines is greater in rural areas than urban and that this increases in rural areas where the ground is uneven. It can have adverse effects on the restorative powers of residents' homes i.e. it can interfere with the feeling of relaxation and well-being at home and thus reduces the ability of people to unwind and increases stress.

A further report from Holland [9] concludes that wind turbine noise can interrupt sleep and increase stress levels. This publication also states that the low-frequency noise and thudding vibration travels further than "audible" noise which can lead to anxiety and nausea in people and also has an adverse impact on

animals – horses are known to become distressed when approaching wind farms.

The British Horse Society recommends that the proposed sized turbines should be at least 375m

from public rights of way and areas of equestrian activity to avoid risk of accident to riders from horses frightened by the movement and noise of the rotors.

Although turbines are relatively safe, staff working for the manufacturers of a large, 125m high turbine (Vestas) are advised to stay at least 400m away from working turbines to avoid injury. The staff instructions also include the statement: "Make sure that children do not stay by or play nearby the turbine. If necessary, fence the foundation." [24]. The turbines proposed would be within 150m of public footpaths.

In Denmark, Feb 2008, a turbine of only 60-70m height broke and rotor parts were flung 500m from the turbine [28]. Other incidents are recorded in various publications (301 incidents to 2006 recorded in one publication [27]).

Turbulence reduces the efficiency of turbines and can increase the risk of rotor damage. Some authorities [29] recommend distances of at least 900m (2950ft) between turbines of the proposed size to avoid turbulence (these turbines would be between 250m and 450m apart).

### **6. Flicker.**

When the sun shines through a turbine the blades cause "flicker". This is a well known cause of stress and has caused at least one prison (Whitemoor Prison, March, Cambridgeshire) to insist on the turbines being switched off at certain times of day because of the effect on prisoners.

Health problems can be exacerbated by flicker when noise is already a problem [23].

## Foxton Parish Council Investigation into the Proposed Gartree Wind Farm

### 7. Radar and TV Reception

Turbines can interrupt radar signals – this has caused the MoD to object to some wind farm applications. Turbines can interfere with reception of TV/radio signals and the reception around here is already very poor in places.

### 8. Wind Profile

A wind distribution map indicates quite clearly that the Midlands has a much lower wind resource than the rest of the UK [4]. This is one of the reasons why the turbines are exceptionally large.

### 9. Noise.

In addition to the health problems associated with low frequency noise, it can also cause major nuisance problems. A recent court case [25] indicated that a wind farm at Deeping, Lincolnshire generated sufficient noise at a distance of 930m to render a home uninhabitable due to sleep deprivation. Lubenham and Gartree are within this distance.

Wind speeds at high levels can be much greater than at ground level. This means that calm weather at ground level, producing little or no noise from wind blowing through trees or buildings, can be accompanied by high wind at higher altitudes, turning rotor blades to an extent where the noise becomes unacceptably loud relative to the background noise [23].

A recent publication [1] states that noise levels cannot be predicted before the development of a site. No-one is, therefore, in a position to know what the levels or mix of noise will be.

Low frequency noise travels further in undulating countryside such as South Leicestershire and may well be exacerbated by the unusually large and high rotors and the lias clay on which they would stand.

The Noise Association recommends a minimum distance of 1 mile from property.

### 10. Wildlife

*"Wind energy is not green: it destroys the landscapes; it chops up birds; it chops up bats".*

**Professor David Bellamy, Botanist**

*"Wind energy is not as clean as its proponents would have us believe. It is an industrial development and as such causes degradation of the environments where turbines are sited. The result is a loss of habitat for wildlife. The proposed environmental benefits of wind farming...will only come from the very large-scale use of turbines. One environmental problem will simply be replaced by another."*

**Dr John Hedger at the Institute of Biological Sciences at the University of Wales, Aberystwyth**

There are many studies illustrating that birds are destroyed by wind turbines. The available evidence suggests that wind farms can harm birds in three possible ways – disturbance,

habitat loss or damage (direct or indirect), and collision. Some major tragedies involving large and rare migrating species of birds have occurred in N. America (Altamont Pass in California). However, it must be said that the RSPB backs wind farms, on condition that they are built in the right places.

The size of the proposed turbines mean the rotors sweep out a vertical area of 1.5 acres – this will clearly increase the risk to birds and bats. Current sightings in the area apparently include red kites (possibly nesting), skylarks and hawks.

Other studies indicate that bats die from haemorrhaging due to changes in air pressure created near the moving rotors [22]. It is believed that there is a rare species of bat close by.

There has been little research carried out on the effect on wildlife and habitat. A disgracefully under-researched DTI publication states that wildlife isn't affected, as domestic farm animals will graze under turbines – this is clearly of no value whatsoever.

Noise, of the type emitted from wind turbines, can have health effects on people; common sense would imply that wildlife could react in a similar way. In addition, wind turbines cause vibrations through the ground (to the extent that Professor Peter Styles recommended a minimum exclusion zone of 10km around seismic monitoring facilities to the Defence Estate in Scotland [26]), it therefore seems sensible to assume that wind turbines have a high risk of driving out wildlife. Species such as otters have been sighted in the area.

## Advantages

### 11. Profits

If you can afford to invest in a cooperative you would make a profit under current government policy. Onshore wind farms are cheaper to build than offshore, although both types are only viable with heavy subsidies.

### 12. Energy Output

Offshore farms can produce more reliable energy output and can therefore be much more effective than those onshore.

### 13. Emissions

Wind Farms can result in an overall reduction in CO<sub>2</sub> emissions (although this is less than claimed and is not always the case).

### 14. Waste, Operation and Decommissioning

Wind Farms produce no waste directly, toxic or otherwise although Energy4All propose leaving most of the concrete foundations (several 100 tons) in situ after decommissioning. Decommissioning is relatively inexpensive and safe. Operation is also relatively safe. However, see section 5.

## References & Links

1. "Wind Chill" by Tony Lodge, Centre for Policy Studies
2. "Renewables Obligation, and Climate Change Levy", Dr. John Constable, Renewable Energy Foundation.
3. "Powering the Nation", The Royal Academy of Engineering, 2<sup>nd</sup> version.
4. "Wind Power in the UK", Sustainable Development Commission.
5. NAO, "Renewable Energy", p. 5, and p. 41
6. NAO, "Renewable Energy", p. 6.
7. NAO, "Renewable Energy", p. 41.
8. "Wind turbine noise, annoyance and self-reported health and well-being in different living environments"; Eja Pederson & Kerstin Persson Waye. BMA article; [oem.bmj.com/cgi/content/full/64/7/480](http://oem.bmj.com/cgi/content/full/64/7/480)
9. "Visual and acoustic impact of wind turbine farms on residents"; EU financed, June 2008 van den Berg, Frits; Pedersen, Eja; Bouma, Jelte; and Bakker, Roel
10. NUS Consulting Group's 2006 – 2007 International Report and cost Summary.
11. "Energy Policy"; Renewable Energy Foundation.
12. [news.bbc.co.uk/1/hi/scotland/4378603.stm](http://news.bbc.co.uk/1/hi/scotland/4378603.stm)
13. [www.earthpeace.com/Wind/WildlifeWind.htm](http://www.earthpeace.com/Wind/WildlifeWind.htm)
14. [news.bbc.co.uk/1/hi/sci/tech/7581990.stm](http://news.bbc.co.uk/1/hi/sci/tech/7581990.stm)
15. [news.bbc.co.uk/1/hi/magazine/3811551.stm](http://news.bbc.co.uk/1/hi/magazine/3811551.stm)
16. [www.telegraph.co.uk/news/newstopics/politics/2910739/Wind-farms-fail-to-deliver-value-for-money-report-claims.html](http://www.telegraph.co.uk/news/newstopics/politics/2910739/Wind-farms-fail-to-deliver-value-for-money-report-claims.html) New report slates wind farms, Daily Telegraph.
17. [www.telegraph.co.uk/news/newstopics/politics/2910741/Windfarms-One-of-the-great-deceptions-of-our-time.html](http://www.telegraph.co.uk/news/newstopics/politics/2910741/Windfarms-One-of-the-great-deceptions-of-our-time.html)
18. [www.warmwell.com/windfarms.html](http://www.warmwell.com/windfarms.html) Wind farms generally.
19. [www.countryguardian.net/case.htm](http://www.countryguardian.net/case.htm) Case against wind farms.
20. [www.warmwell.com/realitycheck.htm](http://www.warmwell.com/realitycheck.htm) Oxford Institute for Energy Studies.
21. [www.warmwell.com/04feb3lovelock.html](http://www.warmwell.com/04feb3lovelock.html) James Lovelock article.
22. [www.ucalgary.ca/news/aug2008/batdeaths](http://www.ucalgary.ca/news/aug2008/batdeaths); University of Calgary, Alberta research document.
23. Location, Location, Location; An investigation into wind farms and noise by The Noise Association, July 2006
24. "Vestas mechanical operating and maintenance manual V90-3.0MW turbine"; June 29, 2007 by Vestas Wind Systems A/S
25. <http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2008/07/26/eawind126.xml>
26. Noise Radiation from Wind Turbines Installed Near Homes: Effects on Health; Barbara J Frey BA MA and Peter J Hadden BSc FRICS, February 2007
27. [http://www.windcows.com/files/accidents-1nov2006\\_1\\_.xls](http://www.windcows.com/files/accidents-1nov2006_1_.xls); 301 wind turbine accidents compiled to 2006 by David Craig
28. "Ingeniøren", Report by Kent Kroyer, Damage to turbine rotor in Denmark.
29. <http://www.nwcommunityenergy.org/wind/resource-assessment/turbine-micro-siting> "Turbine Micro-siting"; North West Community Energy
30. "Guidelines for Community Noise"; WHO, 1999
31. "Occupational and Community Noise"; WHO, 2001
32. <http://www.harborough.gov.uk/ppimageupload/Image70296.PDF>

## Contacts

Please contact one or more of the following with your views – **time is short**:

**MP** Edward Garnier QC

**District** Blake Pain

**Parish** Margaret Wright (Chair)  
Mike Ward (Vice Chair)  
Kerry Farnsworth  
Michael Hadley  
Claire Holt

**Remember – It is your choice, act now and make your views known**