### WEST ANDERSHAW WIND FARM PUBLIC EXHIBITION

21 September - 14 October 2022



A FEL DIN

www.westandershaw.co.uk



### **Contents**

WelcomeAbout West AndershawAn Update on AndershaThe Story So FarProject TimelineEnvironmental Impact ALocal Benefits & InvestBroadbandYour Views are Importal



	4
Wind Farm	8
aw Wind Farm	12
	14
	18
Assessment	20
tment	32
	34
ant to Us	<u>36</u>

# Welcome

Thank you for sharing your views with us since our first consultation in August last year. We would like to update you on our current proposals ahead of submitting an application to the Scottish Government this Winter.

#### **About Statkraft**

- $\rightarrow$  The largest generator of renewable energy in Europe
- $\rightarrow$  A state owned utility, with origins in Norwegian hydropower over 125 years ago
- $\rightarrow$  4,800 employees in 19 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



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



# Welcome

### Statkraft in the UK

- → Scottish Head Office in Glasgow
- $\rightarrow$  Own or operate six wind farms and one hydro plant
- → Recently completed the construction of two wind farms in Dumfries and Galloway
- → Growing UK portfolio of solar developments and electric vehicle charging points
- $\rightarrow$  Over 700MW in development
- → Delivering grid stability services for National Grid in Moray and Liverpool





# **About West Andershaw Wind Farm**

This is an excellent site, west of the existing operational Andershaw Wind Farm, to contribute to Scotland's ambitions of reaching net zero emissions by 2045.

south of Douglas.

#### West Andershaw **Key Facts:**



£341k

£341k per year for a Community Fund\*



A maximum height to blade tip 9 to 250m 2 to 200m



Exciting new opportunity to talk about shared ownership and local suppliers



Hear about the outcomes of our broadband feasibility report.

\* Based on 68.2MW of installed capacity: 11 x 6.2MW. If consented, value of fund determined by actual installed capacity.

Plan showing proposed West Andershaw Wind Farm and current operational wind farms.





#### The nearest turbine is approximately 3.3km south of Glespin, 3.7km west of Crawfordjohn, and 5km

# **About West Andershaw Wind Farm**

### Why this site?

- $\rightarrow$  Proven good wind speeds
- → Extending operational wind farms is considered good design practice using existing infrastructure where possible to minimise construction

- → Designed to reflect topography and fit alongside operational or proposed developments within the area
- → No nationally or internationally designated sites within the site boundary
- → The site will contribute towards Scotland's decarbonisation targets



e site		No. of Turbines	Max Blade Tip Heights	Expected Installed Capacity (MW)	Estin Gene (homes e
ontribute and's on targets	West Andershaw	11	Up to <b>250m</b>	Up to <b>68.2 MW</b> (section 36 planning application)	Aro <b>65,</b> Homes pe

(1) Based assessm of 3,520I Candidat (2) CBF b If consen capacity.





(1) Based on 68.2 MW Installed Capacity, wind resource assessment and average Scottish domestic consumption of 3,520kWh pa in 2020 (published BEIS Dec. 2021). Candidate turbine still tbc'd.

(2) CBF based on 68.2MW x £5k per MW of installed capacity. If consented, value of fund determined by actual installed capacity. Candidate turbine still tbc'd.

### An Update on Andershaw Wind Farm

In September 2021 Statkraft sold the operational Andershaw Wind Farm to Greencoat UK Wind.

- → Statkraft are pleased to keep our link to the area, as we have retained the long term operation and maintenance contract for the wind farm.
- → Two full-time Statkraft employees are expected to be based at site from early 2023 onwards.
- → The community benefit fund available from Andershaw Wind Farm remains available. Contributions from September 2021 are made by Greencoat.
- → During Statkraft's ownership 20 projects were allocated nearly £260,000 of funding from the Community Benefit Fund administered by South Lanarkshire Council.





# The Story So Far

#### Feedback and ongoing studies over the past 12 months have informed the design of West Andershaw Wind Farm.

MAY 2021 →	MAY 2021 – JULY 2021 →	AUGUST 2021 – JULY 2022	SEPTEMBER 2022 – OCTOBER 2022	WINTER 2022/23
<ul> <li>In May last year we requested the view of the Scottish Government and South Lanarkshire Council on the level of study required (known as 'Scoping') to assess the West Andershaw Wind Farm proposal.</li> <li>→ 11 turbines</li> <li>→ 250m tip height</li> </ul>	Consultation with stakeholders and communities receiving their formal views and comments (within a document know as a 'Scoping Opinion') in August 2021.         Additional site work was undertaken to inform and refine the wind farm layout submitted at Scoping:         → 11 turbines         → 250m tip height         → Site design amends to:         → Avoid priority habitats and/ or SPA for protected species         → Reduce potential noise impacts	<ul> <li>1st Public Exhibition August 2021</li> <li>Exhibition Feedback principally around location and visual impact. Feedback coupled with further studies led to further design amends.</li> <li>Slight design amendments:</li> <li>→ 11 turbines 9 x 250m to tip height 2 x 200m to tip height</li> <li>→ 6 turbine locations revised</li> <li>→ Site layout amends to:</li> <li>→ Reduce visual impact</li> <li>→ Reduce impact on setting of cultural heritage assets</li> <li>→ Reduce potential noise impacts</li> </ul>	2nd Public Exhibition         September - October         The exhibition presents the wind         farm layout expected to be submitted         to the Energy Consent Unit later         this year.         → 11 turbines         9 x 250m to tip height         2 x 200m to tip height         2 x 100m to tip height         2 x 200m to tip height         3 week on line chat session         > 1 online chat session         We have written to over 1,400 homes         to let them know about our proposals         and request their feedback by         returning the freepost card.	Section 36 Application expected to be submitted. Members of the community and other interested stakeholders will have an opportunity to make formal representations to the Scottish Government.
We believe the proposal takes into account stakeholder and community feedback and strikes a good balance between				ount stakeholder and od balance between

We believe the proposal takes into account stakeholder and community feedback and strikes a good balance between maximising the electricity output of the site while carefully designing the proposal to relate to the existing landscape.



# **The Story So Far**

#### This is the wind farm design expected to be submitted after considering studies and feedback.





. . . . . .

#### Legend

• • • • •	
	Site Boundary
•	Proposed turbines 200m tip height
•	Proposed turbines 250m tip height

- Hardstanding
- Existing Access Track to be Upgraded
- New Access Track
- **Existing Access Route**, No Upgrade Required
- New Junction

# **Project Timeline**

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

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.	(12 to 18 months) We request the view of the Scottish Government and South Lanarkshire Council on the level of study required (known as "Scoping"). Scoping is sent to local and neighbouring Community Councils and consultees such as NatureScot, SEPA and Historic Environment Scotland. The layout has continued to develop in response to studies and feedback received from communities and consultees. We are now hosting this second consultation to present the proposed submission layout.	<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 consultees such as South Lanarkshire Council and Community Councils can formally comment on the application.</li> </ul>	(12 to 24 months) If West Andershaw 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.	(Up to 50 years) The turbines are man from a regionally bas maintenance team, a operations are contro detailed planning cor We are committed to community benefit at ownership opportunin A community fund is throughout the lifetin the project for worthy community initiatives
			<u>S</u>	



#### 6. DECOMMISSION

 $\cdots \rightarrow$ 

naged sed and olled by nditions.

nd shared ties. active ne of while s.

#### (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 good environmental data on a site is vital to designing a good wind farm, including turbine locations, access roads and other infrastructure. This is carried out by specialist environmental and technical consultants.

This information is incorporated into an Environmental Impact Assessment **Report (EIAR) and will be available** on the project website at the time an application is submitted to planning.

As part of designing this wind farm, advice and guidance has been sought from a range of regulatory and voluntary bodies including, but not limited to, South Lanarkshire Council, NatureScot, Scottish Environment Protection Agency, Transport Scotland and Historic Environment Scotland.



This report covers a range of areas including:

→ Landscape and Visual Amenity	-
ightarrow Ecology	_
ightarrow Ornithology	
ightarrow Forestry	
→ Geology, Hydrology, Hydrogeology and Peat	_

 $\rightarrow$  Cultural Heritage



- $\rightarrow$  Noise
- $\rightarrow$  Shadow Flicker
- $\rightarrow$  Traffic and Transport
- $\rightarrow$  Climate Change
- $\rightarrow$  Land Use, Socioeconomics and Tourism
- $\rightarrow$  Aviation and **Telecommunications**

# Landscape and Visual Assessments

#### What will the project look like?

As part of our studies, we have created images showing how the wind turbines could look from several locations in the area.

The viewpoints have been agreed with South Lanarkshire Council and NatureScot. They are selected on the basis they provide representative views of the development in the area.

Illustrations of all the viewpoints will be available when our application is submitted to the Scottish Government this Winter.

One of our key design objectives has been creating a wind farm which is appropriate for and takes into account the existing landscape character and visual features of the surrounding area while maximising the electricity output.

#### These studies will pay particular regard to:

- $\rightarrow$  Effects on the landscape character of the immediate area. as well as the character of the wider area.
- $\rightarrow$  Effects on the special qualities of landscape designations such as the Leadhills and Lowther Hills Special Landscape Area, and the Douglas Valley Special Landscape Area.





- $\rightarrow$  The amenity of residential properties near to the proposed development and in the surrounding area.
- $\rightarrow$  The design in relation to the operational Andershaw wind farm and other proposed wind farms in the area.
- $\rightarrow$  As the turbines are over 150m effects associated with possible turbine lighting.

# Ecology, Ornithology & Forestry



Extensive surveys have been completed, including for habitats, protected mammals, fisheries and two years of birds surveys as recommended by NatureScot Guidance, to inform the wind farm design process.

The project sits adjacent to the Muirkirk and North Lowther Uplands Special Protection Area. The proposed layout has been designed to ensure a separation distance to the protected area, and to minimise impacts on protected species and habitats. It has incorporated suitable buffers around woodland edges and watercourses.

The layout has also been designed to use the existing commercial forestry infrastructure wherever possible, thereby minimising the requirement for woodland felling and new land take.

Finally, as felling is required for the development the EIAR will have an assessment of the proposed changes to the woodland structure. This will include a proposed felling, restocking and details of any appropriate compensatory planting plan in compliance with Scottish Government's Control of Woodland Removal Policy.

# Geology, Hydrology, Hydrogeology & Peat

Desk and field-based assessments have been undertaken to establish the baseline geological and hydrological conditions across the site. The purpose of the studies was to determine the underlying bedrock, groundwater and surface water catchments, and identify private water supplies in the area.

These studies helped inform the design of the wind farm. Infrastructure has been located to avoid Private Water Catchments or abstractions and ensure they can be protected during the construction and operation of the wind farm, should it be consented. The studies also help us minimise impacts where possible through the careful design of the proposed development, such as including 50m protective buffers around watercourses such as the Glespin Burn, and by designing appropriate watercourse crossings.

Detailed peat probing surveys have been undertaken across the site which show no areas of deep peat on site.





# **Cultural Heritage**



An archaeological and cultural heritage assessment is being undertaken, and which will be completed ahead of submission, in line with Historic Environment Scotland (HES) guidance. Heritage assets within the site have been identified through consultation, desk based research and a walkover survey of the site. Direct impacts on identified assets have been avoided through the design process.

Designated assets, including Scheduled Monuments, Listed Buildings, and Gardens and Designed Landscapes and non-designated historic environment record assets have been identified within a 10km study area from the site. The visibility of the proposed development from these identified assets has been taken into consideration in the design process and the potential impacts on their settings considered through consultation with relevant consultees. Representative visualisations will be provided as part of the EIA Report.

# Noise

A noise assessment is being undertaken for the site in line with Government guidance. The noise assessment will consider the potential effects of construction and operation of the proposed wind farm on nearby residential properties taking into account other wind farms schemes in the area, including the operational Andershaw wind farm.

Background noise monitoring has been carried out at representative properties surrounding the site at locations agreed with local residents and South Lanarkshire Council. These measure the existing noise levels and will help to determine suitable noise limits that the Proposed Development will have to operate within. These limits are informed by South Lanarkshire Council and Government guidance (ETSU-R-97) and will be based on the completed noise surveys.

If consented, the future operational site would operate within levels considered acceptable under the ETSU-R-97 assessment method (Government guidance).





# **Shadow Flicker**

Shadow flicker is the effect caused by the passing of the turbine blades in front of the sun, which can cause a flickering effect during certain times of the day and under certain weather conditions.

A shadow flicker assessment is being undertaken at properties which are within the defined study area. The purpose of the study is to assess the likelihood of shadow flicker occurring at residential properties within this area.

The impacts of shadow flicker can be greatly reduced or removed entirely through various methods. If any potential significant effects are identified at residential properties in this assessment, our project team would be happy to discuss these mitigation options with them directly.

# **Traffic & Transport**

We plan to use the same transport routes used by other projects in the area to minimise construction disturbance.

It is proposed the site will be accessed directly from the existing Andershaw Wind Farm access junction located on the B7078 located to the north of Redmoss. Loads will then proceed through the existing wind farm, crossing via a new junction shown in the site plan above within the extended site boundary directly over the Glespin to Crawfordjohn road to the site.

A transport assessment will consider the impacts on local roads. Where the assessment shows that improvement and mitigation measures are required, these will be set out in the EIAR. Likely measures could include the provision of a Construction Traffic Management Plan, local road improvements and a Wear and Tear Agreement to protect local roads from surface deterioration and to ensure that the roads are returned to the same condition they were in before construction commenced.





# **Climate Change**

The Scottish Government has set a legally binding target to achieve net-zero emissions by 2045. Developments such as West Andershaw 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 see the graph opposite to see how Scotland is doing. There is still progress to be made.

A carbon balance assessment will quantify the anticipated emissions savings of West Andershaw Wind Farm using Scottish Government guidance. A "carbon payback period" will be calculated, demonstrating how long it will take for the carbon emissions saved by the development's renewable electricity generation to exceed the carbon generated for its development.

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

This is one of the most common questions we are asked when we propose a wind farm. This is a very understandable question, and the answer goes beyond the fact that Scotland has one of the strongest wind speeds in Europe. Earlier this year, we were pleased to be able to answer this question with the detail it deserves during a webinar hosted by the news website FutureNetZero. You may be surprised to know that our analysis shows less than 10% of land in Scotland is suitable for development of onshore wind.

You can watch the full webinar here.

#### HOW IS SCOTLAND DOING?

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

Scotland, 2009 - 2020



Source: Scottish Energy Statistics Hub





# Local Benefits & Investment

We want our wind farms to bring benefits to the local area. We have several new initiatives that will be available for West Andershaw Wind Farm that we want to talk to you about.



Crawfordjohn Heritage Venue Museum, which showcases the social history and heritage of the local area received £25,655 from Andershaw Wind Farm through the SLC Renewable Energy Fund. This contribution, along with other funders, helped the community run facility achieve their £128,273 project funding goal to carry out environmental improvement works and install photo-voltaic solar panels and battery storage at the venue.

Community funds are available from Andershaw Wind Farm. To find out how to apply <u>click here.</u>

#### **Community Benefit Fund**

Committed to setting up a Community Benefit Fund for West Andershaw of £5,000 per MW installed per year. We are keen to work with communities to deliver a fund that can meet local community priorities. If consented, the project will generate £341,000\* per year for local groups and initiatives.

\*Based on 68.2 MW of installed capacity. If consented, value of fund determined by actual installed capacity.

#### **Local Investment**

Work with local business groups to increase awareness of the opportunities in construction and operations. We have successfully used local contractors on our construction projects in Dumfries and Galloway.



#### **Shared Ownership**

Progress the opportunity, if there is interest 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 have invested in a broadband feasibility study. Join our exhibitions to find out more about the outcomes.

### **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.

With this in mind, we have commissioned a feasibility study to investigate the potential for our project to bring improved broadband connectivity to the area.



#### **Our study finds out:**

### **FEASIBILITY**

is connected.

#### **FIBRE & FIXED WIRELESS**

#### **A BENEFIT**

#### **NEXT STEPS**

Study at this exhibition.





### Your Views are **Important to Us**

We hope to submit a planning application this Winter, when all application documents will be publicly available.

We welcome your comments and feedback. Please register your comments by completing a feedback form by 26 October 2022.

Comments made will be taken into consideration but are not representations to the Planning Authority. There will be an opportunity for you to submit a formal response to the Scottish Government after the application has been submitted.

Thank you for attending the West Andershaw Wind Farm Exhibition.

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













UKProjects@statkraft.com



**Click here to complete** the online feedback

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

0800 772 0668 (local call rate applies)

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



www.westandershaw.co.uk

Phone: 0800 772 0668