

## Melin Court wind farm

Welcome to the public exhibition for the proposed six turbine Melin Court wind farm. This exhibition provides an update from our November 2013 exhibitions and presents the final proposals to be submitted to Neath Port Talbot County Borough Council in spring 2014.

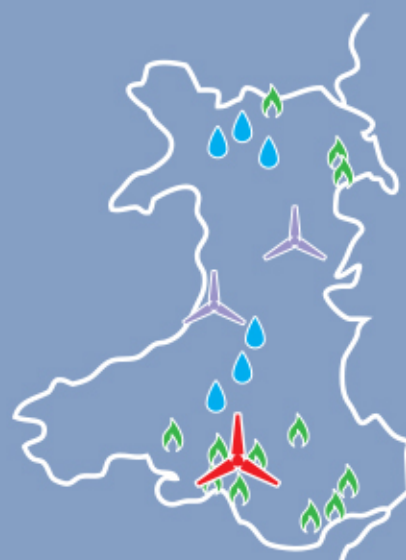
Consultation and community involvement are very important elements of the planning process and Infinis is committed to working with local communities in order to bring forward successful schemes. We have held meetings with the local community council and we shall continue to engage with the local community as the project progresses.

Infinis values dialogue with local residents. As you go around the exhibition, please speak to members of the Infinis team who are here to answer your questions and listen to your views. Feedback forms are available to help you register your opinion. You can complete this and hand it in at the exhibition, or take it home and post it later. Thank you for all the feedback from our November 2013 exhibition.

Information is also available from the dedicated web page on the Infinis company website at [www.infinis.com/melin-court](http://www.infinis.com/melin-court)

### About Infinis

The Infinis group is the UK's leading independent generator of renewable energy. Infinis operates a growing portfolio of onshore wind, landfill gas and hydro plants across the UK with an aggregate generating capacity of 621 MW. In the year to 31 March 2013, the Infinis group produced approximately 7% of the UK's renewable power.



### Infinis sites



#### LANDFILL GAS

Ruabon  
Chirk  
Llanddulas  
Ferry Road  
Lamby Way  
Tythegston  
Tir John  
Pwllfawatkin  
Bryn Pica  
Nant-y-caws  
Docksway  
Silent Valley



#### HYDRO

Cwmorthin  
Elan Valley  
Elan Caban  
Ffestiniog  
Llyn Celyn  
Llyn Brianne



#### WIND

Mynydd Clogau  
Rheidol



### Melin Court

In Wales, Infinis' operational renewable energy portfolio comprises:

- Mynydd Clogau wind farm, Powys (15 MW)
- Rheidol wind farm, Ceredigion (2.4 MW)
- Six hydro-electric sites
- Twelve landfill gas to electricity sites





# Climate change and renewable energy



## Climate change

Climate change is currently the single biggest environmental threat facing the planet and is an even greater threat to future generations, causing unpredictable, severe weather patterns with potentially catastrophic effects on agriculture, wildlife, human health and the economy.

## Need for renewables – climate change targets

As part of its global commitment to combat climate change, the UK has accepted a legally binding target to increase the proportion of energy sourced from renewables to 15% by 2020. In 2012 the UK sourced 4.1% of its energy from renewable sources.

## Security of supply and other reasons to support renewables

Renewable energy is beneficial for a number of reasons, including:

- **Security of supply, working towards energy independence**
- **Finite supplies and a rising cost of fossil fuels and uranium**
- **The need to replace traditional power stations as they reach the end of their life**

At a time of rising energy prices and increasing evidence of the negative effects of climate change, a mix of renewable energy offers us an indigenous, clean and secure source of energy.

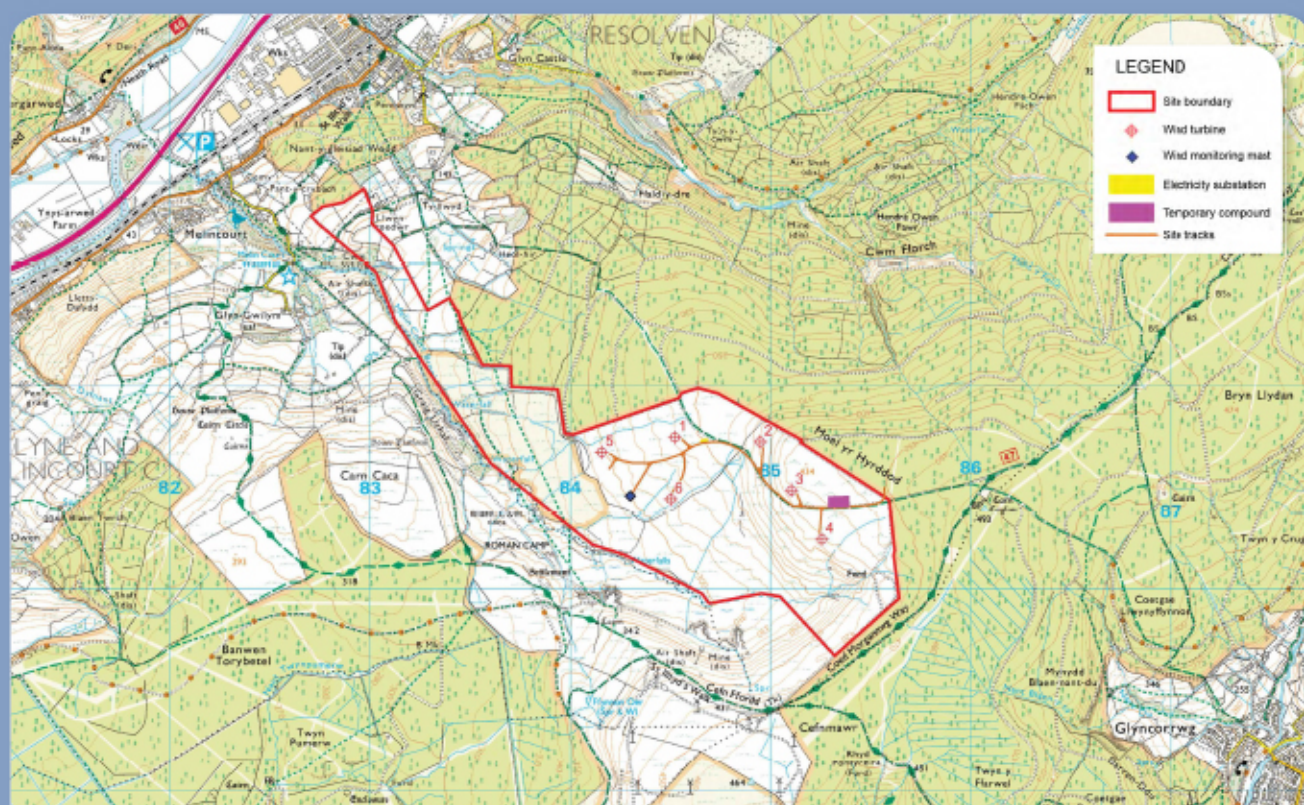
## Why wind power?

In the UK, wind power is the most advanced and readily deployable of the available renewable energy technologies and has the greatest potential to make a significant difference to the generation mix in the coming decade.





# The Melin Court site



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The proposed site is located within the Neath Valley, approximately 2km south east of Resolven. The site is open moorland, bounded by areas of forestry to the north and east.

The site has many advantages, being in an exposed location with high wind speeds, with no international or national designations such as Areas of Outstanding Natural Beauty, Sites of Special Scientific Interest, Special Areas of Conservation or Special Protection Areas. The site is located within the TAN 8 Strategic Search Area F.

It is currently anticipated that Melin Court wind farm will comprise up to six turbines with a generating capacity between 12 – 18 MW. The final size depends on turbine choice and numbers, but taking the mid-case of 15 MW it is estimated that this size of development could generate the equivalent of the average annual electricity use of 8,200 households.

## The proposed development

The wind farm would include a maximum of six turbines up to 145m in height, together with site infrastructure including access tracks, a temporary construction compound, an electrical substation building and a permanent wind monitoring mast.

## Grid connection

Infinis has secured an agreement to connect the wind farm to the local electricity distribution network. The connection point is to an existing electricity cable outside Blaengwrach. Infinis will work with the network operator, Western Power Distribution, to minimise environmental effects associated with the grid connection. A further planning application will be made by Western Power Distribution in due course.

## Wind monitoring

In November 2013, Infinis installed a temporary wind monitoring mast on the site. The results gathered to date confirm that the site has high wind speeds and is a good location for a wind farm.

## The planning process

We are finalising our full planning application and the supporting Environmental Statement and we intend to submit these documents to the Council in spring 2014. Once submitted, you will have an opportunity to let the Council know your views on the project.

## Lifespan of the wind farm

It is envisaged that the wind farm would be in operation for 25 years, with this being the maximum term stipulated by the planning consent.

Once the wind farm has reached the end of its lifespan, the decommissioning process includes removal of the turbines and the site will be returned to its original condition or as near to this as would be ecologically desirable. Infinis will be required to put a bond in place to cover the costs of this work, ensuring that this restoration is not dependant on the continuing viability of the company. The bond will be held by Neath Port Talbot County Borough Council.





# The Environmental Statement

A wide range of assessments and consultations have been carried out to develop the final wind farm design and identify the potential impacts of the development. An Environmental Statement will be submitted with the planning application that details the results of these assessments and describes how the project will address issues that have been identified. The environmental and technical studies carried out for the Melin Court wind farm have been finalised. A brief overview of some key studies is provided here.



## Ecology and ornithology

Baseline ecological and ornithological surveys commenced in 2012. Consultations and data requests have been undertaken with all relevant bodies including the Council's ecologists and Natural Resources Wales. Although some protected species, including red kite, goshawk, nightjar and viviparous lizard have been identified, the assessment concludes that there will be no significant effects on protected species.

## Geology, hydrology and ground conditions

A ground condition and hydrogeological assessment has been undertaken. The results of the assessment have informed the design of the wind farm as we have been careful to locate any proposed infrastructure away from areas of deep peat. The Coal Authority's historic mining records have also been considered in the final layout design.

## Transport, traffic and access

It is proposed to access the site via the adjacent forestry, which would be accessed from the A4061, Rhigos Road, to reduce the traffic impact on local communities.

## Telecommunications

Telecommunications operators have confirmed that there are no microwave links in the vicinity of the proposed turbines.

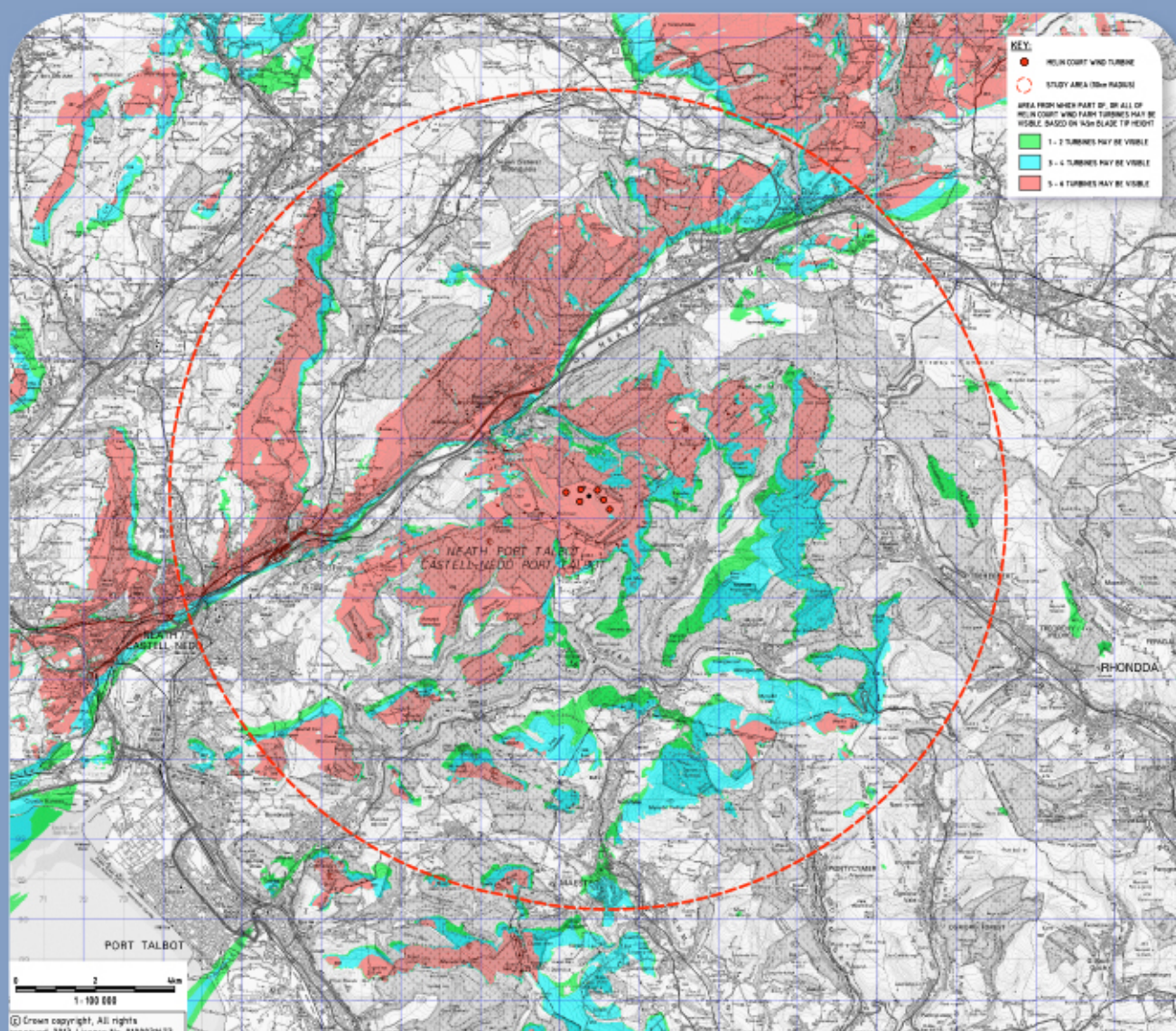
## Noise

The Environmental Statement will include an assessment to ensure that noise generated by the turbines is within acceptable limits at nearby properties. Sources of noise during operation of a wind farm are largely due to the rotation of the rotor blades. While this noise can increase with wind speed, background noise (such as wind in trees) also increases with wind speed.





# The landscape and visual assessment



Zone of theoretical visibility of the Melin Court turbines up to 10km based on 145m turbine tip height

The Environmental Statement will feature a full landscape and visual assessment that includes consideration of:

## Landscape character

It is common practice to define landscapes in relation to landscape character, which depends on the prevailing landscape features, topography, agriculture and settlement patterns. Consideration of landscape character helps the Council assess the suitability of proposals.

## Viewpoints

Viewpoints have been agreed with the Council to represent views from local settlements, key transport routes, tourism and recreation locations. The layout of the wind farm has been finalised; in doing so we have aimed to minimise the visual impacts from key locations and give consideration to how the wind farm sits in the landscape.

## Photomontages

Photomontages have been prepared in accordance with strict guidelines and are provided to assist the Council in determining whether the visual effect of the proposed turbines will be acceptable. They show the proposed turbines superimposed onto photographs of the existing landscape from selected viewpoints.

## Cumulative Impacts

There has been an assessment of the cumulative impact of the Melin Court wind farm in addition to other schemes which will be detailed in the Environmental Statement.

## Zone of Theoretical Visibility (ZTV)

The ZTV diagram presented here is based on the final proposed wind farm layout. This shows the number of turbines theoretically visible from all locations on the map and is used as the starting point for the landscape and visual assessment. It should be noted that the ZTV does not take account of the screening effect of vegetation, buildings or other features that reduce visibility. Also note that the visibility of a small section of a turbine blade is represented the same way as visibility of a full turbine.



## Benefits to the community

### Community development fund

Infinis intends to contribute an annual community development fund of £5,000 per MW of installed capacity once the wind farm is operational. This fund would be allocated to benefit projects in the area.

The final wind farm capacity depends on turbine choice and numbers, but taking the mid-case of 15 MW, this would result in up to £75,000 per year being invested locally, equivalent of over £1.8 million during the life of the wind farm (estimated to be 25 years).

Schemes supported by community funds established for other Infinis wind farms include:

- Local energy efficiency improvements;
- Local charities and community facilities;
- Community heritage projects.

We are particularly interested to hear of any local projects you are aware of that may be suitable for support from the fund.



### The local economy, employment and business opportunities

Wind farms bring excellent opportunities for local businesses, and there is a significant pool of experience in Neath Port Talbot. Infinis hope that these local skills can be employed during the construction, operation and decommissioning of our wind farm, producing a positive effect on the local economy.

It is Infinis policy to utilise, when practical, local contractors for construction, operation and maintenance work. We would like to hear from companies who are interested in tendering for work during the construction phase. In addition to construction spend, indirect expenditure in local shops, services and with accommodation providers is expected.

### Contact information

If you require further information, have ideas for the community trust fund or would like to comment on the Melin Court wind farm proposal please contact the Infinis project manager, Richard Buckland, on 0131 243 1380.

Or send an email to [melincourtwindfarm@infinis.com](mailto:melincourtwindfarm@infinis.com)

Project updates will be posted on the Infinis website: [www.infinis.com/melin-court](http://www.infinis.com/melin-court)

