



CAR DUIBH WIND FARM

VIRTUAL EXHIBITION

14 June – 2 July 2021



Alltwalis Wind Farm, Carmarthen, South Wales, 110m tip height

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This consultation is designed to share our early stage plans for Car Duibh Wind Farm. We are keen to hear your views as we continue to shape the project during this phase.
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About Statkraft

- The largest generator of renewable energy in Europe
- A state owned utility, with origins in Norwegian hydropower 125 years ago
- 4,500 employees in 17 countries, all working towards our low carbon future
- Operating in the UK since 2006
- Distributed over £2 million to communities near operating wind farms

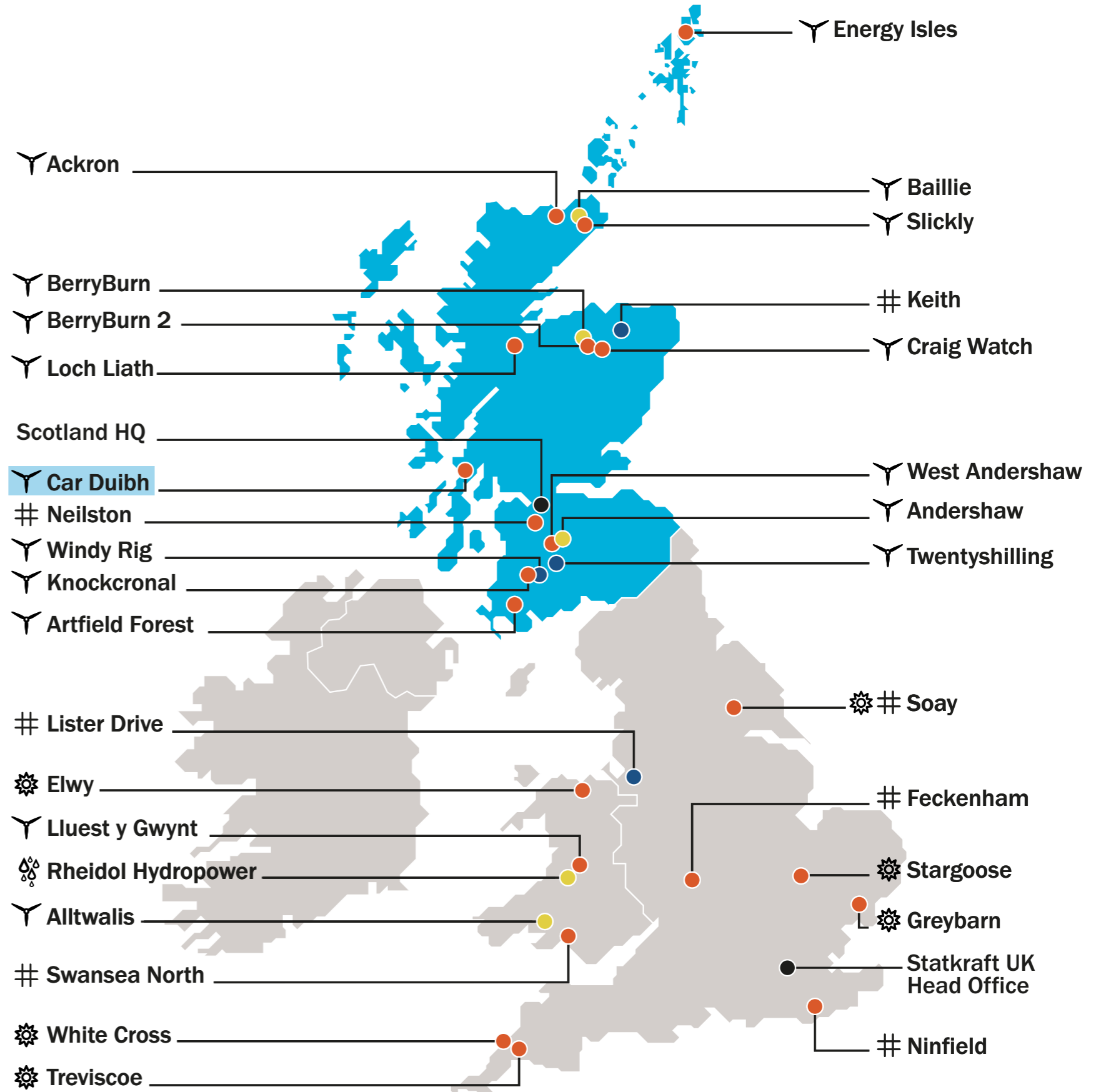


Berry Burn Wind Farm, Moray. 100m tip height

Statkraft in the UK

- Scottish Head Office in Glasgow
- Operational portfolio includes four wind farms, one hydro plant
- Two wind farms in Dumfries & Galloway in construction
- Recent expansion into solar development and electric vehicle charging points
- Over 700MW in development
- Delivering grid stability services for National Grid in Moray and Liverpool

- Operational
- Construction
- Development
- Offices
- Y Wind
- # Greener Grid Park™
- ⦿ Hydro
- ☀ Solar




About Car Duibh Wind Farm

This is an excellent site to contribute to Scotland's ambitions of reaching net zero emissions by 2045


Key Facts:

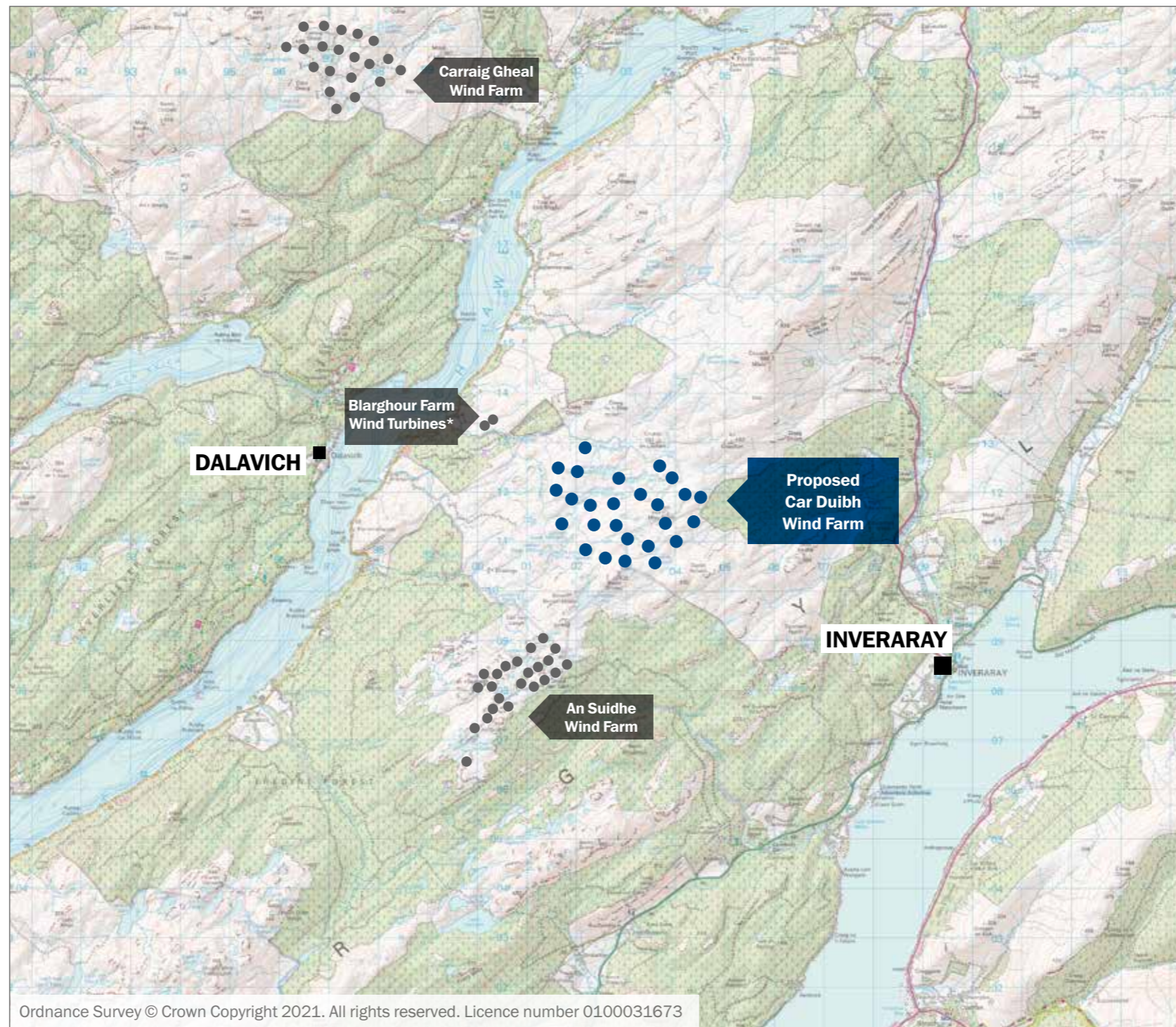
 **26** Up to 26 wind turbines proposed

£5,000 Per MW installed per year for a Community Fund As recommended by Scottish Government

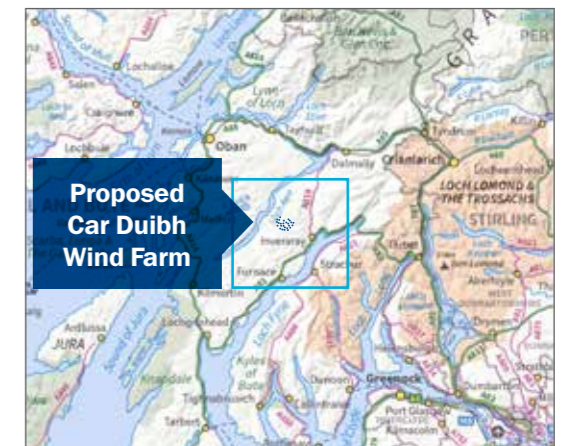
 A maximum height to blade tip **200m**

 Exciting new opportunity to talk about shared ownership and local suppliers

 Potential for improved broadband provision



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* Note: These are the two operational turbines (27m to blade tip) at Blarghour Farm. They are not shown on the OS basemap but have been added to the image for information.

About Car Duibh Wind Farm

Why this site?

→ Development would contribute towards Scotland's commitment of net zero emissions by 2045

→ Studies show that the site benefits from excellent wind speeds

→ No nationally or internationally designated sites within proposed turbine development area

→ Designed to reflect the topography, existing operational and any known wind farms in development

→ Approximately 4.5km to the east of Dalavich and 6km to north west of Inveraray



The below is based on our current knowledge of the site, and will go through further design changes as more information is gathered. The scheme will reduce before an application is submitted for planning consent. We will present this to the community later this year. *Your feedback will help us design a better overall project.*

	No. of Turbines	Max Blade Tip Heights	Expected Installed Capacity (MW)	Estimated Generation (homes equivalent)	Community Fund (per year)
Car Duibh	Up to 26	Up to 200m	Over 50 <small>(section 36 planning application)</small>	Over 5,000 <small>Homes per turbine ⁽¹⁾</small>	£5,000 <small>per MW installed per year ⁽²⁾</small>

(1) Based on 5MW turbine, wind resource assessment and average Scottish domestic consumption of 3.393kWh pa. Candidate turbine still tbc'd.
 (2) As recommended by Scottish Government.

The Story So Far

Car Duibh Wind Farm is a new proposal managed entirely by Statkraft.

The area was previously developed as Ardchnonn Wind Farm by RWE Innogy who have no involvement with this proposal.

In May 2021 we requested the view of the Scottish Government, Argyll and Bute Council, other statutory consultees and community councils on the level of study required (known as ‘Scoping’) to assess our up to 26 turbine Car Duibh Wind Farm proposal.

We expect to receive the views and comments from these groups (within a document known as a ‘Scoping Opinion’) this Summer.







The purpose of this exhibition is to gather the views of the wider community to help shape and inform the Car Duibh proposal.

We will design a proposal that strikes a **good balance, maximising the electricity output of the site within the constraints and context of the site.**

We are in the process of undertaking extensive surveys to gather data on the following:

- **Wind resource**
- **Landscape and Visual Impact**
- **Traffic and transport**
- **Ornithology**
- **Carbon rich soils and priority peatland habitats**
- **Cultural Heritage and Archaeology**
- **Protected Species**

Throughout the process Statkraft continuously engages with the local community and stakeholders about the emerging project.

1. SITE SELECTION	2. PRE-PLANNING	3. SUBMIT APPLICATION & AWAIT DECISION	4. CONSTRUCTION	5. OPERATION	6. DECOMMISSION
<p>(12 months)</p> <p>Extensive research to identify suitable sites: positive indicators include good wind speed and minimal environmental and technical constraints.</p> <p>No public engagement is carried out during this time because the site may not pass the criteria required for being suitable for development.</p> 	<p>(6 to 12 months)</p> <p>We request the view of the Scottish Government and Argyll and Bute Council on the level of study required (known as “Scoping”).</p> <p>Scoping is sent to local and neighbouring Community Councils and consultees such as NatureScot, SEPA and Historic Environment Scotland.</p> <p>There are likely to be further changes to the layout as studies continue and feedback from communities and residents is received. Before the final layout is submitted into planning, we will host another consultation in line with Covid-19 advice.</p> 	<p>(12 months)</p> <p>An application is submitted to the Scottish Government, accompanied by a comprehensive Environmental Impact Assessment Report showing the results of all studies undertaken. This is publicly available information and will be available on the project website.</p> <p>Interested parties and statutory consultees such as Argyll and Bute Council can formally comment on the application.</p> 	<p>(12 to 24 months)</p> <p>If Car Duibh is approved, construction begins at least one year after consent.</p> <p>Construction typically takes 12–24 months and planning conditions are used to manage elements of construction.</p> 	<p>(35 to 40 years)</p> <p>The turbines are managed from a regionally based maintenance team, and operations are controlled by detailed planning conditions.</p> <p>We are committed to community benefit and shared ownership opportunities. A community fund is active throughout the lifetime of the project for worthwhile community initiatives.</p> 	<p>(12 months)</p> <p>At the end of the planning period, turbines are removed. A financial bond or guarantee is put in place before construction starts to cover this cost.</p> 

The process of gathering robust environmental data is vital to designing a wind farm which balances technical, environmental and commercial considerations.

Environmental Impact Assessment (EIA) is the process of identifying, assessing and presenting the likely significant environmental effects of a development proposal to inform sound decision making. Having an understanding of the potential for significant effects as information emerges through the EIA process also allows for early action to be taken to avoid these effects as part of the design of the project.



Surveys and assessments are undertaken by a team of specialist consultants. The results and findings will be detailed in an EIA Report which will be publicly available following submission of our application.

An important first step in the EIA has been the preparation of the EIA Scoping Report. A number of statutory and non-statutory organisations are being consulted on this, including, but not limited to:

- [Argyll and Bute Council](#)
- [NatureScot](#)
- [Scottish Environment Protection Agency](#)
- [Historic Environment Scotland](#)
- [Transport Scotland](#)

[Documents related to the Scoping Report can be downloaded by clicking here.](#)

The EIA will consider the following topics:

- | | |
|---------------------------------------|--------------------------------|
| → Landscape and Visual Amenity | → Noise |
| → Ecology and Ornithology | → Traffic and Transport |
| → Hydrology and Peat | → Socio-economics |
| → Cultural Heritage | → Climate Change |

Landscape and Visual Assessment



The landscape and visual impact assessment will include a detailed assessment of the potential effects of the proposed wind farm across a 45km study area. This will assess the effects of the wind farm on its own, and in combination with other nearby wind farm developments.

Particular consideration will be given to:

- The landscape character of the site and wider area.
- Special qualities of designated landscapes including Loch Lomond and the Trossachs National Park, and North Argyll and East Loch Fyne Coast Areas of Panoramic Quality.
- Cumulative landscape and visual effects with other wind farms in the study area (operational, consented and proposed).
- Views experienced by local residents, road users, people using walking routes and cycle routes (including National Cycle Network Route 78 which follows the western shore of Loch Awe), and people at recreational locations including nearby popular hill summits.
- Potential turbine aviation lighting.

We are working with Argyll and Bute Council and NatureScot to finalise the most suitable locations for viewpoints to illustrate the potential visual effects of the wind farm. Images showing predicted views will be produced when these locations are agreed, and shared during another consultation event later this year.



The following topics are key considerations in the evolution of the Site's design:

Ecology



Extensive ecological surveys are being undertaken across the site for habitats and protected species. The habitats on the site are complex as a result of climatic conditions and the undulating upland topography. Blanket bog is widespread however grazing across the site has resulted in the presence of grassland in some areas. There is also an extensive network of lochans and watercourses across the site. Protected species surveys are underway, and will include detailed surveys for otter, water vole, badger, and bats, as well as habitat suitability surveys for red squirrel, pine marten, fisheries and freshwater pearl mussel.



Ornithology



In accordance with NatureScot guidance, two years of ornithological surveys have been completed at the site. The surveys identified the presence of golden eagle, white tailed eagle, hen harrier, red throated diver, common snipe, curlew, common sandpiper, lapwing, teal and mallard.

The Site is located 6.5km from the Glen Etive and Glen Fyne Special Protection Area (SPA) which is designated for the presence of breeding golden eagle and the potential for impacts on the SPA will be considered as part of the EIA.

The EIA will consider the potential effects during construction and operation of the wind farm.

The project will be carefully designed, in accordance with best practice and consulting with the relevant statutory bodies, to minimise any potential effects on ornithological species.

Hydrology and Peat



A full suite of surveys to assess potential effects of the proposed wind farm on hydrology, hydrogeology, geology and peat are underway. This data will be used to inform the design of the proposed wind farm.

Extensive peat depth surveys are currently ongoing which indicate that the depth and quality of peat varies considerably across the site; the presence of peat will form a key consideration in designing the final layout of the wind farm, including the tracks and other infrastructure, to minimise the effects on peat during the construction process. A peat management plan will be prepared, and a detailed peat slide risk assessment will be undertaken as part of the EIA.

There are a number of water bodies and watercourses located across the site. Where possible, a 50m buffer will be applied to all watercourses (excluding where watercourse crossings are required) to minimise the risk of potential impacts due to changes in runoff, sedimentation, or water quality.

Consultation will be undertaken to identify any Private Water Supplies in use. The catchments for any confirmed abstractions will be identified so that they can be protected during construction and operation of the wind farm.

Socio-economics



The EIA will include an assessment of potential socio-economic effects during construction and operation of the proposed wind farm. During construction, there is potential for benefits to arise associated with job creation, use of local services and income spent locally resulting in positive effects for surrounding local communities. The assessment will also consider the potential for effects on tourism and recreation. This will draw on the findings of the landscape and visual assessment in relation to effects on key viewpoints that are known to be used recreationally, as well as effects on users of nearby recreational routes including National Cycle Route 78 which follows the western shore of Loch Awe.



Car Duibh, Trig Point view

Cultural Heritage



An archaeological and cultural heritage assessment will be undertaken in line with Historic Environment Scotland (HES) guidance. This will include the assessment of the potential for direct effects on any archaeological remains located within the site which will be confirmed through field survey. Setting effects on cultural heritage assets in the wider landscape will also be assessed through the provision of representative visualisations in the EIA Report.



Noise



A noise assessment will be undertaken which will consider the potential effects of construction and operation of the wind farm on nearby residential properties. Noise and vibration associated with the construction activities and associated traffic (including cumulative effects with other nearby wind farms) will be considered.

Traffic & Transport



It is anticipated that turbine components will be delivered to the port of Campbeltown and then transported to site via the A83. From the A83 there are several access options to the site and a detailed access review is being undertaken to identify the most suitable access junction option.

The main transport effects will be associated with the movement of general HGV traffic moving to and from the site during construction and this will be assessed as part of the EIA.

Climate Change



The Scottish Government has set a legally-binding target to achieve net-zero emissions by 2045. Developments such as Car Duibh Wind Farm are key to meeting this target. Whilst Scotland has continued to make good progress in reducing its greenhouse gas emissions, the need for low carbon energy supplies is paramount if Scotland is to achieve this net zero target.

By 2030, The Scottish Energy Strategy calls for 50% of ‘all energy’ to come from renewables. It emphasises that onshore wind is now one of the cheapest forms of electricity and will therefore continue to play an important role in this.

To quantify the emissions savings of Car Duibh Wind Farm, a ‘carbon balance’ assessment will be undertaken for the wind farm using Scottish Government guidance.

What is “Net Zero”?

Credit: www.nationalgrid.com/stories/energy-explained

Net zero means achieving a balance between the greenhouse gases put into the atmosphere and those taken out.

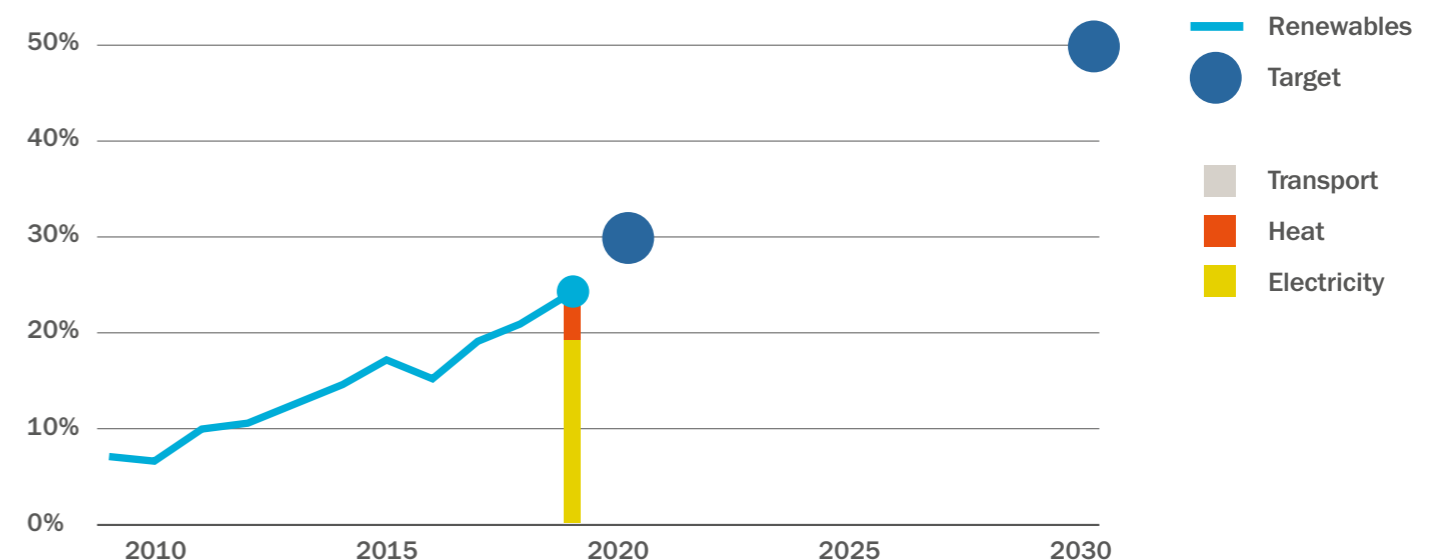
“Think about it like a bath – turn on the taps and you add more water, pull out the plug and water flows out. The amount of water in the bath depends on both the input from the taps and the output via the plughole. To keep the amount of water in the bath at the same level, you need to make sure that the input and output are balanced.

Reaching net zero applies the same principal, requiring us to balance the amount of greenhouse gases we emit with the amount we remove. When what we add is no more than what we take away we reach net zero. This state is also referred to as carbon neutral; although zero emissions and zero carbon are slightly different, as they usually mean that no emissions were produced in the first place.”

HOW IS SCOTLAND DOING?

Scotland’s share of renewable energy (gross final consumption)

Scotland, 2009 - 2019



Source: Scottish Energy Statistics Hub

We would like our wind farms to be considered a local asset and want to talk with you about how we can bring new investment to your community.



Windy Rig Wind Farm, Dumfries & Galloway.

“Windy Rig is another valuable contract for GTR. We are just one of several local businesses who are directly benefiting from the many wind farm developments within this area. This can only be a good thing for both local businesses and the local economy especially during the current pandemic.”

Tanya Russell, Director, GTR Contracts Ltd

Community Benefit Fund

We are committed to setting up a Community Benefit Fund in each of our project locations. Over £2 million has been generated from our UK projects to local causes and innovative schemes.

Community Ownership

Progress the opportunity for local groups to have a financial interest in our project, with the support of organisations such as [Local Energy Scotland](#).

Local Investment

Work with local business groups such as the Chamber of Commerce to increase awareness of the opportunities in construction and operations.

Education & Enterprise

We welcome ideas on how our project can support local education and employment opportunities, and boost local businesses.

Wireless Broadband

We invest in feasibility studies to identify potential for improved connection, and support communities developing their own broadband initiatives.

We are always exploring ways in which we can provide positive benefits to local communities near our projects.

We are often asked by people if we can help deliver faster broadband, or even get them connected in the first place.

With this in mind, we plan to commission a feasibility study to investigate the potential at Car Duibh.



The Broadband Feasibility Study explores the potential for using the infrastructure of our project to deliver super fast broadband.

Our study will find out:

FEASIBILITY

We require a reliable broadband service to operate our wind turbines, and the study explores the **potential for improving local infrastructure** as the wind farm is connected.

FIBRE & FIXED WIRELESS

Fibre is the optimal connection, but fixed wireless broadband also offers opportunities to connect some locations that can be difficult or costly to reach.

A BENEFIT

Potential to provide **improved internet connection for commercial and residential properties**. This could be partially or fully funded by the community benefit fund.

NEXT STEPS

We would like to hear your views on the Broadband Feasibility Study. If you would like to be kept **up to date** on the Broadband Feasibility Study please contact us and **register on the website for updates**.

Your Views are Important to Us

We hope to submit an application early in 2022. Before then we will hold another public exhibition to share details of the final proposal.

We welcome your comments and feedback as our proposal develops. Please register your comments by completing a feedback form [by 30 July 2021](#).

As the project progresses, we will continue to engage with local stakeholders and communities.

Comments made to Statkraft are not representations to the consenting authority. If an application is submitted there will be an opportunity for you to submit a formal response to the Scottish Government at that time.

[Thank you for attending the Car Duibh Wind Farm Exhibition.](#)

We would like to keep you updated as our plans progress:



[Click here to complete the online feedback](#)



Register for updates:
www.carduibh.co.uk



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**For more information
about Car Duibh**

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Andershaw Wind Farm, South Lanarkshire, 11 turbines, 140m tip height