



## Middleton Wind Farm planning application submitted

npower renewables, one of the UK's most experienced wind developers and operators, has submitted a planning application to East Renfrewshire Council for a small wind farm at a site known as Middleton. The site is located approximately 5.5 km south-west of Newton Mearns and 3.5km south of Neilston.

With results obtained from a wide range of site studies and feedback from public consultation, the design for the site has been set at 6 turbines, each with a maximum height to blade tip of 105 metres.

At this size, the project would have an installed capacity of approximately 15 megawatts (MW), producing enough green electricity to meet the average annual electricity demand of up to 8, 400 homes.<sup>1</sup> This even takes into account the times when the wind farm will not be generating, such as periods of low or no wind speeds.

The proposed Middleton Wind Farm is situated on grazed pasture, and is located within East Renfrewshire's Area for Renewable Energy (Replacement Local Plan policy E15) which states that:

**"The Council will generally support renewable energy proposals...provided it can be demonstrated that the environmental impacts of such a proposal can be mitigated."**

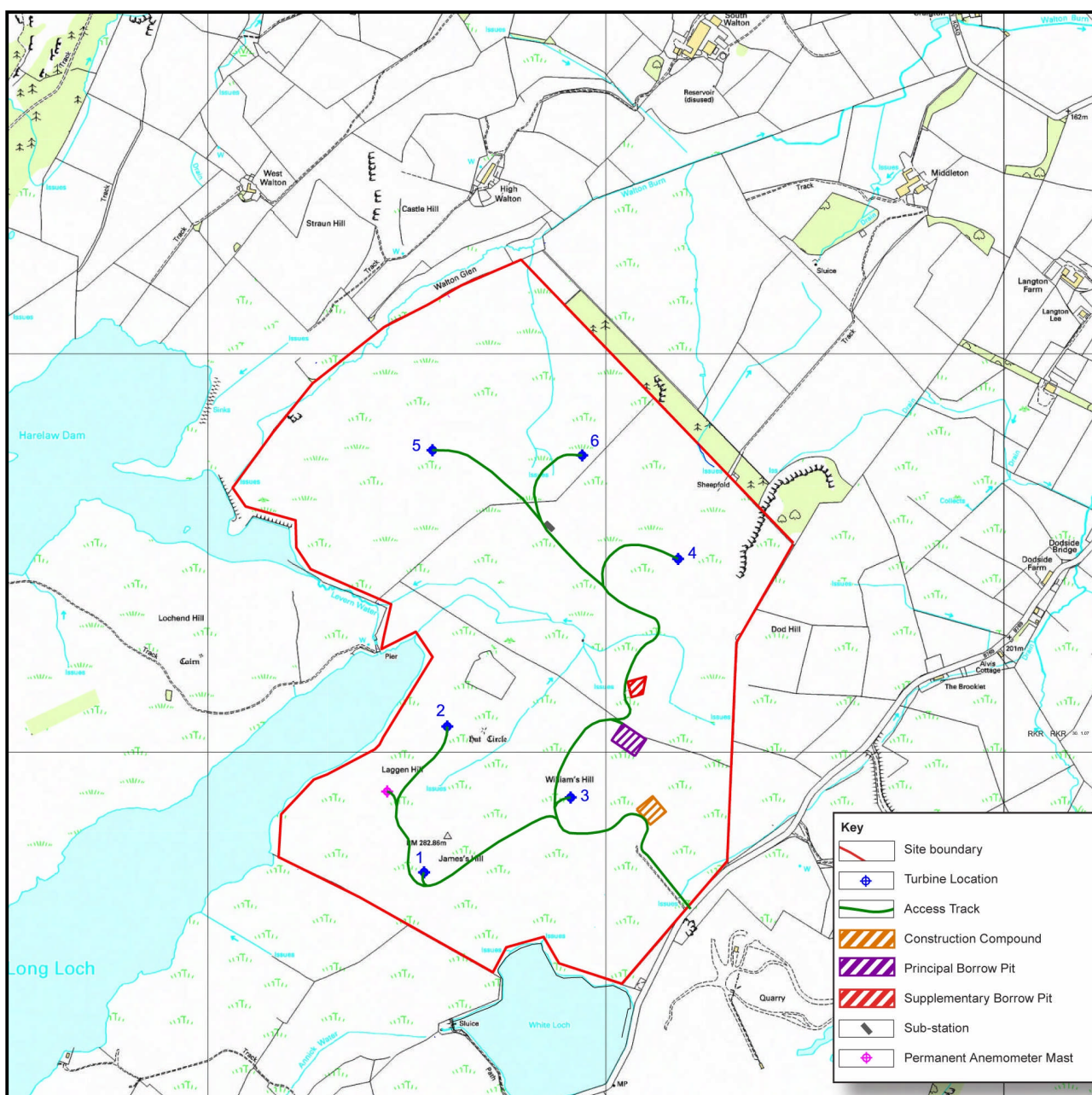
Using clean, renewable energy sources like the wind to generate electricity is a key component of both UK and Scottish Climate Change Programmes. The generation process does not produce greenhouse gases which contribute to global warming and climate change. The technology also enables Scotland and the UK meet global and domestic targets to reduce greenhouse gas emissions and helps improve the security of UK energy supplies.



\*Photomontage of proposed Middleton Wind Farm from Neilston Pad.

\*Photomontages are computer generated illustrations that aim to represent an accurate image of the proposed site. These are not intended to replace photomontages within the Environmental Statement and are for illustrative purposes only.

## Proposed Site Layout



Based upon the Ordnance Survey map with the permission of the Controller of Her Majesty's Stationery Office (copyright) Crown Copyright

## The EIA and ES explained

The Environmental Impact Assessment (EIA) is a process by which information about the environmental effects of the project is collected, evaluated and taken into account in the wind farm design. It provides information on the likely environmental effects of all phases of a project through construction, operation and decommissioning and in doing so, identifies mitigation measures to reduce any negative impacts.

The site layout at Middleton has undergone a number of changes to ensure that an environmentally sympathetic development is built. The EIA has been instrumental in informing this design. The developer must present the information on the project and its environmental effects in an Environmental Statement (ES). This is a statutory requirement to support the planning application.

The Middleton Wind farm ES addresses, amongst others the following:

- **Project description**
- **Planning policy**
- **Landscape and Visuals**
- **Noise**
- **Traffic and Transport**

The ES is over 500 pages long and is available to view at the East Renfrewshire Council Offices in Giffnock and the public libraries in Newton Mearns and Neilston. The ES is summarised in the Non-Technical Summary (NTS) which is freely available from npower renewables.

## What our studies have found

In our last newsletter, we reported on the studies we were undertaking as part of the EIA. Here is a summary of some of our key findings:

### Landscape and Visual

An area of 35 kilometres around the proposal was assessed with regards to Landscape and Visual Impact. Three dimensional computer models were used to generate plans indicating where the wind farm would be visible. Site visits and a selection of 21 representative viewpoints were used to make a detailed assessment of the significance of predicted changes to the features of the landscape and to views.

Through the process of assessment it was established that significant effects from the wind farm could potentially occur within 3km of the outside edge of the turbines. There was found to be no significant direct effects on landscape character and no significant indirect effects on areas of landscape character and landscape designations. There are expected to be significant visual effects on parts of the periphery of Neilston and from fourteen properties within 3km of the wind farm, however, the proposed wind farm is unlikely to have an adverse effect on the overall visual amenity of these properties.

### Noise

A noise assessment was carried out for the construction, operation and decommissioning of Middleton Wind Farm. It concluded that, except for traffic noise from the transportation of concrete required for the six days of concrete pouring, there will be no significant effects in relation to noise during the construction period.

The distance from the turbines and other infrastructure (such as access tracks) is sufficient to ensure that any construction or decommissioning noise effects in the local area, and particularly at properties, will be minimised.

Operational noise from the wind farm was assessed in accordance with standard guidance recommended for use by the Scottish Government (ETSU-R-97). The design of the scheme is such that worst-case predictions of operational noise levels sit within noise limits complying with this guidance. This is based on the background noise measured at the closest properties and the expected noise of the wind turbines. Any turbine installed will be required to meet the noise limits set by the assessment by way of planning condition. Consequently, it is concluded that Middleton Wind Farm will have no significant effects in relation to noise during the operational period.

### Ecology

There are no statutory site designations for nature conservation within, or adjacent to, the survey area for Middleton Wind Farm. The closest statutory designation is Brother and Little Lochs Site of Special Scientific Interest (SSSI) which lies approximately 1 km to the east of the site and is designated on the basis of its open water habitat.

It is considered that the Middleton development will have no significant effects upon the protected areas because of their distance from the site.

No habitat was identified which would support a large number of protected species, although the site is used occasionally by otter and badger and supports brown hare. There are no significant adverse effects predicted for protected species, and wildlife protection legislation will be fully complied with.

### Birds

Middleton supports a bird community typical of the heavily-grazed moorland areas in south-west Scotland. Although Middleton is used on occasion by notable bird species, the relatively infrequent use and low numbers of notable birds means that the site is considered to be of low nature conservation value overall.

## What our studies have found (continued...)

The level of use of the site by species of high nature conservation value was unremarkable and, coupled with the considerable amount of suitable habitat elsewhere within the area surveyed and the wider landscape, the alteration of bird habitat is not expected to be an issue. Low numbers of flights of notable species were recorded as being at a height at which there may be the potential for collision with turbines. The assessment of the potential impacts of the proposed Middleton Wind Farm on birds therefore concluded that none would be significant.

### Public Consultation

Following feedback received through our website, public exhibitions, and information stands, 71 % of people were in support of the development, 18% expressed opposition and 11% were undecided.

## What happens next?

The local planning authority, East Renfrewshire Council, will check the relevant documentation and the planning application submitted by npower renewables.

Consultation letters will then be sent out to neighbouring residents and other consultees inviting comments. The planning officer will then scrutinise the information submitted, and consider comments from local people and other consultees.

A report, recommending either approval or refusal, and the reason for coming to this recommendation, will be provided by the planning officer. This report will then be taken to East Renfrewshire Planning

## Silent workhorses of Ardrossan



**“The Ardrossan Wind Farm has been overwhelmingly accepted by local people – instead of spoiling the landscape, we believe it has been enhanced. The turbines are impressive looking, bringing a calming effect to the town, and contrary to the belief that they would be noisy, we have found them to be silent workhorses”**

Councillor Margaret Munn  
Ardrossan, Scotland

Committee, made up of local elected councillors, who will decide whether to approve or refuse the planning application.

The ES is summarised in the Non-Technical Summary which is available free of charge by writing to the address above or emailing [middleton@npower-renewables.com](mailto:middleton@npower-renewables.com). Alternatively it can be downloaded from [www.npower-renewables.com/middleton](http://www.npower-renewables.com/middleton).

A hard copy of the complete ES is also available, although a contribution to printing costs of £200 will be charged. However, this is also available electronically on CD for a charge of £10.00.

### More Information

Further information can be found at the following websites  
[www.npower-renewables.com/middleton](http://www.npower-renewables.com/middleton)

The British Wind Energy Association:  
[www.bwea.com](http://www.bwea.com)

For Technical Information about wind energy :  
[www.windpower.org/en/core.htm](http://www.windpower.org/en/core.htm)

Or write to us at:  
npower renewables  
Middleton  
North Range East Lodge  
Stanley Mills  
Perth PH1 4QE

E-mail:  
[middleton@npower-renewables.com](mailto:middleton@npower-renewables.com)

### Have your say

**In order to make your thoughts on the proposed wind farm known, you should write, quoting planning application reference number 2008/0096/TP and your name and address, to:**

**The Planning Officer  
East Renfrewshire Council  
Eastwood Park  
Rouken Glen Road  
Giffnock  
G46 6UG.**

### Reference

<sup>1</sup>Energy predicted to be generated by the proposal has been calculated using an assumed capacity factor of 30% (DTI Energy Trends UK regional capacity factors 1998-2004), and is based on an installed capacity of 15 MW. The energy capture predicted and hence derived homes equivalent or emissions savings figures may change as site specific information is gathered.

Equivalent homes supplied is based on an annual electricity consumption per home of 4700 kWh, which is derived from a total UK domestic electricity consumption of 117,589 terawatt-hours (TWh) (The Digest of UK Energy Statistics 2005) and 25.2 million UK households (Mid-year Household Estimates published in 2004 by the Office for National Statistics).