MarramWind

Welcome

Welcome to MarramWind's third round of statutory consultation.

This is an opportunity to find out more about the project's progress and share your views. The consultation is open from 18 August until 11:59pm on 9 September 2025.

About MarramWind

ScottishPower and Shell have joined forces to develop MarramWind, a proposed floating offshore windfarm.

- MarramWind is located approximately 75km off the north-east coast of Aberdeenshire.
- The wind turbines will be barely visible from shore.
- One of the world's largest floating offshore windfarms in development.
- It has the potential to deliver up to 3 gigawatts (GW) of renewable electricity - enough energy to power the equivalent of more than 3.5 million homes.
- The project will be built in three phases. If approved, phase one would be in operation by the early to mid 2030s.
- The project will connect to the national grid at the proposed SSEN Netherton Hub substation to the west of Peterhead.

Supporting net zero targets

The energy generated by MarramWind will play an important role in achieving Scottish and UK net zero targets for 2045 and 2050 respectively. Renewable energy produced by MarramWind will also support the UK's energy security and resilience.

About ScottishPower and Shell

ScottishPower and Shell have over 70 years' combined experience in Scotland's offshore environment, with over 50 years' experience offshore in the North Sea. We also have over 15 years of combined experience in floating offshore wind energy.

As world-leading energy developers, we bring together decades of experience working offshore, a long history of working in Scotland, and an innovative approach to delivering offshore energy projects.

We want to hear your views

Your feedback is important to us and it will help us further refine our plans for the project before our last round of consultation later in 2025. Following this, we intend to take forward our final design and submit our consent applications to the relevant onshore and offshore authorities.

MarramWind

Project Programme

Our priority is to deliver a project that increases renewable energy generation for Scotland and the UK while minimising impacts on local communities and the environment.

2022

ScottishPower and Shell were awarded rights to develop MarramWind within Plan Option NE7 of Scotland's 'Sectoral Marine Plan - Offshore Wind Energy (2020)' as part of Crown Estate Scotland's ScotWind leasing round. Environmental surveys and data gathering commenced in the marine and terrestrial environments to inform the EIA and project design.

2023

The MarramWind Scoping Report was submitted to Aberdeenshire Council and the Marine Directorate. The Scoping Report is available on the project's website **www.marramwind.co.uk**.

A Public Drop-In-Day event was held in Peterhead for stakeholders to learn about the project. A supply chain event was also held for local businesses and suppliers to raise awareness of future contract opportunities.

2024

Two rounds of public consultation were held, each including public events and online Q&A sessions, providing stakeholders with opportunities to view and feedback on the project proposals during the development stage.

Launch of STEM outreach programme to help raise awareness of future career opportunities in offshore wind.

2025

Two additional rounds of public consultation to view progress and provide feedback on the final project proposals.

Submission of necessary applications and consents to the consenting authorities: Aberdeenshire Council and the Marine Directorate. During the subsequent determination period, stakeholders will have further opportunity to comment on MarramWind's proposals.

2026

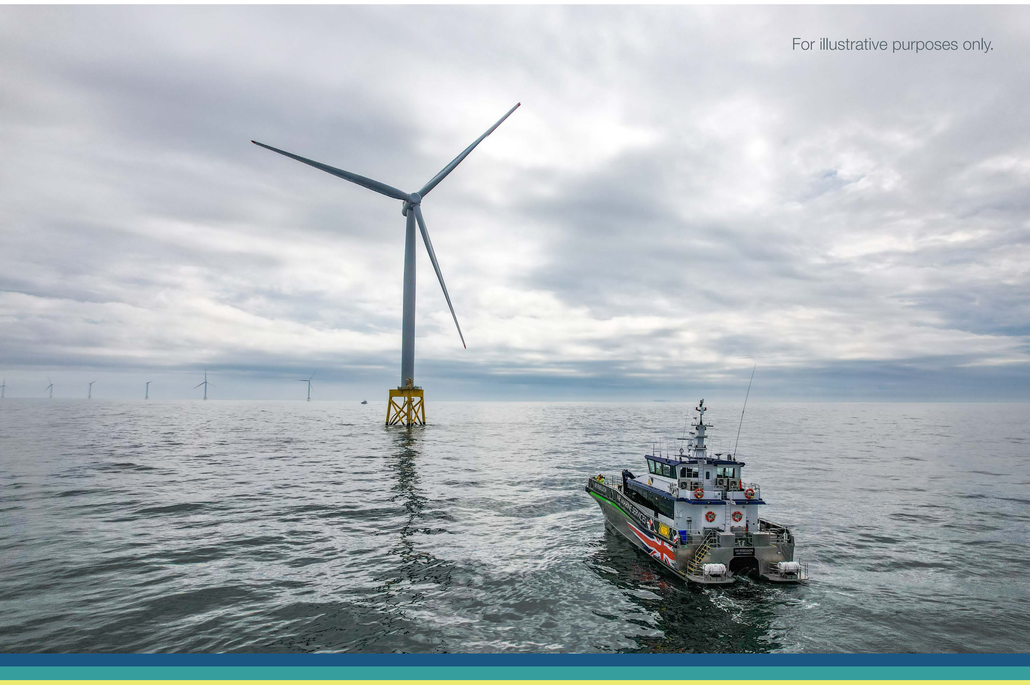
Anticipated planning decisions to be made for the offshore and onshore consents. Updated Supply Chain Development Statement submitted to Crown Estate Scotland.

Early 2030s

Start of phased construction subject to consent.

Early to mid 2030s

First generation of power from phase 1.



For illustrative purposes only.

MarramWind

The Consenting Process

MarramWind is a National Development, which means the need for the project has been identified through government policy. As with all developments of this kind, planning permissions, consents, and licences are required for the project's construction and operation.

We will need to make separate applications for the following parts of the project:

Offshore

- Windfarm site - Section 36 of the Electricity Act 1989. Granted by the Marine Directorate on behalf of Scottish Ministers
- Installation of cables or other infrastructure on or within the seabed - Marine licences under the Marine (Scotland) Act 2010 (0-12 nautical mile). Marine and Coastal Access Act 2009 (12-200 nautical mile)

Onshore

- Planning permission - Town and Country Planning (Scotland) Act 1997 (TCPA), granted by Aberdeenshire Council

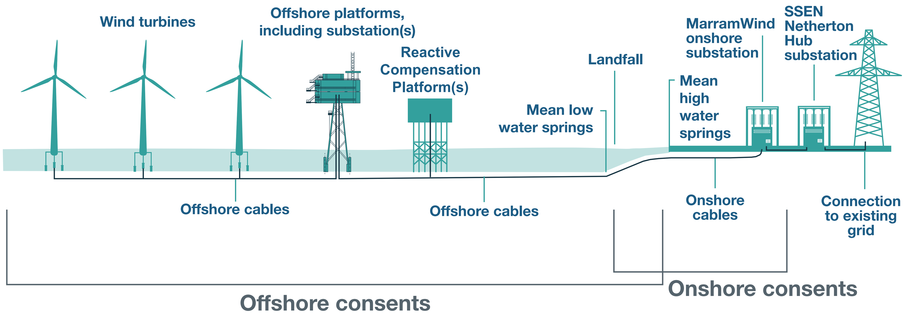
We are also undertaking:

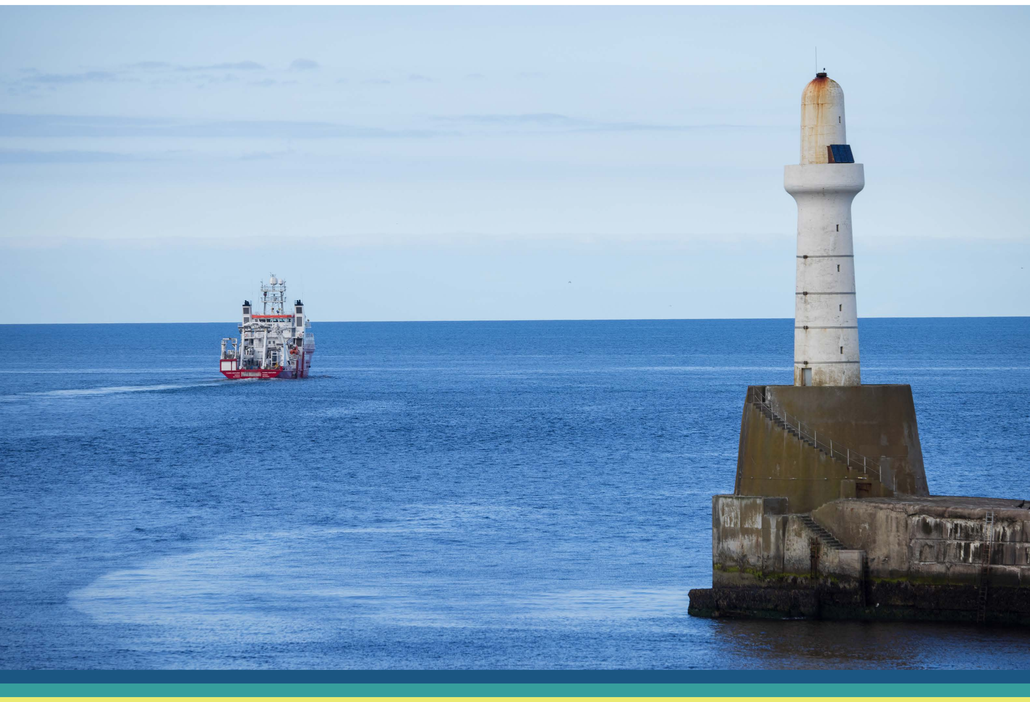
- An **Environmental Impact Assessment (EIA)**, which assesses how the project will affect the environment and outlines proposed mitigations.
- A **Habitats Regulations Appraisal (HRA)** to understand the project's impact on protected wildlife habitats and the species these support.

More information on the EIA and HRA can be found in the consultation booklet.

We are dedicated to undertaking engagement and consultation to help us understand your views, refine the project's design and inform our ongoing EIA work, as well as fulfilling relevant planning requirements.

The diagram below shows the different consents we need to apply for along with the associated offshore and onshore infrastructure.





MarramWind

Offshore Infrastructure

The offshore infrastructure includes floating wind turbines, mooring and anchoring systems, offshore platforms, and cables.

Electricity transmission

Energy generated by our turbines will be transmitted by cables to the onshore substation site and the national grid. We are currently reviewing different technology options including:

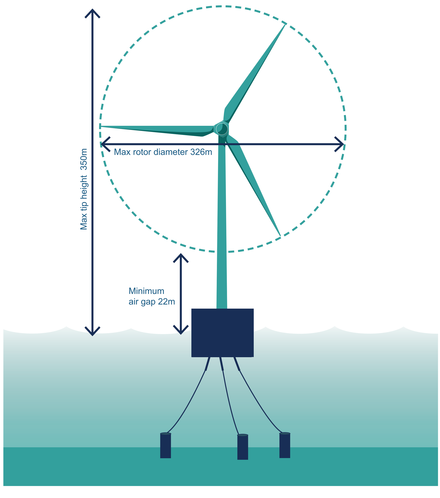
- High Voltage Alternating Current (HVAC)
- High Voltage Direct Current (HVDC)
- A combination of the two.

Floating wind turbines

The turbine models have not been chosen yet because turbine technology is advancing quickly. In total, the windfarm is expected to have:

- Between 126 and 225 turbines
- Turbines with an individual capacity of between 14MW and 25MW
- A blade tip height up to 350m from the water's surface
- A minimum 22m clearance between the blade and Mean High Water Springs.

Lighting will be installed on the turbines and floating units for navigational and aviation safety.



Offshore platforms and substations

Offshore platforms house electrical infrastructure and connect the cables between the turbines with the cables that will transmit electricity to shore.

Up to four substations within the array area could be needed, depending on the type of energy transmission (HVAC or HVDC) and the layout of the windfarm site.

Offshore cables

Cables will transmit electricity from the windfarm to the onshore substation site to connect to the national grid. The maximum offshore export cable length is 130-140km, depending on the precise locations of the landfall(s) and the offshore substation. These cables will be buried 1-2m (where possible) below the seabed.

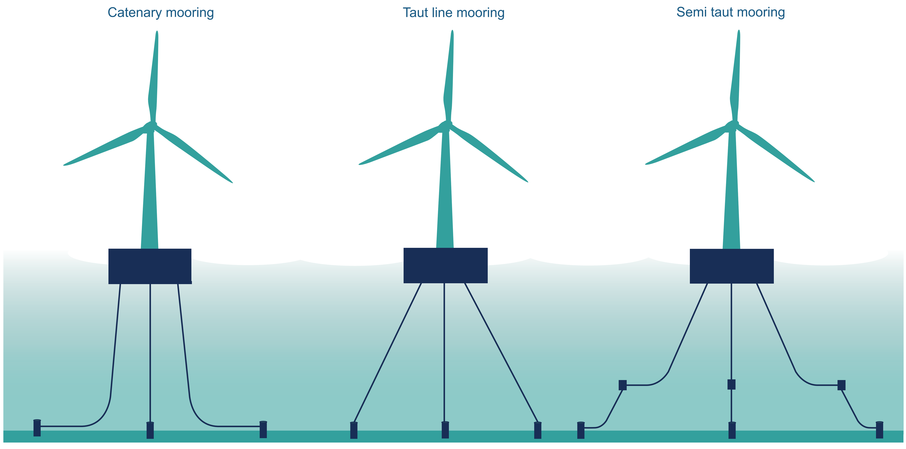
In the few areas where cables cannot be buried, other methods will be used to protect them. This may include rock armour or concrete mattresses.

Mooring and anchoring systems

Each turbine will sit on a floating unit, held in place by a mooring and anchoring system, possible options include (as shown in Figure below):

- Catenary moorings are more slack than other options, which is good for an area where the water depth changes but this option can affect the seabed more.
- Taut line moorings are the tightest, which is good for stabilising the turbine and they take up less seafloor space.
- Semi-taut moorings are a combination of both.

The decision on the most appropriate options will take place after further design development.



MarramWind

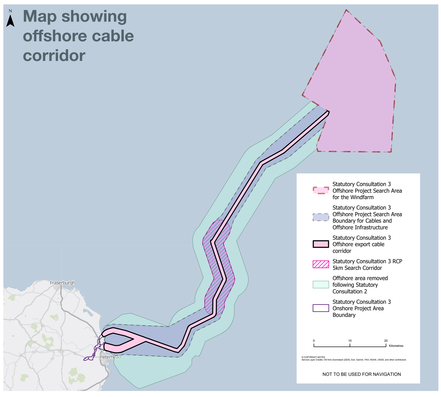
Offshore Project Updates

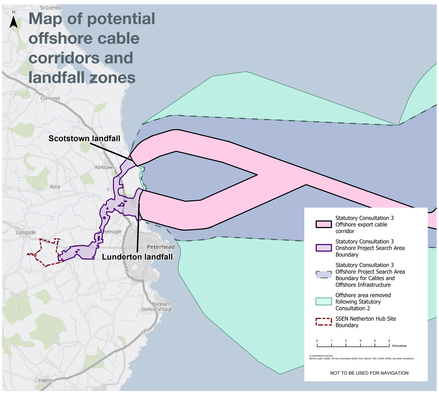
Since our last public consultation, we have been working to refine our offshore project design. Key updates include refinement of the project boundary as well as further assessment of the landfall options.

Windfarm site

The windfarm site is 684km^2 and has water depths ranging between 87m and 134m. Work is ongoing to determine the site layout and locations of the required infrastructure.

We are considering environmental sensitivities, marine users, seabed conditions, water depths, and the presence of existing infrastructure. The layouts are also being reviewed to enable co-existence with other planned energy projects in the region.





Offshore cable corridor

Since our last consultation, the offshore search area for cables and infrastructure has been refined to an offshore export cable corridor.

Work is ongoing to identify the best route for the offshore cables between the windfarm site and landfall(s) on the coast. We are engaging closely with stakeholders to understand what we can do to reduce effects and maintain navigational safety.

We have also introduced a search area for up to two Reactive Compensation Platforms (RCPs). If HVAC technology is chosen, RCPs could be required at the approximate mid-point between the offshore substation and the onshore substation site to house electrical equipment needed to stabilise the voltage of the electricity generated over long distances.

Landfall

Sandford Bay was removed as a landfall option following stakeholder feedback and further environmental and technical assessments. Key reasons include its proximity to the Buchan Ness to Collieston Coast SPA, a protected seabird breeding area, and the presence of other nearby projects limiting space for cable routing and infrastructure.

The Landfall options being considered are:

- Lunderton, north of Peterhead
- Scotstown Beach, north of Peterhead

Our preferred option is to have one landfall for the project however both Scotstown and Lunderton landfall locations will be considered in the EIA, and a final decision on the preferred solution will be based on:

- coordination with other developments in the area; and
- space for cables and onshore infrastructure.

Once the preferred landfall(s) have been confirmed, the landfall site(s) will be further refined to identify where the offshore cables will come onshore.

MarramWind

Onshore Infrastructure

The onshore infrastructure includes an onshore substation site and onshore cables. The onshore cables run from landfall(s) to the onshore substation site and subsequently to the point of connection at the proposed SSEN Netherton Hub substation. This point of connection was confirmed by National Grid in their Holistic Network Design (HND) report.

Onshore cables

- Laid underground within a cable-corridor up to a maximum depth of 1.5m.
- Access points along the route for maintenance during operation.
- Temporary cable construction corridor width:
  - Approximately 89m, from landfall to the onshore substation site.
  - Approximately 99m, from the onshore substation site to SSEN's Netherton Hub.
- After construction, permanent access rights will be required for future maintenance.

Onshore substation site

The onshore substation site is a key part of the project that helps get the electricity generated from the windfarm onto the national grid. The substation changes the voltage of the electricity to the level required for the national grid.

The Project requires three onshore substations co-located on one site. There will be one onshore substation built for each of the three project phases. Each onshore substation will be constructed to align with the phased energisation of the windfarm.

Work is ongoing to identify the best technical and environmental solutions, which will determine final equipment requirements and the substations' size.

What will it look like?

The substation site will be fully or partially enclosed as shown by the illustrative images below (images are not site specific and indicative only) and will include electrical equipment outdoors or inside buildings.

Some of the main equipment includes:

- Transformers - changes the voltage level.
- Switchgear - helps connect and disconnect the circuits from the electricity network.
- Converters - if needed, to convert HVDC electricity to HVAC.

Anticipated substation site layout and dimensions

- Infrastructure height: up to 30m high, although the infrastructure will vary in height across the site.
- Site: up to 15 hectares of land.
- Temporary construction area: up to 3 hectares.
- Additional land may be needed for drainage, environmental mitigation and landscaping subject to substation site design.

Substation site screening

Strategic tree planting will be used to reduce the visual impact of the substation site. This will create a green buffer, helping to support local wildlife and improve air quality.

Illustrative conceptual design for a partially enclosed substation site (without visual screening)

Illustrative conceptual design for a fully enclosed substation site (without visual screening)

MarramWind

Onshore Project Updates

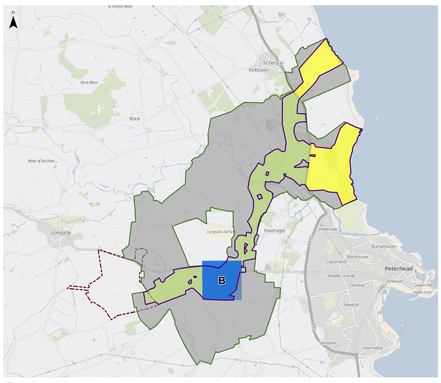
We have been carrying out work to identify the onshore cable corridor and onshore substation site. Since our last consultation, we have selected a preferred onshore substation site which has enabled refinement of the possible cable corridors.

Onshore cable corridor

Selection of onshore substation site B means that the onshore cable corridor will run north of Peterhead from either or both remaining landfalls.

At our last consultation in 2024, we presented two onshore cable corridor search areas – a preferred route and an alternative route. We have since discounted the alternative cable corridor route following stakeholder feedback and further assessment of local environmental and technical constraints.

This is shown on the onshore project search area boundary map.

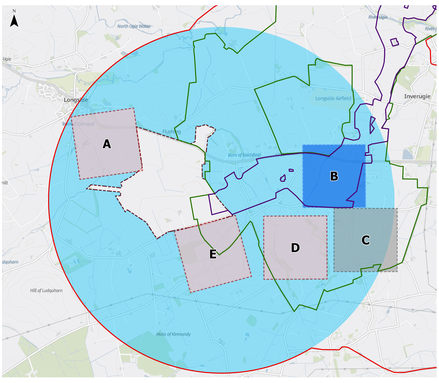


Onshore project search area boundary map showing primary and alternative cable corridor

Onshore substation site

During our last public consultation period in 2024, we presented two shortlisted substation site options B and C. Based on stakeholder feedback and other environmental and technical factors, such as reducing proximity to properties and better access to the A950, we have now selected site B as the preferred site for the construction and operation of the onshore substations.

During our next round of statutory consultation and in the EIA, we will provide a detailed overview of the steps taken at each stage of the iterative site selection process, and why site B is our preferred option.



Map showing onshore substation search area around the proposed SSEN Netherton Hub

Engaging with other developers

We're aware of the scale of energy projects planned around Peterhead and so we're actively working with other developers to coordinate efforts and reduce impacts on local communities and the environment.

Our approach includes:

- Early collaboration with other developers to align plans and avoid overlapping infrastructure.
- Proactive discussions to ensure developments are sensitive to local communities and the environment.

We're also part of the Peterhead Developers Forum, which brings together projects in offshore wind, carbon capture and storage, and electricity networks. This helps us share ideas, align plans, and address local issues. We're committed to open communication and working together to make sure all projects are technically sound and benefit the region.

MarramWind

How will MarramWind be built?

Construction is anticipated to start in the 2030s, subject to consent. Due to the project's size, construction will involve a phased approach over 8-12 years. This timeline will be refined as the project progresses.

Our priority is to minimise the effects of construction on communities and the environment.

Offshore

Windfarm site

- An exclusion zone/s will be established during construction and decommissioning to protect operations and other marine users. The extent will depend on operational needs and input from stakeholders. Since the project will be built in phases, the full site won't be closed off during construction.

Cables

- Before installation, the seabed will be prepared and cleared of obstacles.
- The cables will be laid 1-2m beneath the seabed by cable laying vessels.
- The cables will be buried where possible or protected using other methods, such as rock armour or concrete mattresses.

Wind turbine installation

- It is expected that the wind turbines will be assembled onto their floating unit at a port and then towed to site, although advances in technology could mean they are installed directly onto the floating unit offshore.
- Once on site, the turbines will be connected to the pre-installed anchor and mooring system.

Worker accommodation

- Crew will typically be accommodated on onboard vessels, such as construction vessels & service operation vessels, but may also be housed on walk-to-work vessels or jack-ups, more likely associated with substation commissioning, operation and maintenance.

Substation

- Offshore substation foundations will be built near a port and transported to site using specialist heavy lift vessels. Once installed on the seabed, platform topsides (substations and infrastructure) will be lifted into place.

Landfall

- Cables at landfall(s) will be installed using a trenchless method, such as Horizontal Directional Drilling (HDD) to minimise environmental impacts.
- Maximum width of land use at shoreline to install the cables: 345m.
- Up to six underground transition joint bays (concrete chambers), where the offshore and onshore cables connect.
- A temporary onshore construction compound (location to be determined).

Onshore

Cable infrastructure will include:

- Temporary cable construction corridor for construction traffic access, assembly, trench excavation and storage (typically up to 99m wide and up to 300m for access at crossings and avoidance of obstacles).
- Up to three primary and six temporary construction compounds for the construction of joint bays and underground cable installation, consisting of welfare facilities, storage, accommodate building materials, parking, and site offices.
- Underground cables and ducts will either be installed directly in trenches or placed as ducts first, allowing cables to be pulled through later without re-excavation.
- Trenchless construction methods such as HDD to cross sensitive features, (e.g. watercourses, roads or railways).
- Temporary access routes for construction vehicles.

Substation site infrastructure will include:

- Site preparation works, installation of various infrastructure, drainage, environmental mitigation and landscaping.
- Permanent access road(s) and temporary construction compound, which will be dismantled and the land reinstated when the construction work is complete.
- Construction vehicles include HGVs, concrete mixer trucks and vans. There will be a small number of abnormal loads for large electrical equipment.

Worker accommodation

- Accommodation requirements are not yet determined but the potential effects on local community facilities and services will be assessed as part of a socio-economic impact assessment to mitigate any potential effects on the community.

MarramWind

Feedback from Statutory Consultation 2

We held two rounds of statutory consultation in 2024, with approximately 300 people participating in our in-person events, virtual exhibition space, and online Q&As. Our project team has reviewed and analysed the feedback from our last round of consultation held between 9 October and 19 November 2024 to guide the next steps in refining and developing the project. A summary of the feedback and our responses is included below.

Key themes & our responses

Key theme	MarramWind response
Landfall & Access • Concerns of local villages being cut off due to onshore infrastructure. • Lunderton is suggested for landfall to reduce fishing impacts, with Horizontal Directional Drilling (HDD) proposed from the shore.	• A Construction Traffic Management Plan will be produced to reduce road disruption. • The landfall and onshore export cable infrastructure will be underground, maintaining coastal access. • Both Scotstown and Lunderton landfall options are being assessed. HDD will be used to minimise disruption.
Offshore infrastructure • Offshore power could remain offshore via switching stations, with cable trenching and rock dumping to reduce magnetic field impacts on wildlife. • Suggestions to avoid sonar surveys to protect whales.	• Offshore power must come onshore to meet demand, with grid connections set by the National Energy System Operator and Transmission Operators. • While offshore switching stations are still in development, cables will be buried to protect marine habitats, with alternative protections where burial isn't possible. • Environmental surveys will be risk-assessed and licenced to reduce impacts on sensitive species.
Benefits and Opportunities • Suggestions that MarramWind offers lower energy prices for local residents, invests in community facilities, support training in inshore fishing.	• We're in the early stages of designing our Community Benefit Fund, set to launch when the wind farm becomes operational in the 2030s. Feedback from the statutory consultation will help shape the fund. We'll continue engaging with local stakeholders to ensure it reflects community priorities and delivers real benefits
Construction • Suggestion to occasionally open the landfall site for community viewing. • Questions regarding the impact of the project workforce on local services like housing and healthcare.	• We will consider opening the landfall site for community viewing and keep locals informed throughout the project. • The EIA's Socio-Economic Chapter will assess demands for community facilities and a Socio-Economic Action Plan will outline our commitments. • MarramWind is committed to local employment, offering apprenticeships, trainee roles, and early job advertising.
Landscape and visual • The potential for proposed infrastructure to impact on the rural landscape and affect tourism, agriculture, and forestry.	• Site B was chosen to reduce proximity to properties and better align with the A950. • Mitigation measures like native planting and architectural design will provide screening and enhance ecology and visual quality. • The onshore infrastructure will be designed, built, and operated to improve biodiversity and present an appearance that complements the area.
Fishing • Concerns on impacts of offshore cables on inshore fishing and seabed habitats, especially for lobster, crab, and velvet crab. • Suggestions for fishing assessments to monitor impacts.	• The EIA will assess habitat disturbance, sediment release, invasive species, and EMF effects. • We're engaging with fishing groups to understand EMF impacts. • A Fisheries Mitigation, Monitoring, and Communication Plan (FMMCP) will be developed, guided by the Marine Directorate and NatureScot.
Wildlife and Habitats • The cumulative impact of offshore cables on seabed habitats is a concern. • Trenching and rock dumping are suggested to reduce magnetic field effects on wildlife.	• The EIA will assess these impacts, with plans to bury cables to protect marine habitats, using alternative methods only when burial isn't feasible. • The EIA will consider an option for rock placement instead of burial in the nearshore areas and will be subject to further discussions with fishing groups during the design phase.
Consultation and Engagement • Ongoing engagement with local stakeholders is essential.	• Since the project began, we've been working closely with local experts and stakeholders. • In 2024, two public consultation rounds helped shape the project's early design and we are conducting two more rounds in 2025, focusing on environmental measures and enhancing benefits for Peterhead's communities.

MarramWind

Creating a Lasting Legacy for Communities

As one of the world's largest floating offshore wind farms in development, MarramWind presents an opportunity to generate social, economic, and environmental value, particularly for communities in the North-East of Scotland.

Clean Energy, Local Benefits

The value to the local area will be in the form of:

- Jobs and contracts during development, construction, and operation.
- Investment in local infrastructure and skills.
- A Community benefit fund once the wind farm is operational.

We're committed to keeping as much of the project's value as possible in Scotland and the UK, while ensuring cost-effective delivery.

To date, over 90% of MarramWind's total supply chain expenditure been with UK registered companies, including over 40% with Scotland registered companies. The project's intends to maintain ambitious levels of Scottish and UK supply chain expenditure, as set out in our Supply Chain Development Statement, which is due to be updated in 2026.

Supporting Supply Chain Development

Since securing development rights for MarramWind in 2022, we've taken several steps to promote supply chain opportunities and broader development, including:

- Hosting a supply chain event in Peterhead with DeepWind (Nov 2023)
- Engaging with companies at national and regional industry conferences
- Launching the enhanced MarramWind Supplier Interest Portal (July 2024)
- Supporting Scotland's Strategic Investment Model for infrastructure investment
- Contributing to a SOWEC study on offshore wind socioeconomic benefits
- Collaborating with Scotland's enterprise agencies
- Ongoing engagement with public and private sector partners to grow the offshore wind industry

Socioeconomic Action Plan

As part of our planning application, we are developing a Socioeconomic Action Plan to outline how the wind farm will deliver social and economic benefits for Scotland, especially the North-East. The plan will detail actions to support local economies and community wealth-building. We're consulting widely—including businesses, councils, enterprise agencies, and community groups—and welcome input from anyone with ideas on how MarramWind can create a lasting positive legacy.

Community Benefit Fund

ScottishPower and Shell are proud to support communities near our energy projects. In North-East Scotland, feedback from our first consultation highlighted the creation of a Community Benefit Fund as the top priority for supporting local groups and initiatives.

We are in the early stages of planning a Community Benefit Fund, which will launch when the wind farm becomes operational in the 2030s. We're considering all feedback from this consultation and other engagement with community organisations to help shape the fund. We believe local people know best what their communities need, so we'll keep working with local groups to make sure the fund supports local priorities and delivers real benefits.

MarramWind

Environmental Impact Assessment

Before building MarramWind, we must assess how it could affect the environment and local communities.

What is an Environmental Impact Assessment (EIA)?

The EIA helps identify and reduce potential impacts and is essential for Aberdeenshire Council and the Marine Directorate to make informed decisions on project approvals. Our detailed EIA will be split into two reports:

- **Onshore:** covering cables and substations
- **Offshore:** covering turbines and electrical transmission infrastructure and related equipment.

Approach to Assessments

In January 2023, we submitted our EIA Scoping Report to Aberdeenshire Council and the Marine Directorate. This outlined the environmental assessments we plan to carry out. Feedback from the Council, Scottish Ministers, and other stakeholders has helped refine our approach.

Key steps we've taken:

- Submitted Scoping Report – available at **www.marramwind.co.uk**
- Conducted extensive surveys to understand current environmental conditions
- Shared emerging baseline data where available
- Engaged with key stakeholders to shape our assessments and meet expectations

We aim to:

- Identify and minimise significant effects
- Avoid impacts where possible
- Propose mitigation measures

More details can be found in our consultation booklet.

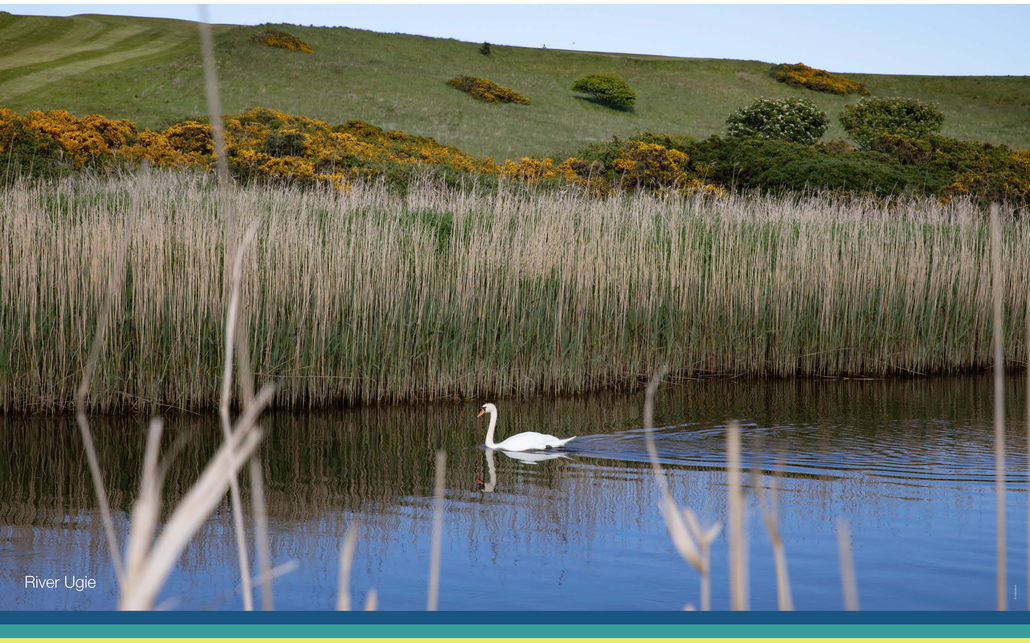
Approach to mitigation

From the start, MarramWind has prioritised a sustainable design that meets operational needs while minimising environmental impact as far as practicable.

In line with best practice, we are applying a mitigation hierarchy to address anticipated environmental impacts:

- Avoid
- Prevent
- Reduce/Mitigate
- Offset (as a last resort)

The resulting embedded environmental measures are being incorporated within the Project and will be detailed in a Commitments Register which will be submitted in support of the consenting applications. These measures are being developed with input from key stakeholders, technical standards, policies and guidance. Relevant commitments will be secured through conditions attached to any consents and licences granted for the Project.



River Ugie

MarramWind

Have Your Say

Stakeholder engagement and consultation is a critical part of the development of MarramWind. We are committed to developing an offshore windfarm in a considered way that is sensitive to the needs and expectations of local stakeholders and communities.

Consultation event

We will be holding a public consultation event. Members of our project team will be available to provide more information and answer any questions. The event takes place on:

- **Wednesday 27 August 2025, 2pm-7pm**
  Palace Hotel, Prince St, Peterhead AB42 1PL

Providing your feedback

We want to hear your views as your feedback is important to us and will help inform our plans for the project.

You can provide your feedback in the following ways:

- Online, using the feedback form on our website **www.marramwind.co.uk**
- Email us your comments at **stakeholder@marramwind.com**
- Fill in a **paper feedback form**, available at our in-person event and at Peterhead Library.
- Write to us at **FREEPOST MarramWind**.

The consultation is open from **18 August 2025 until 9 September 2025**. Feedback received after the deadline may not be considered. We cannot respond to every response received individually.

Next steps

Feedback from this consultation will help further refine the project's:

- design considerations;
- approaches to mitigating likely effects; and
- socio-economic opportunities.

After a final statutory consultation period planned for later this year, we intend to submit consent applications to Aberdeenshire Council and the Marine Directorate by the end of 2025.

During the representation period, you'll have another chance to comment, as comments made to us at this stage are not formal representations to the Planning Authority or the Scottish Ministers. A Pre-Application Consultation (PAC) report will be published as part of our submission, summarising all feedback and how it was considered.

Finding out more

All information related to the proposals is on our website **www.marramwind.co.uk**.

If you have any questions, including requesting materials in an alternative format, you can email **stakeholder@marramwind.com**.