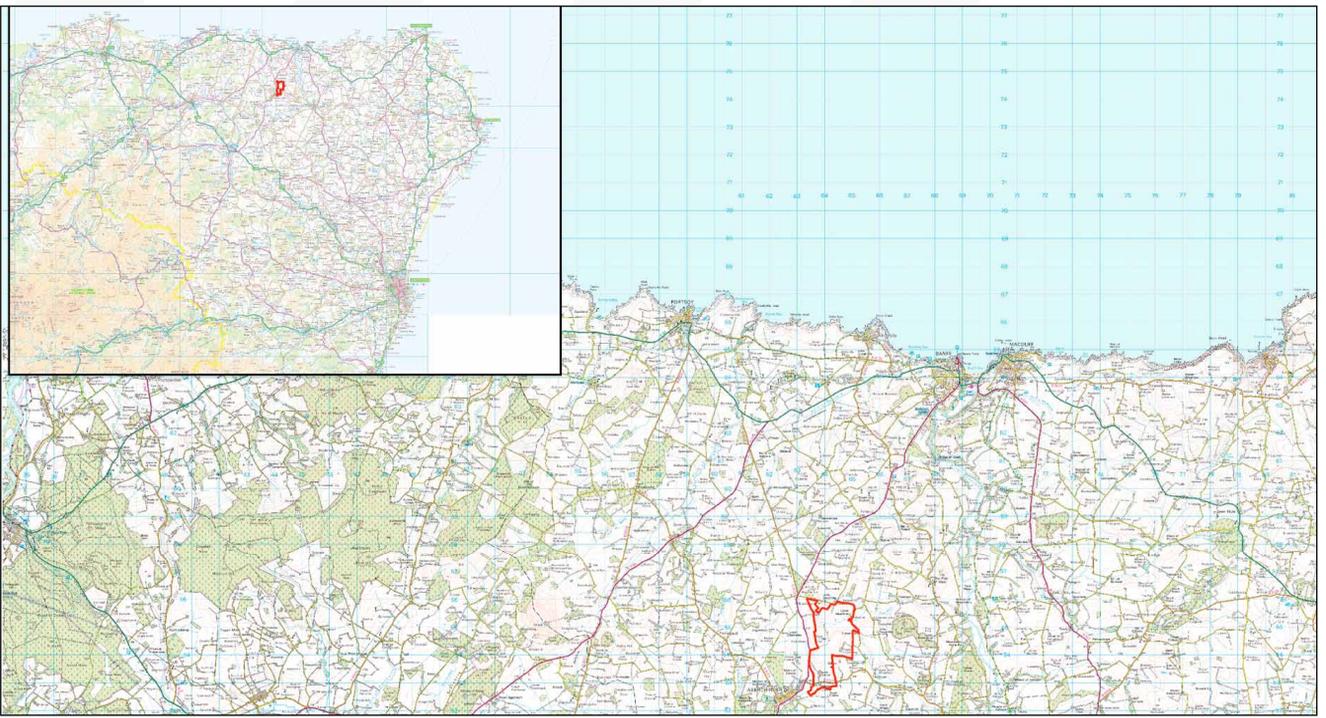


# DEUCHRIES WIND FARM

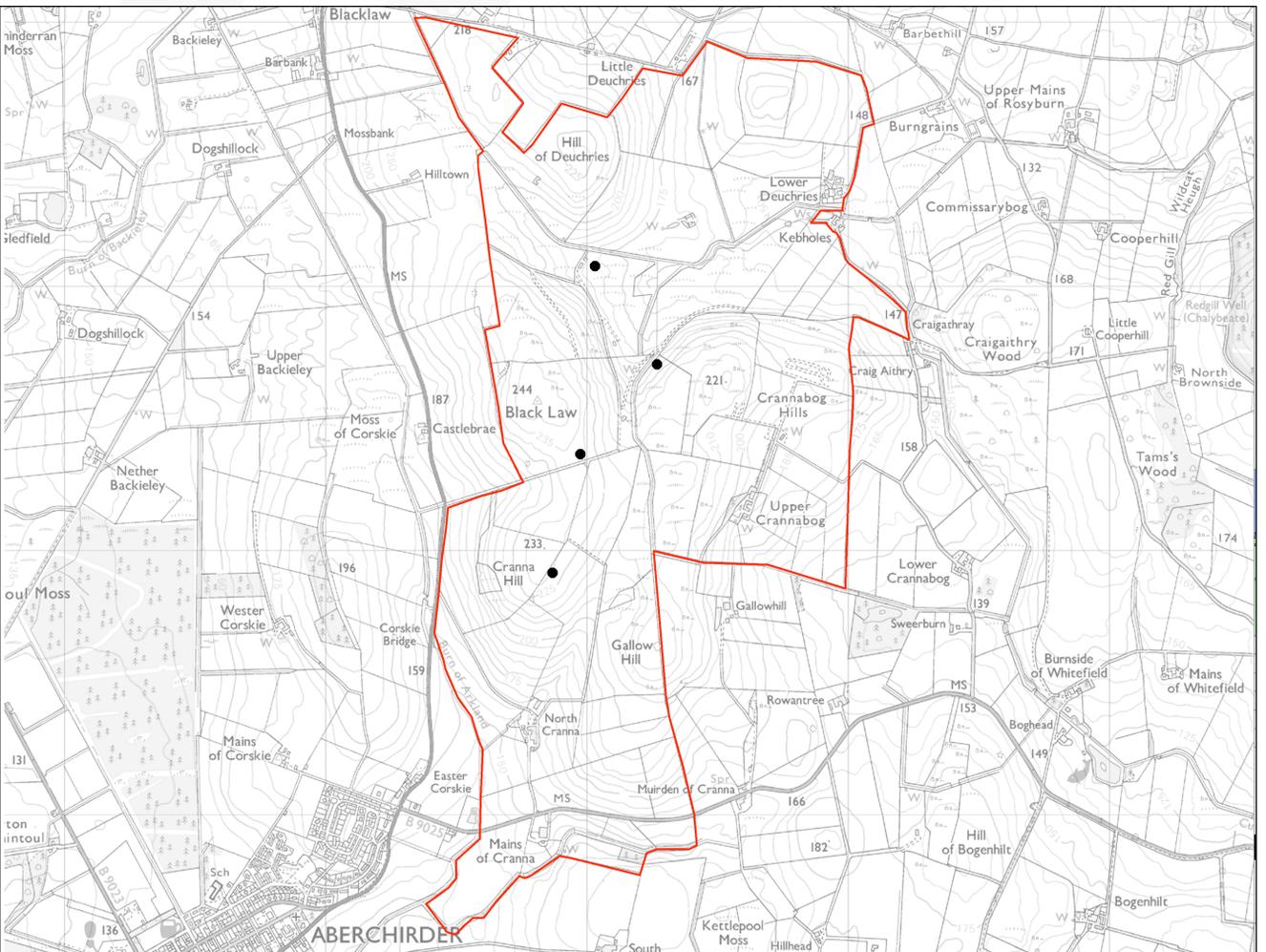
## WELCOME TO OUR EXHIBITION

Welcome and thank you for taking the time to learn more about our proposals for a wind farm in Banff and Buchan, Aberdeenshire. Force 9 Energy is seeking to develop a 4 turbine wind farm 1.5km east of Aberchirder. The proposed wind farm encompasses land owned by three different farms – Deuchries, Upper Crannabog and North Cranna and part of the site boundary would be bordered by the A97, close to Aberchirder.

The proposed turbines would have a maximum height of up to 110m and a blade to tip length of 40m. Overall the installed capacity of Deuchries wind farm would be 8MW (based on 4 x 2MW turbines). It is estimated that the wind farm could generate enough power to meet the annual domestic energy requirements of 4,470 homes<sup>1</sup>. The modest footprint taken by the turbines will ensure they can be readily removed in a matter of months, leaving very little legacy.



Site location



Site layout

<sup>1</sup> Please note that this figure is based on 4 turbines with a rated capacity of 2MW operating at 30% capacity and assuming 4,700 is the average UK household electricity consumption in kW hours.

# WHY DEVELOP A WINDFARM?



The Scottish Government has set ambitious targets for Scotland to achieve in the creation of energy generation from renewable sources. By 2020 the Government want 100% of Scotland's electricity consumption to come from renewable sources such as wind energy. The aim is to reduce Scotland's reliance on less sustainable forms of energy generation and contribute towards energy security by utilising resources found readily in this country.



The UK has the potential to become a world leader in renewable technology due to the vast availability of resources such as wind, tidal and wave. The UK is the windiest country in Europe accounting for just over 40% of Europe's wind resource; and with the right investment wind energy could provide the majority of the UK's renewable energy consumption.<sup>2</sup>

## Benefits of wind energy

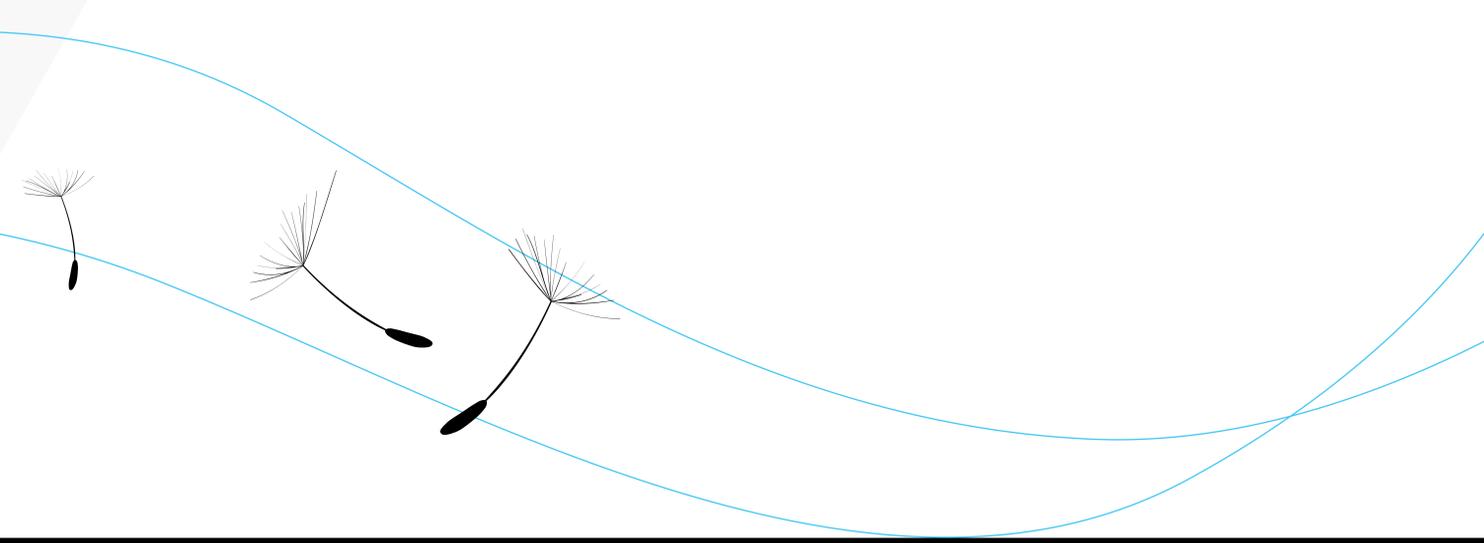
- Wind power is completely renewable. Using renewable energy makes our current lifestyle more sustainable and helps to preserve a high standard of living for generations to come.
- Wind power produces no harmful waste such as carbon dioxide and offsets the emissions of generating electricity from other energy sources. This means that sourcing our energy from wind power instead will assist with the global need to tackle CO<sup>2</sup> emissions to prevent climate change.
- Wind energy is considered to be a reliable, cost-effective, pollution free and secure source of energy.
- Wind energy is compatible with other land uses and can serve as a boost for rural economic development.
- Wind energy costs are low and stable for consumers especially at a time when oil and gas prices are at an all time high.

In response to contributing to the Scottish Government's targets and increasing the energy mix utilised in Scotland and the UK as a whole, Force 9 Energy is seeking to develop a 4 turbine wind farm on farmland near Aberchirder. The Deuchries site benefits from a very high wind resource, which if suitably harnessed and developed would create enough electricity to meet the annual domestic energy needs of 4470 homes<sup>3</sup>....this would power every home in the nearby towns of Turriff and Banff<sup>4</sup>.

<sup>2</sup> <http://www.bwea.com/onshore/index.html>

<sup>3</sup> Please note that this figure is based on 4 turbines with a rated capacity of 2MW operating at 30% capacity and assuming 4,700 is the average UK household electricity consumption in kW hours.

<sup>4</sup> Aberdeenshire Council, Town Statistics <http://www.aberdeenshire.gov.uk/statistics/area/TurriffProfile2010.pdf>





Viewpoint 3: View from B9025, North East of Aberchirder

## FREQUENTLY ASKED QUESTIONS

### How efficient are wind turbines?

A modern wind turbine generates different outputs of energy depending on how windy it is. Wind farms generate electricity around 80-85%<sup>5</sup> of the time, and power is converted to electricity very efficiently, with none of the thermal waste inherent in fossil fuel plants. Wind power is an efficient way to generate electricity, employing a free energy source that is also renewable.

### Why can't all wind turbines be offshore?

Onshore wind turbines are currently more economical than offshore wind turbines. Offshore wind farms also take considerably longer to develop and require a significant maintenance regime once operational. Given these factors, it would be impractical at the present time to place all wind farms offshore. As the technology develops, offshore wind farms are likely to become more competitive, but on-shore wind will always be cheaper, quicker to deploy and easier to maintain.

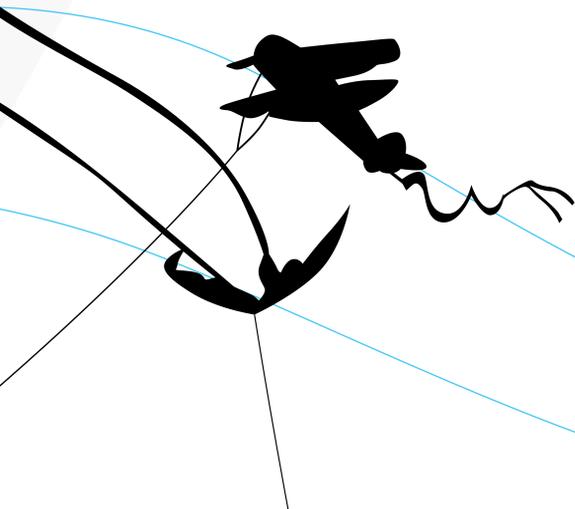
### Will a nearby wind farm affect the value of my property?

The Centre for Sustainable Energy (CSE) cites several studies in its recent publication 'Common concerns about wind power', (published May 2011) regarding the relationship between the proximity of wind turbines and the value of property. In this publication they state that in the most comprehensive study done to date on the issue, the main findings were summarised as follows:

“Specifically, neither the view of the wind facilities nor the distance of the home to these facilities is found to have any consistent, measurable and statistically significant effect on home sales prices.”<sup>6</sup>

<sup>5</sup> Centre for Sustainable Energy, "Common Concerns About Wind Power," May 2011 [www.cse.org.uk](http://www.cse.org.uk), p5

<sup>6</sup> Centre for Sustainable Energy, "Common Concerns About Wind Power," May 2011 [www.cse.org.uk](http://www.cse.org.uk), p.18





Viewpoint 4: View from Lower Deuchries

## ECONOMIC BENEFITS

### Socio-Economics

The site falls within Aberdeenshire Council Ward 1: Banff and District. The Banff and District ward employs people primarily in health and social work (14.4%), manufacturing (14%), agriculture, hunting and forestry (13%) and wholesale and resale trade and repairs (13.1%).<sup>7</sup>

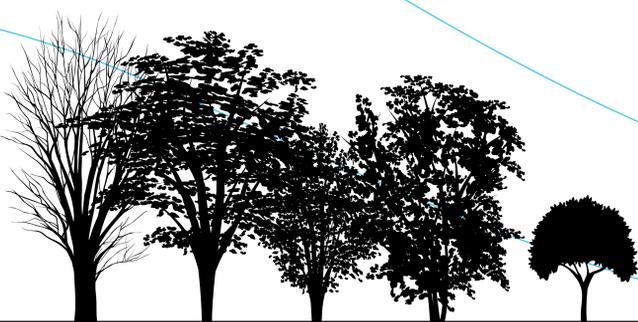
The economic benefits of Deuchries wind farm will be measured alongside the potential impact of the wind farm on tourism and recreational activities in the area. The project will bring with it significant employment opportunities during the construction phase of the wind farm and the associated infrastructure such as the access tracks, control building and meteorological mast. It is Force 9 Energy's policy, through EDF Energy Renewables, to encourage local businesses to tender for construction contracts associated with their development wherever possible.

### Community Benefit

Force 9 Energy is committed to the principal that local communities should share in the benefits of local renewable energy development. As such, Force 9 Energy proposes to fund a community benefit package for every installed megawatt (MW) of energy that Deuchries wind farm generates. Presently, the community benefit fund has not been decided upon. Ahead of deciding upon the amount of community benefit fund, Force 9 Energy is keen to consult with the local community councils and stakeholder groups surrounding the proposed Deuchries site. Furthermore Force 9 Energy will be consulting with Aberdeenshire Council to ensure the proposed fund is in line with policy recommendations.

Force 9 Energy believes that it should be up to the local communities to decide how they would like the community benefit funds to be allocated. If you have any ideas on how this annual fund should be utilised then please let us know! We can then consult on these suggestions with the community as a whole. Alternatively, you may wish to raise the idea with your local Councillor or suggest this to the Community Council directly.

<sup>7</sup> Aberdeenshire Council, 2011. <http://www.aberdeenshire.gov.uk>





Viewpoint 7: View from Banff

## ENVIRONMENTAL IMPACT ASSESSMENT

As part of the development of Deuchries Wind Farm an Environmental Impact Assessment (EIA) is being undertaken. The EIA will identify the existing conditions for a large range of technical subjects that need to be considered to allow the potential impact of the wind farm on the surrounding environment to be assessed.

Where potentially significant effects are considered likely, measures to reduce these will be incorporated into the final design of the wind farm. A scoping report has been submitted regarding the proposed wind farm at Deuchries. The content of this scoping report is based on a documentary review and preliminary field assessment, which has been evaluated over a number of months.

### Landscape and Visual

A comprehensive assessment is being undertaken to examine how the wind farm could affect the character and appearance of the surrounding landscape, views from residential properties, recreational areas, as well as public rights of way and transport routes.

For the purpose of scoping, areas within 35km of the proposed development have been considered to meet the requirements of the specific project and its landscape context, and to reflect the likelihood of significant effects arising over long distances.

### Noise

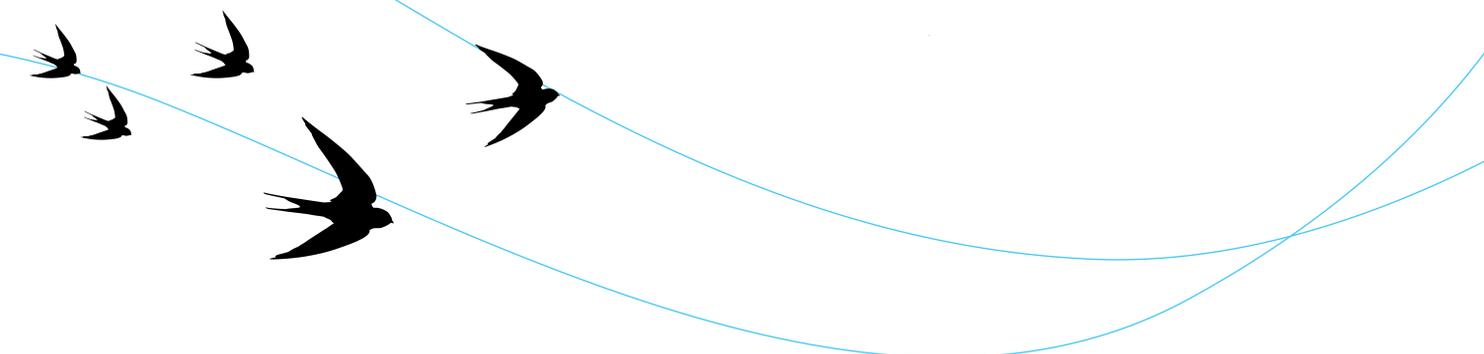
Strict guidelines exist on wind turbines and noise emissions. As part of the EIA, Force 9 Energy has located noise sensitive receptors at 4 locations surrounding the proposed Deuchries wind farm to record noise levels. The potential impacts on sensitive receptors are construction traffic noise (primarily along the local road network) and construction plant noise from the site as well as operational noise from turbines and substations.

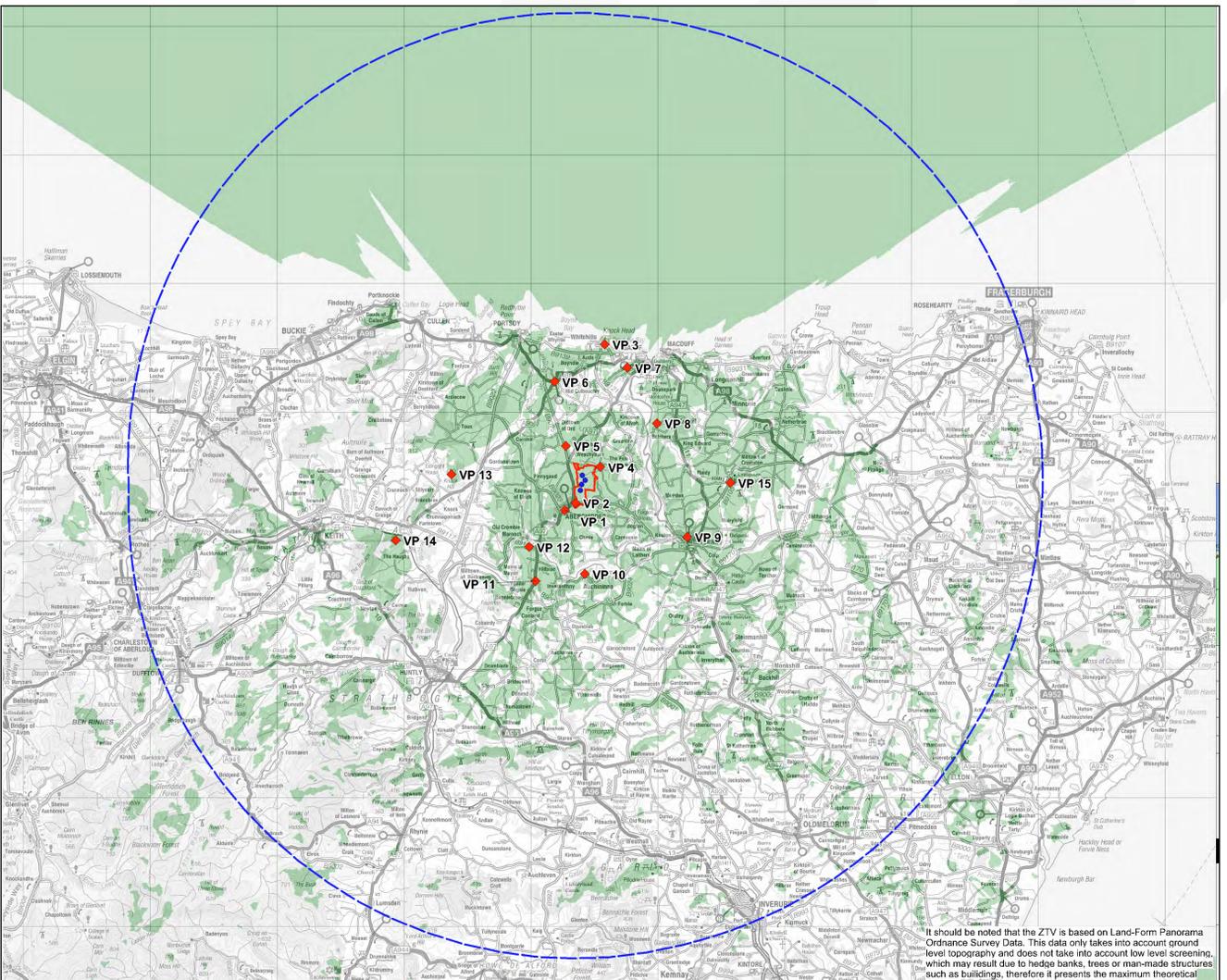
### Ecology and Ornithology

The ecological and ornithological assessment will include a review of any relevant existing ecological information for the development area and immediate surroundings. Scottish Natural Heritage (SNH) has produced guidance on the siting of new wind farm developments. Bird surveys have been carried out at the site but wider ecology surveys have yet to be carried out.

### Shadow Flicker

Shadow flicker can occur where sunlight shines from behind a turbine and the rotating blade creates a flicker affect. It is only likely to be a significant issue within 130 degrees either side of north and within 10 rotor diameters of the wind farm. Any shadow flicker effects on any properties which fall within these criteria will be considered in detail and suitable mitigation incorporated into the operation of the wind farm.





Viewpoint location map

## About Force 9 Energy

Force 9 Energy is a small, privately owned wind farm development company that is dedicated to delivering high quality renewable energy schemes throughout the UK. The company was established in 2002 and has offices in Glasgow and in Amersham, Buckinghamshire. To date Force 9 Energy has successfully taken 4 wind farm developments through the planning process with a 5th application recommended for approval. Our completed and consented projects amount to a total potential installed capacity of almost 200MW.

On the proposed Deuchries wind farm, Force 9 Energy is working in partnership with EDF Energy Renewables (EDF). Under the terms of the partnership, Force 9 Energy will lead on the wind farm development throughout the planning stage and up to the start of construction. Should the wind farm be consented, EDF will take the lead during the construction and subsequently own and operate the wind farm.

## Public Exhibition

At Force 9 Energy we are committed to the principal that local people are given the chance to feedback their views directly to our project team at every stage of the development process. Today's exhibition is an opportunity for our team to introduce the proposals, listen to the views of local people and integrate these views into the ongoing consultation process.

Force 9 Energy has provided a questionnaire to gain your views on the proposals for Deuchries. We would be extremely grateful if you would take the time to complete the questionnaire and return it to us today. Alternatively if you would like to take it away with you and complete it after the exhibition, there is a return address detailed on the questionnaire. If you have any further questions regarding any aspect of the proposals please contact Steven Park at [steven.park@ppsgroup.co.uk](mailto:steven.park@ppsgroup.co.uk) or on **01312261951**.

