

find out more!

Public exhibitions

We would like to invite you to join us at a public exhibition. Details of the proposed wind farm will be on display, with staff from E.ON available to answer questions and also to provide further information. We hope you will attend one of these dates to find out more.

- Pollington Village Hall on 20 September 2005 from 16.30 - 20.30
- East Cowick Village Hall on 21 September 2005 from 10.30 - 20.30
- Snaith Sports Hall on 22 September from 10.30 - 20.30

Contact Us

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Useful websites

Visit these sites to get more information about wind energy in Britain and around the world:

www.yes2wind.com

www.embracewind.com

www.bwea.com

windfarmproposal

Aire & Calder Wind Farm Proposal Green energy for East Yorkshire

Green energy for East Yorkshire

Dear Resident

E.ON UK, the company that runs Powergen, has been working for two years to assess the suitability of a wind farm on land south of the M62 and West Cowick, east of Pollington and north of the Aire and Calder Navigation in East Yorkshire. During this time we've undertaken a significant number of detailed studies and consultations with key authorities. The findings from the detailed environmental studies have told us that this land would make an excellent choice for a wind farm site.

As part of its policy to tackle climate change, the UK Government has created a healthy market for renewable energy. The large number of wind farm proposals for the area to the east of the proposal site, around Thorne and Goole, are a consequence of that policy. E.ON UK is sensitive to concerns that there are too many proposals but it is very unlikely that all schemes will be approved and constructed. Residents may also be aware that it is likely that the Department of Trade & Industry (DTI) may decide to "call in" these proposals and consider them together in a public enquiry. The DTI has the expertise and experience to judge the merits of each proposal, taking into account cumulative effects, and to grant consents accordingly. E.ON UK would welcome and support such an initiative, which would also enable local people to have a say in strategic decisions with regard to wind farm proposals in the area, and therefore have decided to submit a planning application for the proposed wind farm.

Please take time to browse through this newsletter to learn more about the proposal. We believe we have a well planned and designed project and would welcome your support.

This newsletter provides outline information about the Aire and Calder Wind Farm proposal. We would also like to invite you to join us at the Public Exhibition we will be holding in September. Further information on the proposed wind farm will be on display, with staff from E.ON on hand to answer questions. We hope you can attend one of these dates to find out more. Details of the venues and dates are listed at the back of this newsletter.

Yours sincerely,

Alex Fornal

Aire and Calder Project Manager, E.ON UK



Public Exhibitions:

- Pollington on 20 September 16.30 - 20.30
- East Cowick on 21 September 10.30 - 20.30
- Snaith on 22 September 10.30 - 20.30

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Who is E.ON UK

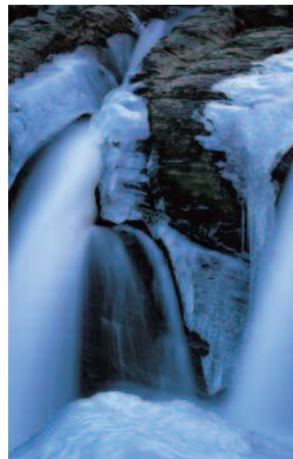
E.ON UK is part of the E.ON Group, the world's largest private sector energy services company. We're the company that runs Powergen, one of the UK's leading energy brands, and we generate, supply and retail electricity and gas to millions of people nationwide.

At E.ON UK we're serious about our commitment to green energy. We already operate projects with the ability to generate enough green electricity to meet the residential power needs of a city the size of Manchester, making us one of the UK's leading green generation businesses. Our current portfolio of projects consists of onshore and offshore wind farms, hydro power schemes and biomass-fuelled generation. These include the UK's first offshore wind farm, the largest hydro-electric scheme in England and Wales and the most powerful onshore wind turbines in the UK. Our development portfolio includes what would be the first offshore wind farm to be built in Scottish Waters and planning permission to build the UK's largest wood-burning power station at Lockerbie, in addition to further onshore wind farm schemes. Working closely with the UK Government, we aim to help them meet their target of supplying 15% of energy from renewables by the year 2015, so building a sustainable future for generations to come.



"Our modern lives depend upon easy access to huge resources of energy. We're going to run out of fossil fuels so need to find an alternative resource. It's unlikely that we'll run out of wind so we may as well use that."

Alex Kapranos, lead singer of Franz Ferdinand



"Recent dramatic weather events such as the floods in Carlisle and Boscastle are a stark reminder that nature can only take so much. Climate change is a reality and we must act now if we are to stop the damage we are doing to our fragile planet. Wind is the best of the new renewable energy sources available right now. I for one am backing wind energy and I know I'm not alone."

Sian Lloyd, Weather reporter

It's now widely accepted that human activities are having an adverse impact on the global climate. The burning of fossil fuels, such as coal, oil and gas for electricity generation and for transportation creates emissions of greenhouse gases.

There's now overwhelming international scientific consensus about the effect of these emissions - major effects on sea levels, water supply and agriculture worldwide. In addition, energy demand in the UK and worldwide is increasing all the time while the availability of fossil fuels is expected to decline. The need to develop long-term sustainable and secure supplies is becoming increasingly important.

With the UK being the windiest country in Europe, wind power can provide part of the solution. It's clean, natural and will never run out. Onshore wind turbines are an effective way to harness this natural, emission-free power. The technology to extract energy from the wind is tried and tested and is available to help combat climate change now.



Why wind?

"The wind is pure energy, raw and restless, an endlessly sustainable natural resource. Let's hug it, let's harvest it. Wind turbines, elegant giants of engineering, can harness that wild energy for our own purposes, subject only to appropriate environmental considerations.... so let's make use of it!" Magnus Magnusson KBE, writer and broadcaster



The proposal

Overview

The proposed wind farm would comprise 15 turbines, each capable of generating up to 3 megawatts (MW), which is enough clean, green electricity to supply up to 15,570 homes, nearly 10 times the number of homes in Pollington, Snaith and Cowick parishes combined. The Government has called on companies such as ours to generate more of our electricity from renewable energy sources to help combat the threat of climate change. The Aire and Calder proposal would make an important contribution towards this and could satisfy all of the East Riding of Yorkshire's 2010 target for renewable energy.

We've undertaken year-round bird studies in close liaison with the RSPB and these show that any effects on birdlife will be minimal. Various other studies - including archaeology, grid connection, highways access, hydrology, telecommunications and wind resource - have also been carried out to confirm the technical and environmental feasibility of the proposal.

Why Aire and Calder?

A wind farm at Aire and Calder could play an important role in helping fulfil the UK's target of 15% of electricity generation to come from renewable sources by 2015.

The East Riding of Yorkshire Development Plan is supportive of wind power in appropriate locations where any adverse effects are minimised. The site was identified following a rigorous site search which identified the most appropriate sites for wind farms in the area.

At Aire and Calder, we've designed a turbine layout that will minimise any potential visual effects while remaining technically feasible.

The construction phase

Building the Aire and Calder Wind Farm would take 12 to 15 months depending on weather and ground conditions and will cost approximately £26m.

The expected sequence of events would be:

- Creation of a temporary works compound close to the proposed wind farm;
- Construction of site tracks and turbine foundations;
- Building of the sub station and installation of the grid connection;
- Excavation of trenches and laying of power and instrumentation cables;
- Erection of the turbines;
- Commissioning of the turbines;
- Land restoration, removal of temporary accommodation and reinstatement of the construction compound.

Turbine delivery, although of short duration - about eight weeks, involves shipping either very long or heavy loads. It is E.ON UK's preferred option to use the Aire and Calder Navigation to bring in the turbine components and aggregate materials for the access tracks, minimising construction traffic.

Everyone benefits

Once built the wind farm could produce enough clean, renewable power for up to 15,570 homes, however we believe that the benefits of developing a wind farm at Aire and Calder will go beyond the obvious environmental considerations.

Experience has shown that the wind farm would have a positive impact on the surrounding area. Construction of the wind farm presents opportunities for local economic benefits and employment. E.ON UK must follow current legislation and go through a competitive tender process for all works associated with the construction of the wind farm. It's normal, however, to expect that local suppliers and contractors with appropriate skills and resources would be well placed to win some of these contracts.

The wind farm would contribute to local authority funding through business rates and provide an important form of rural diversification by helping to supplement farming income.

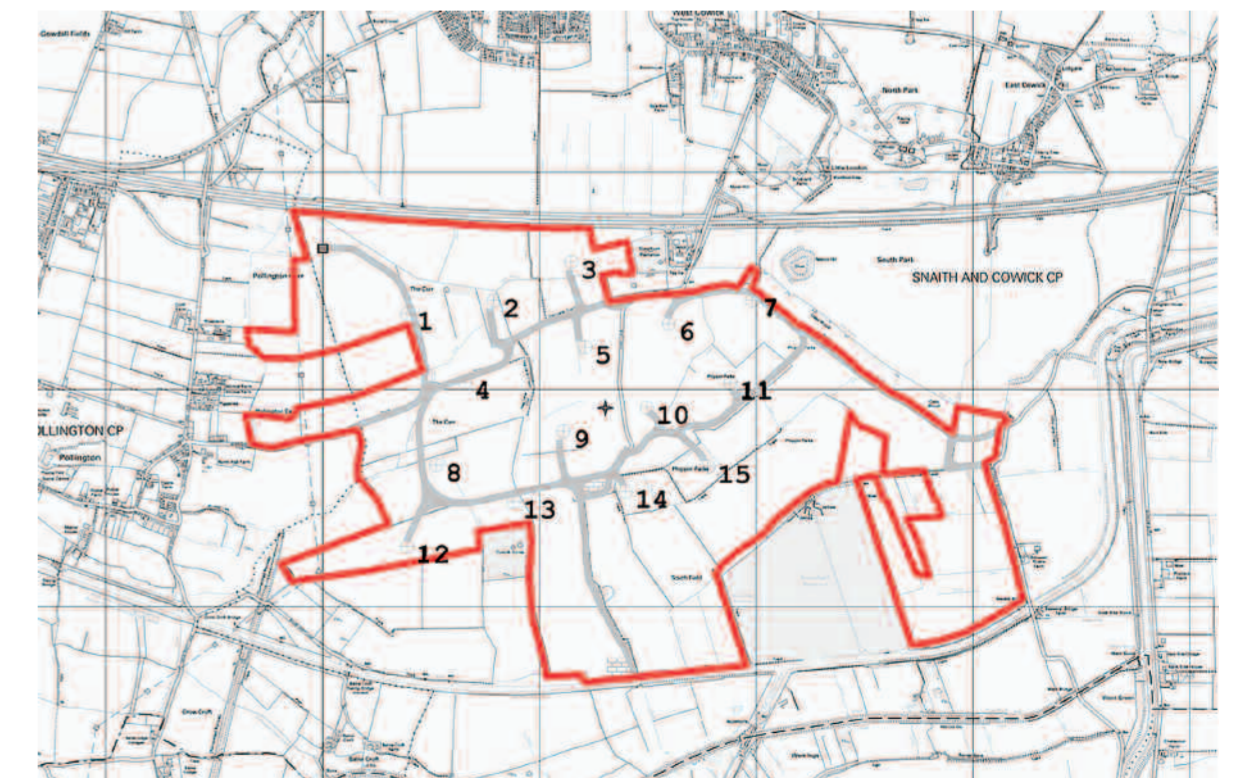
E.ON UK operates a good neighbour policy at all of the wind farms it manages, and as part of this policy we are keen to investigate opportunities for community benefit in relation to the proposed wind farm.

This could take the form of targeted funds to support local projects in communities living close to the wind farm. Examples of previous projects supported by community funds and targeted support include energy efficiency schemes, science education programmes, donations to local charities, computers for schools and improvements to the community environment. We have already received suggestions from the community. A project involving local youth groups and support for a local playing field and Sports Hall facility are currently being considered. After construction, E.ON UK would also seek to enhance the public footpath network through the wind farm site, improving access and increasing enjoyment for local people. We would welcome further suggestions at the public exhibitions.

"I used to be really opposed to wind farms, although I knew they help to reduce pollution. But now that I've lived near one for a couple of years I've completely changed my view, and I'm even studying for an MSc in renewable technology."

Kevin McSweeney,
a neighbour of E.ON's wind farm at Rheidol, Ceredigion

in detail



The new energy boom for the UK

"Wind turbines are modern day Guardian Angels, a stunning addition to our rural landscape and a must if we are to move toward a future powered by green energy."

Chris Tarrant, TV host



Renewable energy markets worldwide are growing rapidly and the World Energy Council predicts total investment of up to £400 billion by 2010. In the UK there are already around 700 companies working in the Renewables sector sustaining around 8,000 jobs which could rise to 35,000 by 2020 according to a report by the DTI. An already vibrant market in Scotland has led to wind turbines and components being made there, with new factories opening and jobs being created. Similar capabilities exist in the East of England for turbine manufacture. The Yorkshire and Humber region has a target of generating 674 MW of its energy from renewable sources by 2010, compared to a current capacity of 103 MW in the region. A large proportion of this target, 300 MW, would come from onshore wind turbines. A report on renewable energy potential, produced for Yorkshire and the Humber regional government in 2002, estimates over the next decade, around 2,250 jobs could be created through wind energy and biomass alone in the region.

"I love wind turbines. They are hypnotically elegant. And they are in my backyard (well, the farmland behind the garden). The ten turbines have been there (very) quietly generating impeccably green energy for over ten years. Down the road, off Great Yarmouth, the Scroby Sands offshore wind farm has just been completed. I am truly proud to have all these turbines on my doorstep."

Edward Ward, a neighbour of E.ON's wind farms at Blood Hill and at Great Yarmouth, Norfolk

Living with a wind farm

Opinion polls show time and time again that wind power is popular, particularly with those living near existing wind farms.

A study published in August 2004 by MORI for the Scottish Executive surveyed residents living around Scotland's 10 existing wind farms. It found high levels of acceptance and overwhelming support for wind power, with support strongest amongst those who lived closest to the wind farms. Three times as many said they feel their local wind farm has had a positive impact (20%) as said they think it had been negative (7%). The vast majority said it had no effect either way. The majority of respondents supported extensions of the farms.

A recent survey for the Countryside Council for Wales showed that between 74 and 83 per cent of people living near three Welsh wind farms found them acceptable developments and 70 per cent said they would be happy to have more in the area.



There are many myths about wind energy. Below are the facts:

Myths and facts

Myth: Tens of thousands of wind turbines will be cluttering the British countryside

Fact: Government legislation means that, by 2010, 10% of electricity supply must come from renewable sources. Wind power is currently the most cost effective renewable energy source in a position to help do that. Around 3,500 of additional modern wind turbines are all that would be needed to deliver 8% of the UK's electricity by 2010, roughly 2,000 onshore and 1,500 offshore.

Myth: Building a wind farm takes more energy than it ever makes

Fact: The average wind farm will pay back the energy used in its manufacture within 3-5 months of operation. This compares favourably with coal or nuclear power stations, which take about six months. A modern wind turbine is designed to operate for more than 20 years and, at the end of its working life, the area can be restored at low financial and environmental costs. Wind energy is a form of development which is essentially reversible - in contrast to fossil fuel or nuclear power stations.

Myth: Wind farms are inefficient, they are only operational 30% of the time

Fact: A modern wind turbine produces electricity 70-85% of the time, but it generates different outputs dependent on wind speed. Over the course of a year, it will generate about 30% of the theoretical maximum output. This is known as its load factor. The load factor of conventional power stations is on average 50%. A single modern wind turbine will generate enough to meet the electricity demands of more than a 1,000 homes over the course of a year.

Myth: Wind energy needs back-up to work

Fact: All forms of power generation require back up and no energy technology can be relied upon 100%. The UK's transmission system already operates with enough back-up to manage the instantaneous loss of a large power station. Variations in the output from wind farms are barely noticeable over and above the normal fluctuation in supply and demand, seen when the nation's workforce goes home, or if lightning brings down a high-voltage transmission line. Therefore, at present there is no need for additional back-up because of wind energy.

Myth: Installing wind farms will never shut other power stations

Fact: The simple fact is that power plants in the UK are being shut down either through European legislation on emissions or through sheer old age. We need to act now to find replacement power sources. Wind is an abundant resource in the UK and has a vital role to play in the new energy portfolio.

Myth: The UK should invest in other renewable energy technologies and energy efficiency instead of wind power

Fact: Wind energy's role in combating climate change is not a matter of either-or. The UK will need a mix of new and existing renewable energy technologies and energy efficiency measures, and as quickly as possible. Significant amounts of investment have been allocated for wave and tidal energy development, and these technologies, along with solar and biomass energy will have an important role in the UK's future energy mix. However, at present wind energy is the most cost effective renewable energy source available to generate clean electricity and help combat climate change. Furthermore, developing a strong wind industry will facilitate other renewable technologies which have not reached commercialisation yet, building valuable experience in dealing with issues such as grid connection, supply chain and finance.

Myth: Wind farms should all be put out at sea

Fact: We will need a mix of both onshore and offshore wind energy to meet the UK's challenging targets on climate change. At present, onshore wind is more economical than offshore. However, more offshore wind farms are now under construction, with the first of the large-scale projects operational at the end of 2003, and prices will fall as the industry gains more experience. Furthermore, offshore wind farms take longer to develop, as the sea is a more hostile environment. To expect offshore to be the only form of wind generation allowed would therefore be to condemn us to missing our renewable energy targets and commitment to tackle climate change.

Myth: Wind farms are ugly and unpopular

Fact: Beauty is in the eye of the beholder, and whether you think a wind turbine is attractive or not will always be a personal opinion. However, studies regularly show that most people find turbines an interesting feature of the landscape. On average 80% of the public support wind energy, less than 10% are against it and the remainder are undecided. Surveys conducted since the early 1990's across the country near existing wind farms have consistently found that most people are in favour of wind energy, with support increasing among those living near existing wind farms.

Note: The 'average modern wind turbine' referred to in this document has a rated capacity of 1.8MW onshore. With the data of approvals and applications currently available for future wind farms we know this will increase to 2+MW. Offshore, turbines currently being installed are rated at 3MW, while it is expected that offshore machines being installed by 2010 will typically be around 5MW.

Myth: Wind farms negatively affect tourism

Fact: There is no evidence to suggest this. The UK's first commercial wind farm at Delabole received 350,000 visitors in its first ten years of operation. A MORI poll in Scotland showed that 80% of tourists would be interested in visiting a wind farm and E.ON's Scroby Sands Wind Farm Information Centre, Great Yarmouth, welcomed 35,000 visitors in 2004.

Myth: Wind farms kill birds

Fact: The RSPB stated in its 2004 information leaflet 'Wind farms and birds' that "in the UK, we have not so far witnessed any major adverse effects on birds associated with wind farms". Wind farms are always subject to an Environmental Impact Assessment. E.ON UK is a member of the British Wind Energy Association (BWEA) and follows its Best Practice Guidelines, working closely with organisations such as English Nature and the RSPB to ensure that wind farm design and layout does not interfere with sensitive species or wildlife designated sites. Furthermore, a recent report published in the journal 'Nature' confirmed that the greatest threat to bird populations in the UK is climate change.

Myth: Wind farms are noisy

Fact: The evolution of wind farm technology over the past decade has rendered mechanical noise from turbines almost undetectable with the main sound being the aerodynamic swoosh of the blades passing the tower. In fact it is possible to hold a conversation beneath a wind turbine without raising your voice. There are strict guidelines on wind turbines and noise emissions to ensure the protection of residential amenity. These are contained in the scientifically informed ETSU Working Group guidelines 1996 and must be followed by wind farm developers, as referenced in national planning policy for renewables. The best advice for any doubter is to go and hear for yourself!

