\* We have renamed the wind farm, following local feedback and further advice, to both accurately reflect local Gaelic and the wind farm location.

### AN CÀRR DUBH\* WIND FARM VIRTUAL EXHIBITION

1 – 21 November 2021



www.ancarrdubh.co.uk



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# Welcome

We want to thank you for sharing your views with us since our first consultation in Summer 2021. We would like to update you on the current proposals ahead of submitting an application to the Scottish Government in 2022.

### **About Statkraft**

- $\rightarrow$  The largest generator of renewable energy in Europe
- $\rightarrow$  A state owned utility, with origins in Norwegian hydropower 125 years ago
- $\rightarrow$  4,600 employees in 18 countries, all working towards our low carbon future
- $\rightarrow$  Operating in the UK since 2006
- $\rightarrow$  Distributed over £2 million to communities near operating wind farms





# Welcome

### Statkraft in the UK

- $\rightarrow$  Scottish Head Office in Glasgow
- $\rightarrow$  Operational portfolio includes three wind farms, one hydro plant

Operational

Construction

Development

Offices

Hydro

Y Wind

袋 Solar

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- $\rightarrow$  Two wind farms in Dumfries & Galloway in construction
- $\rightarrow$  Recent expansion into solar development and electric vehicle charging points
- $\rightarrow$  Over 700MW in development
- $\rightarrow$  Delivering grid stability services for National Grid in Moray and Liverpool

scottish**renewables** 







# About An Càrr Dubh Wind Farm

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

### **Key Facts:**



Up to 21 wind turbines proposed (reduced from 26)

£693k per year for a Community Fund\*



**180m** (reduced from 200m)

Maximum blade tip height:



Exciting opportunity to talk about shared ownership and local suppliers



Explore the potential for improved broadband provision

\* Based on 21 x 6.6MW x £5,000 as per Scottish Government recommendations. If consented, value of fund determined by actual installed capacity.





# **About An Carr Dubh Wind Farm**

### Why this site?

- $\rightarrow$  Development would contribute towards Scotland's commitment of net zero emissions by 2045
- $\rightarrow$  Studies show that the site benefits from excellent wind speeds
- $\rightarrow$  No nationally or internationally designated sites within proposed turbine development area
- $\rightarrow$  Designed to reflect the topography, existing operational and any known wind farms in development



	No. of Turbines	Max Blade Tip Heights	Expected Installed Capacity (MW)	E G (home
An Càrr Dubh	Up to <b>21</b>	Up to <b>180m</b>	<b>138.6</b> (section 36 planning application)	15

(1) Based on 21 x 6.6MW turbines, wind resource assessment and average Scottish domestic consumption of 3,393kWh pa (2) Fund based on £5k per MW installed per year as recommended by the Scottish Government. If consented, value of fund determined by actual installed capacity.



The current proposal reduces the number of turbines from 26 to 21 and from 200m to 180m to tip height.

We will continue to engage and update the community before submitting our application in 2022.



# The Story So Far

# Feedback and ongoing studies have informed our current proposal.

#### MAY 2021

Requested the view of the Scottish Government and Argyll and Bute Council on the level of study required (know as 'Scoping') to assess the An Càrr Dubh Wind Farm Proposal.

ightarrow 26 turbines

ightarrow Up to 200m tip height

#### MAY 2021 – OCTOBER 2021

Consultation with stakeholders and communities receiving their formal views and comments (within a document know as a 'Scoping Opinion') in August 2021.

·····

1st Public Exhibition held June – July.

Following feedback, principally around location, visual impact and wildlife concerns, and additional site work the proposal has been revised:

- ightarrow From 26 to 21 turbines
- → Reduced turbine tip heights to 180m
- $\rightarrow$  Site layout carefully considers visual impacts
- ightarrow Avoid deepest areas of peat where possible

NOVEMBER 2021	20
$\cdots \longrightarrow$	••••
2nd Public Exhibition Present the current wind farm layout for consultation and feedback. We have renamed the wind farm An Càrr Dubh Wind Farm following local feedback and further advice, to both accurately reflect local Gaelic and the wind farm location.	Sec to k Fur tak and exp Cor Me inte opp to t pro

We are designing a proposal that takes into account feedback received and strikes a good balance between maximising the electricity output of the site while carefully designing the proposal to relate to the existing landscape and other developments.



#### 2022

Section 36 Application expected o be submitted.

Further revisions to the wind farm design aking into account consultee, community and other stakeholder feedback, are expected before submission to the Energy Consents Unit.

Members of the community and other nterested stakeholders will have an opportunity to make formal representations o the Scottish Government on the proposal submitted.

# **The Story So Far**

#### This is the current wind farm design. Further revisions are expected ahead of being submitted to the Scottish Government in 2022.

#### LEGEND

- **Turbine locations**  $\bigcirc$ 
  - INFASTRUCTURE
  - Hardstanding
- Substation
- Battery Storage / **Construction Compound**
- **Borrow Pit Search Areas**
- ---- South Eastern Access Option
- South Western Access Option
- On-site Tracks
- An Càrr Dubh Site Boundary

**Turbines and infrastructure** located to minimise water course crossings and proximity to water courses where possible.

**Reducing tip heights of** all turbines to reduce their prominence within the landscape.

**Turbines relocated to** avoid priority peatland where possible.

**Turbines removed due to** ornithological constraints.

**Turbines positioned to** maximise the predicted available wind resource. Use on site resources to miminise impacts on local roads during construction such as borrow pits.





#### Site infrastructure designed to minimise construction footprint.

# **Project Timeline**

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

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1. SITE SELECTION $\rightarrow$	2. PRE-PLANNING $\rightarrow$	3. SUBMIT APPLICATION & AWAIT DECISION $\rightarrow$	4. CONSTRUCTION $\rightarrow$	5. OPERATION
(12 months) Extensive research to identify suitable sites: positive indicators include good wind speed and minimal environmental and technical constraints. No public engagement is carried out during this time because the site may not pass the criteria required for being suitable for development.	<ul> <li>(6 to 12 months)</li> <li>We request the view of the Scottish Government and Argyll and Bute Council on the level of study required (known as "Scoping").</li> <li>Scoping Report is sent to local and neighbouring Community Councils and consultees such as NatureScot, SEPA and Historic Environment Scotland.</li> <li>Consultation events held ahead of submitting our planning application which we expect to in 2022.</li> </ul>	<ul> <li>(12 months)</li> <li>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.</li> <li>Interested parties and statutory consultees such as Argyll and Bute Council can formally comment on the application.</li> </ul>	(12 to 24 months) If An Càrr Dubh Wind Farm is approved, construction begins at least one year after consent. Construction typically takes 12–24 months and planning conditions are used to manage elements of construction.	(35 to 40 years) The turbines are many from a regionally base maintenance team, a operations are contro detailed planning con We are committed to community benefit ar ownership opportunit A community fund is a throughout the lifetim the project for worthw community initiatives









#### 6. DECOMMISSION

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#### (12 months)

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.





The process of gathering robust environmental data is vital to designing a wind farm which balances technical, environmental and commercial considerations. Surveys and assessments are undertaken by a team of specialist consultants to identify, assess and present any significant environmental effects of the proposed development and allow us to avoid, or minimise effects.



### The results and findings are incorporated into an Environmental Impact Assessment Report (EIAR) and 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  $\rightarrow$
- → Scottish Environment Protection Agency
- Historic Environment Scotland
- **Transport Scotland**

The EIA will consider the following topics:

- Landscape and Visual  $\rightarrow$ Amenity
- **Ecology and Ornithology**  $\rightarrow$
- Hydrology and Peat  $\rightarrow$
- **Cultural Heritage**  $\rightarrow$



- Noise  $\rightarrow$
- **Traffic and Transport**  $\rightarrow$
- Socio-economics  $\rightarrow$
- **Climate Change**  $\rightarrow$

# Landscape and Visual Assessments

### What will the project look like?

For this exhibition we have created visualisations showing how the wind turbines could look assessment will also be included from three local view points.

We are currently in the process of agreeing the view point locations with Argyll and Bute Council and NatureScot to ensure the most suitable locations are selected to illustrate the effects of the wind farm.

As the proposed turbines are over 150m, a night time from several viewpoints, agreed with consultees. Where possible, we will aim to minimise the night time lighting scheme required for the proposed development.

Visualisations of all the agreed viewpoints, day and night, will be available when an application is submitted to the Scottish Government.

#### We pay particular regard to:

- The landscape character  $\rightarrow$ of the site and wider area.
- Special qualities of  $\rightarrow$ 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  $\rightarrow$ visual effects with other wind farms in the study area (operational, consented and proposed).





<ul> <li>Views experienced by local residents, road users, people using walking routes and cycle routes (including National Cycle Network Route 78 which follows the</li> </ul>	<ul> <li>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</li> </ul>	• • • • • •	
western shore of Loch Awe), and people at recreational locations including nearby	popular hill summits	>	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

Potential turbine aviation  $\rightarrow$ lighting.

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

# Ecology

Extensive ecological surveys have been 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 have been undertaken which have identified the presence of otter and water vole. Surveys have been undertaken for habitat suitability for red squirrel, pine marten, fisheries and fresh water pearl mussel, which did not identify any significant constraints to the development.

A Habitat Management Plan (HMP) will be implemented at the site to benefit habitats, particularly through the restoration of hagged areas of peat and management of grazing. Habitat restoration will be beneficial to a number of species which are known to be present on the site and in the wider area.

# 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 are 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 address the points raised in their scoping responses and to minimise any potential effects on ornithological species.

The HMP will include habitat restoration and other measures which will be beneficial to bird species which use the site, including golden eagle.





# **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 is being used to inform this design.

Extensive peat depth surveys have been undertaken which indicate that the depth and quality of peat varies considerably across the site; the presence of peat has formed a key consideration in the design of the wind farm, including the tracks and other infrastructure. Where possible the design has sought to avoid peat over 1m deep, however the infrastructure layout presented here is subject to further refinement following more detailed peat surveys that are due to take place before the end of the year. A peat management plan will be prepared, and a detailed peat slide risk assessment will be undertaken as part of the EIA. The EIA will also include a HMP for the site, a key objective of which will be on restoration of hagged areas of peatland.

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.







# **Cultural Heritage**



Field surveys have been completed which have confirmed that archaeological remains within the site are limited, with those that have been identified having been avoided through the design process. In addition to considering direct effects on features within the site, the assessment will also consider potential setting effects on cultural heritage assets in the wider landscape through field survey and the provision of representative visualisations in the EIA Report. Consultation with Historic Environment Scotland was undertaken as part of the EIA Scoping exercise.



# **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 two access options to the site and a detailed access review has been undertaken to identify the most suitable options.

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.





We are investigating two potential access options to deliver components for the project which will exit the A83.



# **Climate Change**



The Scottish Government has set a legally-binding target to achieve net-zero emissions by 2045. Developments such as An Càrr Dubh 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 An Carr Dubh Wind Farm, a 'carbon balance' assessment will be undertaken for the wind farm using Scottish Government guidance.

#### "We need more renewable energy, but why here?"



#### You can watch the full webinar here.



#### Scotland's share of renewable energy (gross final consumption)

#### Scotland, 2009 - 2019



#### Source: Scottish Energy Statistics Hub



#### HOW IS SCOTLAND DOING?

It's great that Scotland now generates the equivalent of over 90% of its total electricity consumption by renewable energy. Reducing fossil fuel sources from heating and transport is essential to Scotland achieving net zero emissions by 2045, this project could contribute to that goal.

Read more here. www.bbc.co.uk/news/uk-scotland-51088089

# Local Benefits & Investment

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.



Broadleaf planting areas at Andershaw Wind Farm. Photo credit: Jason Mackay at MacArthur Greer

"Since 2016, MacArthur Green's experienced team of specialists have been carrying out ecological, ornithological and hydrological monitoring works for Andershaw Wind Farm's Forestry and Habitat Management Plan (FHMP). The FHMP aims to reinstate and enhance blanket bog habitat, and provide a diverse woodland mix including broadleaved woodland to enhance floral and faunal species diversity. Through ongoing monitoring, we have found that these habitats are now developing well, and are helping to increase biodiversity of the site."

Nicola Goodship PhD MCIEEM, Senior Ornithologist, MacArthur Green

#### **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.

#### **Local Investment**

Work with local business groups such as the Chamber of Commerce to increase awareness of the opportunities in construction and operations. If you are a local business please sign up to our Local Suppliers Register.

#### **Wireless Broadband**

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



#### **Shared 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.

#### **Education & Enterprise**

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

### **Broadband**

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. Feedback from the first exhibition revealed that 63% of respondents were interested in exploring this opportunity further.

With this in mind, we have commissioned a feasibility study to investigate the potential at An Carr Dubh.



### **Our study will find out:**

### **FEASIBILITY**

our wind turbines, and the study explores the wind farm is connected.

### **FIBRE & FIXED WIRELESS**

### **A BENEFIT**

### **NEXT STEPS**

on the website for updates.







# Your Views are **Important to Us**

We hope to submit an application in 2022 when all the application documents will be publicly available.

We welcome your comments and feedback as our proposal develops. Please register your comments by completing a feedback form by 17 December 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 An Carr Dubh Wind Farm Exhibition.

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









**Freepost Statkraft** (no stamp or further address details required)



UKProjects@statkraft.com



**Click here to complete** the online feedback

**Register for updates:** www.ancarrdubh.co.uk

0800 772 0668 (local call rate applies)



Statkraft UK 1 West Regent Street Glasgow G2 1RW

#### www.statkraft.co.uk

For more information about An Càrr Dubh www.ancarrdubh.co.uk

Alltwalis Wind Farm, Carmarthen, South Wales. 10 turbines, 110m tip height

#### www.ancarrdubh.co.uk

#### Phone: 0800 772 0668