BUCHAN OFFSHORE WIND

About us

Buchan Offshore Wind is a new floating offshore wind project, with a key role in Scotland's economic future and the fight against climate change.

A ScotWind project located 75km off the coast of Fraserburgh, it will have up to 70 wind turbines generating around 1GW of clean, green renewable energy.

Buchan Offshore Wind could see more than £1.4bn invested in Scotland's manufacturing sector and supply chain, with potential for a further £800m in the rest of the UK. This has the potential to support over 2,800 jobs in Scotland at the peak of construction and 320 during operation.

Buchan Offshore Wind Ltd. is a partnership of three leading European energy businesses. Together they offer a unique breadth and depth of experience and expertise in the development of floating offshore wind.

BW Ideol

BW Ideol is leading a fully integrated platform in floating offshore wind with more than 10 years of experience from design, execution and development of floating wind projects based on Ideol S.A.'s patented and proven floating offshore wind technology and engineering capabilities.

elicio

Elicio is a Belgian developer and operator of on-and-offshore wind energy projects. Elicio recognises its people and stakeholder relationships as key assets which enable to deliver development expertise and operational excellence, with a current capacity of 573 MW, which includes operational windfarms in the Belgian North Sea.

BayWa r.e.

BayWa r.e. is a global renewable energy developer, distributor and energy solutions provider. BayWa r.e. has brought online more than 5.5 GW of renewable energy projects worldwide and manages more than 10 GW of renewable assets. BayWa r.e. has been active in renewable energy development, construction and operation in Scotland for more than 10 years, with offices in Glasgow and Edinburgh.

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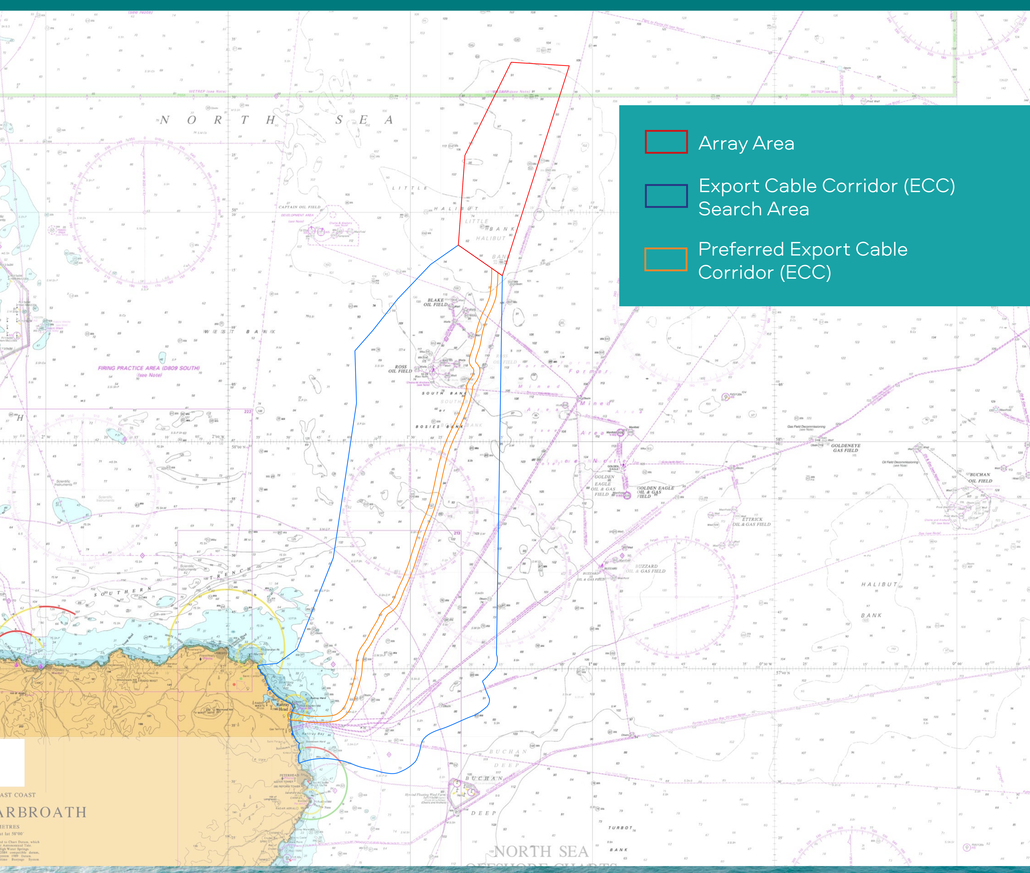
The Offshore Windfarm

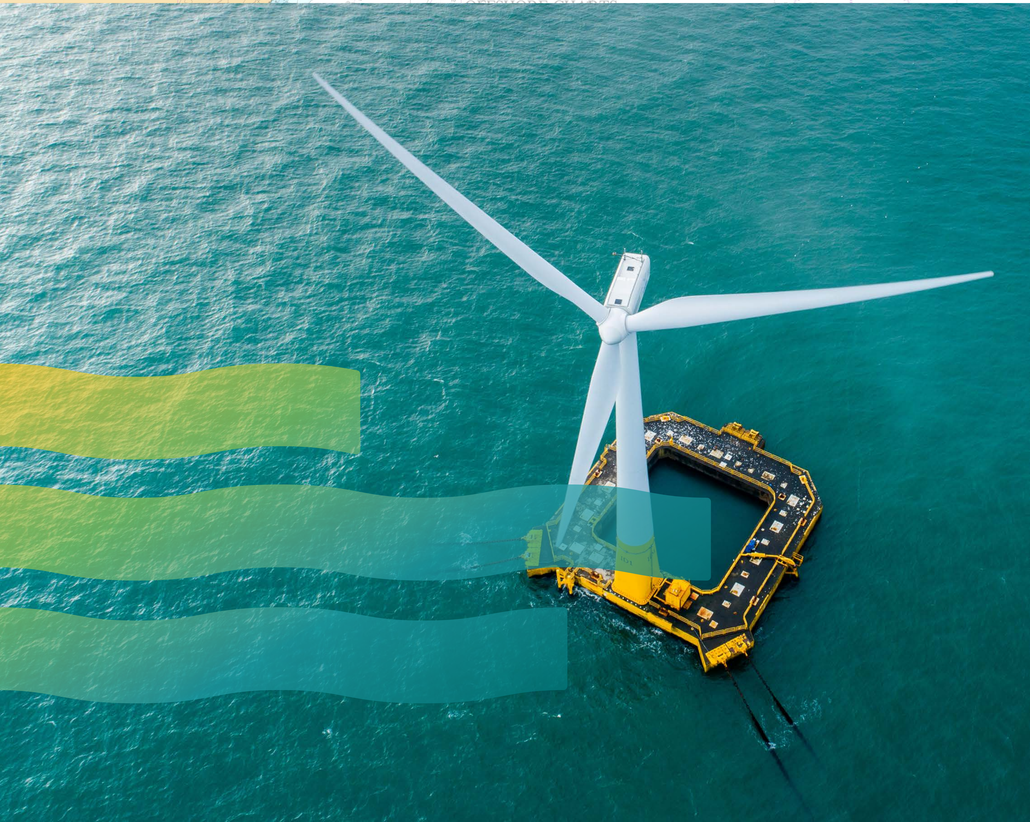
Buchan Offshore Wind was successful in securing an option agreement with Crown Estate Scotland to develop a floating offshore wind project in Plan Option NE8 following the ScotWind leasing process, which concluded in January 2022.

The Scottish Government's Adopted Sectoral Marine Plan identified the areas of sea that were available for the submission of bids as part of the ScotWind leasing process and was adopted in October 2020 following extensive consultation.

Buchan Offshore Wind Ltd was delighted to secure the rights to develop the NE8 site, with an option agreement covering an area of 330 km^2 approximately 75km north-east of Fraserburgh, with water depths of 75-110 metres. The site was identified by the Sectoral Marine Plan as having the potential to generate up to 1GW of clean, green renewable energy, which could power the equivalent of up to 900,000 homes.

We are now developing plans for a floating windfarm of up to 70 turbines with a total generating capacity of up to 1 GW within the site, which we hope to be operational in the early 2030s. Since securing the rights to develop the site we have been undertaking significant survey work to understand the seabed, sea and wind conditions.





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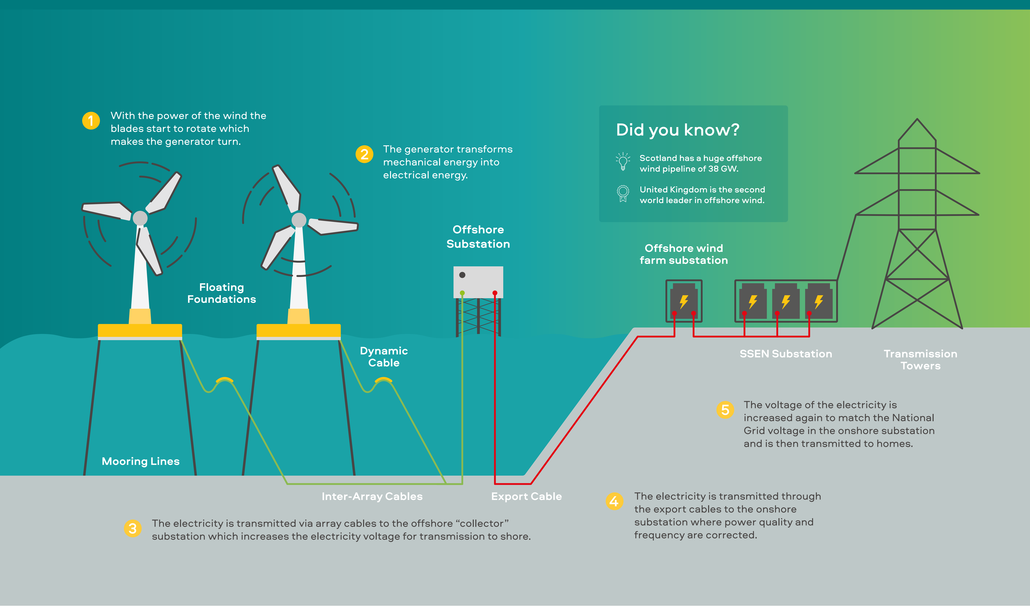
Floating offshore wind – how it works

- The wind turbines will be fixed to floating structures which will be moored and anchored to the seabed. Our preferred technology is BW Ideol's Damping Pool technology, which has already been successfully installed off the coasts of France and Japan.
- The layout of the turbines within the site will be developed to optimise both the available wind resource and suitability of seabed conditions, while taking account of environmental constraints and sensitivities.
- Dynamic (flexible) inter-array cables will connect turbines to each other and up to three offshore substations within the windfarm.
- Up to three export cables will bring power to shore, via an Intermediate Reactive Compensation (IRC) platform, which helps balance the power being transmitted, so it arrives onshore ready for onward transmission.
- The offshore export cables will be buried in the sea bed wherever possible, both to protect them and to minimise the possibility of interference with other sea users. Where burial is not possible and the cables need to be laid on the sea bed – such as when crossing other pipelines and cables, or where ground conditions do not allow burial – rock armour or similar protection will be used.



BW Ideol's proven technology is the preferred floating solution, but we have included a range of floating technology options within our Offshore Scoping Report to allow for flexibility in the delivery of the project.

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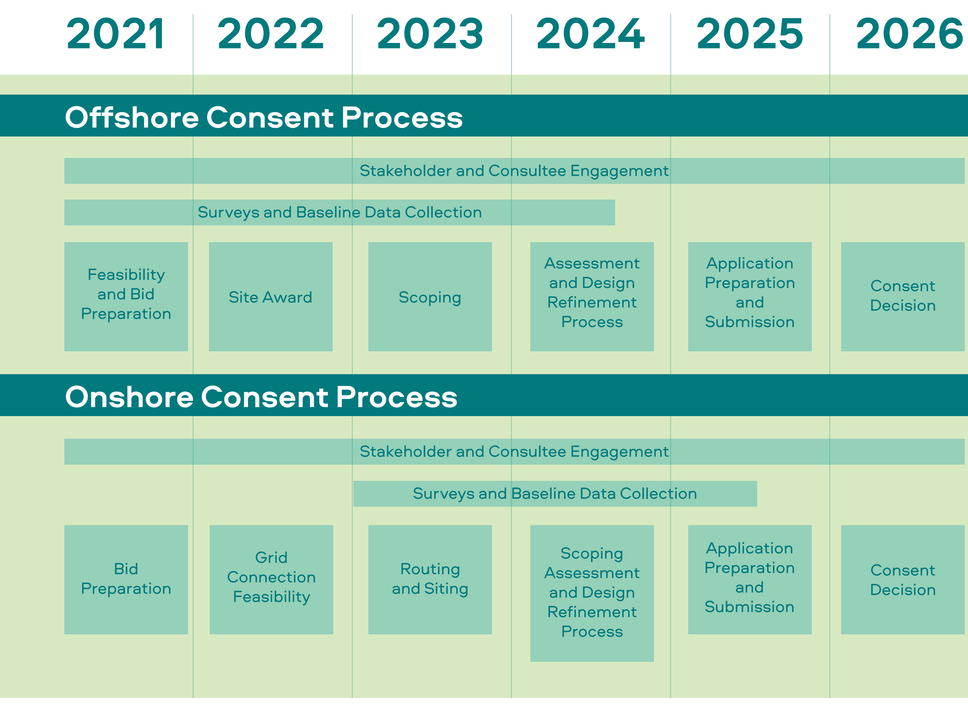
The Development and Consenting Process

Consent for the offshore project will be sought through the Marine Directorate Licensing Operations Team, acting on behalf of Scottish Ministers. We will submit a single offshore application package along with an accompanying Environmental Impact Assessment Report (EIAR) and associated environmental and consultation reports.

The onshore elements of the project will be submitted to Aberdeenshire Council for planning consent. The application will be accompanied by an EIAR and associated environmental and consultation reports.

The EIA process will consider the positive and negative effects of the project, including those that could occur cumulatively with other projects and plans; effects associated with the construction, operational and decommissioning phases; and potential options to mitigate those effects.



We expect the following topics to be considered in the offshore and onshore applications:

Offshore	Onshore
• Physical and Coastal Processes	• Landscape and Visual Amenity
• Marine Water and Sediment Quality	• Ecology
• Benthic and Intertidal Ecology	• Ornithology
• Fish and Shellfish Ecology	• Cultural Heritage
• Offshore and Intertidal Ornithology	• Geology and Soils
• Marine Mammals and other Megafauna	• Hydrology and Water Resources
• Commercial Fisheries	• Airborne noise and vibration
• Shipping and Navigation	• Air quality
• Marine Archaeology and Cultural Heritage	• Traffic and Transport
• Military and Civil Aviation	• Land Use
• Socio-Economics, Tourism and Recreation	• Socio-Economics, Tourism and Recreation
• Infrastructure and other users	• Existing and Planned Infrastructure

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Offshore – what we're doing

We are currently undertaking surveys of the seabed, sea and wind conditions and environmental considerations at the windfarm site and along the potential cable routes to shore. We are also engaging with stakeholders and consultees, including fisheries groups and representatives.

Surveys

In 2022 we began a two-year ornithology and marine mammal survey of the site. This is due to complete in early 2024 and will give us a detailed understanding of how birds and mammals use the site, to inform our assessment process.

In November 2022 we deployed a floating Lidar (Light Detection and Ranging) unit to measure wind and waves on site, and through 2023 we have been undertaking geophysical, environmental and geotechnical surveys of the windfarm site and preferred cable corridor to understand the environmental and technical conditions that will inform the assessment and design of the project.

The data we are collecting will be analysed over the coming months to give us a better understanding of the likely impacts of the project, will enable us to start to refine the project design and will provide a baseline against which project impacts can be assessed.

Working with stakeholders

We have engaged with a range of consultees and stakeholders, including government and statutory consultees, around the survey and assessment requirements for the project to ensure these are addressed within our EIA process. Some of the statutory consultees we have been engaging with include NatureScot, Aberdeenshire Council, Northen Lighthouse Board and Maritime and Coastguard Agency.

We have also been engaging with organisations representing fishing interests, and individual fishers, through our early development activity and offshore survey works. We recognise the importance of the fishing industry and community to the area, and we intend to continue this regular consultation with fisheries representatives.

We are committed to delivering Buchan in collaboration with the community in the North East. We want to work with local communities to address questions people may have about the project and how and where it will be delivered, and to understand and develop opportunities in skills development, employment and investment.

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Supporting Scotland's supply chain

The Scottish and UK Governments aim to ensure that companies across the country can benefit from the opportunities presented by the expansion of the offshore wind sector, at home and abroad, with the sector set to play a key role in securing a Just Transition to net zero.

Buchan Offshore Wind has committed to 80% of the development stage spend being spent on Scottish suppliers.

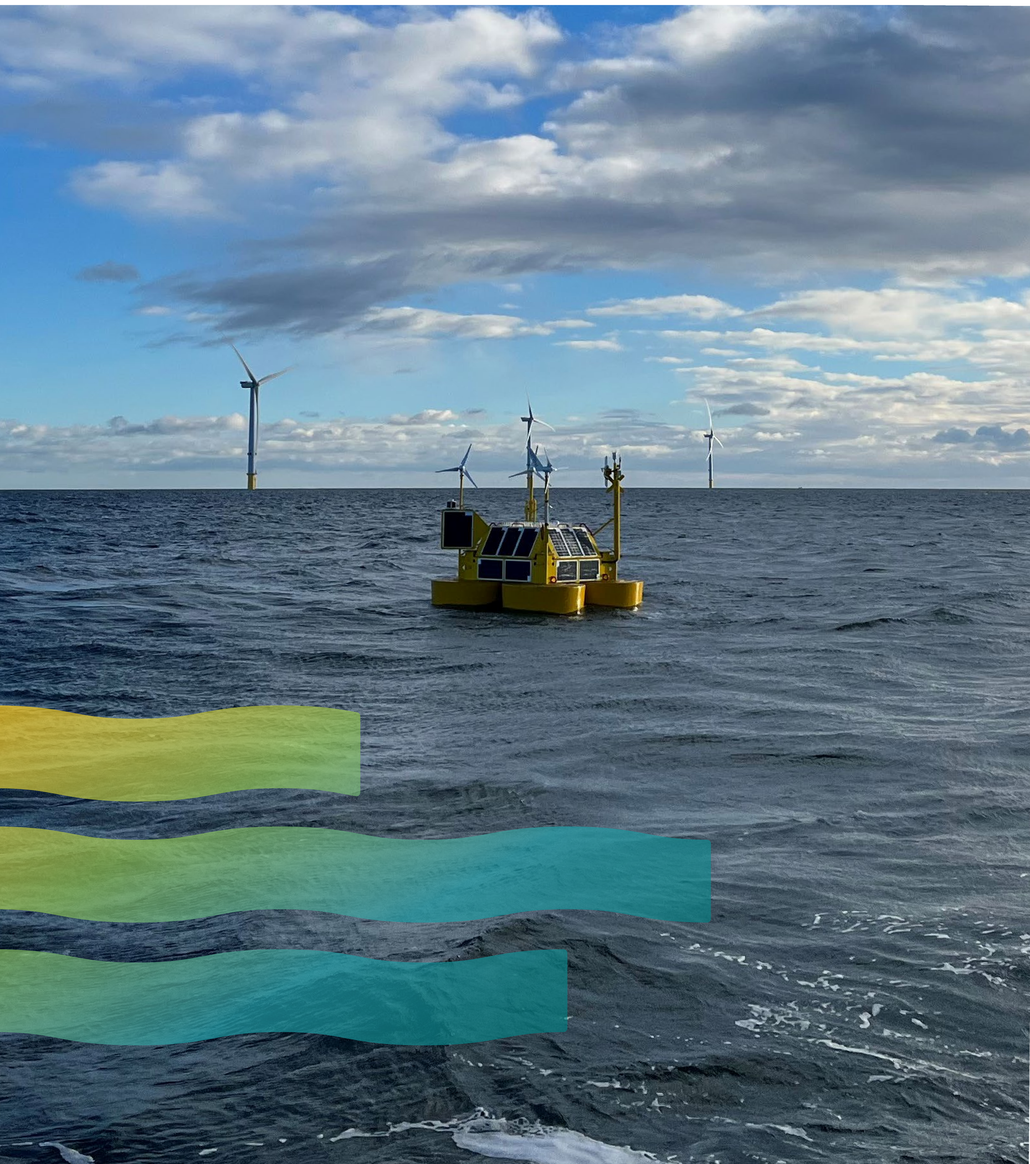
The serial production of foundations and turbine assembly will take place in Scotland.

BW Ideol have prepared detailed plans for the proposed manufacture of concrete floating foundations at Ardersier. It is expected that more than 1,000 staff will be employed in Scotland solely for the manufacturing of the floating foundations.

In addition we are actively involved in working with skills and training providers, development initiatives and the supply chain in Scotland to help it to be in the strongest position to maximise the role it can play in the delivery of the project.

What we're already doing:

- Supporting UHI STEM Programme, donating £150k to an initiative by UHI which promotes STEM school curriculum in the Highlands and Islands
- Working with Fraserburgh and Peterhead Ports to support their ambitions to capitalise on the opportunity floating offshore wind presents
- Joining the Power House initiative based in Alness
- Signing Offshore Wind Collaborative Framework Charter
- Sponsorship of CECA Scotland to support them with delivery of civil engineering training for young people in Scottish academies.
- Joining the Scottish Offshore Wind Energy Council and participating in its various forums
- Member of Strategic Investment Model Collaborative Framework – a joint SOWEC/ Developer approach to infrastructure investment, assessing major investment opportunities for endorsement by collective group of Scotwind Developers
- Support for the successful Opportunity Cromarty Firth Green Freeport bid, and ongoing collaboration with Inverness and Cromarty Firth Green Freeport Ltd
- Active support for suppliers, encouraging use of SIM and providing letters of support
- MoUs with both Skills Development Scotland and the Energy Skills Partnership.



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Buchan in the Community

We have already started work to understand the economic opportunities that could arise locally as a result of the project, and to support local events and initiatives that benefit the community.

This has included:

- Sponsorship of the Best of Buchan Awards in July 2023 as part of Peterhead Scottish Week
- Working with Fraserburgh and Peterhead Ports to support their ambitions to capitalise on the opportunity floating offshore wind presents
- Engagement with Fraserburgh Academy and universities (UHI, Heriot Watt and Robert Gordon) with the aim of informing the future workforce of the pathways into Offshore Wind and employment in the sector

We are also talking to Peterhead FC's Community Foundation about how we can support delivery of their wide-ranging Community Foundation Programme.

Our wider work on understanding the potential for local communities to benefit from the project and the wider offshore wind development pipeline is a longer-term initiative and includes engagement and collaboration with the local supply chain to understand how they could use their existing skills and capacity to help in the delivery of the project.

We would be happy to hear about any further initiatives which we could support in the local area.

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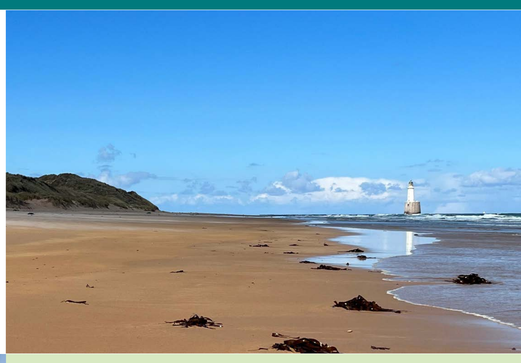
Our onshore plans

Subsea cables will bring electricity from the windfarm ashore in Aberdeenshire. We selected the current preferred landfall point after appraising several sites along the Aberdeenshire Coast. The appraisal considered environmental constraints, intertidal and onshore infrastructure requirements and engineering and geotechnical constraints.

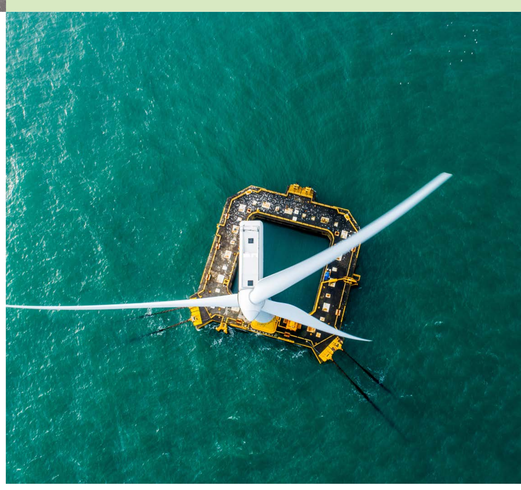


The subsea cables will enter a transition joint bay at the landfall point. From there, onshore underground cables will take the electricity to a new project substation near Peterhead. The underground cables will not be visible once installed, but we will need joint bays at regular intervals for operational maintenance. These will also be underground; all that will be visible will be manhole covers for access.

The project's substation is likely to be housed inside a building. The final size of the substation will be refined through the design development process but, at this early stage, it is likely to have a footprint of no more than 300 x 250m.

The project substation will convert the electricity to 400kV (400,000 volts) for connection (via more underground cables) to the existing electricity transmission network, owned and operated by Scottish and Southern Electricity Networks (SSEN).

The final point of connection for the project will be determined following the conclusion of a study by National Grid ESO (Electricity System Operator). Their Holistic Network Design Follow-Up Exercise (HND-FUE) is looking at the best way to connect all the ScotWind projects, and other new power generation, to the network.



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Onshore cable route and substation site options

Key

- Preferred Onshore Cable Route Corridor
- Alternative Onshore Cable Route Corridor Option
- Existing Transmission Network owned and operated by SSEN
- Shortlisted Substation Search Area
- Substation Search Area

We have worked with Natural Power, our independent environmental consultants, to identify potential routes for underground cables from the Rattray landfall to project substation site options near Peterhead. Our objective was to identify a cable route corridor option and substation site which are technically and economically viable and cause the least disturbance to the environment and local people.

We started by looking at the area between Rattray and potential substation sites near Peterhead to identify any international, national or European designated sites (such as Special Protection Areas or Special Sites of Scientific Interest), and defined a study area boundary. We then mapped all environmental, topographical and infrastructure constraints within the study area, to identify areas we should avoid where possible.

The next step was to identify cable route corridor options from the Rattray landfall to potential substation sites that could accommodate a development of 300m x 250m. The route corridor options have a 300m buffer applied either side of a centre line to allow for refinement as the design process evolves.

The route options were then appraised against environmental, technical and economic factors to produce a preferred route option.

Our preferred underground cable route heads west from the landfall point, crossing the A90 near Keyhead before turning south, passing between St Fergus Moss and the St Fergus gas terminal. It crosses under the River Ugie and passes between the former RAF airfield and Blackhills before turning south-east to arrive at a new project substation, in the Peterhead area.

We identified six potential substation sites with route options to all six. At this stage, we have shortlisted Substation Areas 4, 5 and 6.

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Consultation and next steps

We are asking stakeholders and local people for feedback on our preferred underground cable route and substation siting areas.

Our consultation runs until Friday 15 December 2023. You can make comments on a feedback form or online at www.buchanoffshorewind.com, where you can also find more information.

We will carefully consider all feedback we receive, alongside our technical and environmental assessments, as we develop our plans.

We will carry out further consultation on our detailed proposals before submitting consent applications.

At this stage, your comments are not representations to the planning authority. If we do make an application for development consent in future, you will be able to make formal representations at that stage.

Get in touch:

You can contact us through these channels:

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Freepost:
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