

Pentland floating offshore wind farm

Onshore Pre-Application Consultation Report



PENTLAND FLOATING OFFSHORE WIND FARM ONSHORE PRE-APPLICATION CONSULTATION REPORT

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GLOSSARY OF PROJECT TERMS

Key Terms	Definition
Cable Joint Bay	Cable Joint Bays (CJBs) are typically required every 500 to 1,000 m to string together the onshore cable sections.
Dounreay Substation	The existing Scottish Southern Energy (SSE) Dounreay 132 kV Substation.
Dounreay Tri Floating Wind Demonstration Project (The Dounreay Tri Project)	The 2017 consented project previously owned by Dounreay Tri Limited (in administration) and subsequently acquired in 2020 by Highland Wind Limited (HWL). The Dounreay Tri Floating Wind Demonstration Project consent was for two demonstrator floating turbines with a marine licence covering the same area for which the Pentland Floating Offshore Wind Farm (PFOWF) Array, as defined, is applying for consent. The Dounreay Tri Project also gained consent for the onshore infrastructure required to support the offshore elements of the project. The offshore components of the Dounreay Tri consent are no longer being implemented. The onshore components will not be implemented if the application for which this EIA accompanies is approved.
Grid Connection Point	The point at which the electricity generated by the Project connects into the National Electricity Transmission System, located at the Dounreay Substation.
Grid Connection Cable Circuit	Electricity cable circuits connecting the Onshore Substation to the Grid Connection Point. Each circuit is made up of three cables in a trefoil or flat arrangement.
Offshore EIAR	The EIAR submitted for the Offshore Development. This was submitted to Marine Scotland in August 2022. This is available at https://pentlandfloatingwind.com/document-library/
Highland Wind Limited (HWL)	The Developer of the PFOWF Project (defined below) and the Applicant for the associated planning permissions and consents.
Landfall	Point where the Offshore Export Cable(s) from the PFOWF Array, as defined, will reach the shore and connect to the Onshore Cable Circuit(s).
Offshore Export Cable(s)	The cable(s) which transmits electricity produced from the offshore wind turbines to landfall.
Offshore Site	Area encompassing the PFOWF Array Area and Offshore Export Cable Corridor, as defined.
Offshore Development	All offshore components of the PFOWF (Wind Turbine Generators (WTGs), cables, floating substructures and all other associated infrastructure required) across all project phases from development to decommissioning.
Onshore Cable Circuit(s)	Electricity cable circuits running from the Transition Joint Bay to the Onshore Substation. Each circuit is made up of three cables in a trefoil or flat arrangement.
Onshore Site	The area where the Onshore Development, as defined, will be located and where the planning permission is being sought.
Onshore Substation	A substation (including transformers, switchgear, megavolt ampere reactor) located within the Onshore Site. Two indicative locations are assessed within this Onshore EIAR.
PFOWF Onshore Transmission Infrastructure (the Onshore Development)	All onshore components of the PFOWF including HDD, Onshore Cable Circuit(s) (i.e. those above Mean Low Water Springs), Transition Joint Bay, cable joint bays, Onshore Substation, construction compound and access (and all other associated infrastructure) across all project phases from development to decommissioning, for which HWL are seeking planning permission from The Highland Council. The focus of this document.
PFOWF Project (the Project)	The combined Offshore Development and Onshore Development for the Pentland Floating Offshore Wind Farm (PFOWF), as defined.
Transition Joint Bay	A concrete structure where offshore export cables and onshore cables are spliced together.

ACRONYMS AND ABBREVIATIONS

CIP	Copenhagen Infrastructure Partners
COP	Copenhagen Offshore Partners
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
GDPR	General Data Protection Regulations
GVA	Gross Value Added
HDD	Horizontal Directional Drilling
HWL	Highland Wind Limited
kV	Kilovolt
m	Metre
MCA	Maritime and Coastguard Agency
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
MS-LOT	Marine Scotland Licensing Operations Team
MW	Megawatt
NC	North Coast
NETS	National Electricity Transmission System
NLB	Northern Lighthouse Board
nm	Nautical Miles
NRTE	Naval Reactor Test Establishment
OECC	Offshore Export Cable Corridor
PAC	Pre-application Consultation
PAN	Proposal of Application Notice
PFOWF	Pentland Floating Offshore Wind Farm
PPP	Planning Permission in Principle
PV	Photovoltaics
SEPA	Scottish Environment Protection Agency
SNH	Scottish Natural Heritage (now NatureScot)
SSE	Scottish Southern Energy
STEM	Science, Technology Engineering and Maths
THC	The Highland Council
TJB	Transition Joint Bay
UHI	University of the Highlands and Islands
UK	United Kingdom
US	United States
WTG	Wind Turbine Generators

1 Background

1.1 Introduction

This Pre-Application Consultation (PAC) Report has been prepared by PlanA Consulting on behalf of Highland Wind Limited (HWL) (the Applicant) to support an application for planning permission in principle (PPP) under Section 59 of The Town and Country Planning (Scotland) Act 1997 (as amended) to The Highland Council (THC). The application is to construct and operate the required onshore transmission infrastructure to export electricity from the Pentland Floating Offshore Wind Farm (PFOWF) to the National Electricity Transmission System (NETS) network (the Onshore Development).

The purpose of this PAC Report is to examine in detail the methods by which HWL sought to consult upon proposals and gather the views of the public and other interested parties during the pre-application phase.

Whilst this PAC Report has been prepared to support the application for the Onshore Development, comments relating to the offshore components (the Offshore Development) have been included (in addition to those relating to the Project as a whole or solely to the Onshore Development) for completeness, but these are not considered in detail as they are not relevant to the determination of this application. This information is detailed further within the Offshore PAC Report submitted to Marine Scotland as part of the application for the Offshore Development. Application documents for the Offshore Development are available on Marine Scotland's website at: <https://marine.gov.scot/ml/pentland-floating-offshore-wind-farm>

This PAC Report contains comments and feedback received from in-person events as well as those received through a wider community engagement programme. The PAC Report also illustrates how HWL has responded to comments from members of the public and community groups and, where relevant, has helped shape and inform the design of the Onshore Development.

HWL has applied the principles of the consultation process as set out in The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 (as amended) and Circular 3:2013 - Development Management Procedures. This enables the local community and all those with an interest in the proposals a clear opportunity to view the proposals, and importantly provide comment and feedback.

1.2 The Applicant

The Onshore Development is being developed by HWL; a Special Purpose Vehicle established to deliver the Project.

HWL are majority-owned (90%) by a fund managed by Copenhagen Infrastructure Partners P/S (CIP) with HexiconAB as a minority shareholder (10%). Project development activities are being led by CIP's development partner, Copenhagen Offshore Partners A/S (COP).

CIP are a fund management company focused on energy infrastructure including offshore wind, onshore wind, solar photovoltaics (PV), biomass, energy-from-waste, transmission and distribution, and other energy assets such as reserve capacity and storage. CIP has offices in Australia, Denmark, Germany, Japan, the Netherlands, the United Kingdom (UK), and the United States (US). CIP was founded in 2012 by senior executives from the energy industry in cooperation with PensionDanmark. CIP manages seven funds and has approximately €16 billion (£13.82 billion) under management.

HexiconAB are a leading floating offshore wind technology and project developer. They were founded in 2009 and are headquartered in Stockholm, Sweden. COP are a leading and experienced provider of project development, construction management, and operational management services to offshore wind projects. The company is headquartered in Denmark and has offices in Australia, Brazil, Greece, Japan, Italy, France, Korea, Taiwan, the UK, the US, and Vietnam. COP's team of specialists has a broad range of competencies within project management, early and late-stage project development, engineering, construction, procurement, and operational management as well as business development and project financing. The Project's development team is based in COP's Global Floating Wind Competence Centre, in Edinburgh.

1.2.1 The Onshore Development

The proposed Onshore Development is located within THC's jurisdiction at the Dounreay coast in Caithness, immediately adjacent to the western boundary of the Vulcan Naval Reactor Test Establishment (Vulcan NRTE) and the Dounreay Site (former nuclear facility) (the Onshore Site), as illustrated within Figure 1.

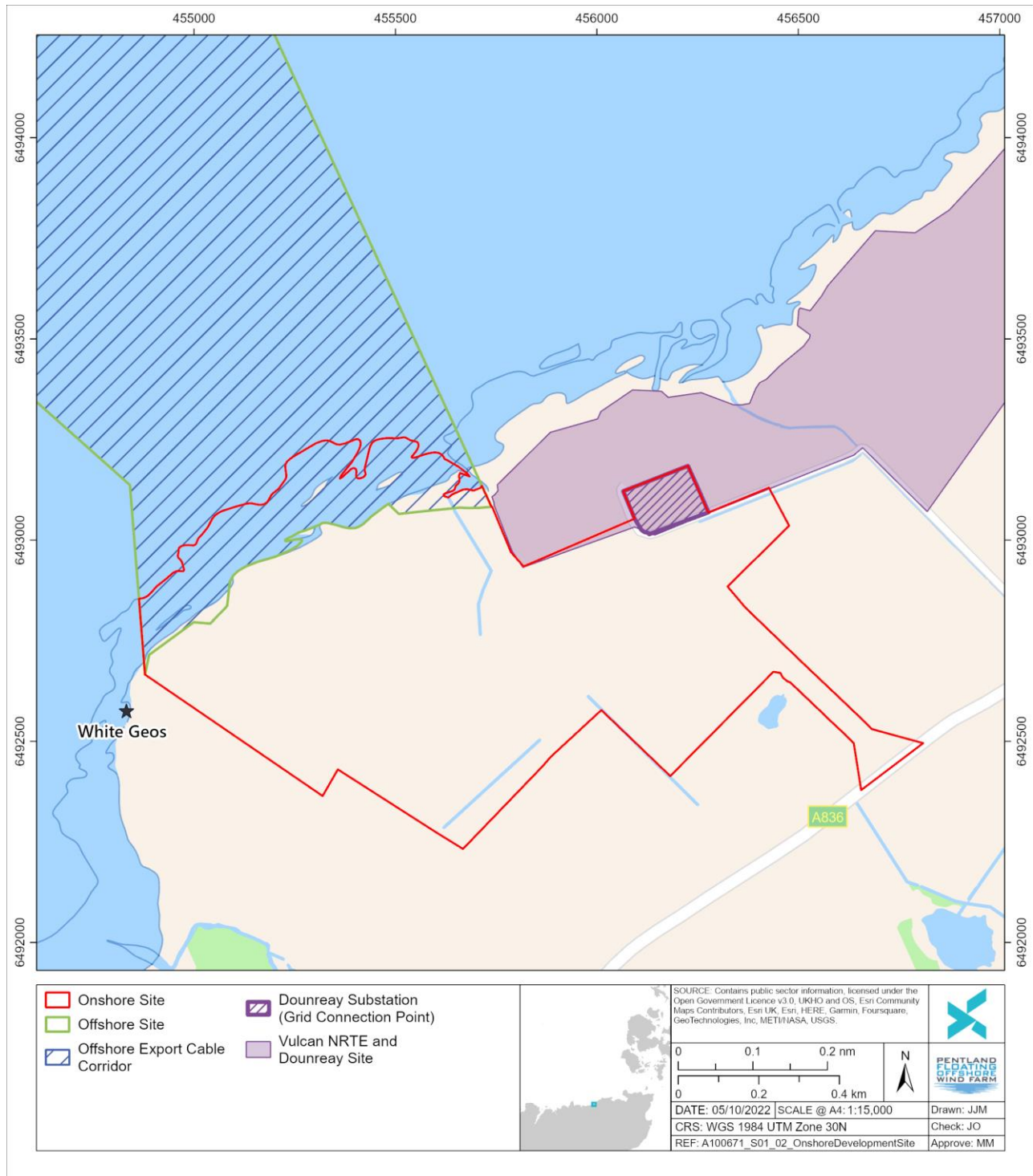


Figure 1: Site Location

The Onshore Site covers an area of approximately 103 hectares. The site character is coastal-rural and comprises a patchwork of fields defined by fencing and drystone walling, with a landform of generally uniform level and raised atop shallow sea cliffs, some 10 m in height overlooking the Pentland Firth. The nearest settlements include Reay and Thurso, which are located approximately 1.5 km west and 14 km to the east respectively. The nearest residential receptor is Isauld House, located approximately 106 m southwest of the Onshore Site.

Within the eastern portion of the Onshore Site is the existing Scottish Southern Energy (SSE) Dounreay 132 kV Substation (the Dounreay Substation), which forms the Project's grid connection point. The proximity of this grid connection point is a key factor in HWL's decision to locate the Onshore Development at this location.

Anticipated to be operational by 2026, the Onshore Development comprises all infrastructure required to facilitate the Project above Mean Low Water Springs (MLWS). Offshore works, including all elements below MLWS, are considered within the offshore application, including an Offshore PAC Report, submitted to Marine Scotland for section 36 consent and marine licences under the Electricity Act 1989 and the Marine (Scotland) Act 2010 respectively.

The Onshore Development will comprise the following key elements:

- > A cable landfall (the Landfall), located between the boundary of Vulcan NRTE (east) and the border with the archaeological track 'White Geos' (west), where up to two offshore export cables from the PFOWF Array will be brought ashore via horizontal directional drilling (HDD) and into the Transition Joint Bay (TJB);
- > A TJB where up to two offshore and up to two Onshore Cable Circuit(s) (each circuit is made up of three cables in a trefoil or flat arrangement) will be spliced together;
- > Onshore Cable Circuit(s) (up to two), buried to a depth of approximately 1 to 2 m and laid in a maximum of two trenches each approximately 3 m wide, subject to ground conditions, landowner requirements and cable characteristics;
- > If the Onshore Cable Circuit(s) are installed in sections, cable jointing pits will be required to join the sections together;
- > An Onshore Substation up to 65 m wide, 65 m length and 14 m in height, which is required to transfer the electricity from the PFOWF Array prior to connection into the existing Dounreay Substation;
- > Onshore Cable Circuits from the Onshore Substation to the grid connection point at the Dounreay Substation, laid in trenches and/or ducts; and
- > Construction compound to accommodate a temporary work site including parking, welfare facilities, offices and changing rooms.

Access to the Onshore Site will be via the A836 and the Vulcan NRTE access road. Temporary access tracks are likely to be required to provide access for the HDD works at the Landfall and, if the final Onshore Substation position is not directly accessible via the main access to site, an additional permanent access track may be required to allow for vehicular access to the Onshore Substation.

2 Consultation Approach and Methodology

2.1 Coronavirus and Consultation

Due to the Covid-19 pandemic and the associated Government guidance contained within the Town and Country Planning (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020, published in April 2020 and extended throughout 2021 and 2022, some of the public consultation for the PFOWF took place online.

These regulations advised of the temporary suspension of the requirement for an in-person public event but require alternative approaches to enable an exchange of views. The regulations and their accompanying

guidance¹ include several important points of reference. These include the requirement for the planning system to continue to function throughout the pandemic, in order to support future economic growth and societal recovery (paragraph 4 of the guidance), indicating that development should not be on hold throughout the pandemic. The Scottish Government's guidance also states that newspaper notices are still required to advertise developments (paragraph 13-15), and that a possible way of consulted upon information is to host it online (paragraph 19 and 20), provided that it is easily accessible and free to download. The guidance saw the introduction of web-based live chat functions and stipulated that there should be a minimum of a 21 day period between a newspaper advert being posted and the close of online material (paragraph 23).

The details of the consultation events and associated analysis, presented within this report, provide clarity on how these amended and interim requirements have been met.

2.2 Proposal of Application Notice

A Proposal of Application Notice (PAN) was submitted to THC on 11th July 2022 and validated on 19th July 2022 under THC reference 22/03168/PAN. Given the national status of the Onshore Development under the Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009, the PAN was sent to relevant stakeholders, including Melvich and Caithness Community Councils, and accordingly the application for the Onshore Development cannot be submitted within 12 weeks of its validation. This equates to the earliest viable date of 11th October 2022 for a full submission of the planning application to THC.

2.3 Detail of Consultation Events

Three consultation events were created, advertised and held in September 2021, May 2022 and August 2022. Details of all events are provided below. September 2021

The first consultation event in September 2021 was advertised in the John O' Groats Journal on the 20th August 2021, six weeks in advance of the live question and answer session. Given the prominence of Covid-19 at this time, it was considered that providing the first exhibition entirely online would be most appropriate. The event was staged on the OpenPlans Platform and was available via a link on the project website: www.pentlandfloatingwind.com. The exhibition went live on 27th September 2021, with feedback open until 31st October 2021. A screenshot of the OpenPlans exhibition is shown for context below in Figure 2.

¹ <https://www.gov.scot/publications/coronavirus-covid-19-planning-guidance-on-pre-application-consultations-for-public-events/>

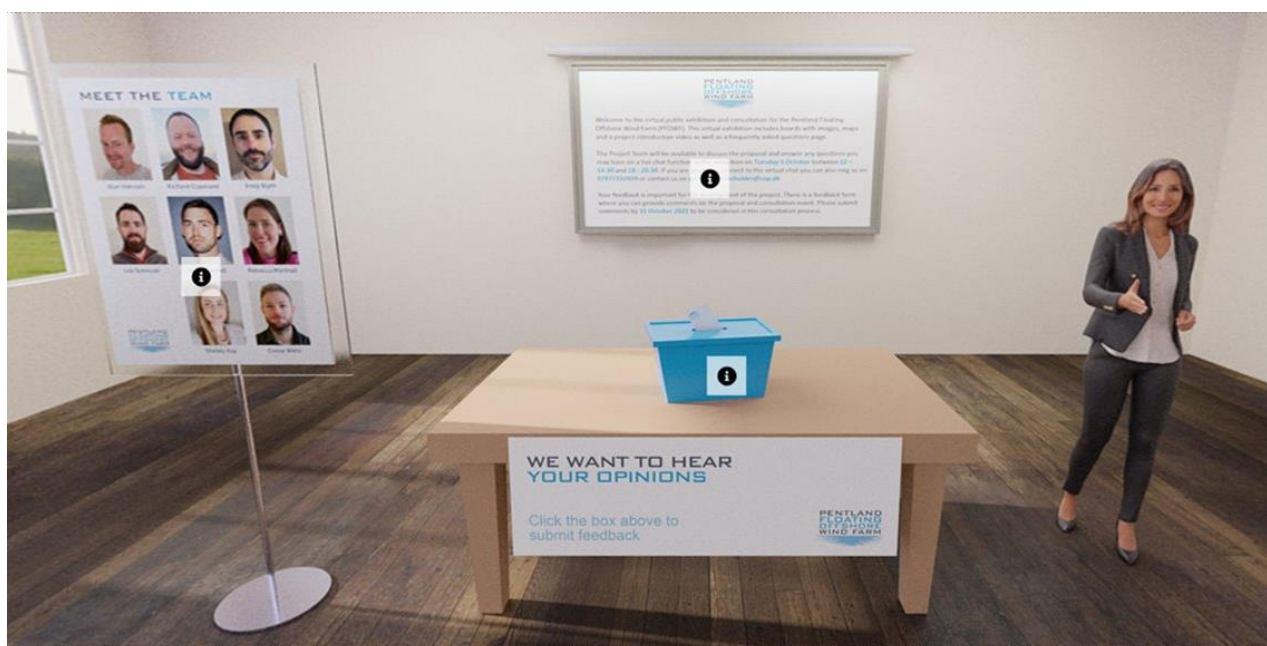


Figure 2: Example of OpenPlans exhibition as used in September 2021

In addition, a live chat event was held on 5th October 2021 from 12pm until 2.30pm and then again from 6pm until 8.30pm. This allowed members of the public to access web-based software within the virtual exhibition that would allow them direct access to the project team where they could ask any questions and receive direct feedback.

Along with the advert in the John O'Groats Journal, the PAC advertisement was also sent to THC and other relevant stakeholders including Community Councils. HWL carried out a targeted leaflet drop ahead of the event, to properties in the KW14 7 postcode district which encompassed properties along the coastline in proximity to the Onshore Development. The leaflet was distributed to over 3,500 properties in the local community to advertise the upcoming PAC event. Posters were placed in targeted areas within the community.

Material provided in September and October 2021 sought to provide an introduction to both the offshore and onshore elements of the Project. It included:

- > Details on the Applicant and an introduction to the project including its size, description and location;
- > An understanding of how much energy may be provided by the Project;
- > A timeline of the development process including consenting routes;
- > An explanation as to why floating technology will be utilised for the project including discussion of how it may be installed;
- > Discussion of the rationale behind the design envelope; and
- > Inclusion of topics for the Environmental Impact Assessment (EIA), their progress (where applicable) and provision of an initial assessment of the potential visual impact.

On this final point, indicative viewpoints including baseline photography and wirelines were provided from multiple key viewpoints. Frequently Asked Questions (FAQs) were also provided to answer common questions, along with biographies for key staff as well as alternative ways to contact the project team.

A feedback form (see Appendix E) was posted to the virtual exhibition space (above) and participants were invited to submit their views electronically either through the feedback form or via email. A phone number was also listed in the advertisements for people who were unable to connect to the virtual exhibition space to provide feedback.

2.3.1 May 2022

Once the Project had advanced further in terms of project design and assessment, a second public event was held in May 2022. Owing to the relaxation of Covid-19 measures from the Scottish Government, it was decided that in order to provide the most flexibility to participants, a blended approach of both online material and in-person exhibition was appropriate.

In person drop-in events were held on 11th May 2022 at the Reay Golf Course and 12th May 2022 at the North Coast Visitor Centre in Thurso. Both events provided an opportunity for interested members of the community to speak directly to the project team on the Project. A photo of the event in Reay is provided in Figure 3.



Figure 3: Reay exhibition, May 2022

A second online virtual exhibition went live on the OpenPlans platform on 9th May 2022 and the consultation period closed on 20th May 2022. During this virtual exhibition, on 18th May, a live chat question and answer session was opened within the exhibition which provided an opportunity for the public to directly communicate with the project team. In addition, a phone number was available for members of the public to contact the project team. These events provided updated information on the status of the Project and focused on areas that were identified from the first PAC event to be of most interest to the public. Feedback from members of the public was encouraged from those in attendance at both the in-person events and online.

The in-person local events and the online exhibition were advertised in the John O'Groats Journal on 25th March 2022, six weeks in advance of these events taking place. HWL carried out a targeted leaflet drop ahead of the event, to properties in the KW14 7 postcode district which encompassed properties along the coastline in proximity to the Offshore Development. The leaflet was distributed to over 3,500 properties in the local community to advertise the upcoming PAC event.

Due to an error, the first consultation event flyer that was circulated incorrectly referenced the events as being held in September and October 2021. HWL was contacted by several individuals who received the incorrect flyer, and the correct version was emailed to them. The flyer referred to the PFOWF website where the correct information regarding dates and events was available. In addition, to rectify this error, a mail drop was manually conducted to approximately 300 houses in Reay, Melvich and Portskerra (i.e. properties along the coastline) ahead of the events (7th and 8th May 2022). This can be viewed within Appendix F. Posters were also placed in prominent areas within the community including:

- > Noticeboard near Kirtomy;
- > Bus shelter near Armadale;
- > Noticeboard near Strathy Point;
- > Noticeboard near Strathy East;
- > Noticeboard at the church at Strathy;
- > Melvich Noticeboard;
- > Halladale Inn;
- > Noticeboard between Reay and Melvich;
- > Reay Village Hall;
- > Reay Shop Bus Shelter;
- > Reay Golf Club Noticeboard;
- > Forss Business Park Noticeboard;
- > Weigh Inn Hotel Noticeboard; and
- > Blue Door Café Noticeboard.

Members of the public were asked to provide comments on a feedback form that was available in hard copy format within the in-person events and electronically within the virtual exhibition room. Members of the public were also able to provide feedback via email and telephone during the consultation period.

2.3.2 August 2022

As a result of a change in the consenting strategy surrounding the mechanisms by which planning permission would be sought for the Onshore Development, where the application boundary was expanded to incorporate the foreshore area and access, and the permission sought was amended to a PPP, HWL undertook a further pre-application event virtually between 24th August 2022 and 19th September 2022. A live chat was available on 1st September 2022 between 12pm and 2.30pm, and then again from 6pm to 8.30pm. Similar feedback mechanisms were provided.

This event was advertised in the John O’Groats Journal on the 19th August 2022.

2.3.3 Offshore Project Information Update – July 2022

In addition, an online pre-submission project information update for the Offshore Development was held in July 2022 through a virtual exhibition space. The information update explained reductions to the Offshore Development’s footprint and the reduction in the number of WTGs being considered as part of the Application. These changes were made based on feedback from the second PAC event and the Scoping Opinion responses. As this focussed entirely on the Offshore Development, it is not considered further in this Report.

2.4 Community Council Meetings

Throughout the pre-application process, HWL have been in regular communication with Community Councils who may be affected by the Onshore Development.

Those Community Councils that had the potential to be affected by the offshore and/or onshore components of the Project were kept regularly updated with Project updates and details of public consultation events. These community councils included:

- > Betthill, Strathnavar and Altnaharra Community Council;
- > Birsay Community Council;

- > Caithness West Community Council;
- > Castletown Community Council;
- > Dunnet and Canisbay Community Council;
- > Graemsay, Hoy and Wallis Community Council;
- > Hoy and Wallis Community Council;
- > Harrays and Wick Community Council;
- > South Ronaldsay and Burray Community Council;
- > Strathy and Armadale Community Council;
- > Stromness Community Council;
- > Tongue Community Council; and
- > Thurso Community Council.

Project Briefing Notes were sent to community councils and other interested stakeholders in September 2021 and November 2021. Update emails were sent out in April 2022, May 2022, July 2022 and August 2022.

The host Community Council to the Onshore Development, Caithness West Community Council, was invited to meet with HWL and meetings were held on 1st November 2021, 19th July 2022 and 20th September 2022.

The meeting on 1st November 2021 constituted a presentation on the outline of the overall Project. Concerns were expressed about the visual impact, tourism, hazards to shipping and radioactive particles at the outfall pipe. Initial discussions were held regarding the overall community benefit which it was suggested should be long lasting and provide meaningful benefit for the community in the future. The Community Council requested that more was done to make sure that the public understood the height of the turbines proposed, and this was taken forward into future consultation events.

The meeting in July 2022, held by a representative from Foundation Scotland, provided an update to the Community Council and discussed funding in further detail whilst setting out timelines for the required consent applications. Potential uses for a community benefit fund were discussed, including the funding of a community shop in Reay, the launch of the PFOWF Education and Training Fund, which assists up to four students studying STEM (Science Technology, Engineering and Mathematics) subjects each year, and discussion on the parameters of the fund area.

A presentation was provided in September 2022, which focused on the further refinement of the proposed Project, following previous consultations. The meeting focussed on the key changes to the Project and the associated visual impacts. Community benefits and project timescales were also discussed.

Melvich Community Council were also offered a meeting and met with the project team (online through Teams) in June 2021. At this meeting, the Project Team provided an introduction to the PFOWF and the Project Team have since been in regular contact with the Melvich Community Council to provide project updates.

3 Consultation Outcomes and Analysis

3.1 Introduction

The following sections outline for each event the feedback gathered including attendance, associated analysis of this feedback, and how the data has been used to inform project decisions if applicable. In line with General Data Protection Regulations (GDPR) this feedback has been redacted and summarised for anonymity.

3.2 Feedback Received

Feedback from each PAC event was received through a number of mechanisms, including feedback forms, emails, telephone calls, live question and answer sessions and direct feedback to the Project Team at the in-person events.

There was a high level of engagement during the first PAC event. A total of 359 users visited the virtual exhibition site during the consultation period and 558 sessions were recorded indicating multiple interactions by the individuals who visited the site. In response to the consultation, over 30 responses were received on the Project through the various mechanisms available (feedback forms, email, telephone calls and live chat function). Feedback was able to be provided anonymously and some individuals provided multiple responses including through different channels.

For the second consultation event, over 40 individuals attended the in-person events and 132 users visited the virtual exhibition site during the consultation period with 189 sessions recorded online indicating multiple interactions by the individuals who visited the site. In response to the consultation, 16 written responses were received through the various mechanisms available (email, live chat function and feedback forms).

The third public consultation event, specific to the Onshore Development, had 61 unique users accessing the site on 85 occasions (indicating that some visited the exhibition more than once). During the third virtual event, one direct communication was received on the onshore proposal via email. Emails received on aspects of the project outside the onshore proposal during the consultation period for the third event have not been considered in this report. The overall feedback numbers are provided in Table 4-1.

Table 4-1 Feedback responses from the PAC Events

Feedback Mechanism	No. of Responses
PAC Event 1 – Virtual Exhibition (launched 27th September 2021)	
Feedback Forms	8
Q&A Sessions	5
Direct Communications (Emails, phone calls etc)	19
PAC Event 1 Total	32
PAC Event 2 – In person Reay and Thurso Events (11th & 12th May 2022) and Virtual Exhibition (launched 9th May)	
Feedback Forms	10
Q&A Sessions	2
Direct Communications (Emails, phone calls etc)	4
PAC Event 2 Total	16
PAC Event 3 –Virtual Exhibition (launched 24th August 2022)	
Feedback Forms	0
Q&A Sessions	0
Direct Communications (Emails, phone calls etc)	1
PAC Event 3 Total	1

**The number of responses accounts for the total number responses received. However, some individuals contacted the team on multiple occasions and through different channels (i.e. feedback form and email).*

3.2.1 Qualitative Responses

Overall, 18 feedback forms were received across the three PAC events. Eight feedback forms were received during the first PAC event and ten feedback forms were received during the second PAC event. Of those who submitted formal feedback through the feedback forms, 33.3 % rated the quality of the events as “Excellent”, 44.4% found the event to be “Good” and 22.2 % found the event to be “Average”. No person who responded to the event via the feedback forms found the events to be of “Poor” quality. 94.4% of those providing feedback noted that the events and exhibitions were easy to navigate.

One person noted in their feedback form that they felt that the second PAC materials provided were not a true representation of Portskerra, highlighting that additional visual materials should have been provided.

Table 4-2 Overview of Event Quality

How did you find the quality of information provided at today's event?		Did you find the exhibition accessible and easy to navigate?		Accessibility - If no, what could we do better?	HWL Response to comments received
Response	No. of Responses	Response	No. of Responses		
PAC Event 1 – Virtual Exhibition (launched 27 September 2021)					
Excellent	2	Yes	8	No additional comments provided	N/A
Good	4				
Average	2	No	0	No additional comments provided	N/A
Poor	0				
PAC Event 2 – In person Reay and Thurso Event (11 & 12 May 2022) and Virtual Exhibition (launched 9 May)					
Excellent	4	Yes	9	No additional comments provided	N/A
Good	4				
Average	2	No	1	One response commented that the information provided was not a true portrayal of Portskerra village. The response noted that the island of Hoy would be obliterated by the Offshore Development. This is further noted in the Offshore PAC Report.	The visual materials provided from the viewpoint at Portskerra/ Melvich (including photomontages and wirelines) have been created by leading industry experts in line with industry best practice and guidance and at locations agreed through consultation with Statutory Consultees. Further details on the assessment of the visual impacts on Portskerra/ Melvich and Hoy are provided in Offshore EIAR (Volume 2): Chapter 16: Seascape, Landscape and Visual Amenity. Additionally, all
Poor	0				

How did you find the quality of information provided at today's event?		Did you find the exhibition accessible and easy to navigate?		Accessibility - If no, what could we do better?	HWL Response to comments received
Response	No. of Responses	Response	No. of Responses		
					viewpoint visual materials are provided in Offshore EIAR (Volume 4): Visual Materials: Appendix 16.9.

During the first PAC events, feedback was also received via email and the live chat function noting that on two occasions members of the public reported that they had difficulty submitting their feedback through the forms provided. One of these individuals also noted that they found the virtual exhibition hard to navigate due to their internet connection. These correspondences were followed up by the Project Team and full feedback was subsequently received from both individuals through email and the live question and answer session.

3.2.2 Feedback on Level of Engagement

Table 4-3 highlights feedback from the feedback forms on the level of engagement HWL has undertaken with the public since the beginning of the Project.

Overall, 38.9% of those completing feedback forms thought the level of engagement was at "the correct level", 22.2% thought there was "not enough" engagement carried out and 38.9% were "unsure" on the level of engagement.

On one occasion following the first PAC event a member of the public contacted the Project Team via email and noted that they felt more in-person engagement was needed. At the time, due to COVID-19 restrictions, this was not possible. However, subsequently, HWL committed to and undertook a number of in-person events for the second PAC event in light of the eased COVID-19 restrictions.

A further eight responses on the level of engagement undertaken for the Project were submitted by alternative methods to the feedback forms. These responses raised concerns with the level of face-to-face consultation with the local community and Sutherland. Two responses raised concerns about the accessibility of using virtual exhibitions for the local community, particularly in regard to the first PAC event.

Following receipt of feedback from the first and second PAC events, HWL carried out a pre-submission information event, which took place in July 2022 and which focussed on key changes to the Offshore Development. This event was targeted at key consultees and interested stakeholders to inform them of how the feedback from the PAC events had been considered by the Project in finalising the design envelope for the Offshore Development. HWL will continue to engage the local community and stakeholders as the Project progresses.

Table 4-3 Feedback on level of engagement undertaken by HWL submitted by feedback form

Do you have any concerns on the level of engagement undertaken to date from Highland Wind Limited?			
Response	No. of Responses	Further Comments	HWL Response/ Action
Correct Level	7	No additional comments provided	N/A
Not Enough	4	One additional comment received stating there had been a lack of in-person events in Sutherland, particularly Melvich/ Portskerra.	HWL want to keep the local community up to date with the development of the Project. The Project Team have given presentations on the Project to a number of community organisations and other interested groups and have reached out to community councils in the local area to present at their upcoming meetings (see Section 3.3.4 for details). HWL are happy to arrange follow up engagement sessions with other organisations or interested groups and can be contacted at: Pentland-stakeholder@cop.dk Or through the Project website at: www.pentlandfloatingwind.com to arrange these.
Unsure	7	One additional comment received noting there had not been enough engagement.	

3.2.3 General Feedback on the Proposal

Table 4- 4, Table 4-5 and Table 4-6 provide an overview of the general feedback received from the feedback forms across the first two PAC events, in response to questions regarding the overall proposal, the offshore elements and the onshore location of the infrastructure.

Those in agreement with the proposals note that it is a necessary development to negate the effects of climate change and to test deep water technologies.

The key elements of concern on the proposals are the visual impacts associated with the Offshore Development, impacts on tourism, the benefit the Offshore Development can bring to the local community and the potential impacts on ornithology and marine ecology.

Following the feedback received from the second event, key changes were made to the design of the Offshore Development as outlined within the Offshore PAC Report.

Table 4-4 Overview of feedback on the proposal

Do you agree with Highland Wind Limited's proposals for the Pentland Floating Offshore Wind Farm?		
Response	No. of Responses	Summary of key reasons for responses
Agree	7	<ul style="list-style-type: none"> > It's the way forward. > Importance as a prototype for future deep-water projects. > Necessary to negate the effects of climate change
Disagree	9	<ul style="list-style-type: none"> > Impact on economy for coastal communities. > Lack of benefit for the local community. > Development is too close to the shore. > Concerns regarding impacts on ornithology, migratory marine mammals and fish and shellfish species.
Unsure	2	No additional comments provided.

Table 4-5 Overview of feedback on the offshore elements

Do you have any concerns with the proposed offshore elements for the Pentland Floating Offshore Wind Farm?		
Response	No. of Responses	Summary of key reasons provided for responses
None	6	No additional comments provided.
Concerned about the offshore elements	10	<ul style="list-style-type: none"> > Concern about the location of the Offshore Development > Concerns about impacts on the local economy, including tourism from visual impacts associated with the Offshore Development. > Concerns about impacts on ornithology, including puffins. > Concerns about the visual impacts for local residents and the impact on the views from the coast. > Concerns about the cumulative impact of the PFOWF with onshore wind farms
Unsure	2	No additional comments provided.

In response to the question regarding the proposed location of the onshore infrastructure, the responses indicated that some people had concerns for the Onshore Development location. Those that responded to the question noted that they were concerned with the visual impacts of the Offshore Development and associated impacts on the local economy including tourism. As these comments relate to the Offshore Development, they are discussed in detail within the Offshore PAC Report.

Table 4-6 Overview of feedback on the onshore infrastructure

Do you have any concerns with the proposed location of the onshore infrastructure for the Pentland Floating Offshore Wind Farm?		
Response	No of. Responses	Summary of key reasons provided for responses
None	9	No additional comments provided
Concerned about the location	7	No additional comments provided specific to onshore infrastructure.
Unsure	1	No additional comments provided
No response	1	No additional comments provided

In addition to the feedback forms, one email was received in relation to the Onshore Development. This was to request additional information regarding the onshore site, specifically with regards to its co-existence with the permitted SSE Dounreay West Substation. No specific concerns with the proposals were raised within this email.

3.2.4 Key Topics Raised and HWL Responses

Table 4-4 provides an overview on the general feedback received from the feedback forms from the two PAC events. This has been collected across all feedback channels including feedback forms, emails, telephone calls, and discussions during the live Q&A sessions during the virtual exhibitions.

The area of most interest from the public is the potential for visual impacts associated with the Offshore Development, particularly on the local community and also in regard to cumulative pressures of wind farms in the region. Other responses included concerns regarding impacts upon tourism, ecology, ornithology and alternatives considered. The Offshore PAC details these comments and HWL's responses fully.

Thirteen responses were in relation to the supply chain with several noting that it is a great opportunity to develop the supply chain and it will be beneficial to local businesses from increased visitors to the area brought about by the Offshore Development workforce. Whilst not specifically quoted as an applicable point relevant to the Onshore Development, it is also relevant.

Potentially relevant to the whole Project, six responses received were in relation to community benefits. HWL are in the process of developing a Community Benefit Fund for the Project. Independent grant making charity Foundation Scotland has conducted a consultation on the Community Benefit Fund with relevant local stakeholders. A representative from Foundation Scotland attended the events in Reay and Thurso in May 2022 to answer any questions and receive feedback from the local community.

Table 4-7 summarises points below with potential relevance for the Onshore Development.

Table 4-7 Key Topics Raised in Feedback for the Offshore Development

Key Topics Raised in Feedback	No. of responses*	Summary of responses received	HWL Response/ Action
Supply Chain	13	> Several responses concerned the excellent opportunities for the supply chain from the Project	HWL are committed to providing opportunities for local supply chain within the construction and operation of the Project.

Key Topics Raised in Feedback	No. of responses*	Summary of responses received	HWL Response/ Action
Impacts on Tourism (NC 500)	10	<ul style="list-style-type: none"> > Several responses raised concerns regarding the impact on tourism from the visual impact, including deterring tourists from the area including users of the NC500 and associated impacts on local accommodation providers (including campsites, hospitality and B&Bs) and broader impact to the local economy. > One response noted that effects on tourism and the benefits of renewable energy tourism should be assessed in the application. 	<p>A recent report published by the Scottish Government in 2022, concludes that survey findings on the impact of offshore wind farms on tourism show that the vast majority of respondents would not avoid having a holiday in Scotland because of visible wind turbines. 80% of respondents noted that being able to view turbines from an offshore wind farm while on holiday in Scotland would make no difference to their choice of holiday, while 4% would be more likely to choose the holiday if they could see turbines. 11% of national respondents noted they would be less likely to choose the holiday because they could see turbines from an offshore wind farm (Scottish Government, 2022). Further information on the tourism impacts from the Offshore Development are provided in the Offshore EIAR (Volume 2): Chapter 19: Socio-economics, Recreation and Tourism.</p>
Community Benefits	6	<ul style="list-style-type: none"> > Several responses raised concerns regarding benefits to the local community including access to energy generated or reduction in local energy prices. > One response noted that restoration of the Caithness and Sutherland Peatlands could be included in the community benefits. > Several responses raised concerns about the impact to the community economy including through the associated impacts on tourism. > One response was in favour of how the Project could benefit local hospitality 	<p>HWL are committed to ensuring this Project provides long term benefits to the local community. HWL has undertaken social and economic studies with involvement of the University of the Highlands and Islands (UHI) and leading industry experts to understand the positive impacts the Project will have (both directly and indirectly) on the community, for example, through providing jobs, Gross Value Added (GVA) potential and demand for local services. Further information on the socio-economic impacts from the Offshore Development are provided in Offshore EIAR (Volume 2): Chapter 19: Socio-economics, Recreation and Tourism.</p> <p>HWL is developing a Community Benefits Fund and engaged Foundation Scotland to lead the consultation (which concluded in July 2022).</p>

Key Topics Raised in Feedback	No. of responses*	Summary of responses received	HWL Response/ Action
<p><i>*The totals here are based on the number of comments received on each topic. Some individual responses included comments on a number of topics. For clarity where individuals have commented on a range of topics these have been included in each applicable topic total.</i></p>			

4 Conclusions

Regarding PAC for the Project, HWL's overarching aim has been to ensure the efficient development of an environmentally and socially responsible offshore wind farm that benefits the local community. The Onshore Development plays a vital role in fulfilling that aim.

The Project Team has gone above and beyond the statutory PAC requirements. This robust consultation process resulted in a number of recommendations regarding the design of the Offshore Development, and accordingly changes to the design of the Offshore Development have been made to take account of key concerns and these are reported within the Offshore EIA Report. Additionally, HWL are developing a Community Benefit Fund which is being developed in line with the feedback received from the local community should the Project come forward.

In accordance with legislative requirements and industry best practices, submission of the application for the Onshore Development will be advertised and the application and EIA documentation will be physically available for public inspection at Reay Village Hall, Reay, Thurso KW14 7RE.

In addition, the EIA documentation, including all figures, technical appendices, and accompanying documents, will be made available to view on the Project website at www.pentlandfloatingwind.com. Anyone having difficulty accessing the application documents through this website can contact Pentland-stakeholder@cop.dk for assistance. If you wish to comment on the Onshore application or make representations to THC, please email the Highland Council at: simon.hindson@highland.gov.uk.

Appendix A: Consultation Adverts

September 2021

Highland Wind Limited
Marine (Scotland) Act 2010
The Town and Country Planning (Scotland) Act 1997 (as amended)
PRE-APPLICATION PUBLIC CONSULTATION

Notice is hereby given that Highland Wind Limited (company number: SC675148, 4th Floor 115 George Street, Edinburgh, Midlothian, Scotland, EH2 4JN) plans to hold a pre-application consultation (PAC) event regarding two applications for proposed licensable activities at Dounreay, Caithness (central grid reference: 58° 39.093' N, 03° 50.976' W). The application for marine activities consist of the installation of up to 10 floating wind turbine generators, associated floating platforms, inter-array and export cables. A separate application for onshore activities includes the commissioning of an onshore substation and associated infrastructure.

Due to the ongoing COVID-19 pandemic there are temporary modifications to the Marine Licence (Pre-application Consultation) (Scotland) Regulations 2013 and the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013.

In response to these modifications and in order to safeguard the community a **virtual public exhibition on the proposal will be available online from Monday 27 September 2021** on the project website at www.pentlandfloatingwind.com.

The project team will be available for a live question and answer session on the proposals between **12:00 – 14.30 hrs and 18.00 – 20.30 hrs on Tuesday 5 October 2021** via a live chat function in the virtual public exhibition which will be accessible from www.pentlandfloatingwind.com. The event will provide an opportunity for the public and stakeholders to consider and comment on the **prospective application**.

If you are unable to access the online question and answer session, you can contact the project team on +44 (0)7427186664.

The virtual public exhibition will include a link to a feedback form where comments and questions on the proposal, as well as any requests for further information, can be submitted directly to the Project Team. Alternatively, you may do so by emailing pentland-stakeholder@cop.dk.

If you have any further questions or comments on the proposals, we request that these be submitted via the feedback form by 5pm on **Sunday 31 October 2021**. Alternatively, you may do so by emailing the Project Team at the above contact details.

Please note that comments made to Highland Wind Limited are not representations to the Scottish Ministers or The Highland Council. Once the licence applications are submitted there will be an opportunity for representations to be made to the Scottish Ministers and The Highland Council on the associated applications.

May 2022

Highland Wind Limited Marine (Scotland) Act 2010 The Town and Country Planning (Scotland) Act 1997 (as amended) **PRE-APPLICATION PUBLIC CONSULTATION**

Notice is hereby given that Highland Wind Limited (company number: SC675148, 4th Floor 115 George Street, Edinburgh, Midlothian, Scotland, EH2 4JN) plans to hold a pre-application consultation (PAC) event regarding two applications for proposed licensable activities at Dounreay, Caithness (central grid reference: 58° 39.093' N, 03° 50.976' W). The application for marine activities consist of the installation of up to 10 floating wind turbine generators, associated floating platforms, inter-array and export cables. A separate application for onshore activities includes the commissioning of an onshore substation and associated infrastructure.

The following pre-application consultations will be held:

Event	Date and Time	Location
Virtual Exhibition	Launched Monday 9 May 2022	Available at: https://openplans.uk/pentland/
In person drop-in event at Reay Golf Course Club House, Thurso	Wednesday 11 May 2022, 14.00 – 20.00	Reay Golf Course, Club House, Reay, Thurso KW14 7RE
In person drop-in event at North Coast Visitor Centre, Thurso	Thursday 12 May 2022, 11.00 – 17.00	North Coast Visitor Centre, High Street, Thurso, KW14 8AJ
Online Question and Answer Session	Wednesday 18 May 2022, 12.00 – 14.30 and 18.00 -20.30	Accessible using live chat function in virtual exhibition, available at: https://openplans.uk/pentland

If you are unable to access the online question and answer session, you can contact the project team on 07877332459 during the allotted times on Wednesday 18 May 2022. The consultations will provide an opportunity for the public and stakeholders to consider and comment on the prospective application. The virtual public exhibition will include a link to a feedback form where comments and questions on the proposal, as well as any requests for further information, can be submitted directly to the Project Team. Alternatively, you may do so by emailing pentland-stakeholder@cop.dk. Further information about the Pentland Floating Offshore Wind Farm is available at <https://www.pentlandfloatingwind.com/>.

If you have any further questions or comments on the proposals, we request that these be submitted via the feedback form by **Friday 20 May 2022**. Alternatively, you may do so by emailing the Project Team at the above contact details.

Please note that comments made to Highland Wind Limited are not representations to the Scottish Ministers or The Highland Council. Once the licence applications are submitted there will be an opportunity for representations to be made to the Scottish Ministers and The Highland Council on the associated applications.

August 2022

Highland Wind Limited
The Town and Country Planning (Scotland) Act 1997 (as amended)
Pentland Floating Offshore Wind Farm
Onshore Transmission Infrastructure
PRE-APPLICATION CONSULTATION

Notice is hereby given that Highland Wind Limited (company number: SC675148, 4th Floor 115 George Street, Edinburgh, Midlothian, Scotland, EH24JN) plans to hold a pre-application consultation (PAC) event for proposed licensable activities at Dounreay, Caithness (grid reference NC975665).

Proposal: Planning Permission in Principle for the onshore transmission infrastructure to connect Pentland Floating Offshore Wind Farm (PFOWF) into the national electricity transmission system network at land adjacent to Dounreay Nuclear Facility, approx. 14 km west of Thurso, Caithness.

Highland Wind Limited (HWL) intends to seek planning permission in principle for the construction, operation and decommissioning of an onshore substation, underground electricity cables, cable landfall and associated temporary and permanent infrastructure to export electricity from PFOWF into the national electricity transmission system network, including transition joint bay, cable joint bays, construction compounds and new and upgraded access tracks.

A virtual exhibition on the proposals will be available for viewing between 29 August 2022 and 19 September 2022 and will be available via a link in the Pentland Floating Offshore Wind Farm website:

website: www.pentlandfloatingwind.com

A live and interactive question and answer session will take place between 12:00 – 14.30 hrs and 18:00 – 20.30 hrs on Thursday 1 September 2022 with members of the Project Team. This will take place via a live chat function in the virtual public exhibition. If you are unable to access the online question and answer session, you can contact the project team on 07877332459 during the allotted times on Thursday 1 September 2022.

The virtual exhibition will include a feedback form where comments and questions on the proposal, as well as any requests for further information, can be submitted directly to the Project Team. Alternatively, you may wish to do so by emailing pentland-stakeholder@cop.dk.

If you have any comments or questions on the proposals, we request that these are submitted via the feedback form by 5pm on 19 September 2022. Alternatively, you may do so by emailing or calling the Project Team at the above contact details.

Please note that this notice does not relate to a planning application and that any comments made on the proposals to HWL at this stage are not representations to the planning authority. If a planning application is subsequently submitted to The Highland Council, normal neighbour notification and publicity will be undertaken at that time and you will have the opportunity then to make formal representations.

Appendix B: September 2021 Consultation Materials



WELCOME

Welcome to the virtual public exhibition and consultation for the Pentland Floating Offshore Wind Farm (PFOWF). This is the first of a number of public consultation events designed to keep local residents and other interested stakeholders up-to-date and to encourage feedback as the PFOWF Project progresses. We are committed to working with local communities and stakeholders to help shape the development of our proposal.

This consultation is being undertaken virtually in order to minimise risk to the public with regard to COVID-19. The layout of this exhibition is similar to what you would expect to find at a traditional public exhibition including information boards on the proposal, opportunities to ask the team questions and possibilities to provide feedback.

This virtual exhibition includes images, maps, frequently asked questions and an introduction video to provide an overview of the project and current development activities.

LIVE CHAT QUESTION & ANSWER SESSION

On the 5 October 2021, the project team will be available to answer any further questions you may have on a live chat function in the virtual public exhibition during the following times: **12:00 – 14:30** and **18:00 – 20:30**.

You can provide feedback through the feedback form in this virtual exhibition until 31 October 2021. A second event will be held before we submit the EIA application to provide you with an update of the project. It is anticipated that the second event will be held in early 2022.

Our website www.pentlandfloatingwind.com provides further information about the project. Should you have any further questions or feedback once the consultation period for this exhibition has closed, you can contact us at pentland-stakeholder@cop.dk.

If you would like to provide us feedback on the event, consultation closes on 31 October 2021. The virtual exhibition space will remain live throughout the planning process.

WHO WE ARE

Pentland Floating Offshore Wind Farm is being developed by Highland Wind Limited which is majority owned by a fund managed by Copenhagen Infrastructure Partners (CIP) with Hexicon AB as a minority shareholder. Project development activities are being led by CIP's development partner, Copenhagen Offshore Partners (COP). The project development team is based in COP's Global Floating Wind Competence Centre, recently established in Edinburgh.



Copenhagen Infrastructure Partners P/S (CIP) is a fund management company focused on energy infrastructure including offshore wind, onshore wind, solar photovoltaic (PV), biomass and energy-from-waste, transmission and distribution, reserve capacity and storage, and other energy assets like Power-to-X.

CIP has offices in Copenhagen, Hamburg, New York, Tokyo, Utrecht, Melbourne and London. CIP was founded in 2012 by senior executives from the energy industry in cooperation with PensionDanmark. CIP manages eight funds and has approximately €16 billion under management.

www.cippartners.dk



Copenhagen Offshore Partners (COP) is a leading and experienced provider of project development, construction management, and operational management services to offshore wind projects.

The company is headquartered in Denmark and has offices in Taiwan, USA, Australia, Japan, South Korea, UK & Vietnam. COP's team of specialists has a broad range of competencies within project management, early and late-stage project development, engineering, construction, procurement, operational management as well as business development and project financing.

www.cop.dk



Hexicon AB is a leading floating offshore wind technology and project developer. It was founded in 2009 and is headquartered in Stockholm, Sweden.

www.hexicon.eu



THE PENTLAND FLOATING OFFSHORE WIND FARM

Pentland Floating Offshore Wind Farm will be located off the coast of Dounreay, Caithness.

Pentland Floating Offshore Wind Farm will be developed in stages:

- A single turbine demonstrator project
- A larger array project (up to 10 turbines) with a maximum generating capacity of 100MW providing enough energy to power up to 70,000 homes, equivalent to 64% of homes in the Highland Council Area (based on 2019 figures)

The onshore substation for the project will be located adjacent to the Vulcan Naval Reactor Test Establishment (NRTÉ) and the former Dounreay Nuclear Facility.

Environmental Impact Assessments for the array project are currently being prepared and will be submitted to Marine Scotland and the Highland Council in 2022.



DEVELOPMENT



The demonstrator project is seen as the pathway to the development of the larger Pentland floating array project, as well as future potential floating projects in Scotland.

INNOVATION



The innovative technology trialled in this demonstrator project will be key to the commercialisation of this floating technology. It will deliver valuable insight into developing floating wind technology in Scotland.

LEARNING



The learnings from this will help contribute to the development of a strong Scottish supply chain for floating wind.

INDICATIVE DEVELOPMENT TIMELINE

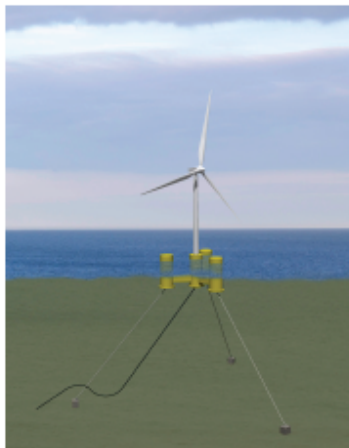


WHY FLOATING OFFSHORE WIND?

Currently the majority of offshore wind farms in Scotland are fixed bottom, there are only two floating wind farms in operation. Unlike traditional fixed bottom wind farms, floating wind farms use wind turbine generators mounted on a floating substructure which is connected to the seabed using mooring lines and anchors. Approximately 80% of global offshore wind resources are in water depths where fixed bottom wind farms are not technically and economically feasible. Floating technology is key to the UK achieving net zero as the energy transition will require a mix of floating and fixed foundation wind farms.



Generic floating structure



- Floating offshore wind offers the offshore wind industry key opportunities to create a new supply chain and job opportunities.
- Fixed bottom wind is now one of the most economically competitive forms of energy and it is expected that floating wind will follow suit.
- Scotland is a world leader in floating technology and is well positioned to capitalise on advances in the sector due to experience in oil and gas and maritime heritage.
- The significant global pipeline for floating offshore wind could create export opportunities for the local supply chain in Scotland.

INSTALLATION

One of the advantages with floating offshore wind is the capacity for the complete wind turbine and structure assembly to be towed to site where it is hooked to the pre-installed mooring system which allows it to be installed and decommissioned much quicker than fixed-bottom turbines.

SUBSEA CABLES

A key design difference between a fixed bottom and floating turbine is the dynamic nature of the cables. The cable system must accommodate the movement of the floating substructure without impacting the cables. This is typically achieved by adding a buoyancy element into the design.

FLOATING SUBSTRUCTURES

Currently there are over 40 floating wind turbine generators (WTGs) structure concepts at varying stages of development in the industry. Each has varying dimensions to meet the unique engineering challenges associated with floating turbines, turbine sizes and project specific requirements.

MOORING & ANCHORS

The mooring and anchoring systems are responsible for maintaining the position of the floating offshore wind farm during the most extreme events or energetic storms. There are a number of different anchoring solutions available.

The final project design has not yet been determined and will depend on the seabed conditions, engineering studies and environmental impacts assessed. The Pentland Floating Offshore Wind Farm Project has adopted a project design envelope approach to retain flexibility to capitalise on innovations in this area.



PROJECT DESCRIPTION

OFFSHORE PROPOSAL

PROJECT DESIGN ENVELOPE

The Pentland Floating Offshore Wind Farm has adopted a design envelope approach to developing the project. This is a common approach with major infrastructure projects including offshore wind farms. The design envelope approach does not consent specific technology, but allows maximum parameters to be used to assess impacts. This allows the flexibility to utilise new innovations emerging in floating wind technology, whilst also gathering greater information about the site conditions.

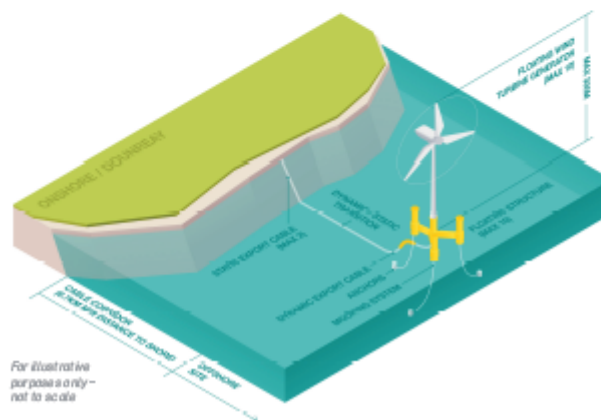
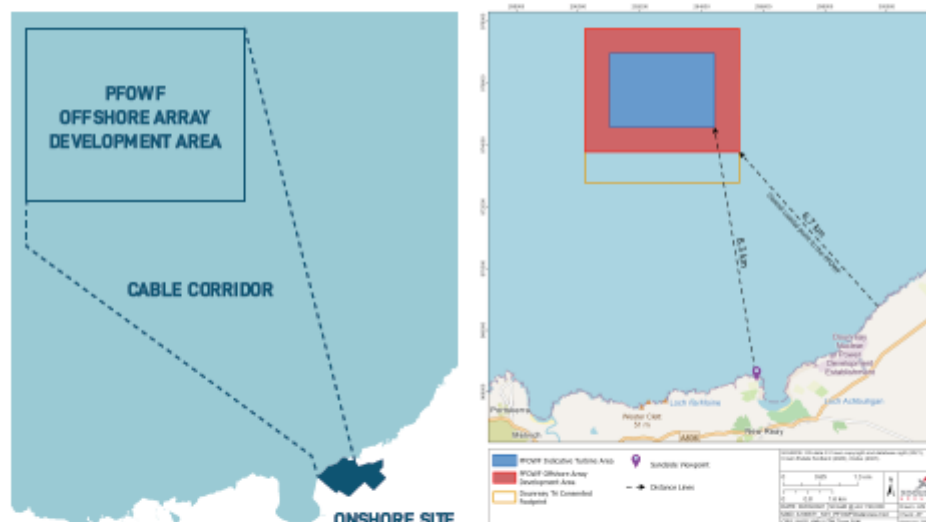
The Environmental Impact Assessment will consider these parameters that represent the worst-case scenarios for receptors likely to be

impacted by this development. As such, the project design envelope presented here shows the proposed maximum parameters for the project. The final project parameters may not reach these maximum limits and the final project design will be submitted for approval.

The Pentland Floating Offshore Wind Farm offshore array development area is 20 km² within the Pentland Firth, approximately 6.7 km north of the coast of Dunroary, Caithness. The offshore infrastructure works will comprise:

- Up to a maximum of 10 floating wind turbine generators (100 MW capacity);
- Turbines will have a maximum tip height of 300 m;
- Floating structures (one per turbine) to support the turbines;
- Mooring structures (anchors and mooring lines) to secure the floating structures;
- A network of inter-array cabling linking the individual wind turbines; and
- A maximum of two offshore export cables connecting the wind turbines to the onshore substation.

It is anticipated that the closest turbine will be at least 8 km offshore from Sandside Bay.



As part of the Environmental Impact Assessment (EIA) process, we are currently undertaking:

- Geophysical and geotechnical seabed surveys;
- Environmental surveys;
- Technical and engineering studies; and
- Discussions with stakeholders and the local community.

Through undertaking these activities, the project design envelope will be refined further to ensure the optimal design can be adopted for the project.

For illustrative
purpose only –
not to scale

PROJECT DESCRIPTION

ONSHORE PROPOSAL

A landfall site has been identified at Dounreay, immediately adjacent to the Vulcan Naval Reactor Test Establishment (NRTE) and the former Dounreay Nuclear Facility.



The onshore infrastructure will comprise:

- A cable landfall west of the Vulcan nuclear facility – the preferred option is for the cable to be brought to shore by Horizontal Directional Drilling (HDD) depending on HDD feasibility studies;
- An onshore cable buried to a depth of approximately 1 metre;
- A cable Transition Joint Bay (TJB) where offshore and onshore cables are spliced together; and
- An onshore substation and switchgear.

The offshore turbines will export power up to a maximum of 110 kV. The Project will require an onshore substation to connect to the transmission network at 132 kV.

The onshore substation or switchgear will include the electrical equipment required to connect the Project to the grid. This may include switchgear, transformers, harmonic filter, reactive compensation devices, protection equipment, batteries and other auxiliary equipment. The entire footprint is likely to be an area of approximately 100 m x 60 m (0.60 hectares).

The majority of electrical plant will be indoors owing to the coastal location and will broadly be adjacent to existing infrastructure in the area. The exact configuration and access roads will be decided at a later stage.



*For illustrative
purposes only –
not to scale*

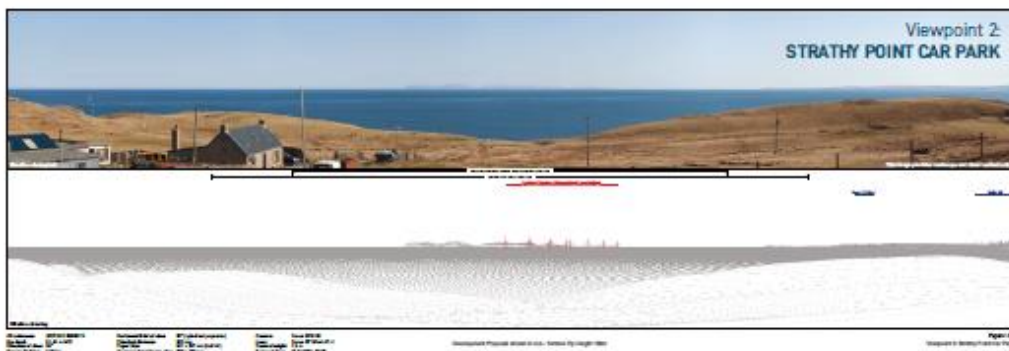


SEASCAPE, LANDSCAPE & VISUAL IMPACTS

As part of our Environmental Impact Assessment (EIA), we will be undertaking a Seascape and Landscape Visual Impact Assessment (SLVIA).

The SLVIA will consider the potential visual effects of the offshore and onshore infrastructure from a number of coastal viewpoints. Wirelines are presented below and give an indication of the likely views of the proposed offshore array area from selected viewpoints. These wirelines do not take into consideration weather conditions such as mist and fog or any intervening obstacles such as houses and vegetation, all

of which influence how visible the turbines will be. The wirelines are therefore provided for indicative purposes only. For each view point two scenarios are shown: an indicative layout of 5 turbines at 300m tall and 10 turbines at 192m tip height. The final turbine configuration is likely to fall somewhere between these. Comparative baseline photographs from the selected viewpoints are also provided below.









CONSENTS & ASSESSMENTS

The project will make two separate applications for both the offshore and onshore components.

OFFSHORE

Marine licences and consent under Section 36 of the Electricity Act 1989 will be sought from Marine Scotland for the offshore infrastructure.

ONSHORE

An application for planning permission will be made under Section 57 of the Town and Country Planning (Scotland) Act 1997 to The Highland Council for the onshore elements of the Project.

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

EIA is a process which identifies and assesses the potential significant environmental effects of a project, informs the design of the project from an environmental perspective, and sets out standard industry and additional mitigation measures to eliminate or minimise the project's effect on the environment. An EIA Report is the written output of the EIA process. Two EIA Reports will be produced (one for the onshore part of the project and

one for the offshore) and will demonstrate that all potentially significant effects on the environment have been considered and assessed and that appropriate mitigation measures to reduce any significant effects are identified and commitments made to implement these.

WHAT WILL BE ASSESSED?

It is currently proposed that the following environmental topics will be considered within the EIA Reports:

ASSESSMENT	OFFSHORE EIA REPORT	ONSHORE EIA REPORT
PHYSICAL ENVIRONMENT	Offshore Physical Environment Physical Processes Water & Sediment Quality	Geology & Hydrogeology Land Use, Agriculture & Soils
BIOLOGICAL ENVIRONMENT	Benthic Ecology Fish & Shellfish Ecology Marine Mammals & Other Megafauna Marine Ornithology	Terrestrial Ecology Terrestrial Ornithology
HUMAN ENVIRONMENT	Commercial Fisheries Shipping & Navigation Aviation & Radar Seascape, Landscape & Visual Amenity Marine Archaeology & Cultural Heritage Other Users of the Marine Environment Socio-Economics, Tourism & Recreation	Onshore Archaeology & Cultural Heritage Air Quality Landscape & Visual Amenity Traffic & Transport Onshore Noise



SURVEY CAMPAIGN

In order to understand the local environment, potential impact from the development and how we can reduce and mitigate impacts, our EIAs will include the findings from a range of surveys and studies conducted in the local area.

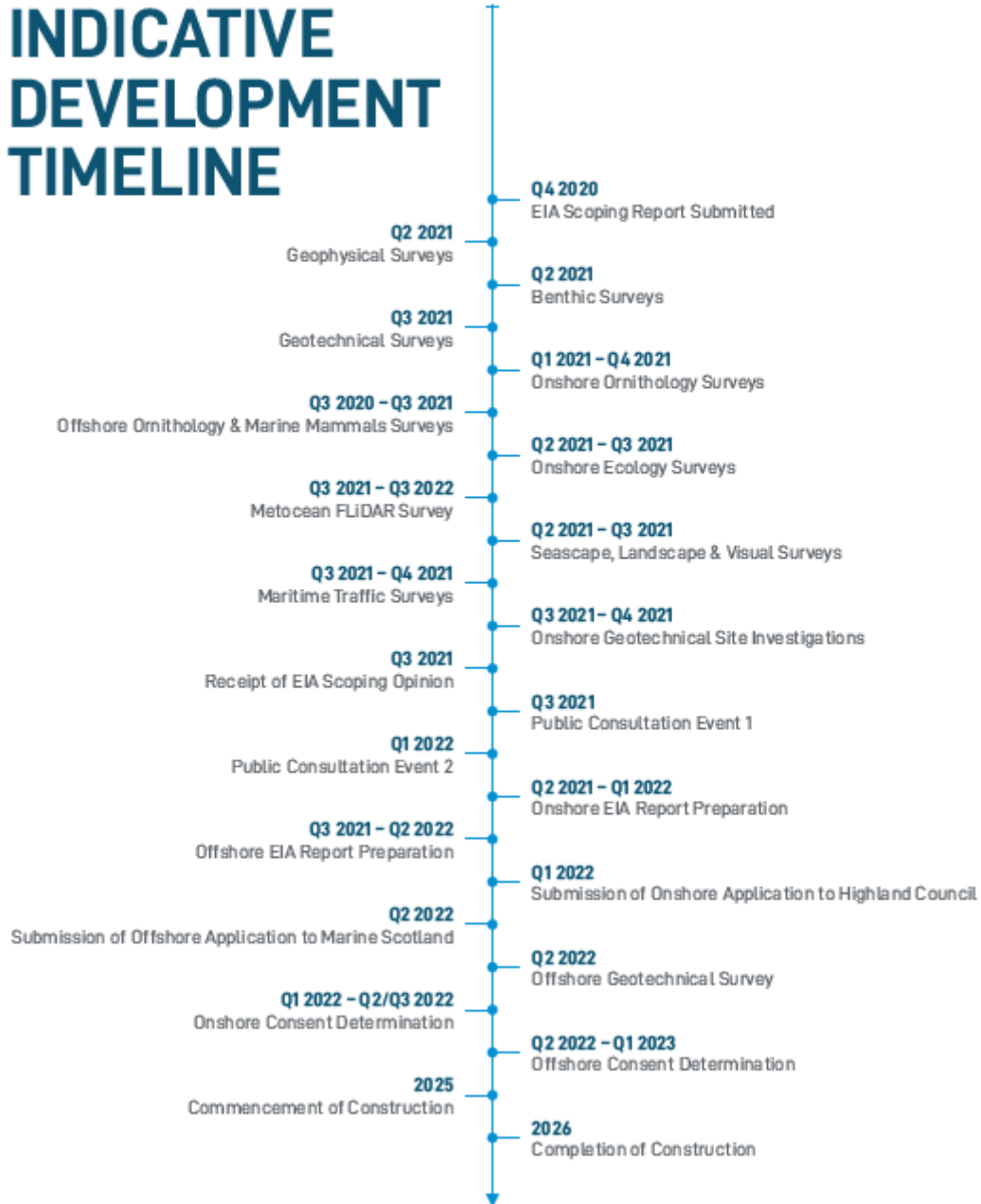


We have already begun the environmental surveys in the onshore and offshore environment and a number of studies to support the applications. The survey campaign and studies undertaken for the project are detailed below:

1. A site walkover survey has been undertaken to ground truth the above ground elements and constraints of the onshore site. Additionally, onshore geotechnical site investigations and studies are underway to inform onshore cable routing activities and substation siting. **ONGOING**
2. A programme of bird surveys is currently underway to identify the local ornithology features in order to support the offshore and onshore ornithology impact assessments. These surveys include terrestrial, breeding bird surveys, breeding seabird surveys and wintering bird surveys. **ONGOING**
3. A programme of terrestrial ecology surveys are ongoing to identify the local wildlife and ecology in order to support the terrestrial ecology impact assessment. These assessments will look at the potential impact on such species as otters and bats, as well as any protected or sensitive habitats or flowers, such as bogs. **ONGOING**
4. In order to ascertain the potential visual impacts on static viewpoints a number of windlines and photomontages will be created from all viewpoints to be assessed within the EIAs. **ONGOING**
5. The onshore EIA will undertake a high-level assessment of the turbine noise and potential impacts to receptors, in accordance with relevant guidance. **ONGOING**
6. Socio-economic studies are being undertaken to quantify aspects such as potential for direct, indirect, and induced jobs and GVA associated with the development and operation of the proposed project. A supply chain study is also being conducted in tandem. **ONGOING**
7. Geophysical seabed surveys have been undertaken to characterise the seabed and seabed features in order to inform the offshore EIA and to allow for detailed project design and cable routing activities. **COMPLETE**
8. Geotechnical investigations of the seabed will be undertaken to assess the technical stability of the seabed in order to inform the installation requirements for the subsurface structure and export cable. **ONGOING**
9. Benthic surveys have been conducted offshore in order to obtain samples of the seabed to characterise the benthic habitats, macrofaunal species and the quaternary sediments to support the offshore EIA. **COMPLETE**
10. A floating LIDAR buoy has been deployed in order to ascertain metocean characteristics for the offshore site, this data will be used to ensure that the correct floating wind technologies are selected for the Project. **ONGOING**
11. Shore-based maritime traffic surveys (summer and winter) of the offshore site area will be undertaken using a combination of Radar, AIS and visual observations. These surveys will characterise the shipping activities in the vicinity of the development in order to support the EIA. **ONGOING**
12. Aerial surveys are being undertaken to identify seabirds and marine mammals including whales, dolphins, porpoises and seals in the vicinity of the offshore site. **COMPLETE**
13. An archaeology and cultural heritage site survey was conducted to ascertain the position of any potentially vulnerable cultural heritage features within the onshore site. **COMPLETE**
14. Engagement with local fisheries is being undertaken to understand how they use the offshore wind farm site, cable route and surrounding area. **ONGOING**
15. Engagement with stakeholders, including local residents, community councils, local and national authorities. **ONGOING**



INDICATIVE DEVELOPMENT TIMELINE



THE DEVELOPMENT PROCESS

PREPARATION FOR THE APPLICATION

In December 2020 the EIA Scoping Report for both the onshore and offshore elements of the Project was submitted to Marine Scotland Licensing Operations Team (MS-LOT). Detailed feedback from statutory consultees was collected and has been used to help define the scope of the onshore and offshore EIAs.

ENVIRONMENTAL STUDIES / SURVEYS

Desk based assessments, consultations with statutory consultees and field studies are underway. These will define the baseline environment and identify receptors for consideration within the EIA Report.

PUBLIC EVENT

The project design and EIA scope will be presented to the public ahead of the applications being submitted. This online virtual exhibition is the first Public Consultation Event for the development and details both the onshore and offshore proposals. Your views and feedback at this stage will help shape the development of our proposal.

PREPARATION OF THE EIA REPORTS

The impacts of the proposed onshore and offshore designs will be assessed by competent experienced professionals using the relevant baseline information collected, various guidance, good practice guidelines and expert judgement. All the findings and proposed mitigation measures identified through the EIA process will be presented in the Offshore and Onshore EIA Reports.

FURTHER EVENTS

Our aim is to host a second Public Consultation Event closer to the time of submission to communicate any updates to the Project, in particular the offshore application, in order to showcase more detailed design decisions and collate any additional feedback into the final applications at this point.

SUBMISSION OF APPLICATIONS

A planning application for the onshore transmission works for the Pentland Floating Offshore Wind Farm under the Town and Country Planning (Scotland) Act 1997 will be submitted to The Highland Council. Additionally, an application for a marine licence and consent under Section 36 of the Electricity Act 1989 for the offshore development will be submitted to Marine Scotland. At this point, there will be a period for the public to formally comment on the proposals, information to the public on how to respond will be advertised through local press.

DETERMINATION OF APPLICATION

It is anticipated that it will take up to 1 year for the applications to be determined. During this time the project will continue with engineering studies to finalise the project requirements. During this time detailed supply chain discussions will also be held as well as finalising our community benefits associated with the project.

PREPARATION FOR CONSTRUCTION

The consents granted will likely have a number of conditions associated with them. Information on the detail of the project will be submitted in order to ensure they are in line with the consented project. Construction and environmental management and monitoring plans detailing how the project will be delivered will also be submitted for approval.

CONSTRUCTION

It is anticipated that construction will commence in 2025. The construction of the project is anticipated to take 1 year. An independent Environmental Clerk of Works will be employed to ensure that the construction is carried out in line with the consent.



FAQS

Q: Who are Highland Wind Limited?

A: Pentland Floating Offshore Wind Farm is being developed by Highland Wind Limited which is majority owned by a fund managed by Copenhagen Infrastructure Partners (CIP) with Hexion AB as a minority shareholder. Copenhagen Infrastructure Partners P/S (CIP) is a fund management company focused on energy infrastructure including offshore wind, onshore wind, solar photovoltaic (PV), biomass and energy from waste, transmission and distribution, reserve capacity and storage, and other energy assets like Power-to-X. It was founded in 2012 and currently has approximately EUR 16 billion under management. CIP is a major investor in the offshore wind sector and has significant investments in a number of offshore wind projects around the world. Copenhagen Offshore Partners (COP), which conducts offshore wind development activities on behalf of the funds managed by CIP, has recently opened an office in Edinburgh to support the funds' increasing engagement in Scotland, with a particular focus on floating wind.

Q: What are the benefits of floating wind and do we need it?

A: Almost 80% of the world's wind resource is in water deeper than 60 metres. It is where wind speeds are stronger and more consistent meaning higher capacity factors. It is looking extremely likely that floating wind will be essential to meet the UK's net-zero emission targets and is needed to deliver on ambitions set by the Committee on Climate Change. You can read more about floating wind on Board 3 – Why Floating Wind?

Q: How does Downreay T1 Project fit in with your proposal?

A: The Pentland Floating Offshore Wind Farm Project is an update to the Downreay T1 Project that was granted key consents and a site lease in 2017. The original Downreay T1 Project consisted of a two-turbine offshore wind farm with an installed capacity of between 8 to 12 MW, approximately 6 km off Downreay, Caithness. Highland Wind Limited acquired the Project and associated consent, licences and site lease in 2020. Highland Wind Limited are planning to utilise this existing consent by deploying a single demonstrator turbine ahead of the larger array (the focus of this exhibition), subject to a Consent Variation. This demonstrator turbine will be deployed ahead of the array to test the technology needed for the wider array but will ultimately form part of the Pentland Floating Offshore Wind Farm and will be included within the proposed maximum 10 turbines. The demonstrator turbine will also be located at least 8.2 km offshore. The current timeline would see the demonstrator deployed by 2023, subject to the award of the Consent Variation.

Q: What are your plans?

A: The primary objective of the Project is to test and demonstrate a technology solution for floating wind in Scotland. By progressing with the demonstrator project, followed by the wider array the capabilities of the local supply chain in Scotland will be better understood. This understanding will allow us to support the development of a strong local supply chain for floating wind in Scotland, helping to meet climate change targets, and providing highly skilled jobs and energy security. Highland Wind Limited firmly believes that this project will be an enabler for larger scale developments resulting from the current ScotWind Leasing Round and in turn will result in knowledge exchange and export opportunities in relation to the global floating offshore wind market.

Q: What technology are you using?

A: Highland Wind Limited will develop the project using the optimal technical, environmental and commercial solution. Currently, this technology is still evolving so the exact technological requirements for the project are still under consideration. We will look to establish our selected technology and suppliers once we have gathered all the information from our meteorological and seabed surveys to ensure the most efficient and technically feasible options are taken forward. Nonetheless, we are planning on using up to 10 turbines, with the maximum height of the turbine blade tip from the sea surface being 300 metres.

Q: Will I see the Pentland Floating Offshore Wind Farm from the shore?

A: The Pentland Floating Offshore Wind Farm EIA Application Boundary will be approximately 6.7 km from shore, this distance has been increased from the previously consented 6 km for the Downreay T1 Project in order to further reduce any visual impacts. It is anticipated that the closest turbine will be at least 8 km offshore from Sandside Bay. A selection of wirelines have been produced for relevant viewpoints around the coastline and showcase the likely views from shore for the maximum tip of the 300 m turbines. You can find these on Board 6: Seascape, Landscape and Visual Impact Assessment.

Q: Will there be disruptions during construction?

A: We are working to engage closely with landowners, local residents, the Maritime Coastguard Authority, ports and harbours and Traffic and Transport Scotland to ensure the development minimises disruptions to local communities as far as possible. We already understand there are some concerns regarding construction and operational traffic in the local area. This will be taken into account in our application.

Q: What about environmental impacts on seabirds and other marine life?

A: Renewable energy technologies are key to combatting the effects of climate change, which is considered one of the biggest threats to marine life. Floating wind is part of the solution for a greener and safer future. Nonetheless, any development activity in the marine environment has the potential to impact on marine life and seabirds. We are committed to following best practice and proactively undertaking environmental surveys and conducting assessments, monitoring and modelling to minimise any impact on wildlife during the project's development. The project team continues to engage with key environmental and conservation stakeholders and other relevant consultees in order to inform the scope of the Environmental Impact Assessments (EIA) and detail of the project related to the EIA.

Q: When will the Pentland Floating Wind Farm be completed?

A: We are planning to finish construction on commissioning the wider Pentland Floating Offshore Wind Farm array by 2026, to be fully operational by 2027. The single demonstrator turbine is planned to be deployed ahead of the wider array in 2023 to allow time to test and demonstrate the floating wind technology.

Q: How many homes will you power?

A: The Pentland Floating Offshore Wind Farm will provide enough green energy for up to 70,000 homes per year, equivalent to 64% of households in The Highland Council Area (based on 2019 figures). This would offset up to 125,000 tonnes of CO₂ when considering all types of fossil fuels (<https://www.gov.scot/publications/renewable-and-conversion-calculators/>).

Q: How are you involving the local community?

A: We are committed to early stakeholder engagement. We have contacted local community and community councils to offer a project overview. However, COVID19 has made it difficult to engage in person, hence the use of virtual consultation in this instance. Naturally, we would prefer to carry out stakeholder engagement in person and will do that as soon as we can. Our website contains information on the project or you can contact us on pentland-stakeholder@cip.dk where you can email the project team directly. Alternatively if you wish to you can fill in the feedback form which can be found in the virtual exhibition room. There is also the opportunity to converse directly with the Project Team through our live chat function which will be active between 12:00 – 14:30 and 18:00 – 20:30 on Tuesday 5th October.

Q: What are the benefits to the local community?

A: Highland Wind Limited is committed to ensuring this Project provides long term benefits to the local community. We are currently undertaking social and economic studies with involvement of the University of the Highlands and Islands (UHI) and leading industry experts to understand the positive impacts the project will have (both directly and indirectly) on the community, for example, through providing jobs, Gross Value Added (GVA) potential and demand for local services. Furthermore, we have commissioned a supply chain study to complement the socio-economic work in order to assess local supply chain capability and identify opportunities to support the project. When available, this information will be shared with any interested parties. We are at the early stages of developing a Community Benefits Fund, which would likely become available on commissioning of the array project. We will seek advice from a number of parties on the best way to administer this fund and would welcome any local views on this.

Q: How many jobs will this development provide to the local community?

A: This is an important aspect to Highland Wind Limited and a key insight that is expected to come out from the studies currently being undertaken. It requires an independent assessment of the local content and economic impact potential, based on the local supply chain capability and the project requirements, to produce a good estimate of the employment potential with this development in full-time equivalent (FTE) terms. One of the aims is to identify opportunities for a more ambitious outcome, both in terms of temporary and permanent direct jobs sourced locally throughout the project life cycle.

Q: Who else are you engaging with in the application process?

A: To date we have been in contact with a number of stakeholders including the Highland Council, Marine Scotland, Scrabster and Wick Harbour Authorities, local fisheries, NatureScot, Northern Lighthouse Board, the Maritime Coastguard Authority SEPA, landowners, Downreay Site Restoration Limited, NRTF Vulcan, Crown Estate Scotland, RSPB and Melvich Community Council. We plan on further engagement as the application progresses towards submission.

Q: I want to keep informed on project updates, how do I do this?

A: Updates on the project will be provided on our website at www.pentlandfloatingwind.com. A second public consultation event will also be held closer to the time of submission of the proposals to update the community on any refined elements of the project. Additionally, there will be an opportunity for the community to make formal comment on the proposals to Scottish Ministers and The Highland Council once our applications have been submitted. Details on how to go about this will be detailed in a local newspaper and published on our website at the time of submission.

Appendix C: May 2022 Consultation Materials

In-Person Event Boards – May 2022

WELCOME



Welcome to the public exhibition and consultation for the Pentland Floating Offshore Wind Farm. This public consultation event is designed to keep local residents and other interested stakeholders informed and to encourage feedback as the Pentland Floating Offshore Wind Farm progresses towards submission. We are committed to working with local communities and stakeholders to help shape the development of our proposal.

We are pleased to welcome you to this consultation event. The following information boards are designed to provide an introduction to the project. If you have any questions when reviewing the boards please reach out to one of the project team. This consultation is being undertaken both virtually and in-person. The virtual exhibition also includes information boards on the proposal including images, maps and visualisations of the wind farm in addition to frequently asked questions and an introduction video to provide an overview of the project and current development activities. Within the virtual exhibition there are also opportunities to ask the team questions and to provide feedback.

IN PERSON DROP-IN EVENTS

On Wednesday 11 May 2022 a public consultation event will be held at the Reay Golf Course from 14.00 - 20.00.

On Thursday 12 May 2022 a public consultation event will be held at the North Coast Visitor Centre in Thurso from 11.00 - 17.00.

LIVE CHAT QUESTION & ANSWER SESSION

On Wednesday 18 May 2022 the project team will be available to answer any further questions you may have on a live chat function in the virtual public exhibition during the following times: 12.00 - 14.30 and 18.00 - 20.30.

You can provide feedback using the feedback form in the virtual exhibition until 20 May 2022.

Our website www.pentlandfloatingwind.com provides further information about the project. Should you have any further questions or feedback once the consultation period for this exhibition has closed, you can contact us at pentland-stakeholder@cop.dk.

If you would like to provide us feedback on the event, consultation closes on 20 May 2022. The virtual exhibition space will remain live throughout the planning process.

WHO WE ARE – Pentland Floating Offshore Wind Farm is being developed by Highland Wind Limited which is majority owned by a fund managed by Copenhagen Infrastructure Partners (CIP) with Hexicon AB as a minority shareholder. Project development activities are being led by CIP's development partner, Copenhagen Offshore Partners (COP). The project development team is based in COP's Global Floating Wind Competence Centre, recently established in Edinburgh.



Copenhagen Infrastructure Partners P/S (CIP) is a fund management company focused on energy infrastructure including offshore wind, onshore wind, solar photovoltaic (PV), biomass and energy-from-waste, transmission and distribution, reserve capacity and storage, and other energy assets like Power-to-X.

CIP has offices in Copenhagen, Hamburg, New York, Tokyo, Utrecht, Melbourne and London. CIP was founded in 2012 by senior executives from the energy industry in cooperation with PensionDanmark. CIP manages eight funds and has approximately €16 billion under management.

www.cippartners.dk



Copenhagen Offshore Partners (COP) is a leading and experienced provider of project development, construction management, and operational management services to offshore wind projects.

The company is headquartered in Denmark and has offices in Taiwan, USA, Australia, Japan, South Korea, UK & Vietnam. COP's team of specialists has a broad range of competencies within project management, early and late-stage project development, engineering, construction, procurement, operational management as well as business development and project financing.

www.cop.dk



Hexicon AB is a leading floating offshore wind technology and project developer. It was founded in 2009 and is headquartered in Stockholm, Sweden.

www.hexicon.se

www.pentlandfloatingwind.com

THE PENTLAND FLOATING OFFSHORE WIND FARM



Pentland Floating Offshore Wind Farm will be located off the coast of Dounreay, Caithness.

The Pentland Floating Offshore Wind Farm will comprise up to ten turbines and will provide enough energy to power to approximately 70,000 homes, equivalent to approximately 65% of homes in the Highland Council Area (based on 2020 figures).

A single turbine will be deployed as the first stage of the Pentland Floating Offshore Wind Farm in 2025 to allow time to test and demonstrate the floating wind technology. The remaining turbines (up to nine) will be deployed during 2026.

The onshore substation for the project will be located adjacent to the Vulcan Naval Reactor Test Establishment (NRTE) and the former Dounreay Nuclear Facility.

Environmental Impact Assessments for the Pentland Floating Offshore Wind Farm are currently being prepared and will be submitted to Marine Scotland and the Highland Council in 2022.



DEVELOPMENT

A staged approach to the deployment of the floating technology underpins the development of the Pentland Floating Offshore Wind Farm, as well as our future floating projects in Scotland and globally.



INNOVATION

The innovative technology trialled in this project will be key to the commercialisation of this floating technology. It will deliver valuable insight into developing floating wind technology in Scotland.



LEARNING

The learnings from this will help contribute to the development of a strong Scottish supply chain for floating wind.



WHY FLOATING OFFSHORE WIND?



Currently the majority of offshore wind farms in Scotland are fixed directly to the seabed, there are only two floating wind farms in operation. Unlike traditional fixed bottom wind farms, floating wind farms use wind turbine generators mounted on a floating substructure which is connected to the seabed using mooring lines and anchors. Much of the seabed around Scotland is too deep to be well suited to fixed bottom turbines. Floating offshore wind provides a technological solution which enables the production of large amounts of renewable energy which underpins Scotland and the UK's energy transition and is key to achieving net zero.



BENEFITS TO SCOTLAND

- Floating offshore wind offers the offshore wind industry key opportunities to create a new supply chain and job opportunities.
- Fixed bottom wind is now one of the most economically competitive forms of energy and it is expected that floating wind will follow suit.
- Scotland is a world leader in floating technology and is well positioned to capitalise on advances in the sector due to experience in oil and gas and maritime heritage.
- The significant global pipeline for floating offshore wind could create export opportunities for the local supply chain in Scotland.

INSTALLATION

One of the advantages with floating offshore wind is the capacity for the complete wind turbine and substructure assembly to be towed to site where it is hooked up to the pre-installed mooring system which allows it to be installed much quicker than fixed bottom turbines that require calmer seas and wind conditions during installation.

SUBSEA CABLES

A key design difference between a fixed bottom and floating turbine is the dynamic nature of the cables. The cable system must accommodate the movement of the floating substructure. This is typically achieved by adding a buoyancy element into the design.

FLOATING SUBSTRUCTURES

Currently there are over 40 floating wind turbine generators (WTGs) substructure concepts at differing stages of technical maturity in the industry. Each has varying dimensions to meet the unique engineering challenges associated with floating turbines, turbine sizes and project specific requirements.

MOORING & ANCHORS

The mooring and anchoring systems are responsible for maintaining the position of the floating wind turbine generators (WTGs) during the most extreme events or energetic storms. There are a number of different anchoring solutions available which can be deployed depending on the site conditions.



Generic floating structure – for illustrative purposes only, not a representation of the final substructure or mooring and anchoring design

The final project design has not yet been determined and will depend on the seabed conditions, engineering studies and environmental impacts assessed. The Pentland Floating Offshore Wind Farm Project has adopted a project design envelope approach to retain flexibility to capitalise on innovations during the next stages of the project.

PROJECT DESCRIPTION

OFFSHORE PROPOSAL



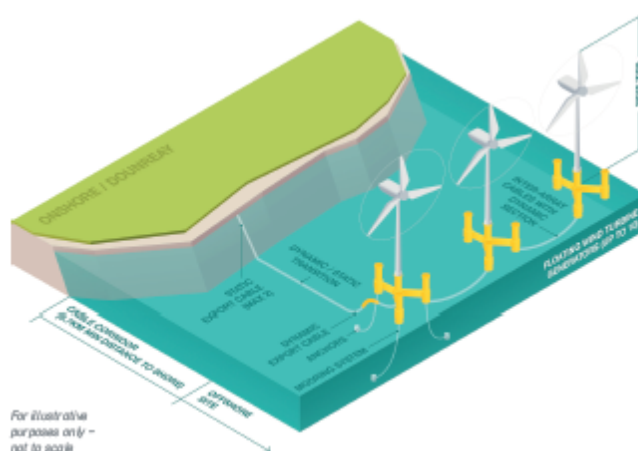
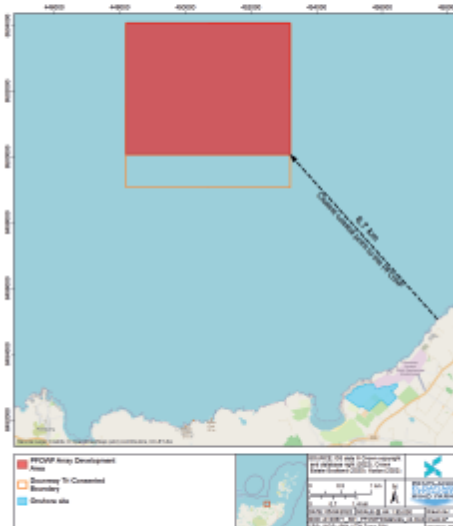
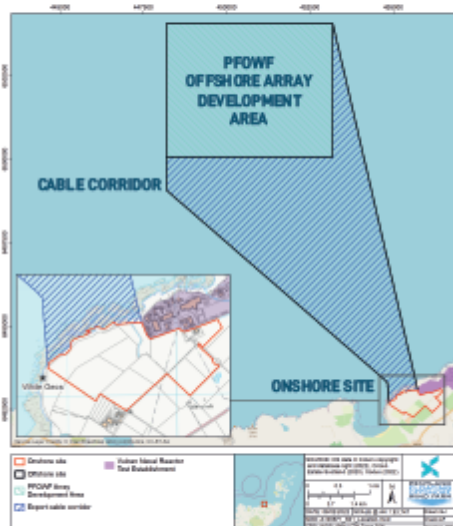
PROJECT DESIGN ENVELOPE

The Pentland Floating Offshore Wind Farm has adopted a design envelope approach to develop the project. This is a common approach with major infrastructure projects including offshore wind farms. The design envelope approach does not consent specific technology, but allows outline consent to be granted and enables projects impacts to be assessed on the basis of maximum parameters or worst case scenarios for specific receptors. This gives projects the flexibility to utilise new innovations in emerging floating wind technology and greater information on site conditions once this is available.

The Environmental Impact Assessment will consider the parameters that represent the worst impact for receptors caused by the development. As such, the project design envelope presented here shows the proposed maximum parameters for the project. The final project parameters may not reach these maximum limits and the final project design will be submitted for approval prior to construction.

The Pentland Floating Offshore Wind Farm offshore development area is 20 km² within the Pentland Firth, approximately 6.7 km north of the coast of Dounreay, Caithness. The offshore infrastructure works will comprise:

- Up to a maximum of ten floating wind turbine generators;
- Turbines will have a maximum tip height of 300 m;
- Floating substructures (one per turbine) to support the turbines;
- Mooring systems (anchors and mooring lines) to ensure the turbines stay within a given footprint;
- A network of inter-array cabling linking the individual wind turbines; and
- A maximum of two offshore export cables connecting the offshore wind farm to the onshore substation.



As part of the Environmental Impact Assessment (EIA) process, we undertook the following activities:

- Geophysical and geotechnical seabed surveys;
- Environmental surveys;
- Technical and engineering studies; and
- Discussions with stakeholders and the local community.

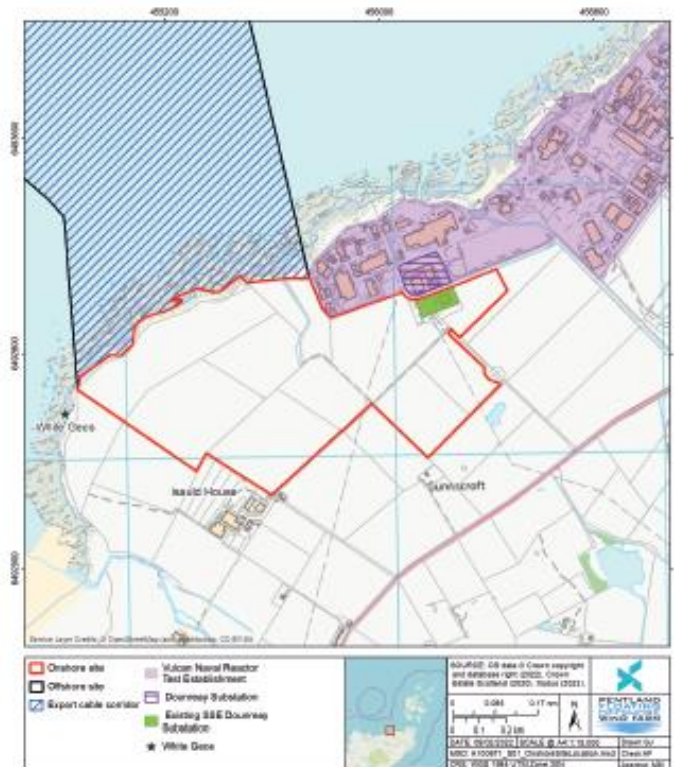
Through these activities we were able to gain an understanding of the conditions of the site which will ensure that the optimal design can be adopted for the project.

PROJECT DESCRIPTION

ONSHORE PROPOSAL

**PENTLAND
FLOATING
OFFSHORE
WIND FARM**

A landfall site has been identified at Dounreay, immediately adjacent to the Vulcan Naval Reactor Test Establishment (NRTE) and the former Dounreay Nuclear Facility.



The onshore infrastructure will comprise:

- A cable landfall west of the Vulcan nuclear facility – the preferred option is for the cable to be brought to shore by Horizontal Directional Drilling (HDD) depending on HDD feasibility studies;
- An a maximum of two onshore cables buried to a depth of approximately 1 metre;
- A cable Transition Joint Bay (TJB) where offshore and onshore cables are spliced together;
- An onshore substation and switchgear; and
- A temporary construction compound.

It is currently proposed that the grid connection point will be into the existing SSE 132/33/11 kV Dounreay Substation and a connection agreement has been received from Scottish and Southern Electricity Networks (SSEN) Transmission.

The onshore substation or switchgear will include the electrical equipment required to connect the Project to the grid. This may include switchgear, transformers, harmonic filter, reactive compensation devices, protection equipment, batteries and other auxiliary equipment. The entire footprint is likely to be an area of approximately 100 m x 60 m (0.60 hectares).

While the majority of electrical plant is expected to be located indoors, due to the coastal location some equipment may also be located outside. The equipment is expected to be broadly adjacent to existing infrastructure in the area. The onshore infrastructure will be located within the red line boundary shown on the above map. The exact location of the access roads will be decided at a later stage.



For illustrative purposes only – final substation design and location may differ

CONSENTS & ASSESSMENTS



The project will make two separate applications for both the offshore and onshore components.

OFFSHORE

Marine licences and consent under Section 36 of the Electricity Act 1989 will be sought from Marine Scotland for the offshore infrastructure.

ONSHORE

An application for planning permission will be made under Section 57 of the Town and Country Planning (Scotland) Act 1997 to The Highland Council for the onshore elements of the project.

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

EIA is a systematic process which identifies and assesses the potential significant environmental effects of a project, informs the design of the project from an environmental perspective, and sets out standard industry and additional mitigation measures to eliminate or minimise the project's effect on the environment. An EIA report is the written output of the EIA process.

Two EIA reports will be produced for the project, one for the onshore project components and one for the offshore project components. These will demonstrate that all potentially significant effects on the environment have been considered and assessed and that appropriate mitigation measures to reduce any significant effects are identified and commitments made to implement these.



RESPONDING TO FEEDBACK RECEIVED DURING THE FIRST CONSULTATION EVENT

During the first consultation process we received valuable feedback regarding local concerns over certain aspects of the project. The Pentland Floating Offshore Wind Farm is currently undertaking Environmental Impact Assessments (offshore and onshore), to establish the potential impacts on various receptors in the vicinity of the Project. An extensive programme of surveys have been undertaken to underpin the Environmental Impact Assessments (EIA). The final results of both the offshore and onshore assessments will be detailed within the respective Offshore and Onshore EIA Reports but preliminary results, where available, are indicated below:



VISUAL IMPACTS

Feedback was received concerning the potential visual impacts of the Pentland Floating Offshore Wind Farm. In particular, there were concerns regarding the inclusion of wirelines rather than photo montages at the previous consultation event. In order to address this feedback, we have developed photomontages for selected viewpoints. To further aid understanding, we have also developed a virtual reality representation of the windfarm which provides an indication of what the windfarm will look like from different locations along the coastline, and this is available in the virtual exhibition space. The photomontages can be seen on Board 6: Seascape, Landscape and Visual Impacts. The impact assessments on seascape, landscape and visual amenity are currently on-going, and the final results of the turbine and substation visual assessments will be detailed within the respective Offshore and Onshore EIA Reports.



IMPACT ON TOURISM

Feedback was received concerning the potential impact of the Pentland Floating Offshore Wind Farm on tourism. Studies have shown that existing and proposed wind farm developments are predicted to have little overall economic effect on tourism in Scotland. For more information: <https://www.climatechange.org.uk/research/projects/the-impact-of-wind-farms-on-scottish-tourism/>. Assessments of the impacts of the Pentland Floating Offshore Wind Farm on tourism are on-going but preliminary results show that there will be no significant effects on tourism throughout the life-cycle of the project. The final results of the assessment will be available in the Offshore EIA Report.



IMPACT ON BIRDS

During the first consultation event, feedback was received concerning the potential impact of the Pentland Floating Offshore Wind Farm on birds. Detailed assessments on marine and terrestrial birds are currently being undertaken and are supported by in-depth modelling with input from industry leading experts and consultation with regulators. In terms of the Onshore Development, preliminary results of the terrestrial ornithology impact assessment indicate that there will be no significant effects on ornithology features from the onshore development activities. For the Offshore Development, the modelling is still on-going. The final results will be detailed within the respective Offshore and Onshore EIA Reports.



IMPACT ON MARINE MAMMALS

We received feedback concerning the potential impact of the Pentland Floating Offshore Wind Farm on marine mammals. Detailed assessments on the potential impacts on marine mammals and other megafauna e.g. basking sharks are currently being completed. These are supported by the results of aerial surveys and underwater noise modelling. Currently the underwater noise modelling assessments are on-going with input from industry leading experts. However, preliminary results of the underwater noise modelling highlight that there will be no significant effects on marine mammals from the pre-construction and construction related activities. The final results of the assessments, including the findings of effects on marine mammals from other assessed impacts will be detailed within the Offshore EIA Report.



IMPACTS ON SHIPPING & NAVIGATION

Feedback was received concerning the potential impact of the Pentland Floating Offshore Wind Farm on shipping and navigation. The impact assessment on shipping and navigation has been supported by vessel traffic surveys and various consultations, including hazard identification workshops with relevant stakeholders. Currently the impact assessment is on-going. However, it is anticipated from preliminary results that there will be no significant effects on shipping and navigation with the implementation of standard best practices and mitigations. The final results of the assessments will be detailed within the Offshore EIA Report.



IMPACT ON FISHERIES

During the first consultation event, concerns were raised on the potential impact of the Pentland Floating Offshore Wind Farm on fisheries. Local fishers were initially engaged for site investigation surveys in 2021. A consultation workshop was held in November 2021 and SFF, SWFPA, OFA, NECRIFG and local fishers were invited to attend. The Project FIR reached out to local fishers in the area to supply flyers for the workshop to maximise attendance as far as practicable. Since the workshop was held, the project has undertaken to reduce the number of anchors and mooring lines from 12 to 9 which will reduce the impacts on other sea users. We have used the feedback from the workshop in the EIA to assess impacts on commercial fisheries. Moving forwards we will continue to engage with the fishing industry. Preliminary results from the commercial fisheries impact assessment indicate that there will be no residual significant effects with the implementation of mitigations which will be detailed in the Fisheries Management and Mitigation Strategy. The final results of the assessment will be detailed within the Offshore EIA Report.



IMPACTS ON FISH ECOLOGY

Detailed assessments are currently being undertaken to assess the potential impacts of the Pentland Floating Offshore Wind Farm on fish ecology. This is supported by underwater noise modelling and the results of the benthic habitat surveys. Currently the underwater noise modelling assessments are on-going with input from industry leading experts. However, based on preliminary results of the underwater noise modelling and other supporting assessments, it is anticipated that there will be no significant effects on fish ecology. The final results of the assessments will be detailed within the Offshore EIA Report.



IMPACTS ON BENTHIC ECOLOGY

Detailed assessments are currently being undertaken to assess the potential impacts of the Pentland Floating Offshore Wind Farm benthic ecology. This is supported by the findings of benthic habitat surveys carried out across the Offshore Site in 2021. It is anticipated from preliminary assessment results that there will be no significant effects on benthic ecology. The final results of the assessments will be detailed within the Offshore EIA Report.



IMPACTS ON TERRESTRIAL HABITATS & ECOLOGY

The terrestrial habitats and ecology impact assessments have been supported by a number of terrestrial ecology and habitat surveys at the Onshore Site. The findings of these assessments show that no significant effects on terrestrial ecological features are predicted on sensitive coastal and wetland habitats, watercourses, protected or notable plants, bats, and other protected mammals, reptile species and invertebrates. The full details of the assessment and results will be provided in the Onshore EIA Report.



IMPACTS ON AVIATION

The impact assessment for aviation and radar activity is on-going. However, it is anticipated from preliminary results that there will be no significant effects on aviation and radar with the implementation of standard best practices and mitigations. The final results of the assessments will be detailed within the Offshore EIA Report.



BENEFITS TO THE LOCAL COMMUNITY & SUPPLY CHAIN

The Project is currently consulting on community benefit approach. The project is committed to supporting local suppliers, where possible, and developing the project so that it promotes the welfare, livelihood and sustainability of local communities. You can find more details on Board 8: Benefits to the Community on how to get involved in the consultation process and further information on supply chain engagement and contribution to the local economy.

BENEFITS TO THE COMMUNITY



We want to ensure the Pentland Floating Offshore Wind Farm provides long term benefits to communities local to the development. We are working with local schools and universities to provide support to skills development in the renewable industry. We are currently consulting on the development of a community benefit fund. We have also completed a supply chain assessment and socio-economic studies to understand the benefits the project will bring to the community through jobs and value created.



COMMUNITY BENEFIT FUND

We are at the early stages of developing a community benefit fund for the Pentland Floating Offshore Wind Farm, which would likely become available on commissioning of the array project. The fund will support local projects that are focused on climate smart initiatives.

We have commissioned Foundation Scotland who are consulting locally on the development of this fund and would welcome your views. A representative from Foundation Scotland will be available at the in-person drop-in events being held in Thurso and Reay. You can also provide feedback on the community benefit fund through an online questionnaire available at: www.foundationscotland.org.uk/pentland

SUPPLY CHAIN ASSESSMENT & LOCAL VALUE CREATION

The Pentland Floating Offshore Wind Farm is committed to supporting local suppliers where possible and developing the Project so that it promotes the welfare, livelihood and sustainability of local communities. In 2021 the project team met with a number of local suppliers and negotiated a Memorandum of Understanding with Scrabster Harbour Trust, to work together on the development of operations and maintenance requirements, services and facilities. This shows a commitment to work collaboratively to investigate the potential for construction support services and major component change out for the floating wind turbines.

In 2021, we undertook a social and economic study in partnership with the University of the Highlands and Islands (UHI) and leading industry experts, to understand the positive impacts the project will have (both directly and indirectly) on the community, for example, through providing jobs, Gross Value Added (GVA) potential and demand for local services. We have also commissioned a supply chain study to inform the socio-economic work in order to assess local supply chain capability and identify opportunities to support the project.

It is anticipated that during the lifetime of the Pentland Floating Offshore Wind Farm, between 750-800 FTE job-years in Caithness and between 2,400-3,300 FTE job-years in the Highlands and Islands will be created. The Pentland Floating Offshore Wind Farm is anticipated to create around £50 million for Caithness and £150-200 million for Highlands and Islands of Gross Value Added at 2021 prices. These numbers will be updated as we finalise the detailed design, procurement activities and construction and operations and maintenance strategies. The socio-economic impacts of the Project will be assessed in detail within the Environmental Impact Assessment, as set out on Consents & Assessments.

SKILLS DEVELOPMENT

The Pentland Floating Offshore Wind Farm is supporting an Education and Training Fund which will award scholarships to selected students from Thurso and Farr High Schools, who are going on to study higher education and training programmes focussed on Science, Technology, Engineering and Mathematics.

We are proud to have students from the University of Highland and Islands (UHI) and the University of Strathclyde interning with the project, enabling them to gain offshore wind industry experience. Meet Grant, an intern on the Pentland Floating Offshore Wind Farm:

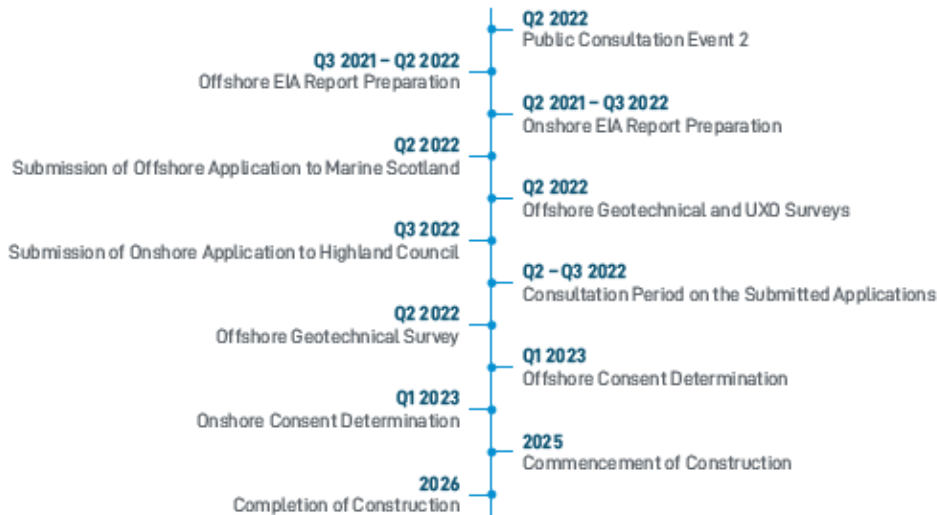


GRANT ANDERSON

I am currently in my final year of Energy Engineering at the UHI Outer Hebrides and

working as an intern on the Pentland Floating Offshore Wind Farm. The internship has allowed me to be fully involved with a range of different disciplines including engineering, health and safety and project management. I have been able to apply many elements of my degree program during the internship including data analysis, report writing and computer modelling. More importantly, it has allowed me to get relevant hands-on experience on a current project which will be valuable for any future employment in the offshore wind world. I have really enjoyed being part of a dynamic and motivated team.

DEVELOPMENT TIMELINE



THE DEVELOPMENT PROCESS

PREPARATION OF THE EIA REPORTS

The Pentland Floating Offshore Wind Farm is currently at the stage of preparing the EIA Reports for Submission. Within the EIA Reports, impacts of the proposed onshore and offshore project design will be assessed by competent experienced professionals, using the relevant baseline information collected, various guidance, good practice guidelines and expert judgement. All the findings and proposed mitigation measures identified through the EIA process will be presented in the Offshore and Onshore EIA Reports. Desk based assessments and field studies helped to define the baseline environment and identify receptors for consideration and the assessments are supported by detailed modelling and technical studies. For further information, please see Consents & Assessments.

The project design and EIA scope draws on the feedback from statutory consultees and the comments received during the first Public Consultation Event. Your views and feedback during this second consultation period will continue to help shape the development of our project proposals.

SUBMISSION OF APPLICATIONS

A planning application for the onshore transmission works for the Pentland Floating Offshore Wind Farm under the Town and Country Planning (Scotland) Act 1997 will be submitted to The Highland Council. Additionally, an application for a marine licence and consent under Section 36 of the Electricity Act 1989 for the offshore development will be submitted to Marine Scotland. At this point, there will be a period for the public to formally comment on the proposals, information to the public on how to respond will be advertised through local press.

DETERMINATION OF APPLICATION

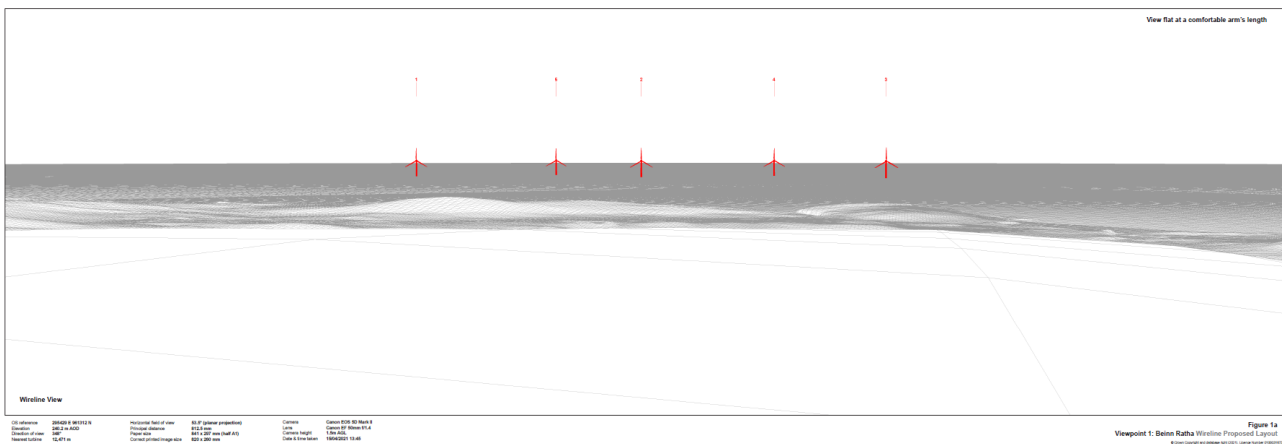
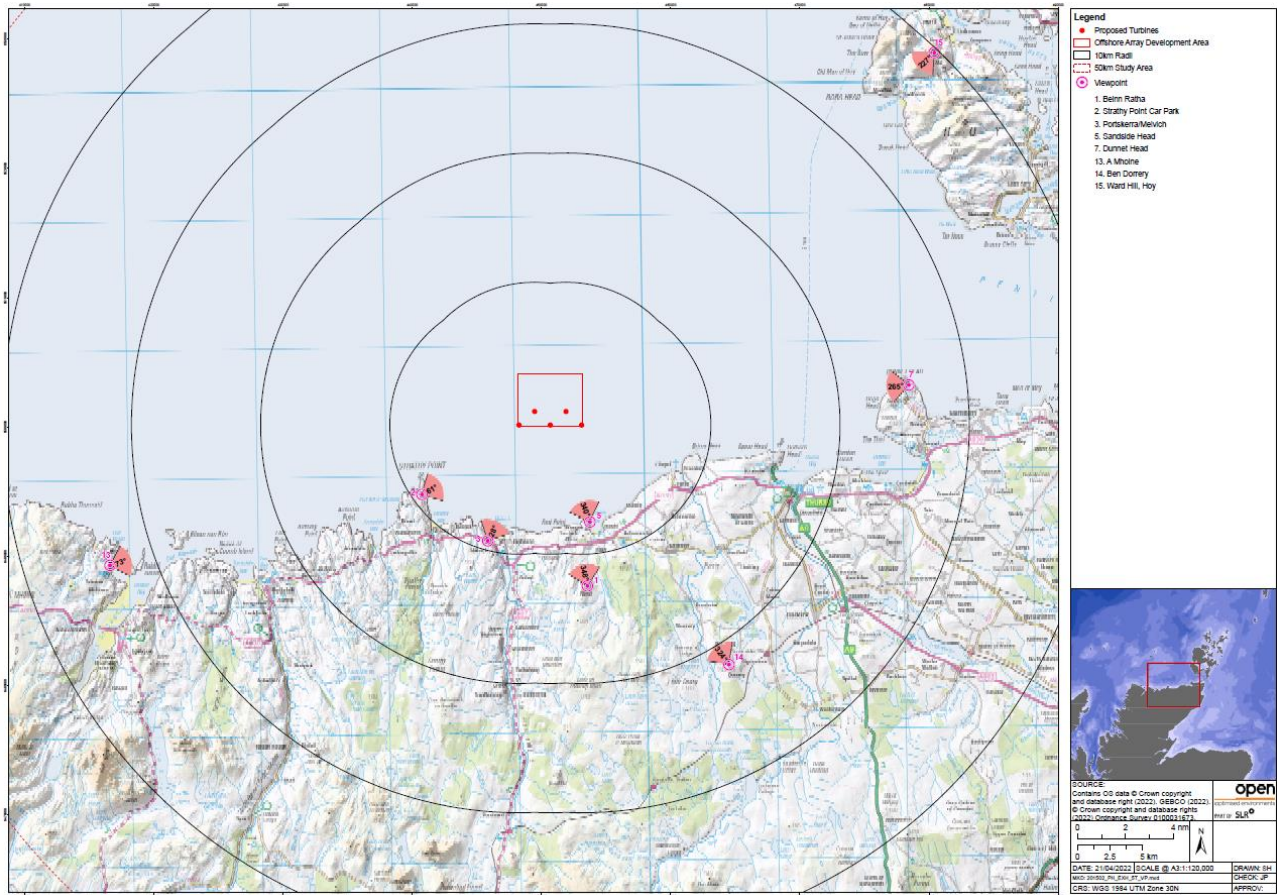
It is anticipated that it will take up to 1 year for the applications to be determined. During this time the project will continue with engineering studies to finalise the project requirements. During this time detailed supply chain discussions will also be held as well as finalising our community benefits associated with the project.

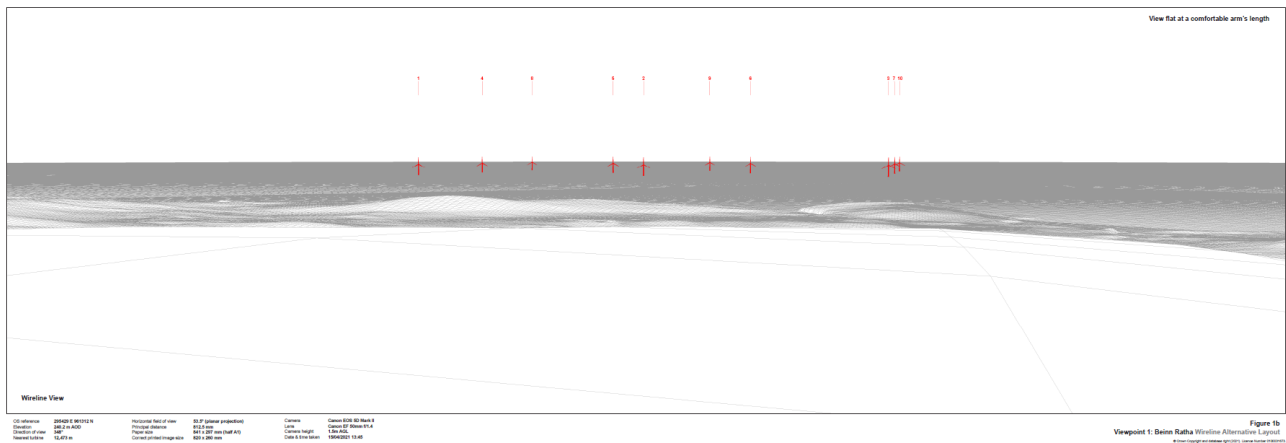
PREPARATION FOR CONSTRUCTION

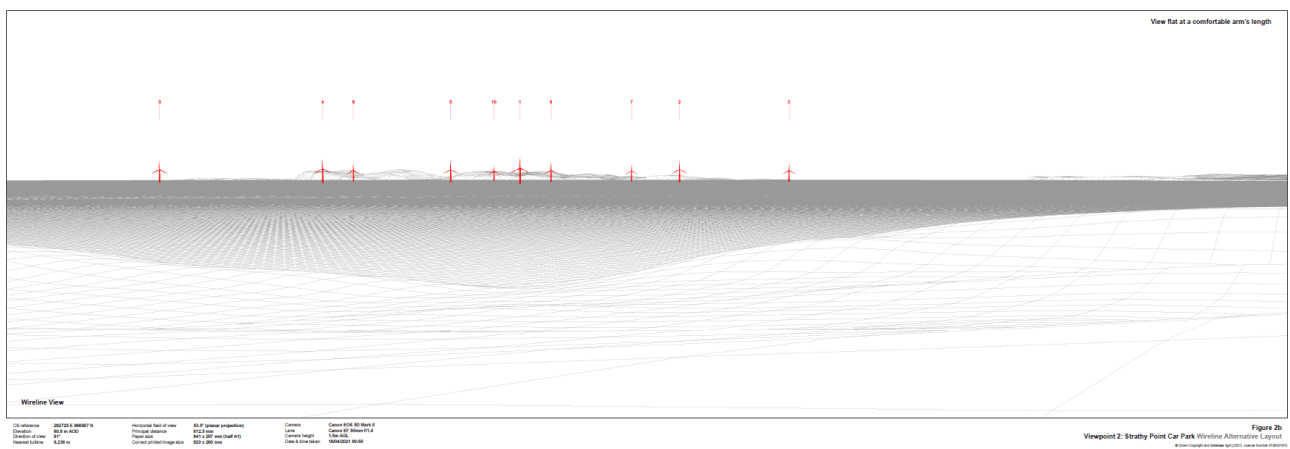
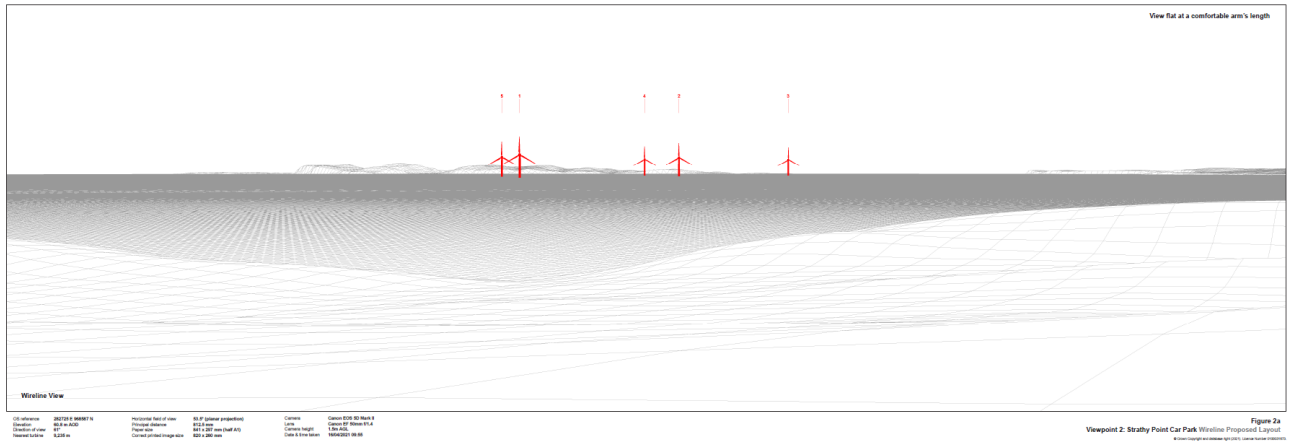
The consents granted will likely have a number of conditions associated with them. Information on the detail of the project will be submitted in order to ensure they are in line with the consented project. Construction and environmental management and monitoring plans detailing how the project will be delivered will also be submitted for approval.

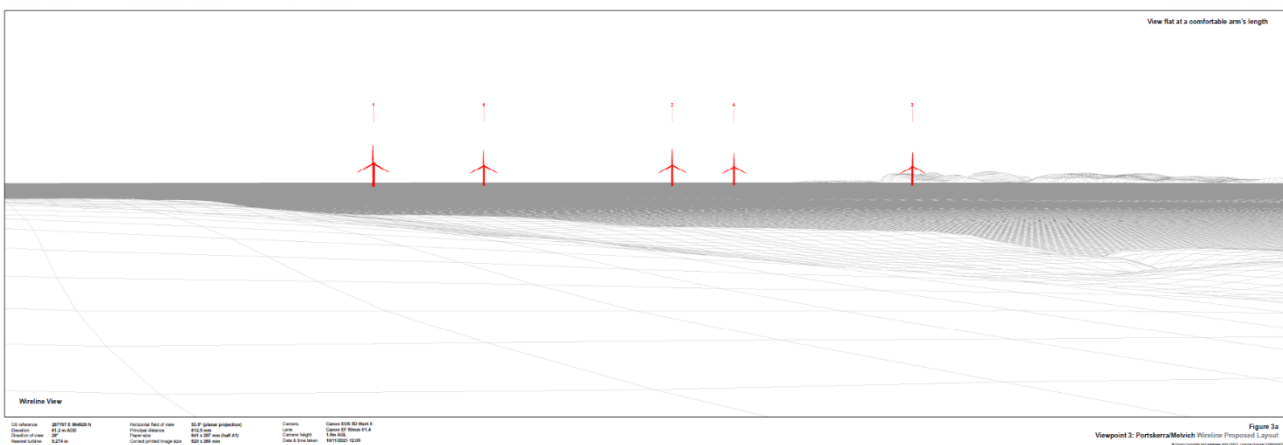
CONSTRUCTION

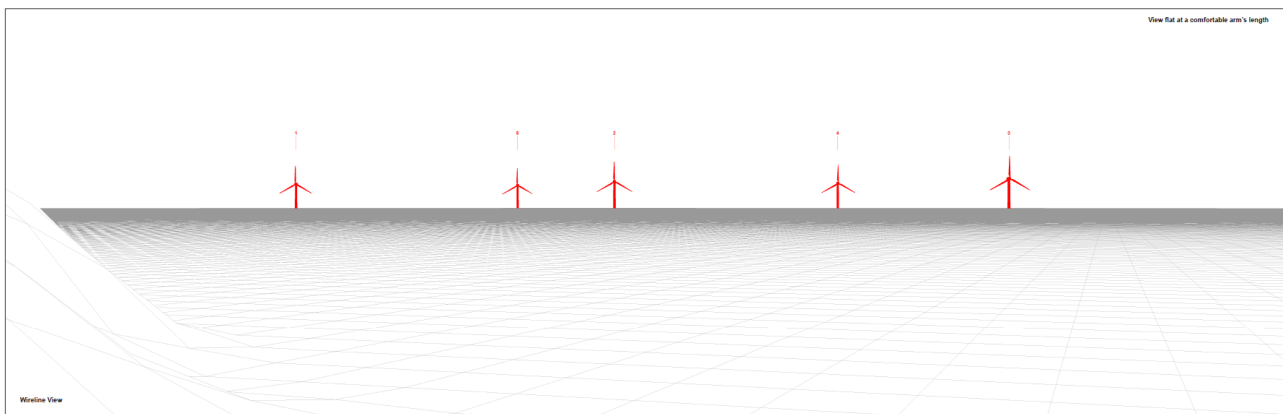
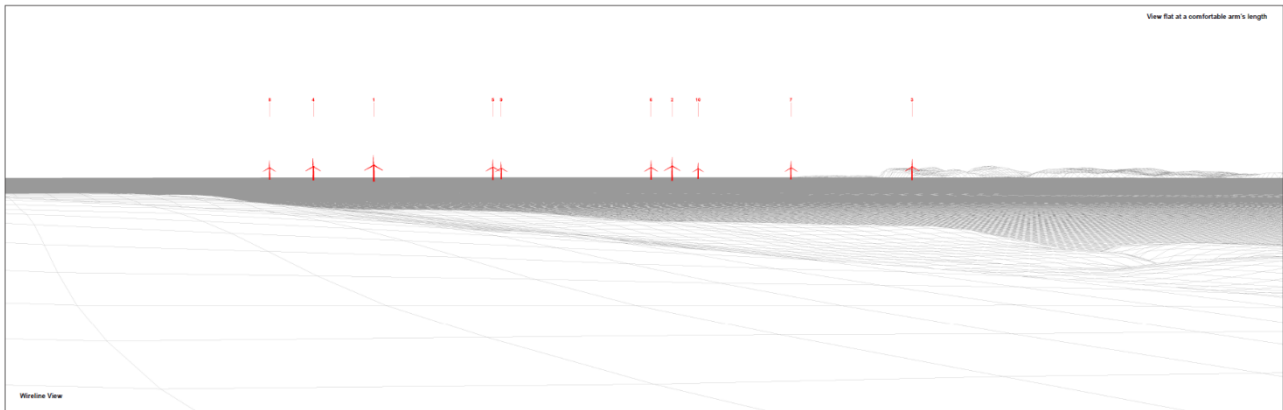
It is anticipated that construction will commence in 2025. The construction of the project is anticipated to take place within a two year period. An independent Environmental Clerk of Works will be employed to ensure that the construction is carried out in line with the consent.

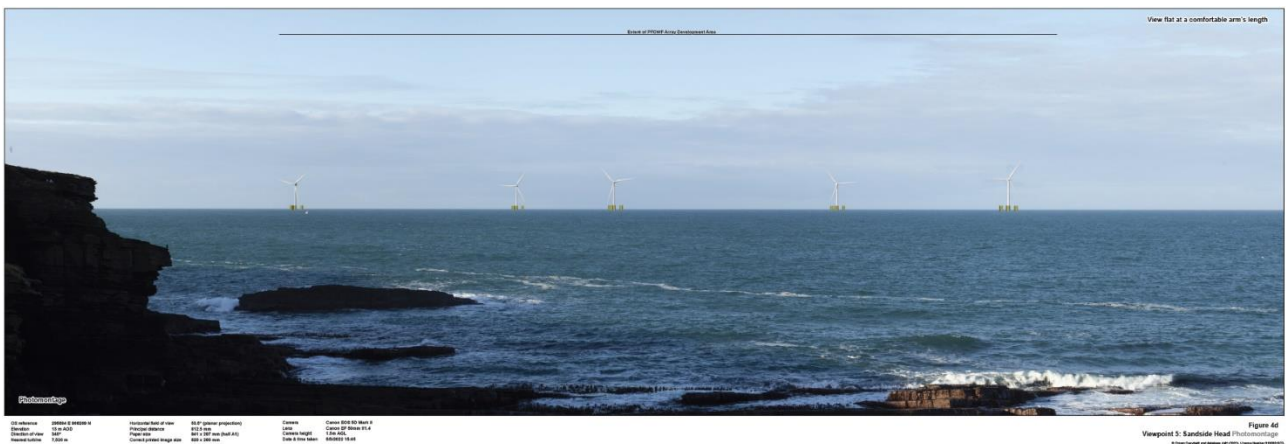
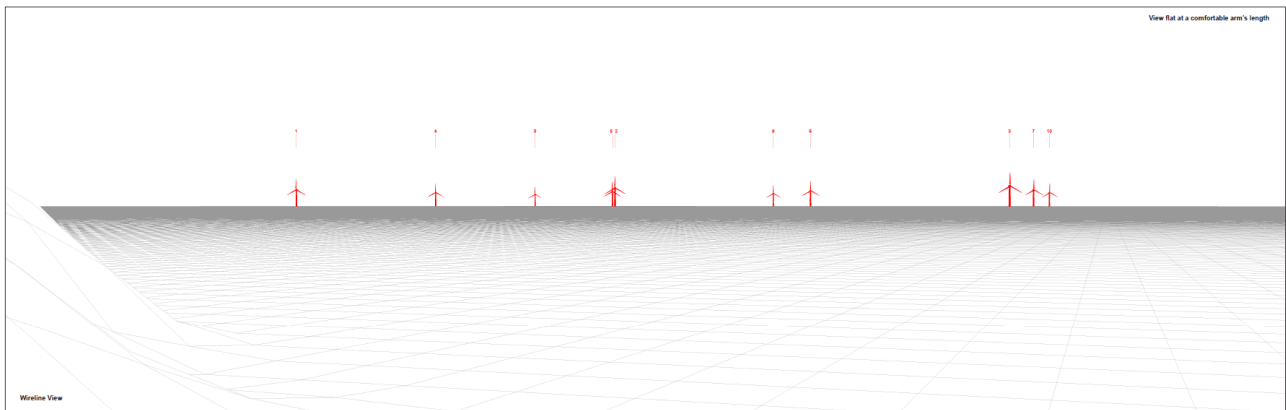












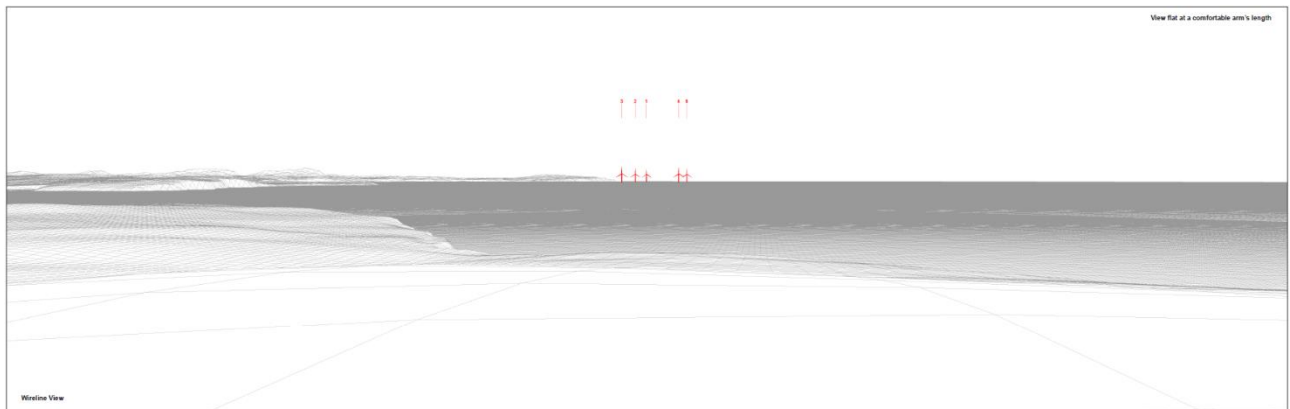


Figure 5a
Viewpoint 7: Dunnet Head Windline Proposed Layout
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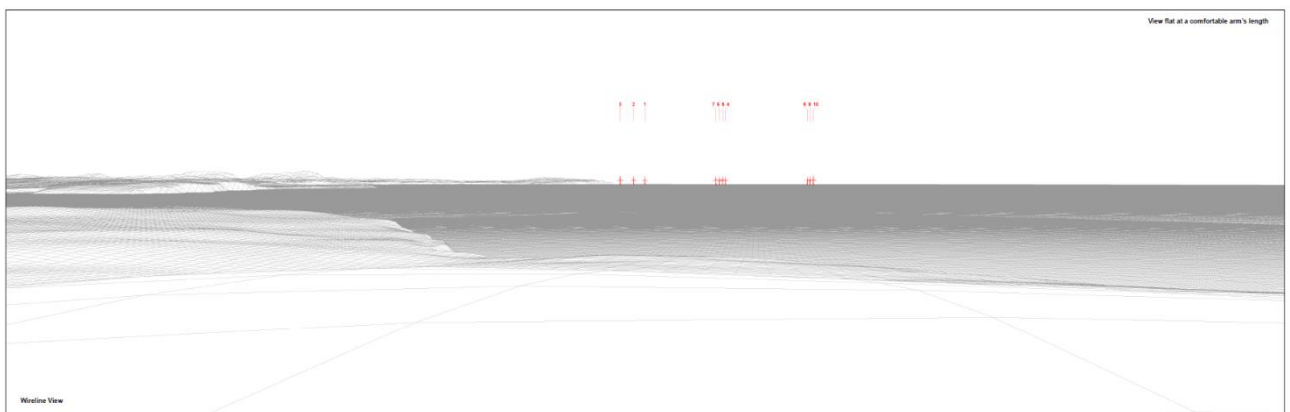


Figure 5b
Viewpoint 7: Dunnet Head Windline Alternative Layout
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Virtual Exhibition Boards – May 2022



WELCOME

Welcome to the virtual public exhibition and consultation for the Pentland Floating Offshore Wind Farm. This is the second consultation event and is designed to keep local residents and other interested stakeholders informed and to encourage feedback as the Pentland Floating Offshore Wind Farm progresses towards submission of its application documents. We are committed to working with local communities and stakeholders to help shape the development of our proposal.

This consultation is being undertaken both virtually and in-person. This virtual exhibition is similar to what you would expect to find at a traditional public exhibition including information boards on the proposal, opportunities to ask the team questions and possibilities to provide feedback. In addition we will hold two drop-in events in Thurso and Reay at which the project team will be available to answer questions on the project.

This virtual exhibition includes images, maps, frequently asked questions and an introduction video to provide an overview of the project and current development activities.

IN PERSON DROP-IN EVENTS

On Wednesday 11 May 2022 a public consultation event will be held at the Reay Golf Course from 14.00 - 20.00.

On Thursday 12 May 2022 a public consultation event will be held at the North Coast Visitor Centre in Thurso from 11.00 - 17.00.

LIVE CHAT QUESTION & ANSWER SESSION

On Wednesday 18 May 2022 the project team will be available to answer any further questions you may have on a live chat function in the virtual public exhibition during the following times: 12.00 - 14.30 and 18.00 - 20.30.

You can provide feedback through the feedback form in this virtual exhibition until 20 May 2022.

Our website www.pentlandfloatingwind.com provides further information about the project. Should you have any further questions or feedback once the consultation period for this exhibition has closed, you can contact us at pentland-stakeholder@cop.dk.

If you would like to provide us feedback on the event, consultation closes on 20 May 2022. The virtual exhibition space will remain live throughout the planning process.

WHO WE ARE

Pentland Floating Offshore Wind Farm is being developed by Highland Wind Limited which is majority owned by a fund managed by Copenhagen Infrastructure Partners (CIP) with Hexicon AB as a minority shareholder. Project development activities are being led by CIP's development partner, Copenhagen Offshore Partners (COP). The project development team is based in COP's Global Floating Wind Competence Centre, recently established in Edinburgh.



Copenhagen Infrastructure Partners P/S (CIP) is a fund management company focused on energy infrastructure including offshore wind, onshore wind, solar photovoltaic (PV), biomass and energy-from-waste, transmission and distribution, reserve capacity and storage, and other energy assets like Power-to-X.

CIP has offices in Copenhagen, Hamburg, New York, Tokyo, Utrecht, Melbourne and London. CIP was founded in 2012 by senior executives from the energy industry in cooperation with PensionDanmark. CIP manages eight funds and has approximately €16 billion under management.

www.cippartners.dk



Copenhagen Offshore Partners (COP) is a leading and experienced provider of project development, construction management, and operational management services to offshore wind projects.

The company is headquartered in Denmark and has offices in Taiwan, USA, Australia, Japan, South Korea, UK & Vietnam. COP's team of specialists has a broad range of competencies within project management, early and late-stage project development, engineering, construction, procurement, operational management as well as business development and project financing.

www.cop.dk



Hexicon AB is a leading floating offshore wind technology and project developer. It was founded in 2009 and is headquartered in Stockholm, Sweden.

www.hexicon.eu

Boards

THE PENTLAND FLOATING OFFSHORE WIND FARM

Pentland Floating Offshore Wind Farm will be located off the coast of Dounreay, Caithness.

The Pentland Floating Offshore Wind Farm will comprise up to ten turbines and will provide enough energy to power to approximately 70,000 homes, equivalent to approximately 65% of homes in the Highland Council Area (based on 2020 figures).

A single turbine will be deployed as the first stage of the Pentland Floating Offshore Wind Farm in 2025 to allow time to test and demonstrate the floating wind technology. The remaining turbines (up to nine) will be deployed during 2026.

The onshore substation for the project will be located adjacent to the Vulcan Naval Reactor Test Establishment (NRTE) and the former Dounreay Nuclear Facility.

Environmental Impact Assessments for the Pentland Floating Offshore Wind Farm are currently being prepared and will be submitted to Marine Scotland and the Highland Council in 2022.



DEVELOPMENT



A staged approach to the deployment of the floating technology underpins the development of the Pentland Floating Offshore Wind Farm, as well as our future floating projects in Scotland and globally.

INNOVATION



The innovative technology trialled in this project will be key to the commercialisation of this floating technology. It will deliver valuable insight into developing floating wind technology in Scotland.

LEARNING



The learnings from this will help contribute to the development of a strong Scottish supply chain for floating wind.



WHY FLOATING OFFSHORE WIND?

Currently the majority of offshore wind farms in Scotland are fixed directly to the seabed, there are only two floating wind farms in operation. Unlike traditional fixed bottom wind farms, floating wind farms use wind turbine generators mounted on a floating substructure which is connected to the seabed using mooring lines and anchors. Much of the seabed around Scotland is too deep to be well suited to fixed bottom turbines. Floating offshore wind provides a technological solution which enables the production of large amounts of renewable energy which underpins Scotland and the UK's energy transition and is key to achieving net zero.



BENEFITS TO SCOTLAND

- Floating offshore wind offers the offshore wind industry key opportunities to create a new supply chain and job opportunities.
- Fixed bottom wind is now one of the most economically competitive forms of energy and it is expected that floating wind will follow suit.
- Scotland is a world leader in floating technology and is well positioned to capitalise on advances in the sector due to experience in oil and gas and maritime heritage.
- The significant global pipeline for floating offshore wind could create export opportunities for the local supply chain in Scotland.

INSTALLATION

One of the advantages with floating offshore wind is the capacity for the complete wind turbine and substructure assembly to be towed to site where it is hooked up to the pre-installed mooring system which allows it to be installed much quicker than fixed bottom turbines that require calmer seas and wind conditions during installation.

SUBSEA CABLES

A key design difference between a fixed bottom and floating turbine is the dynamic nature of the cables. The cable system must accommodate the movement of the floating substructure. This is typically achieved by adding a buoyancy element into the design.

FLOATING SUBSTRUCTURES

Currently there are over 40 floating wind turbine generators (WTGs) substructure concepts at differing stages of technical maturity in the industry. Each has varying dimensions to meet the unique engineering challenges associated with floating turbines, turbine sizes and project specific requirements.

MOORING & ANCHORS

The mooring and anchoring systems are responsible for maintaining the position of the floating wind turbine generators (WTGs) during the most extreme events or energetic storms. There are a number of different anchoring solutions available which can be deployed depending on the site conditions.



Generic floating structure – for illustrative purposes only; not a representation of the final substructure or mooring and anchoring design

The final project design has not yet been determined and will depend on the seabed conditions, engineering studies and environmental impacts assessed. The Pentland Floating Offshore Wind Farm Project has adopted a project design envelope approach to retain flexibility to capitalise on innovations during the next stages of the project.



PROJECT DESCRIPTION

OFFSHORE PROPOSAL

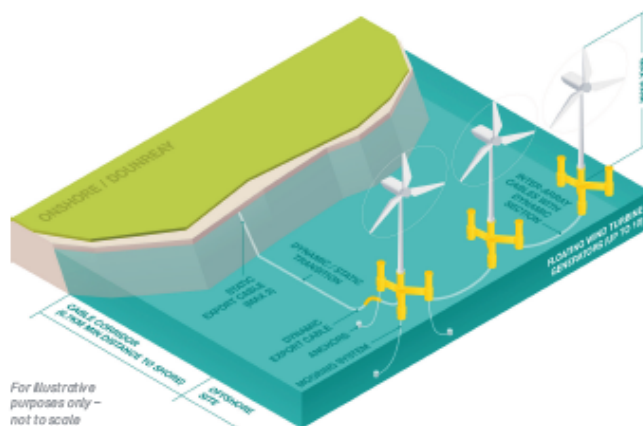
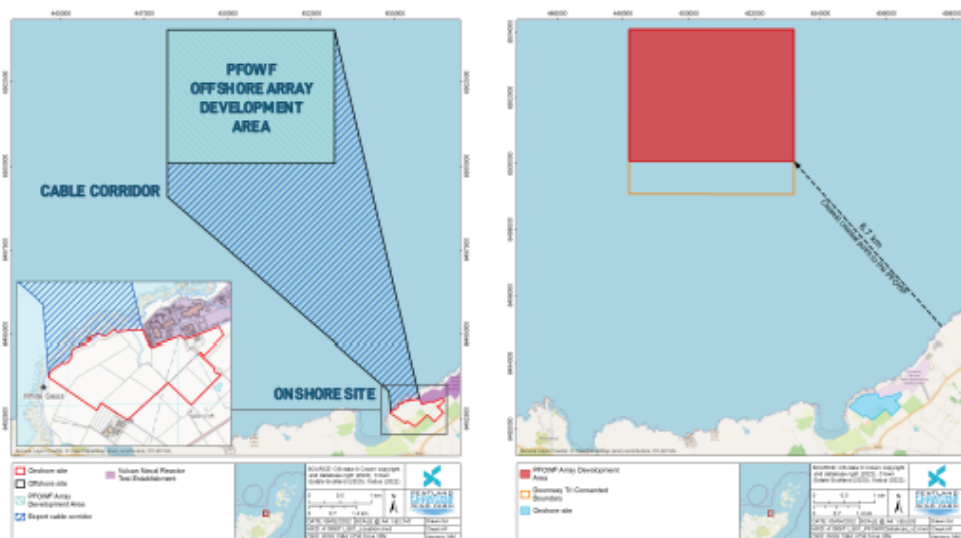
PROJECT DESIGN ENVELOPE

The Pentland Floating Offshore Wind Farm has adopted a design envelope approach to develop the project. This is a common approach with major infrastructure projects including offshore wind farms. The design envelope approach does not consent specific technology, but allows outline consent to be granted and enables projects impacts to be assessed on the basis of maximum parameters or worst case scenarios for specific receptors. This gives projects the flexibility to utilise new innovations in emerging floating wind technology and greater information on site conditions once this is available.

The Environmental Impact Assessment will consider the parameters that represent the worst impact for receptors caused by the development. As such, the project design envelope presented here shows the proposed maximum parameters for the project. The final project parameters may not reach these maximum limits and the final project design will be submitted for approval prior to construction.

The Pentland Floating Offshore Wind Farm offshore development area is 20 km² within the Pentland Firth, approximately 6.7 km north of the coast of Dunrosey, Caithness. The offshore infrastructure works will comprise:

- Up to a maximum of ten floating wind turbine generators;
- Turbines will have a maximum tip height of 300 m;
- Floating substructures (one per turbine) to support the turbines;
- Mooring systems (anchors and mooring lines) to ensure the turbines stay within a given footprint;
- A network of inter-array cabling linking the individual wind turbines; and
- A maximum of two offshore export cables connecting the offshore wind farm to the onshore substation.



As part of the Environmental Impact Assessment (EIA) process, we undertook the following activities:

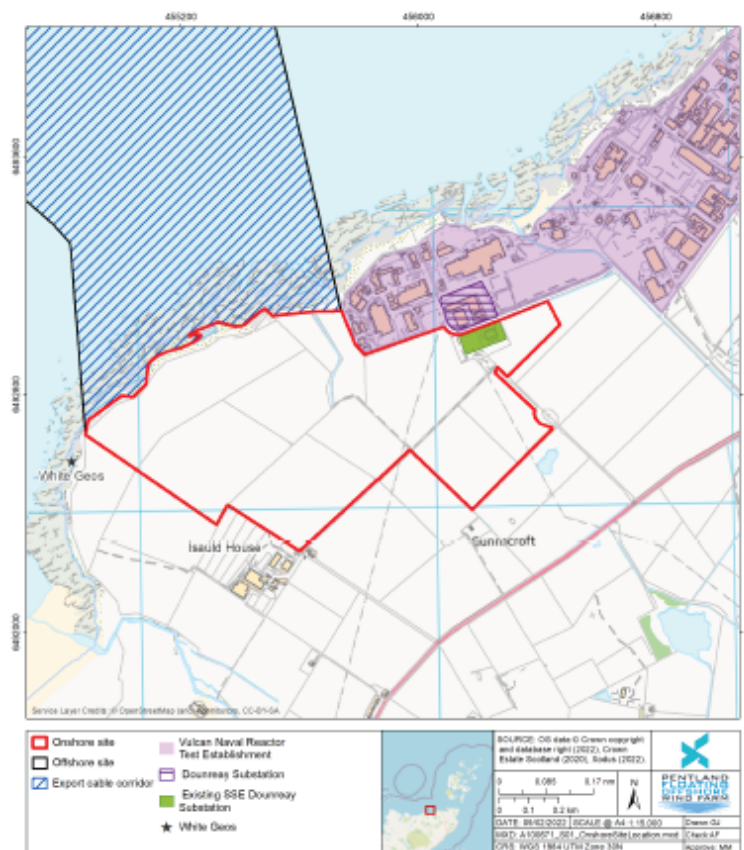
- Geophysical and geotechnical seabed surveys;
- Environmental surveys;
- Technical and engineering studies; and
- Discussions with stakeholders and the local community.

Through these activities we were able to gain an understanding of the conditions of the site which will ensure that the optimal design can be adopted for the project.

PROJECT DESCRIPTION

ONSHORE PROPOSAL

A landfall site has been identified at Dounreay, immediately adjacent to the Vulcan Naval Reactor Test Establishment (NRTE) and the former Dounreay Nuclear Facility.



The onshore infrastructure will comprise:

- A cable landfall west of the Vulcan nuclear facility – the preferred option is for the cable to be brought to shore by Horizontal Directional Drilling (HDD) depending on HDD feasibility studies;
- An a maximum of two onshore cables buried to a depth of approximately 1 metre;
- A cable Transition Joint Bay (TJB) where offshore and onshore cables are spliced together;
- An onshore substation and switchgear; and
- A temporary construction compound.

It is currently proposed that the grid connection point will be into the existing SSE 132/33/11 kV Dounreay Substation and a connection agreement has been received from Scottish and Southern Electricity Networks (SSEN) Transmission.

The onshore substation or switchgear will include the electrical equipment required to connect the Project to the grid. This may include switchgear, transformers, harmonic filter, reactive compensation devices, protection equipment, batteries and other auxiliary equipment. The entire footprint is likely to be an area of approximately 100 m x 60 m (0.60 hectares).

While the majority of electrical plant is expected to be located indoors, due to the coastal location some equipment may also be located outside. The equipment is expected to be broadly adjacent to existing infrastructure in the area. The onshore infrastructure will be located within the red line boundary shown on the above map. The exact location of the access roads will be decided at a later stage.



For illustrative purposes only – final substation design and location may differ

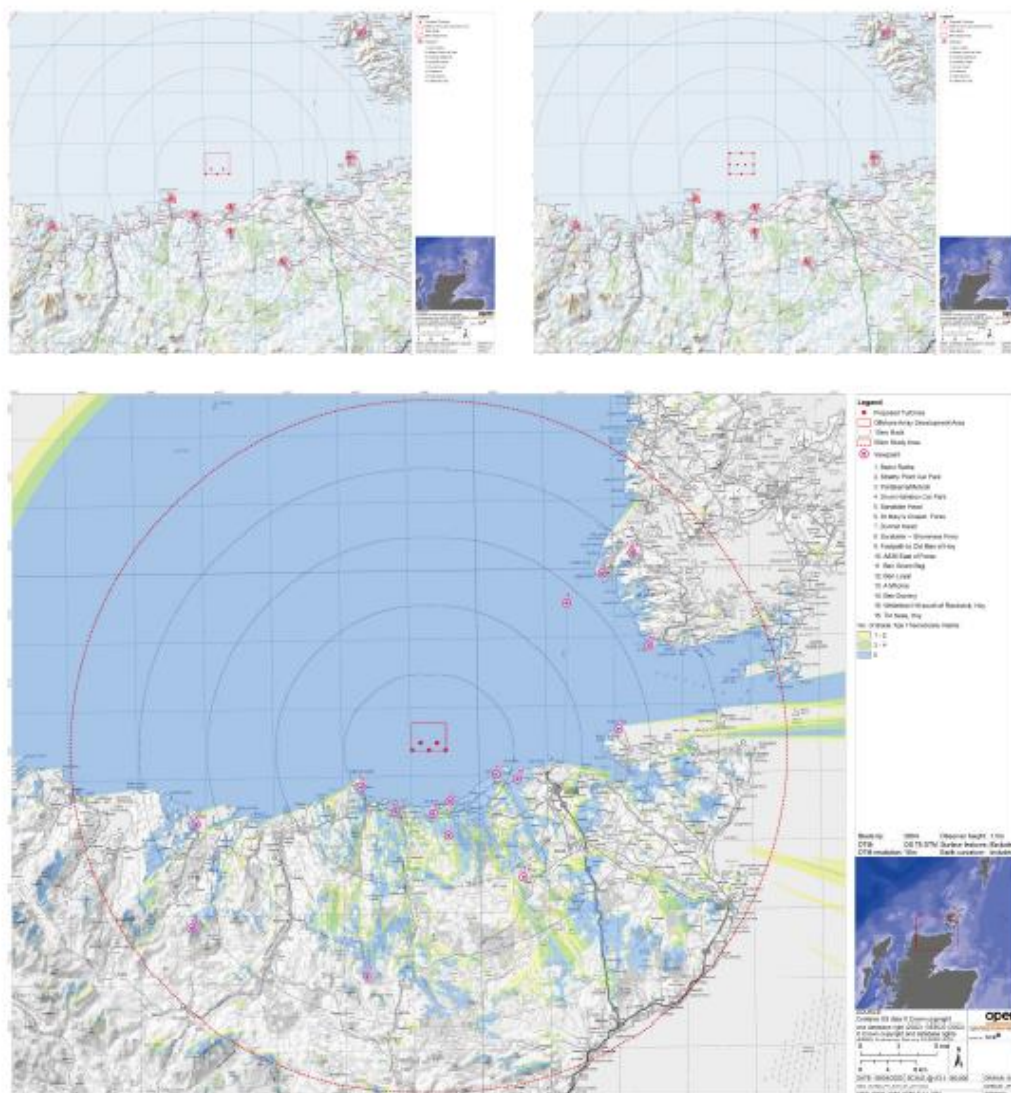
As part of our Environmental Impact Assessment (EIA), we are undertaking a Seascape and Landscape Visual Impact Assessment (SLVIA).

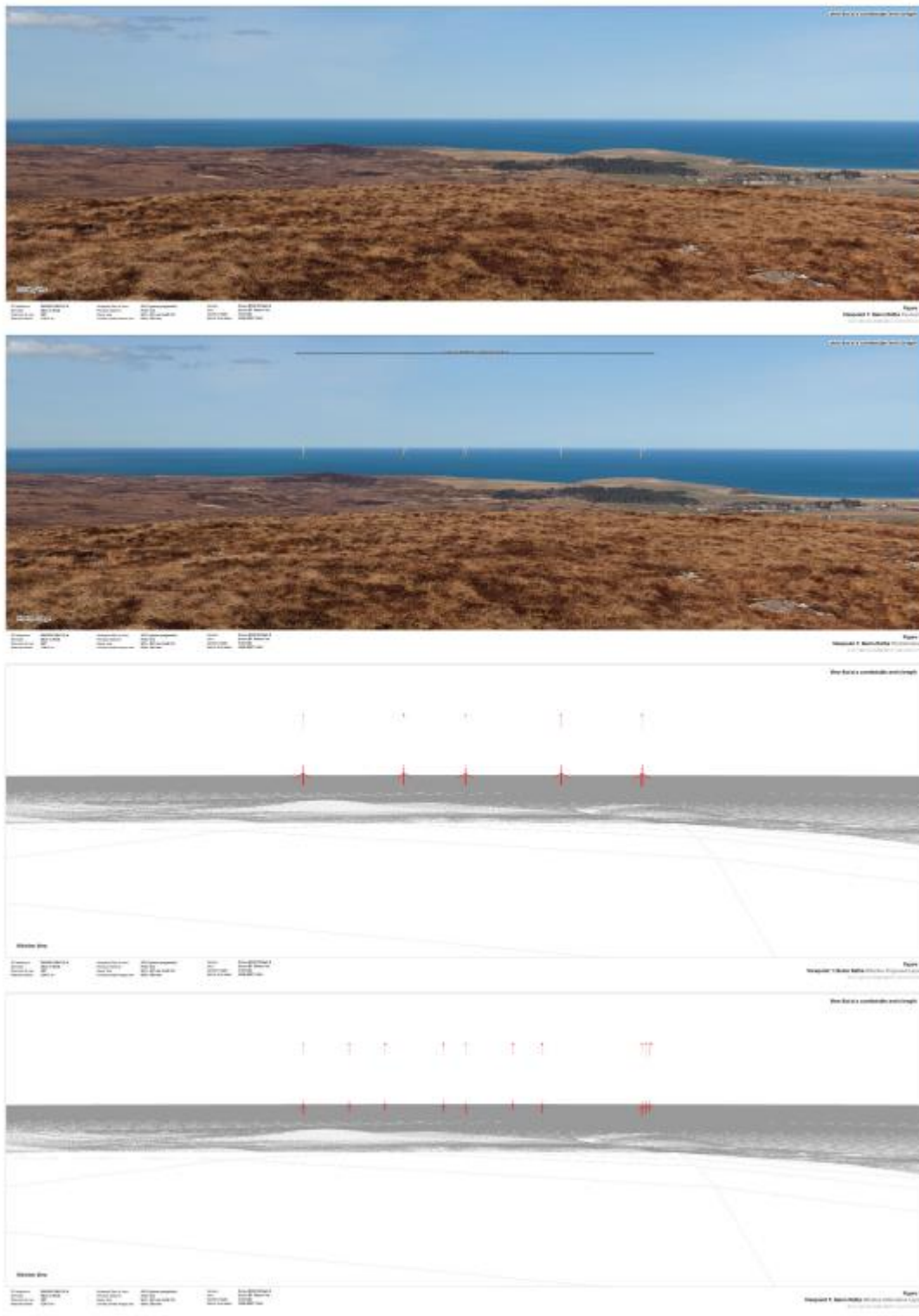
These photomontages and wirelines represent visibility of the Pentland Floating Offshore Wind Farm during 'very good' or 'excellent' visibility to ensure the worst case scenario is shown. Viewpoints have been selected to present the fullest visibility from those locations that are representative of local residents, road-users, walkers and visitors to the area.

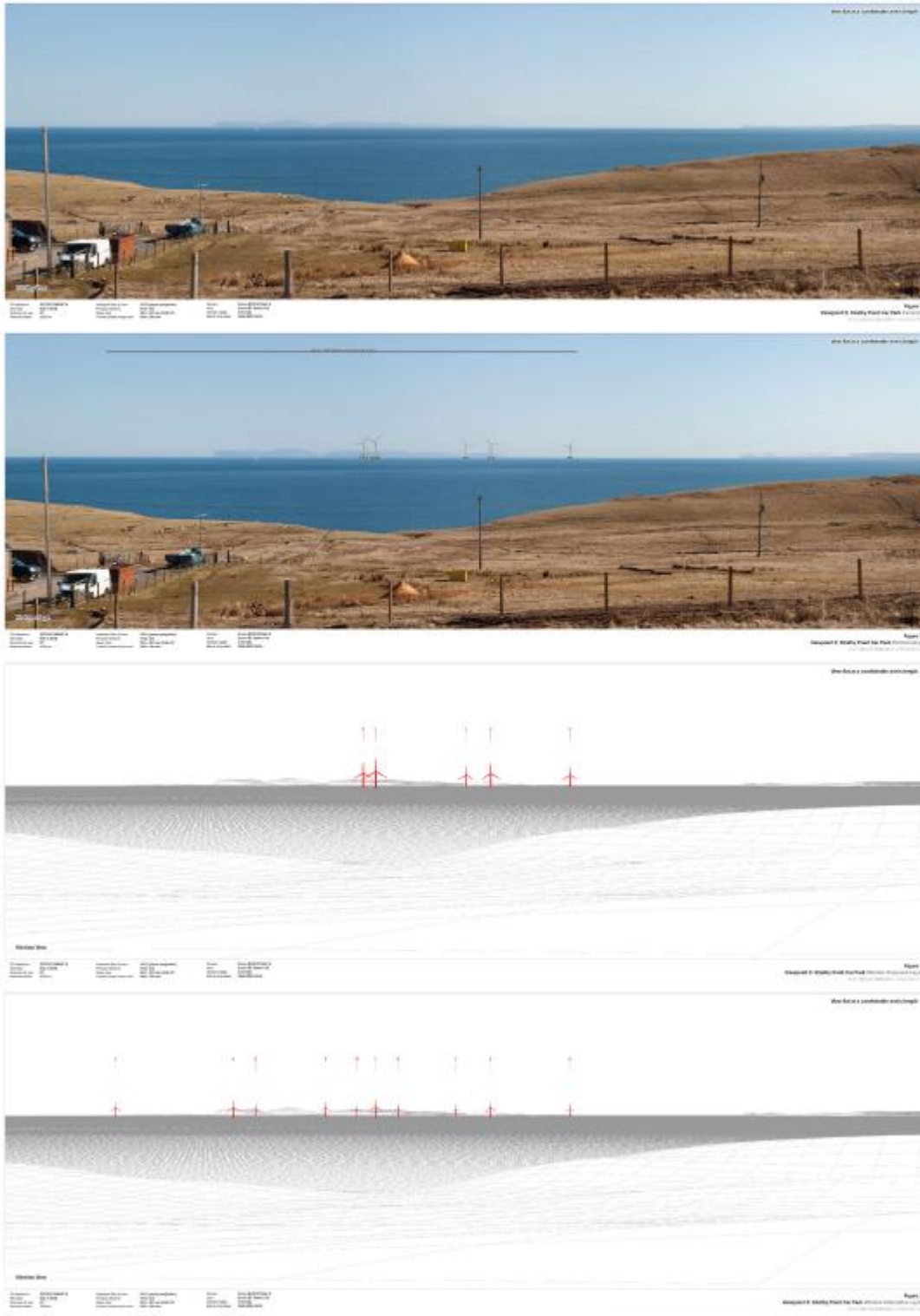
For each viewpoint, a photomontage with an indicative layout of five turbines at 300m to tip height is presented as the worst case scenario. As the Pentland Floating Offshore Wind Farm is being consented to include up to ten turbines, two wirelines are presented

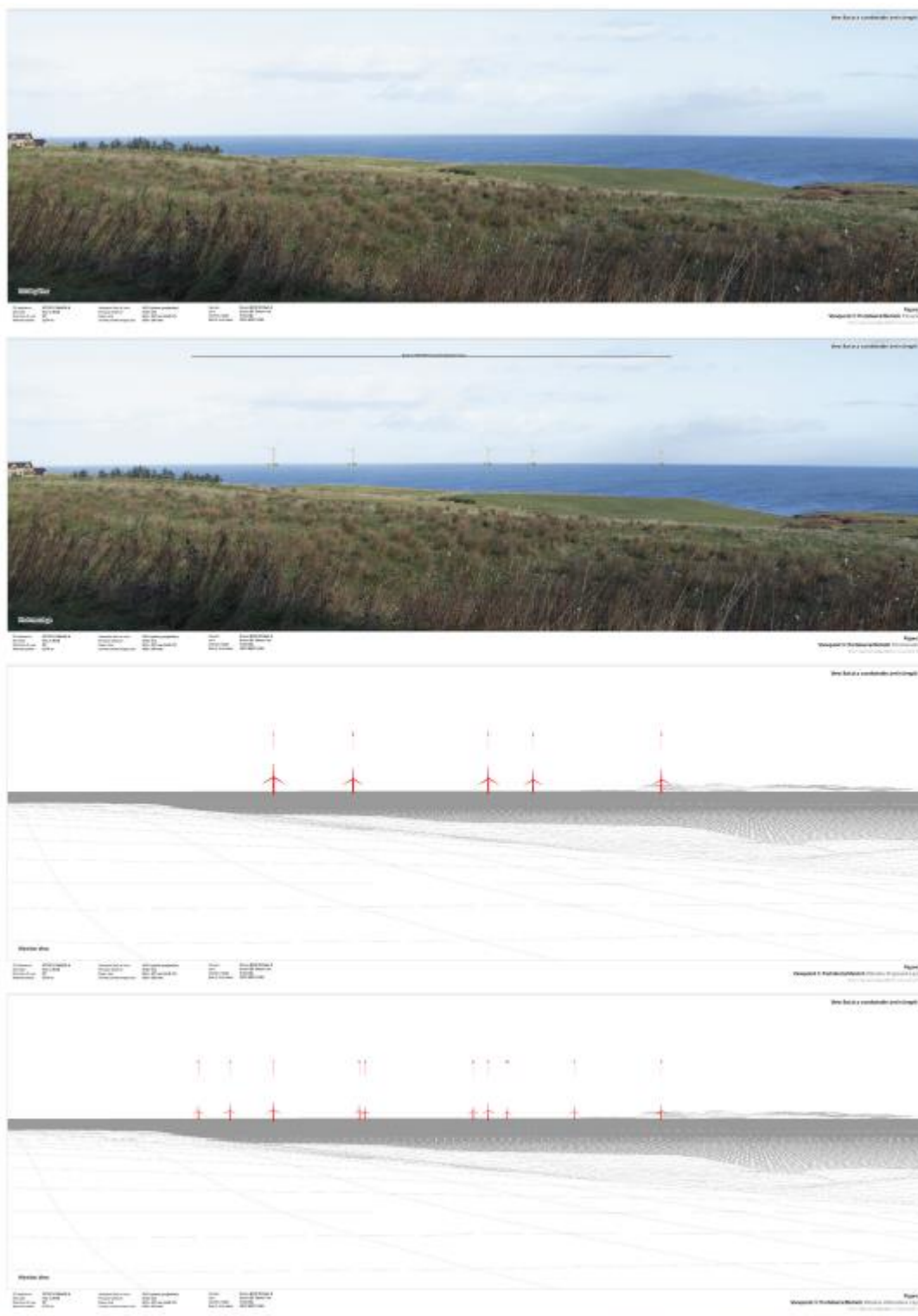
for each viewpoint; one with an indicative layout of five turbines at 300m to tip height; and one with an indicative layout of ten turbines at 192m to tip height.

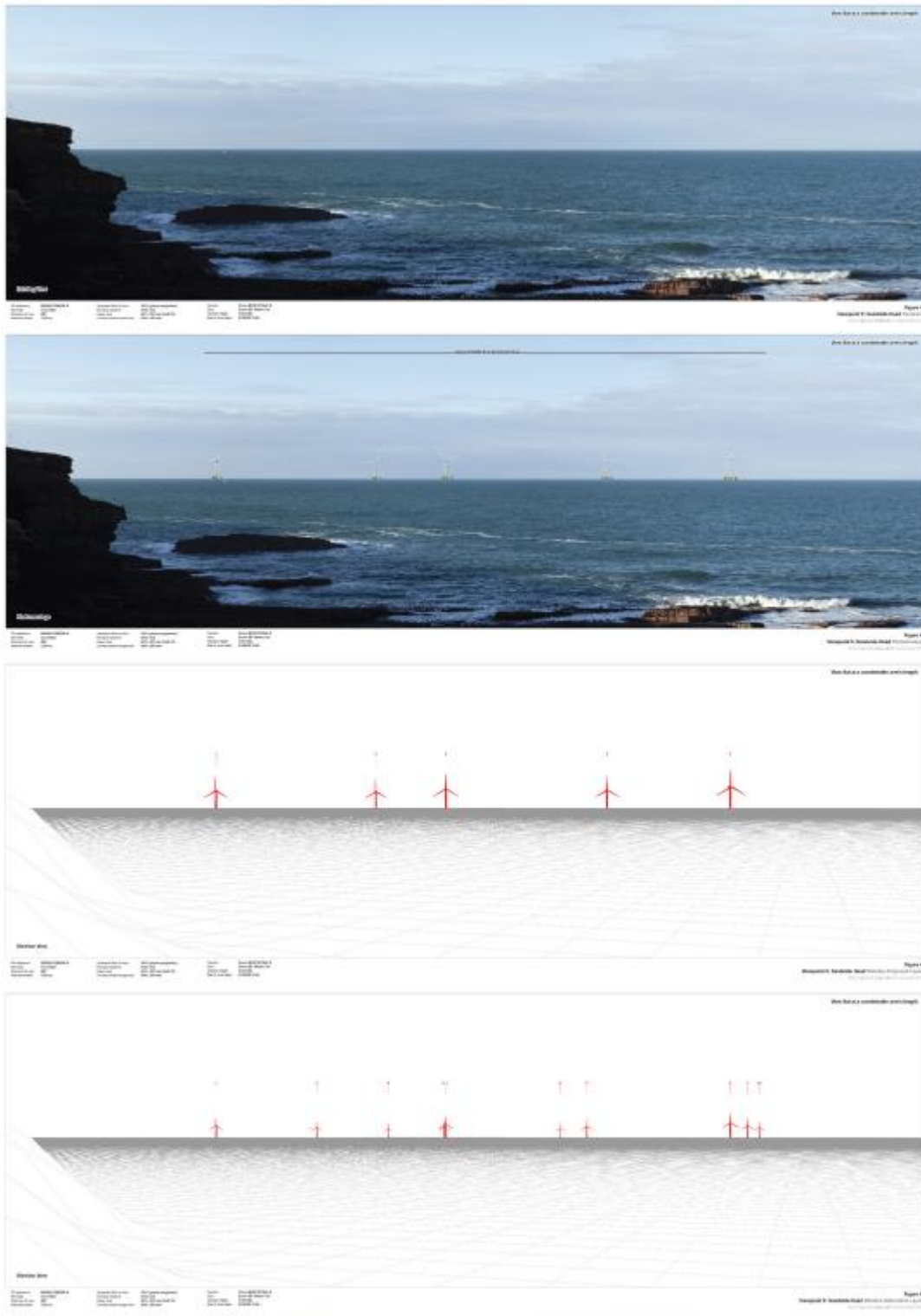
The presented layouts are indicative at this stage, and the final turbine configuration will be confirmed prior to construction. Comparative baseline photographs from the selected viewpoints are also provided below. In addition, an image which shows the Zone of Theoretical Visibility (ZTV) for the five turbine indicative layout is included to provide an indication of the areas where the turbines are likely to be visible from.

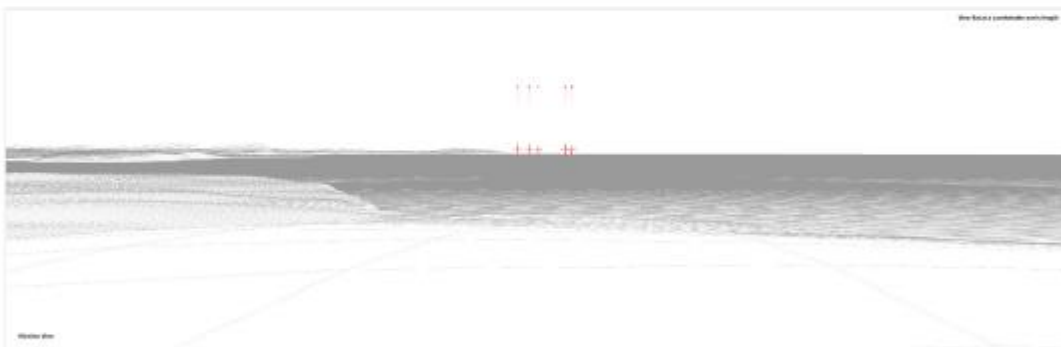


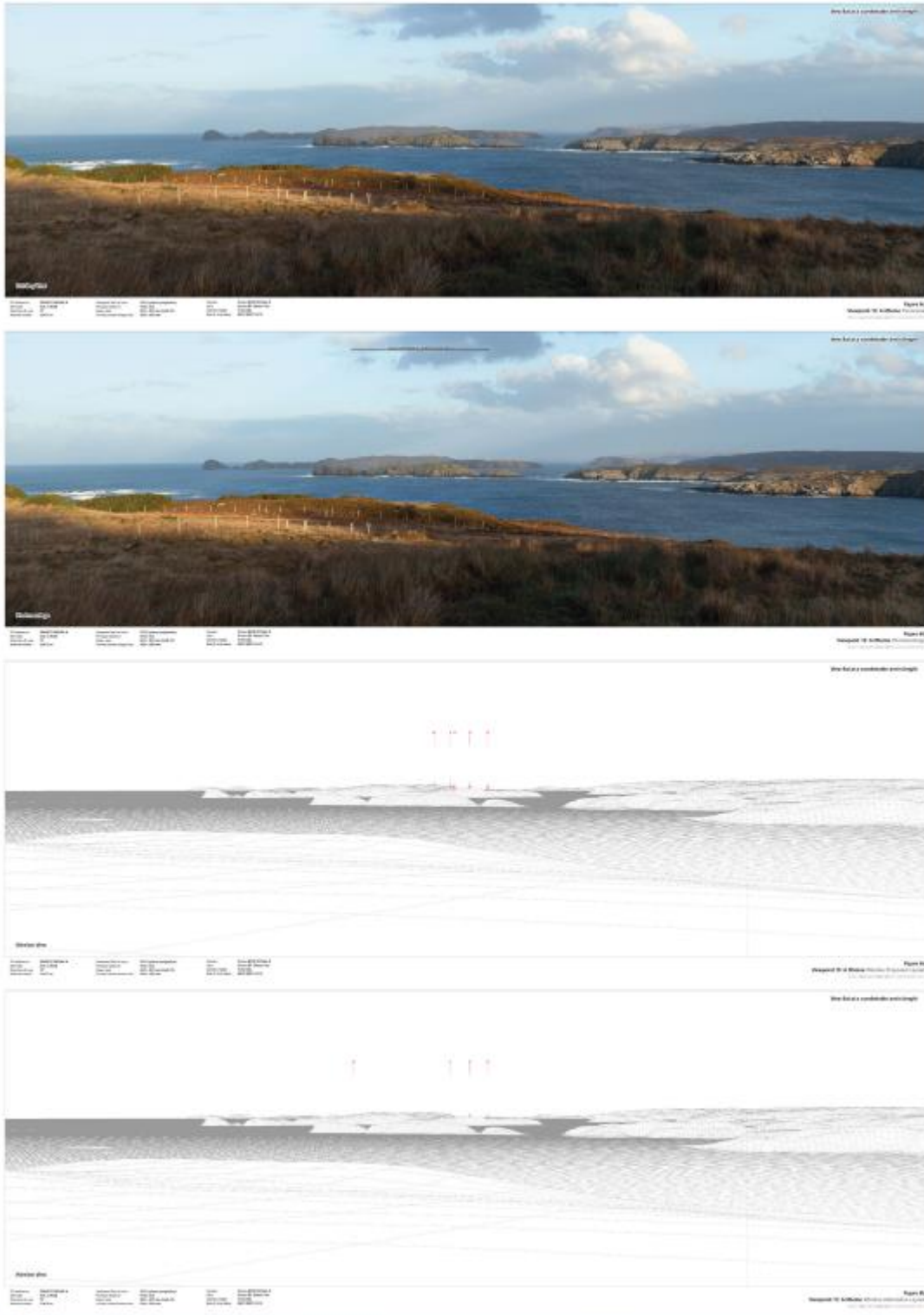


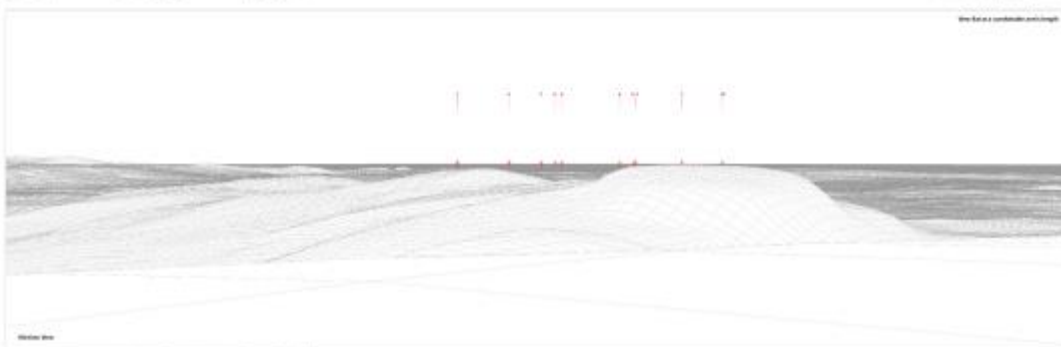
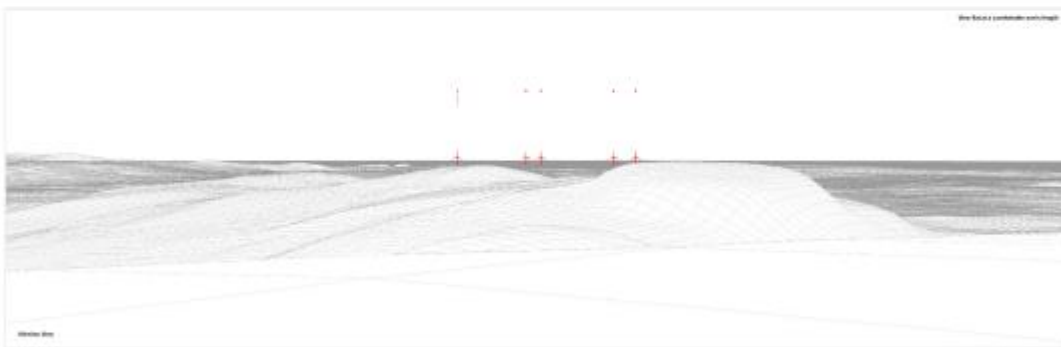


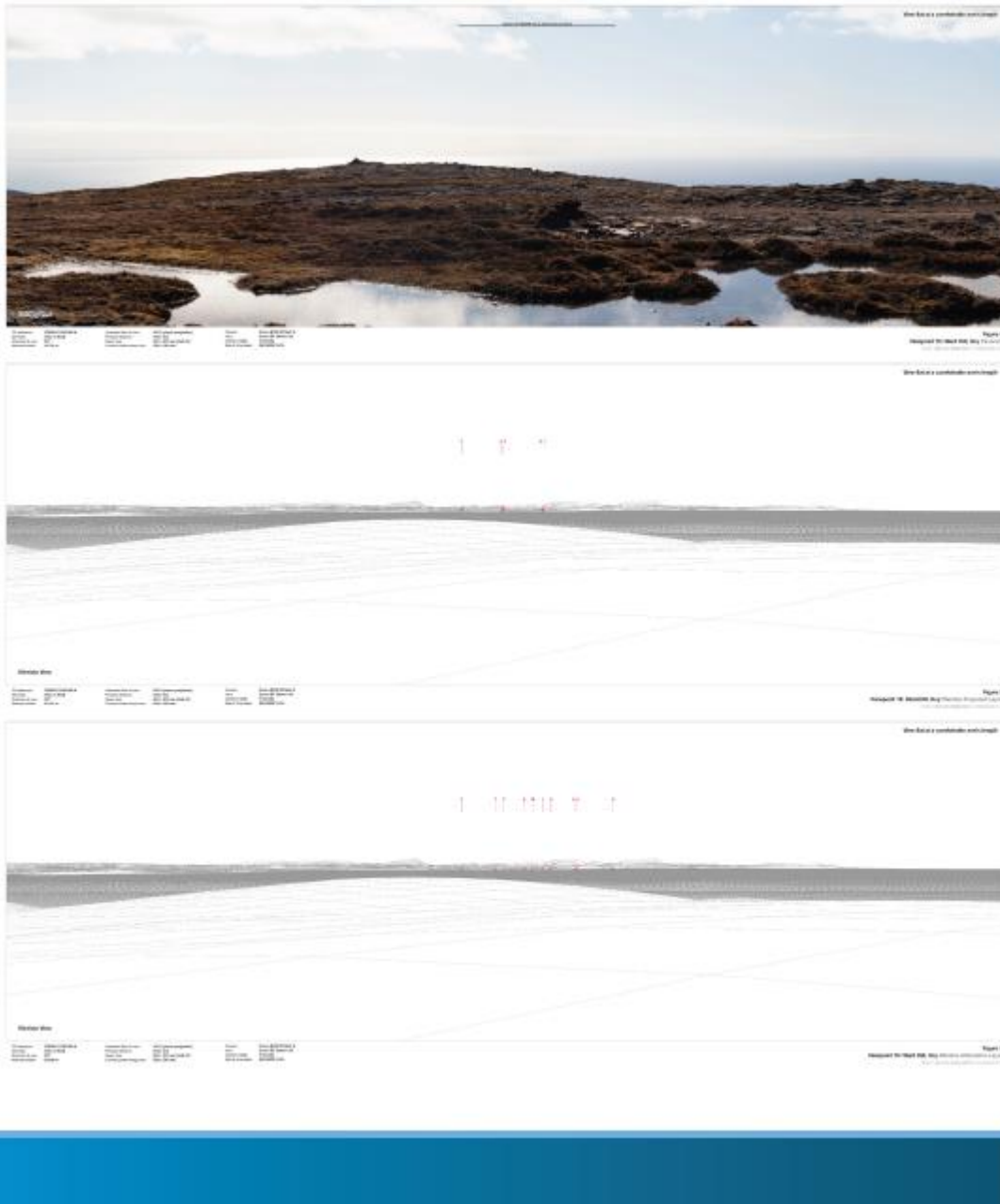












CONSENTS & ASSESSMENTS



The project will make two separate applications for both the offshore and onshore components.

OFFSHORE

Marine licences and consent under Section 36 of the Electricity Act 1989 will be sought from Marine Scotland for the offshore infrastructure.

ONSHORE

An application for planning permission will be made under Section 57 of the Town and Country Planning (Scotland) Act 1997 to The Highland Council for the onshore elements of the project.

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

EIA is a systematic process which identifies and assesses the potential significant environmental effects of a project, informs the design of the project from an environmental perspective, and sets out standard industry and additional mitigation measures to eliminate or minimise the project's effect on the environment. An EIA report is the written output of the EIA process.

Two EIA reports will be produced for the project, one for the onshore project components and one for the offshore project components. These will demonstrate that all potentially significant effects on the environment have been considered and assessed and that appropriate mitigation measures to reduce any significant effects are identified and commitments made to implement these.



RESPONDING TO FEEDBACK RECEIVED DURING THE FIRST CONSULTATION EVENT

During the first consultation process we received valuable feedback regarding local concerns over certain aspects of the project. The Pentland Floating Offshore Wind Farm is currently undertaking Environmental Impact Assessments (offshore and onshore), to establish the potential impacts on various receptors in the vicinity of the Project. An extensive programme of surveys have been undertaken to underpin the Environmental Impact Assessments (EIA). The final results of both the offshore and onshore assessments will be detailed within the respective Offshore and Onshore EIA Reports but preliminary results, where available, are indicated below:



VISUAL IMPACTS

Feedback was received concerning the potential visual impacts of the Pentland Floating Offshore Wind Farm. In particular, there were concerns regarding the inclusion of wirelines rather than photo montages at the previous consultation event. In order to address this feedback, we have developed photomontages for selected viewpoints. To further aid understanding, we have also developed a virtual reality representation of the windfarm which provides an indication of what the windfarm will look like from different locations along the coastline, and this is available in the virtual exhibition space. The photomontages can be seen on Board 6: Seascape, Landscape and Visual Impacts. The impact assessments on seascape, landscape and visual amenity are currently on-going, and the final results of the turbine and substation visual assessments will be detailed within the respective Offshore and Onshore EIA Reports.



IMPACT ON TOURISM

Feedback was received concerning the potential impact of the Pentland Floating Offshore Wind Farm on tourism. Studies have shown that existing and proposed wind farm developments are predicted to have little overall economic effect on tourism in Scotland. For more information: <https://www.climatechange.org.uk/research/projects/the-impact-of-wind-farms-on-scottish-tourism/>. Assessments of the impacts of the Pentland Floating Offshore Wind Farm on tourism are on-going but preliminary results show that there will be no significant effects on tourism throughout the life-cycle of the project. The final results of the assessment will be available in the Offshore EIA Report.



IMPACT ON BIRDS

During the first consultation event, feedback was received concerning the potential impact of the Pentland Floating Offshore Wind Farm on birds. Detailed assessments on marine and terrestrial birds are currently being undertaken and are supported by in-depth modelling with input from industry leading experts and consultation with regulators. In terms of the Onshore Development, preliminary results of the terrestrial ornithology impact assessment indicate that there will be no significant effects on ornithology features from the onshore development activities. For the Offshore Development, the modelling is still on-going. The final results will be detailed within the respective Offshore and Onshore EIA Reports.



IMPACT ON MARINE MAMMALS

We received feedback concerning the potential impact of the Pentland Floating Offshore Wind Farm on marine mammals. Detailed assessments on the potential impacts on marine mammals and other megafauna e.g. basking sharks are currently being completed. These are supported by the results of aerial surveys and underwater noise modelling. Currently the underwater noise modelling assessments are on-going with input from industry leading experts. However, preliminary results of the underwater noise modelling highlight that there will be no significant effects on marine mammals from the pre-construction and construction related activities. The final results of the assessments, including the findings of effects on marine mammals from other assessed impacts will be detailed within the Offshore EIA Report.



IMPACTS ON SHIPPING & NAVIGATION

Feedback was received concerning the potential impact of the Pentland Floating Offshore Wind Farm on shipping and navigation. The impact assessment on shipping and navigation has been supported by vessel traffic surveys and various consultations, including hazard identification workshops with relevant stakeholders. Currently the impact assessment is on-going. However, it is anticipated from preliminary results that there will be no significant effects on shipping and navigation with the implementation of standard best practices and mitigations. The final results of the assessments will be detailed within the Offshore EIA Report.



IMPACT ON FISHERIES

During the first consultation event, concerns were raised on the potential impact of the Pentland Floating Offshore Wind Farm on fisheries. Local fishers were initially engaged for site investigation surveys in 2021. A consultation workshop was held in November 2021 and SFF, SWFPA, OFA, NECRIFG and local fishers were invited to attend. The Project FIR reached out to local fishers in the area to supply flyers for the workshop to maximise attendance as far as practicable. Since the workshop was held, the project has undertaken to reduce the number of anchors and mooring lines from 12 to 9 which will reduce the impacts on other sea users. We have used the feedback from the workshop in the EIA to assess impacts on commercial fisheries. Moving forwards we will continue to engage with the fishing industry. Preliminary results from the commercial fisheries impact assessment indicate that there will be no residual significant effects with the implementation of mitigations which will be detailed in the Fisheries Management and Mitigation Strategy. The final results of the assessment will be detailed within the Offshore EIA Report.



IMPACTS ON FISH ECOLOGY

Detailed assessments are currently being undertaken to assess the potential impacts of the Pentland Floating Offshore Wind Farm on fish ecology. This is supported by underwater noise modelling and the results of the benthic habitat surveys. Currently the underwater noise modelling assessments are on-going with input from industry leading experts. However, based on preliminary results of the underwater noise modelling and other supporting assessments, it is anticipated that there will be no significant effects on fish ecology. The final results of the assessments will be detailed within the Offshore EIA Report.



IMPACTS ON BENTHIC ECOLOGY

Detailed assessments are currently being undertaken to assess the potential impacts of the Pentland Floating Offshore Wind Farm benthic ecology. This is supported by the findings of benthic habitat surveys carried out across the Offshore Site in 2021. It is anticipated from preliminary assessment results that there will be no significant effects on benthic ecology. The final results of the assessments will be detailed within the Offshore EIA Report.



IMPACTS ON TERRESTRIAL HABITATS & ECOLOGY

The terrestrial habitats and ecology impact assessments have been supported by a number of terrestrial ecology and habitat surveys at the Onshore Site. The findings of these assessments show that no significant effects on terrestrial ecological features are predicted on sensitive coastal and wetland habitats, watercourses, protected or notable plants, bats, and other protected mammals, reptile species and invertebrates. The full details of the assessment and results will be provided in the Onshore EIA Report.



IMPACTS ON AVIATION

The impact assessment for aviation and radar activity is on-going. However, it is anticipated from preliminary results that there will be no significant effects on aviation and radar with the implementation of standard best practices and mitigations. The final results of the assessments will be detailed within the Offshore EIA Report.



BENEFITS TO THE LOCAL COMMUNITY & SUPPLY CHAIN

The Project is currently consulting on community benefit approach. The project is committed to supporting local suppliers, where possible, and developing the project so that it promotes the welfare, livelihood and sustainability of local communities. You can find more details on Board 8: Benefits to the Community on how to get involved in the consultation process and further information on supply chain engagement and contribution to the local economy.

BENEFITS TO THE COMMUNITY

We want to ensure the Pentland Floating Offshore Wind Farm provides long term benefits to communities local to the development. We are working with local schools and universities to provide support to skills development in the renewable industry. We are currently consulting on the development of a community benefit fund. We have also completed a supply chain assessment and socio-economic studies to understand the benefits the project will bring to the community through jobs and value created.



COMMUNITY BENEFIT FUND

We are at the early stages of developing a community benefit fund for the Pentland Floating Offshore Wind Farm, which would likely become available on commissioning of the array project. The fund will support local projects that are focused on climate smart initiatives.

We have commissioned Foundation Scotland who are consulting locally on the development of this fund and would welcome your views. A representative from Foundation Scotland will be available at the in-person drop-in events being held in Thurso and Reay. You can also provide feedback on the community benefit fund through an online questionnaire available at: www.foundationscotland.org.uk/pentland

SUPPLY CHAIN ASSESSMENT & LOCAL VALUE CREATION

The Pentland Floating Offshore Wind Farm is committed to supporting local suppliers where possible and developing the Project so that it promotes the welfare, livelihood and sustainability of local communities. In 2021 the project team met with a number of local suppliers and negotiated a Memorandum of Understanding with Scrabster Harbour Trust, to work together on the development of operations and maintenance requirements, services and facilities. This shows a commitment to work collaboratively to investigate the potential for construction support services and major component change out for the floating wind turbines.

In 2021, we undertook a social and economic study in partnership with the University of the Highlands and Islands (UHI) and leading industry experts, to understand the positive impacts the project will have (both directly and indirectly) on the community, for example, through providing jobs, Gross Value Added (GVA) potential and demand for local services. We have also commissioned a supply chain study to inform the socio-economic work in order to assess local supply chain capability and identify opportunities to support the project.

It is anticipated that during the lifetime of the Pentland Floating Offshore Wind Farm, between 750-800 FTE job-years in Caithness and between 2,400-3,300 FTE job-years in the Highlands and Islands will be created. The Pentland Floating Offshore Wind Farm is anticipated to create around £50 million for Caithness and £150-200 million for Highlands and Islands of Gross Value Added at 2021 prices. These numbers will be updated as we finalise the detailed design, procurement activities and construction and operations and maintenance strategies. The socio-economic impacts of the Project will be assessed in detail within the Environmental Impact Assessment, as set out on Board 7: Consents & Assessments.

SKILLS DEVELOPMENT

The Pentland Floating Offshore Wind Farm is supporting an Education and Training Fund which will award scholarships to selected students from Thurso and Farr High Schools, who are going on to study higher education and training programmes focussed on Science, Technology, Engineering and Mathematics.

We are proud to have students from the University of Highland and Islands (UHI) and the University of Strathclyde interning with the project, enabling them to gain of shore wind industry experience. Meet Grant, an intern on the Pentland Floating Offshore Wind Farm:



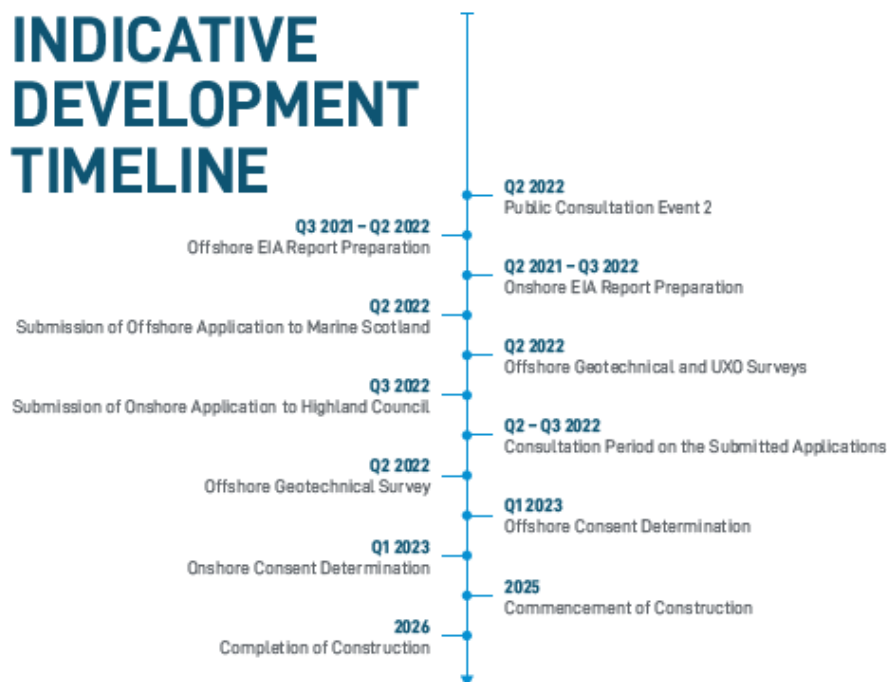
GRANT ANDERSON

I am currently in my final year of Energy Engineering at the UHI Outer Hebrides and working as an intern on the

Pentland Floating Offshore Wind Farm. The internship has allowed me to be fully involved with a range of different disciplines including engineering, health and safety and project management. I have been able to apply many elements of my degree program during the internship including data analysis, report writing and computer modelling. More importantly, it has allowed me to get relevant hands-on experience on a current project which will be valuable for any future employment in the offshore wind world. I have really enjoyed being part of a dynamic and motivated team.



INDICATIVE DEVELOPMENT TIMELINE



THE DEVELOPMENT PROCESS

PREPARATION OF THE EIA REPORTS

The Pentland Floating Offshore Wind Farm is currently at the stage of preparing the EIA Reports for Submission. Within the EIA Reports, impacts of the proposed onshore and offshore project design will be assessed by competent experienced professionals, using the relevant baseline information collected, various guidance, good practice guidelines and expert judgement. All the findings and proposed mitigation measures identified through the EIA process will be presented in the Offshore and Onshore EIA Reports. Desk based assessments and field studies helped to define the baseline environment and identify receptors for consideration and the assessments are supported by detailed modelling and technical studies. For further information, please see Board 7: Consents and Assessments.

The project design and EIA scope draws on the feedback from statutory consultees and the comments received during the first Public Consultation Event. Your views and feedback during this second consultation period will continue to help shape the development of our project proposals.

SUBMISSION OF APPLICATIONS

A planning application for the onshore transmission works for the Pentland Floating Offshore Wind Farm under the Town and Country Planning (Scotland) Act 1997 will be submitted to The Highland Council. Additionally, an application for a marine licence and consent under Section 36 of the Electricity Act 1989 for the offshore development will be submitted to Marine Scotland. At this point, there will be a period for the public to formally comment on the proposals; information to the public on how to respond will be advertised through local press.

DETERMINATION OF APPLICATION

It is anticipated that it will take up to 1 year for the applications to be determined. During this time the project will continue with engineering studies to finalise the project requirements. During this time detailed supply chain discussions will also be held as well as finalising our community benefits associated with the project.

PREPARATION FOR CONSTRUCTION

The consents granted will likely have a number of conditions associated with them. Information on the detail of the project will be submitted in order to ensure they are in line with the consented project. Construction and environmental management and monitoring plans detailing how the project will be delivered will also be submitted for approval.

CONSTRUCTION

It is anticipated that construction will commence in 2025. The construction of the project is anticipated to take place within a two year period. An Independent Environmental Clerk of Works will be employed to ensure that the construction is carried out in line with the consent.



FAQS

Q: Who are Highland Wind Limited?

A: Pentland Floating Offshore Wind Farm is being developed by Highland Wind Limited which is majority owned by a fund managed by Copenhagen Infrastructure Partners (CIP) with Hexicon AB as a minority shareholder. Copenhagen Infrastructure Partners P/S (CIP) is a fund management company focused on energy infrastructure including offshore wind, onshore wind, solar photovoltaic (PV), biomass and energy from waste, transmission and distribution, reserve capacity and storage, and other energy assets like Power-to-X. It was founded in 2012 and currently has approximately EUR 16 billion under management. CIP is a major investor in the offshore wind sector and has significant investments in a number of offshore wind projects around the world. Copenhagen Offshore Partners (COP), which conducts offshore wind development activities on behalf of the funds managed by CIP, has recently opened an office in Edinburgh to support the fund's increasing engagement in Scotland, with a particular focus on floating wind.

Q: What are the benefits of floating wind and do we need it?

A: Almost 80% of the world's wind resource is in water deeper than 60 metres. It is where wind speeds are stronger and more consistent meaning higher capacity factors. It is looking extremely likely that floating wind will be essential to meet the UK's net-zero emission targets and is needed to deliver on ambitions set by the Committee on Climate Change. You can read more about floating wind on Board 3 - Why Floating Wind?

Q: How does Downray Tri Project fit in with your proposal?

A: The Pentland Floating Offshore Wind Farm Project is an update to the Downray Tri Project that was granted key consents and a site lease in 2017. The original Downray Tri Project consisted of a two-turbine offshore wind farm, with an installed capacity of between 8 to 12 MW, approximately 6 km off Downray, Caithness. Highland Wind Limited acquired the Project and associated consent, licence and site lease in 2021. The Pentland Floating Offshore Wind Farm will be built out under a new consent that is the subject of this exhibition.

Q: What are your plans?

A: The primary objective of the Pentland Floating Offshore Wind Farm is to test and demonstrate a technology solution for floating wind in Scotland. By developing the project in stages, through deploying the single turbine followed by the remaining turbines a year later, the capabilities of the local supply chain in Scotland will be better understood. This understanding will allow us to support the development of a strong local supply chain for floating wind in Scotland, helping to meet climate change targets, and providing highly skilled jobs and energy security. Highland Wind Limited firmly believes that this project will be an enabler for larger scale developments resulting from the current ScotWind Leasing Round and in turn will result in knowledge exchange and export opportunities in relation to the global floating offshore wind market.

Q: What technology are you using?

A: Highland Wind Limited will develop the project using the optimal technical, environmental and commercial solution. Currently, this technology is still evolving so the exact technological requirements for the project are still under consideration. We will look to establish our selected technology and suppliers once we have gathered all the information from our meteorological and seabed surveys to ensure the most efficient and technically feasible options are taken forward. Nonetheless, we are planning on using up to 10 turbines, with the maximum height of the turbine blade tip from the sea surface being 300 metres.

Q: Will I see the Pentland Floating Offshore Wind Farm from the shore?

A: The Pentland Floating Offshore Wind Farm Application Boundary will be approximately 6.7 km from shore, this distance has been increased by 1 km from the previously consented boundary for the Downray Tri Project in order to further reduce any visual impacts. It is anticipated that the closest turbine will be at least 8 km offshore from Sandside Bay. A selection of montages and wirelines have been produced for relevant viewpoints around the coastline and demonstrate the likely views from shore for the maximum tip of the 300 m turbines. You can find these on Board 6: Seascape, Landscape and Visual Impact Assessment.

Q: Will there be disruptions during construction?

A: We are working to engage closely with landowners, local residents, the Maritime Coastguard Authority, ports and harbours and Traffic and Transport Scotland to ensure the development minimises disruptions to local communities as far as possible. We already understand there are some concerns regarding construction and operational traffic in the local area. This will be taken into account in our application.

Q: What about environmental impacts on seabirds and other marine life?

A: Renewable energy technologies are key to combating the effects of climate change, which is considered one of the biggest threats to marine life. Floating wind is part of the solution for a greener and safer future. Nonetheless, any development activity in the marine environment has the potential to impact on marine life and seabirds. We are committed to following best practice and have proactively undertaken environmental surveys and have conducted assessments, monitoring and modelling to minimise any impact on wildlife during the project's development. The project team continues to engage with key environmental and conservation stakeholders and other relevant consultees in order to inform the scope of the Environmental Impact Assessments (EIA) and detail of the project related to the EIA.

Q: When will the Pentland Floating Offshore Wind Farm be completed?

A: The single turbine demonstrator is planned to be deployed as the first stage of the Pentland Floating Offshore Wind Farm in 2025 to allow time to test and demonstrate the floating wind technology. We are planning to finish construction and installation of the remaining turbines during 2026.

Q: How many homes will you power?

A: The Pentland Floating Offshore Wind Farm will provide enough green energy for approximately 70,000 homes per year, equivalent to approximately 65% of households in the Highland Council Area (based on 2020 figures). This would offset up to 125,000 tonnes of CO2 when considering all types of fossil fuels (<https://www.gov.scot/publications/renewable-and-conversioncalculators/>).

Q: How are you involving the local community?

A: We are committed to robust stakeholder engagement. We have contacted local communities and community councils to offer a project overview. During 2021, COVID-19 made it difficult to engage in person so much of our consultation was held virtually. As restrictions around COVID-19 have been eased we are able to engage in person. We have decided to hold this consultation event both virtually and in-person to ensure that it is accessible to the most amount of people. Our website contains information on the project or you can contact the Project Team directly at penland-stakeholder@cip.dk. Alternatively feedback can also be provided using the feedback form, available in the virtual exhibition room. There is also the opportunity to converse directly with the Project Team at the consultation event at the Reay Golf Course from 14.00 - 20.00 on 11 May and at the North Coast Visitor Centre in Thurso from 11.00 - 17.00 on 12 May. In addition, the team will be available to answer questions online on the 18 May between 12.00 - 14.30 and 18.00 - 20.30 through an online chat function in this exhibition space.

Q: What are the benefits to the local community?

A: Highland Wind Limited is committed to ensuring this Project provides long term benefits to the local community. We have undertaken social and economic studies with involvement of the University of the Highlands and Islands (UHI) and leading industry experts to understand the positive impacts the project will have (both directly and indirectly) on the community, for example, through providing jobs, Gross Value Added (GVA) potential, and demand for local services. Furthermore, we have commissioned a supply chain study to complement the socio-economic work in order to assess local supply chain capability and identify opportunities to support the project. We are at the early stages of developing a Community Benefits Fund which would likely become available on commissioning of the array project. We will seek advice from a number of parties on the best way to administer this fund and would welcome any local views on this.

Q: How many jobs will this development provide to the local community?

A: It is anticipated that during the lifetime of the Pentland Floating Offshore Wind Farm, between 750-800 FTE job-years in Caithness and between 3400-3300 FTE job-years in the Highlands and Islands will be created. More information on the jobs and value created can be found on Board 8: Benefits to the Community.

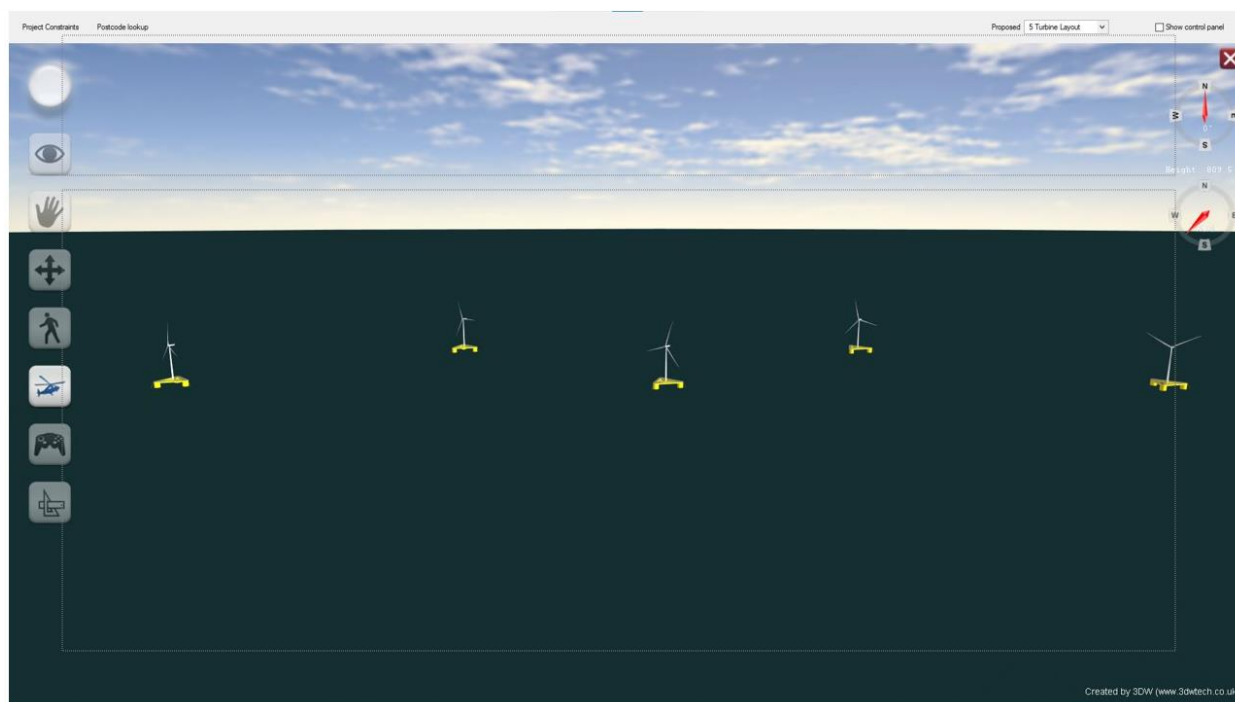
Q: Who else are you engaging with in the application process?

A: To date we have been in contact with a number of stakeholders including the Highland Council, Marine Scotland, Orkney and Shetland Islands Councils, local fisheries, NatureScot, Northern Lighthouse Board, the Maritime Coastguard Authority, SEPA, landowners, Downray Site Restoration Limited, NRE Vulcan, Crown Estate Scotland, RSPB, Downray Stakeholder Group, Caithness West Community Council and Melvich Community Council. We plan to continue engagement as the application progresses towards submission.

Q: I want to keep informed on project updates, how do I do this?

A: Updates on the project will be provided on our website at www.pentlandfloatingwind.com. There will be an opportunity for the community to make formal comment on the proposals to Scottish Ministers and The Highland Council once our applications have been submitted. Details on how to go about this will be provided in a local newspaper and published on our website at the time of submission.

Screengrab showing the viewpoint interactive map available at the second virtual exhibition:



Appendix D: August 2022 Consultation Materials



OVERVIEW

Welcome to the virtual public exhibition and consultation for the Pentland Floating Offshore Wind Farm. This consultation event is being held to update local residents and other interested stakeholders on key changes made to the onshore proposal. We encourage feedback as the Pentland Floating Offshore Wind Farm progresses towards submission of its application documents for the onshore elements of the project. We are committed to working with local communities and stakeholders to help shape the development of our proposal.

This consultation is being undertaken virtually. This virtual exhibition is similar to what you would expect to find at a traditional public exhibition including information boards on the proposal, opportunities to ask the team questions and possibilities to provide feedback.

This virtual exhibition includes images, maps and a list of frequently asked questions to provide an overview of the project and current development activities. It will explain the changes made to the onshore proposal since the previous consultation.

This exhibition is focused on the onshore elements of the Pentland Floating Offshore Wind Farm. Further information regarding the offshore proposal is available on www.pentlandfloatingwind.com.

The consultation period runs until 19 September 2022. You can provide feedback through the feedback form in this virtual exhibition until this date.

We will review the feedback together with the results of the environmental assessments which will be undertaken to inform

the final design of the project. Details of how your comments may have influenced the final design will be explained in the application submissions.

Please note that any comments made on the proposals at this stage are not representations to the planning authority. When the application is submitted to The Highland Council, normal neighbour notification and publicity will be undertaken at that time and you will have an opportunity then to make formal representations to the Council.

LIVE CHAT QUESTION & ANSWER SESSION

On Thursday 1 September 2022 the project team will be available to answer questions you may have on a live chat function in the virtual public exhibition during the following times: 12:00-14:30 and 18:00-20:30.

Our website www.pentlandfloatingwind.com provides further information about the project. Should you have any further questions or feedback once the consultation period for this exhibition has closed, you can contact us at pentland-stakeholder@cop.dk.

WHO WE ARE

Pentland Floating Offshore Wind Farm is being developed by Highland Wind Limited which is majority owned by a fund managed by Copenhagen Infrastructure Partners (CIP) with Hexicon AB as a minority shareholder. Project development activities are being led by CIP's development partner, Copenhagen Offshore Partners (COP). The project development team is based in COP's Global Floating Wind Competence in Edinburgh.



Copenhagen Infrastructure Partners P/S (CIP) is a fund management company focused on energy infrastructure including offshore wind, onshore wind, solar photovoltaic (PV), biomass and energy-from-waste, transmission and distribution, reserve capacity and storage, and other energy assets like Power-to-X.

CIP has offices in Copenhagen, Hamburg, New York, Tokyo, Utrecht, Melbourne and London. CIP was founded in 2012 by senior executives from the energy industry in cooperation with PensionDanmark. CIP manages eight funds and has approximately €16 billion under management.

www.cippartners.dk



Copenhagen Offshore Partners (COP) is a leading and experienced provider of project development, construction management, and operational management services to offshore wind projects.

The company is headquartered in Denmark and has offices in Taiwan, USA, Australia, Japan, South Korea, UK & Vietnam. COP's team of specialists has a broad range of competencies within project management, early and late-stage project development, engineering, construction, procurement, operational management as well as business development and project financing.

www.cop.dk



Hexicon AB is a leading floating offshore wind technology and project developer. It was founded in 2009 and is headquartered in Stockholm, Sweden.

www.hexicon.eu

THE PENTLAND FLOATING OFFSHORE WIND FARM

Pentland Floating Offshore Wind Farm will be located off the coast of Dounreay, Caithness.

It will comprise up to seven turbines and will provide enough energy to power to approximately 70,000 homes, equivalent to approximately 65% of homes in the Highland Council Area (based on 2020 figures).

Construction of the wind farm and installation of the offshore export cable(s) is anticipated to take place in two stages:

- Stage 1: The anchors for all Wind Turbine Generators (WTGs) will be installed, and a single floating demonstrator WTG and associated infrastructure may be deployed and commissioned ahead of the wider array to trial the technology required for the project.
- Stage 2: The remainder of the array, comprising up to seven WTGs (up to six if a single WTG is installed as part of the first stage) and associated offshore infrastructure, will be deployed to test and demonstrate commercial-scale floating wind technologies in Scotland.
- The construction of the onshore elements of the project will span these stages.

The project is anticipated to be commissioned and in operation by the end of 2026.

The onshore substation for the project will be located adjacent to the Vulcan Naval Reactor Test Establishment (NRTE) and the former Dounreay Nuclear Facility.

The Environmental Impact Assessment for the Pentland Floating Offshore Wind Farm onshore elements is currently being prepared and will be submitted to the Highland Council in 2022.



DEVELOPMENT



A staged approach to the deployment of the floating technology underpins the development of the Pentland Floating Offshore Wind Farm, as well as our future floating projects in Scotland and globally.

INNOVATION



The innovative technology trialled in this project will be key to the commercialisation of this floating technology. It will deliver valuable insight into developing floating wind technology in Scotland.

LEARNING



The learnings from this will help contribute to the development of a strong Scottish supply chain for floating wind.



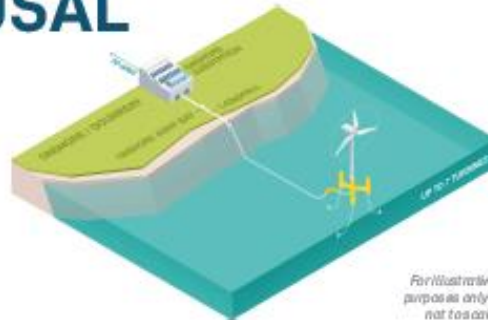


PROJECT DESCRIPTION

ONSHORE PROPOSAL

The Pentland Floating Offshore Wind Farm is applying for planning permission in principle for the onshore substation and transmission infrastructure.

Planning permission in principle allows the proposal to be assessed by the planning authority without the details of the layout and design being finalised at the application stage. This allows the principle of the development to be approved whilst allowing for flexibility in the design. Details of the final design and layout will be submitted to The Highland Council for approval ahead of construction work commencing.



For illustrative purposes only – not to scale



The onshore infrastructure will comprise:

- A cable landfall west of the Vulcan nuclear facility – the preferred option is for the cable to be brought to shore by Horizontal Directional Drilling (HDD);
- A maximum of two onshore cable circuits buried to a depth of approximately one metre;
- A cable Transition Joint Bay (TJB) where offshore and onshore cables are spliced together;
- An onshore substation and switchgear; and
- A temporary construction compound.

It is currently expected that the grid connection point will be into the existing SSE 132/33/11 kV Downreay Substation and a connection agreement has been received from Scottish and Southern Electricity Networks (SSEN) Transmission.

Two indicative onshore substation locations have been identified (as indicated on the map above). These are indicative positions only and the locations for the onshore substation and associated construction compound have not yet been finalised within the onshore site. The final position will be subject to detailed design and further consultation with The Highland Council and relevant consultees, if planning permission is granted.

The onshore substation will include the electrical equipment required to connect the project to the grid. The main components encapsulated in the onshore substation are:

- Transformers;
- Reactors;
- Capacitors;
- Power Electronics; and
- Associated substation equipment.

The main components encapsulated in the construction compound (in addition to the onshore substation) are:

- Offices / welfare facility;
- Car park;
- Control of Substances Hazardous to Health (COSHH) storage;
- Plant fuel / gas storage and refuelling area;
- Diesel generator;
- Water tanks;
- General / recycling / hazardous waste skips;
- Quarantine area;
- Plant storage / laydown area; and
- Security office.

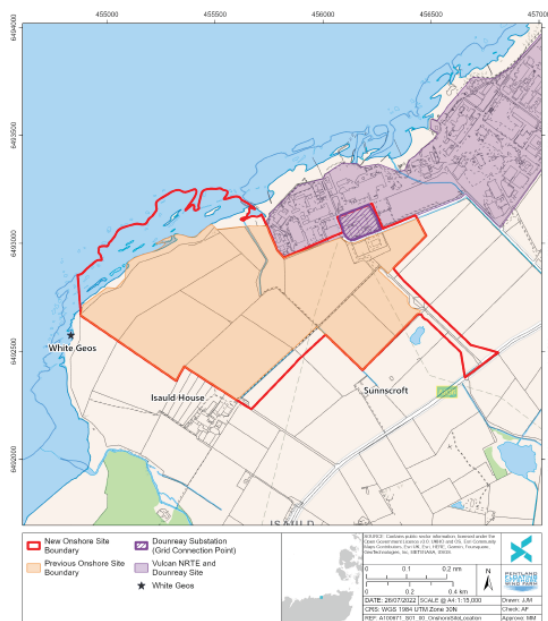
Depending on the final design, the electrical equipment may be housed externally. The exact location of the onshore substation, construction compound, access roads and other onshore infrastructure will be decided at a later stage, following landowner discussions, detailed design and interactions with other projects.



For illustrative purposes only – final substation design and location may differ

MAXIMUM PARAMETER	VALUE / DESCRIPTION
Substation Width	65 m
Substation Length	65 m
Substation Height	14 m
Substation Footprint	4,225 m ²
Construction Compound Footprint	6,975 m ²
Combined Substation & Construction Compound Footprint	11,200 m ² (1.12 hectare)
Perimeter Fence Height	2.4 m

Indicative parameters, subject to final design



CHANGES TO THE ONSHORE SITE

The onshore site area has been increased compared to what has been shown at previous consultation events to include aspects of the development which were not previously included.

This includes the intertidal area covering the area between Mean High Water Springs (MHWS) and Mean Low Water Springs (MLWS), an access track and a route into the existing substation where the project will connect into the national grid.

The decision was made to incorporate all onshore requirements within one application. Although the site area has been increased (as indicated on the map), the proposed infrastructure and its footprint has not changed.

CONSENTS & ASSESSMENTS

An application for planning permission in principle will be made under the Town and Country Planning (Scotland) Act 1997 to The Highland Council for the onshore elements of the project.

The application to The Highland Council will be accompanied by an Environmental Impact Assessment (EIA).

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

EIA is a systematic process which identifies and assesses the potential significant environmental effects of a project, informs the design of the project from an environmental perspective, and sets out standard industry and additional mitigation measures to eliminate or minimise the project's effect on the environment. An EIA report is the written output of the EIA process.

An EIA will be prepared for the onshore project components. The EIA will demonstrate that all potentially significant effects on the environment have been considered and assessed and that appropriate mitigation measures to reduce any significant effects are identified and commitments made to implement these.



The Pentland Floating Offshore Wind Farm is currently undertaking an Environmental Impact Assessment for the onshore development to establish the potential impacts on various receptors in the vicinity of the project. An extensive programme of surveys have been undertaken to underpin the Environmental Impact Assessments (EIA). The final results of the assessments will be detailed within the onshore EIA report.



GEOLOGY & HYDROGEOLOGY

A field walkover survey identified main topographical, hydrological and hydrogeological features within the site, including drainage patterns, watercourse crossings, private water supplies and peatlands. The assessment will cover impacts on identified geology and hydrogeology receptors from the construction, operation and maintenance, and decommissioning phases, including potential effects from ground breaking construction works, for example during HDD and installation of cables.



LAND USE, AGRICULTURE & SOILS

A site walkover survey was undertaken to ground truth receptors including soils, land use, property, recreational areas, utilities and access tracks that are present within the onshore site and surrounding area. The EIA will assess the key land uses including agricultural land, areas of residential and commercial properties, and utilities together with the locations of transport routes, access tracks and routes used for informal recreation.



TERRESTRIAL ECOLOGY

A suite of terrestrial ecology surveys are being undertaken to identify local wildlife and ecology. This includes Extended Phase One habitat surveys which will characterise the baseline habitat and vegetation and identify signs of protected species or other species of conservation importance. National Vegetation Classification (NVC) surveys have also been undertaken to identify sensitive habitats within the site and to classify any ground-water dependent terrestrial ecosystems. Bat surveys have also been undertaken around the site, including surveys of buildings within the area, to identify signs of bat activity. The Ecological Impact Assessment will assess potential impacts on ecological receptors, including direct habitat loss, potential for disturbance or injury, and indirect effects due to pollution sedimentation.



TERRESTRIAL ORNITHOLOGY

A programme of bird surveys was undertaken to identify the local ornithology features in order to support the ornithology impact assessment. The survey scope included terrestrial breeding bird surveys, foraging seabirds, and wintering migrant bird surveys. The survey area focussed on the onshore site and surrounding area, and coastal waters. The EIA will assess the impacts of the onshore development on these species in terms of effects such as disturbance, habitat loss and potential displacement.



ONSHORE ARCHAEOLOGY & CULTURAL HERITAGE

An archaeology and cultural heritage terrestrial site survey was conducted for the previous Dunreay Tri consent application to ascertain the position of any potentially vulnerable cultural heritage features within the onshore site. This survey covered all the areas relating to the onshore development application, and so is applicable to the assessment. This included augmenting heritage data collected from records and highlighted through consultation and determining whether there were any previously unrecorded historic features visible or present at the site. The EIA will consider the impact of the onshore development on scheduled monuments, listed buildings and other designated archaeological and cultural heritage assets.



AIR QUALITY & CLIMATE CHANGE

The EIA will assess construction and decommissioning activities that could impact localised air quality from the generation of dust, and the potential impacts of these on human health and ecological receptors.

Dust may be generated from construction works such as onshore cable laying and upgrading of access tracks. The assessment will also consider potential cumulative air quality impacts that may arise from nearby developments. The EIA report will also include an assessment of the carbon costs and savings impact of the onshore development. Findings from the greenhouse gas and carbon assessment for the offshore development will be used to quantify the overall carbon savings with regard to the onshore infrastructure. This will include a high level assessment which will quantify the carbon offset of the wind farm in relation to the carbon footprint of the onshore infrastructure. Additionally, information will be provided in relation to potential alternatives for materials for the onshore infrastructure, which will note the strategy for selecting the materials including the criteria that materials selected will ensure the project is carbon neutral.



LANDSCAPE & VISUAL AMENITY

In order to ascertain the potential visual impacts on static viewpoints, a number of wirelines and photomontages will be created from all viewpoints to be assessed within the EIA. The viewpoints have been identified through site surveys and through consultation with statutory consultees. The Landscape and Visual Impact Assessment will assess effects on landscape character and visual amenity, from effects such as loss of agricultural land and vegetation, and introduction of development infrastructure to the environment. Careful site selection and iterative design of the layout have sought to minimise landscape and visual effects associated with the onshore development through embedded mitigation.



TRAFFIC & TRANSPORT

A desk study and review of existing traffic surveys has been undertaken to provide the baseline and characterisation of the existing traffic network. The assessment will focus on potential effects arising from traffic generation through the construction phase, and particularly cumulative impacts with other projects, including road safety, driver delay, noise and effects on vulnerable road users (including pedestrians, particularly children and older adults or disabled people, cyclists, horse riders, and motorcyclists).



ONSHORE NOISE

The main source of noise from the development is likely to come from noisy construction activities, such as HDD works. Whilst noise impacts during operation and maintenance are unlikely to cause significant disturbance, noise from the operation elements of the development, such as the substation, will be assessed within the EIA. Cumulative impacts will also be assessed to identify any overlap of noisy construction work with other nearby projects, such as the Dunreay substation. A detailed assessment and background noise survey will be undertaken once substation location and layout are finalised prior to construction.



BENEFITS TO THE LOCAL COMMUNITY & SUPPLY CHAIN

The Pentland Floating Offshore Wind Farm has completed a consultation on the community benefit approach. The project is committed to supporting local suppliers, where possible, and developing the project so that it promotes the welfare, livelihood and sustainability of local communities. You can find more details on Board 7: Benefits to the Community on how to get involved in the consultation process and further information on supply chain engagement and contribution to the local economy.



SUBSTATION OPTION 1 – LANDSCAPE & VISUAL IMPACTS

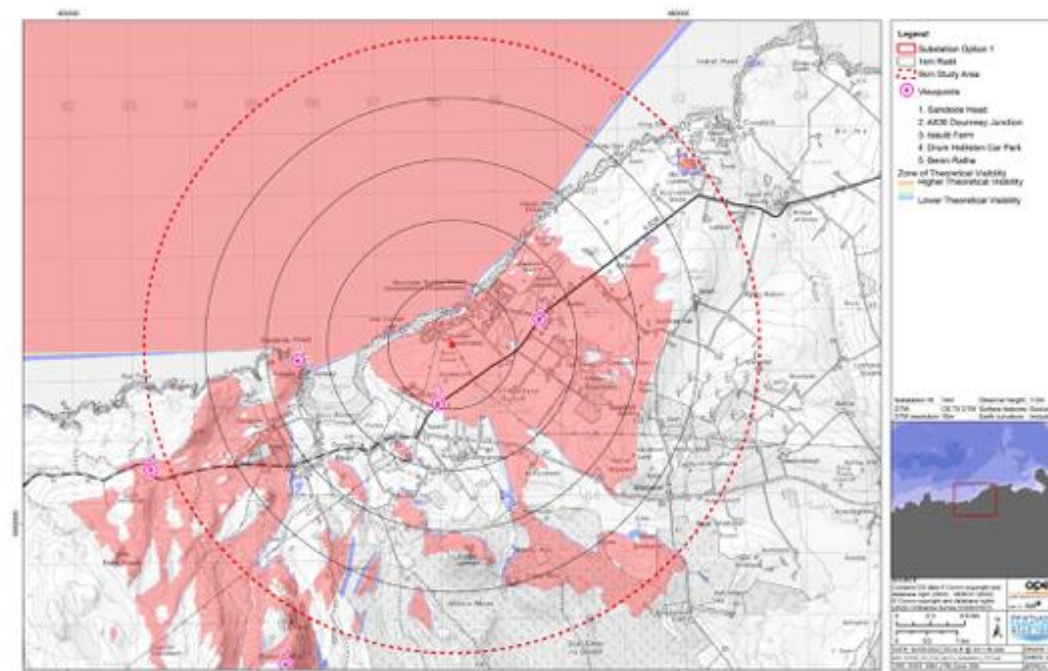
The Landscape and Visual Impact Assessment (LVIA) assesses the potential effects on landscape character and visual amenity arising as a result of the onshore development. The LVIA assesses the potential impacts of the project on landscape and visual receptors within the 5km onshore study area. This includes the likely impacts of the onshore development, comprising the onshore substation, landfall, onshore cable route and other associated infrastructure including the plant required during construction and decommissioning. The LVIA assesses the likely effects that the construction and operation of the onshore development will have on landscape and visual receptors, encompassing effects on coastal character, landscape character, wild land, effects on views and visual receptors, and cumulative effects.

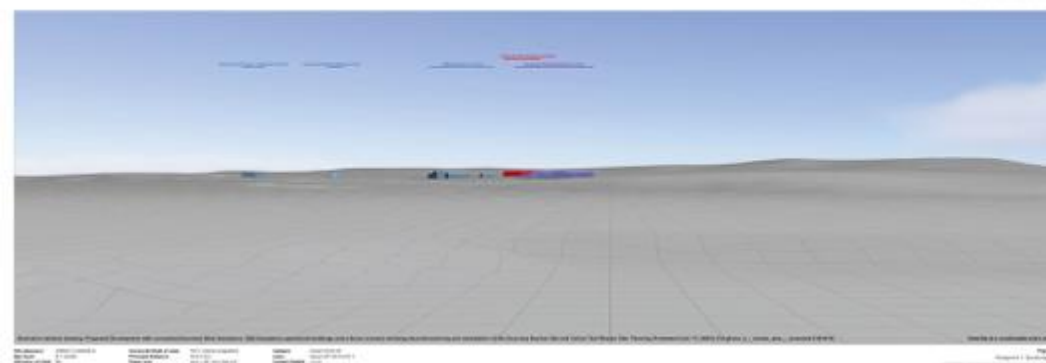
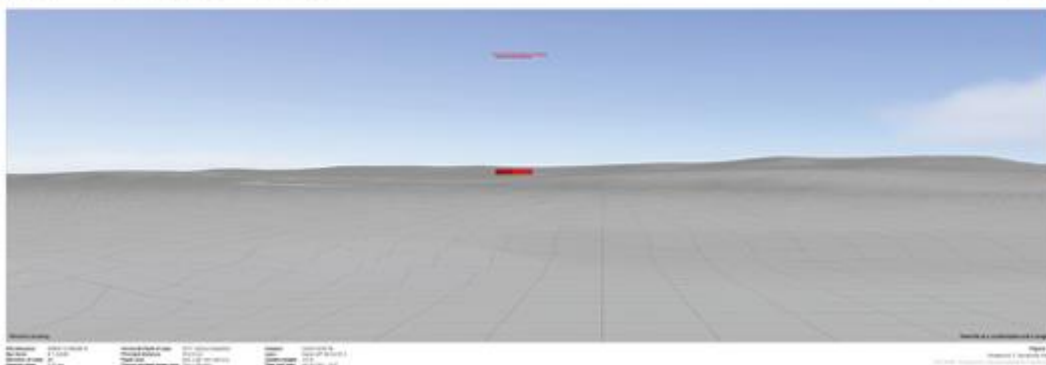
Visibility of the onshore development will be largely contained within the 5km radius from the boundary of the onshore development. This relates to the relatively small scale of the onshore substation, the enclosure of landform which gradually rises up from the coastal edge, and the large-scale forestry which covers the sweeping moorlands to the south.

The photomontages and wirelines presented below provide an indication of the likely visibility of the onshore development from the selected viewpoints.

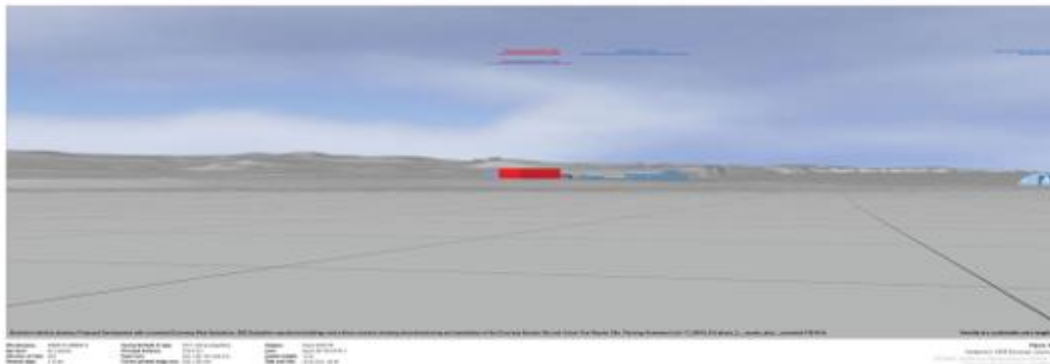
These represent visibility during 'very good' or 'excellent' conditions to ensure the worst case scenario is shown. Viewpoints have been selected to present the fullest visibility from those locations which are representative of local residents, road-users, walkers and visitors to the area.

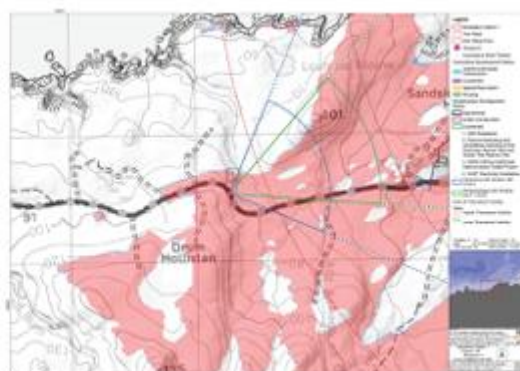
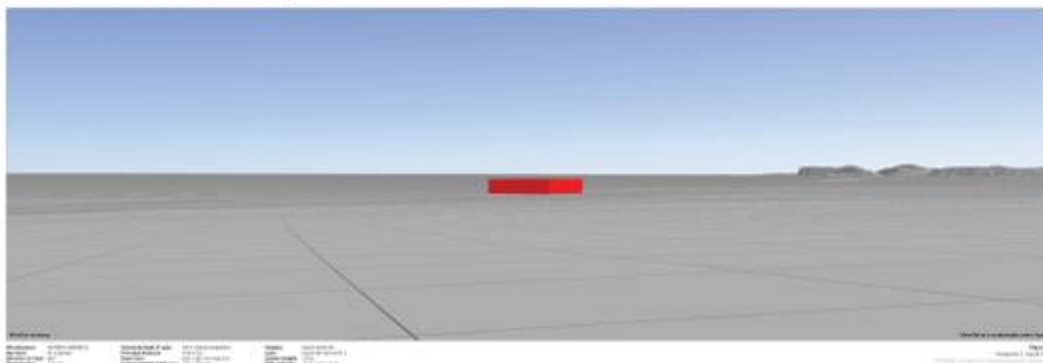
For each viewpoint, photomontages and wirelines illustrate two alternative and indicative substation locations which represent the realistic worst-case scenarios for development on this site. On this banner, photomontages and wirelines are shown for each viewpoint for substation option one, based on the realistic worst-case scenario. The presented layouts are indicative at this stage and are based on the maximum parameters in respect of length, width and height. The final substation location and layout will be confirmed prior to construction. Comparative baseline photographs from the selected viewpoints are also provided below and for viewpoints one and two there are photomontages illustrating the future scenario in which substantial parts of the Dounreay Nuclear Power Facility and Vulcan NRTF would be removed. In addition, an image which shows the Zone of Theoretical Visibility (ZTV) for the onshore development is included to provide an indication of the areas where theoretical visibility of the onshore substation would arise, although in reality this may be reduced by screening from buildings, tree cover or other vegetation.

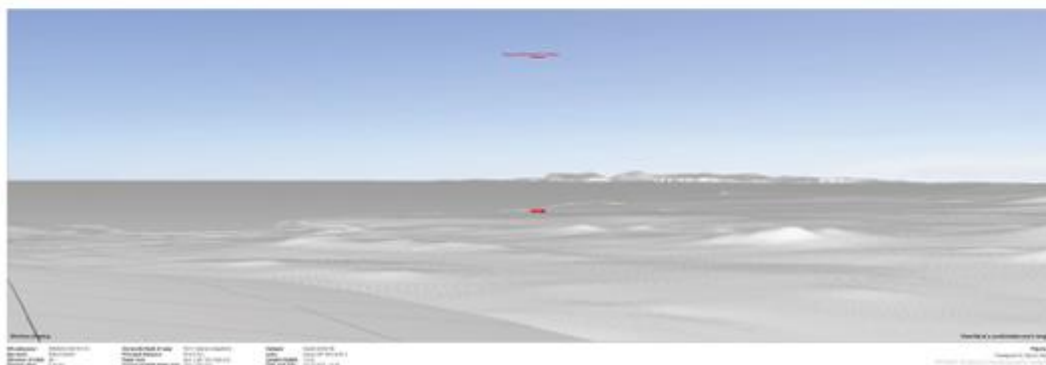












SUBSTATION OPTION 2 – LANDSCAPE & VISUAL IMPACTS

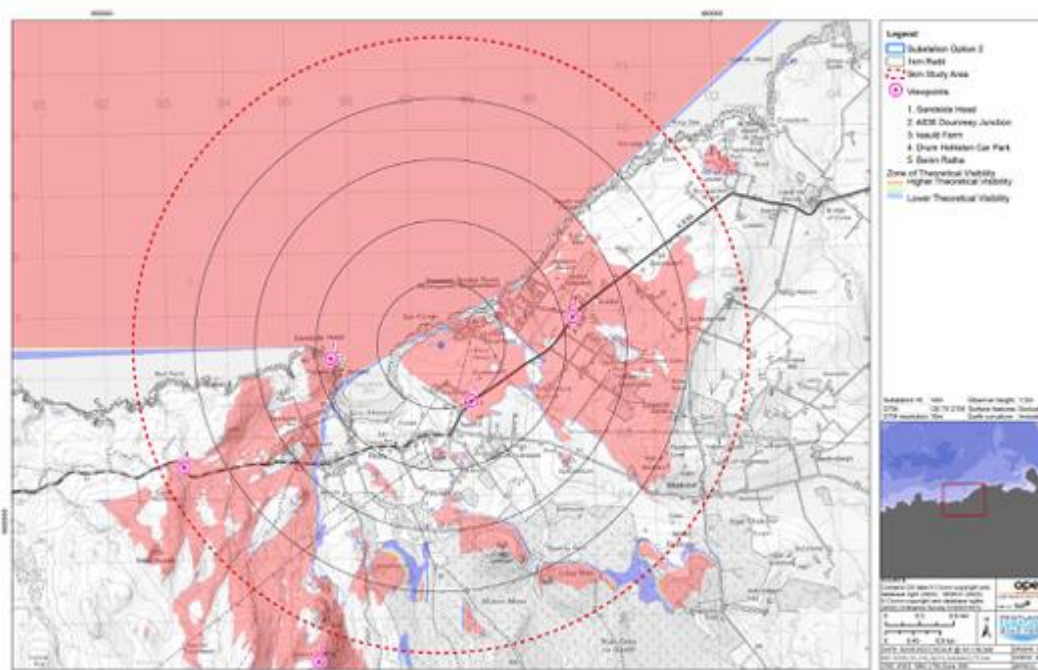
The Landscape and Visual Impact Assessment (LVIA) assesses the potential effects on landscape character and visual amenity arising as a result of the onshore development. The LVIA assesses the potential impacts of the project on landscape and visual receptors within the 5km onshore study area. This includes the likely impacts of the onshore development, comprising the onshore substation, landfill, onshore cable route and other associated infrastructure including the plant required during construction and decommissioning. The LVIA assesses the likely effects that the construction and operation of the onshore development will have on landscape and visual receptors, encompassing effects on coastal character, landscape character, wild land, effects on views and visual receptors, and cumulative effects.

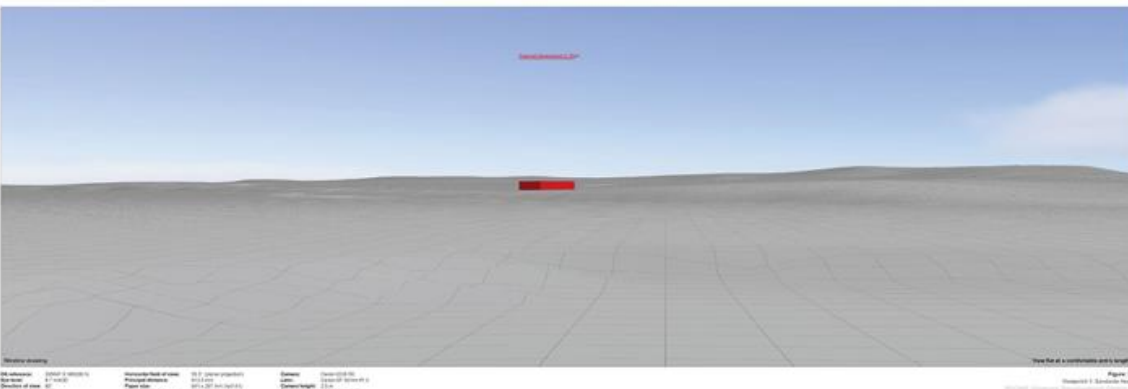
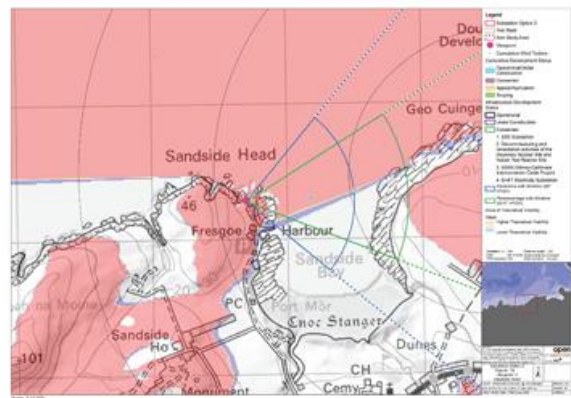
Visibility of the onshore development will be largely contained within the 5km radius from the boundary of the onshore development. This relates to the relatively small scale of the onshore substation, the enclosure of landform which gradually rises up from the coastal edge, and the large-scale forestry which covers the sweeping moorlands to the south.

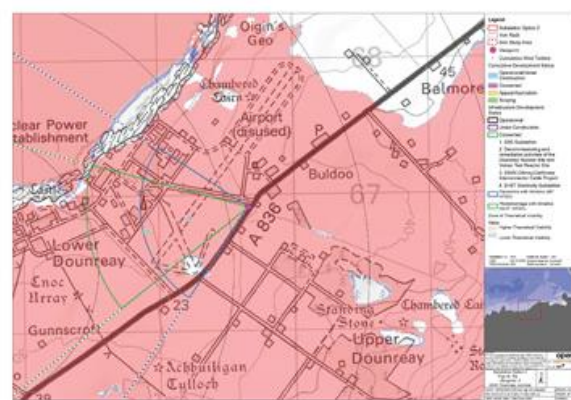
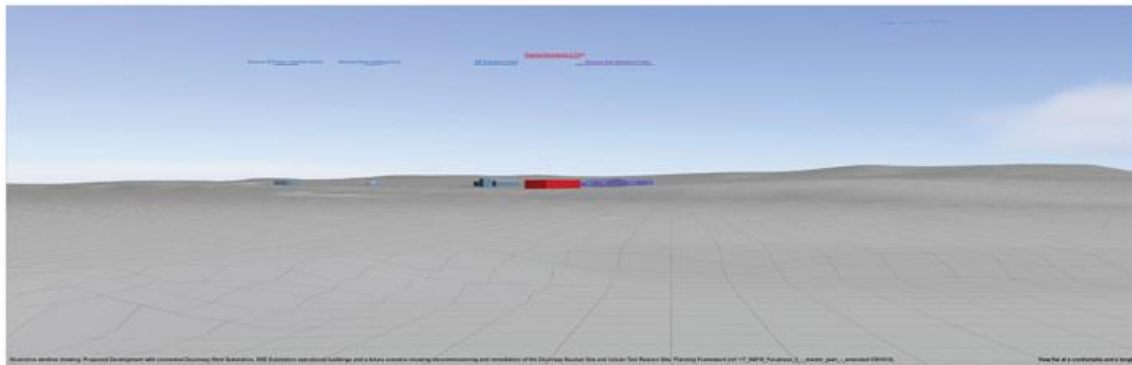
The photomontages and wirelines presented below provide an indication of the likely visibility of the onshore development from the selected viewpoints.

These represent visibility during 'very good' or 'excellent' conditions to ensure the worst case scenario is shown. Viewpoints have been selected to present the fullest visibility from those locations which are representative of local residents, road-users, walkers and visitors to the area.

For each viewpoint, photomontages and wirelines illustrate two alternative and indicative substation locations which represent the realistic worst-case scenarios for development on this site. On this banner, photomontages and wirelines are shown for each viewpoint for substation option two, based on the realistic worst-case scenario. The presented layouts are indicative at this stage and are based on the maximum parameters in respect of length, width and height. The final substation location and layout will be confirmed prior to construction. Comparative baseline photographs from the selected viewpoints are also provided below and for viewpoints one and two there are photomontages illustrating the future scenario in which substantial parts of the Dounreay Nuclear Power Facility and Vulcan NRTF would be removed. In addition, an image which shows the Zone of Theoretical Visibility (ZTV) for the onshore development is included to provide an indication of the areas where theoretical visibility of the onshore substation would arise, although in reality this may be reduced by screening from buildings, tree cover or other vegetation.







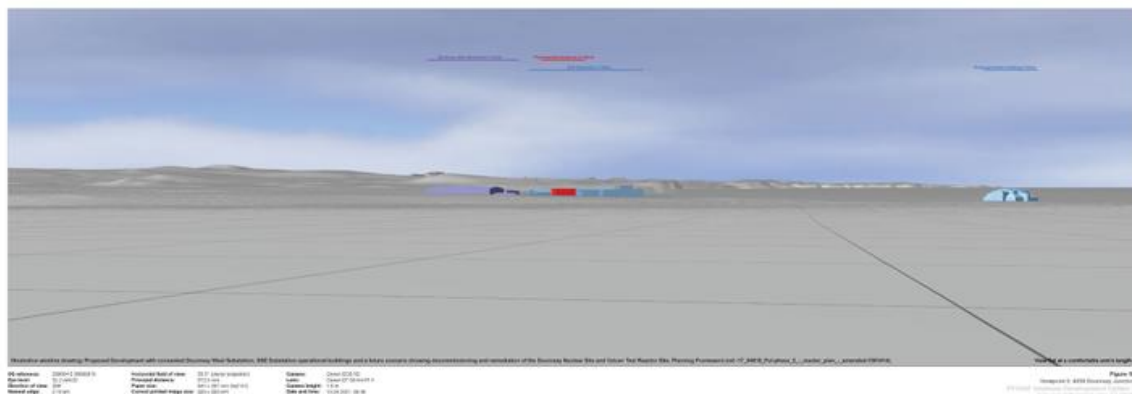
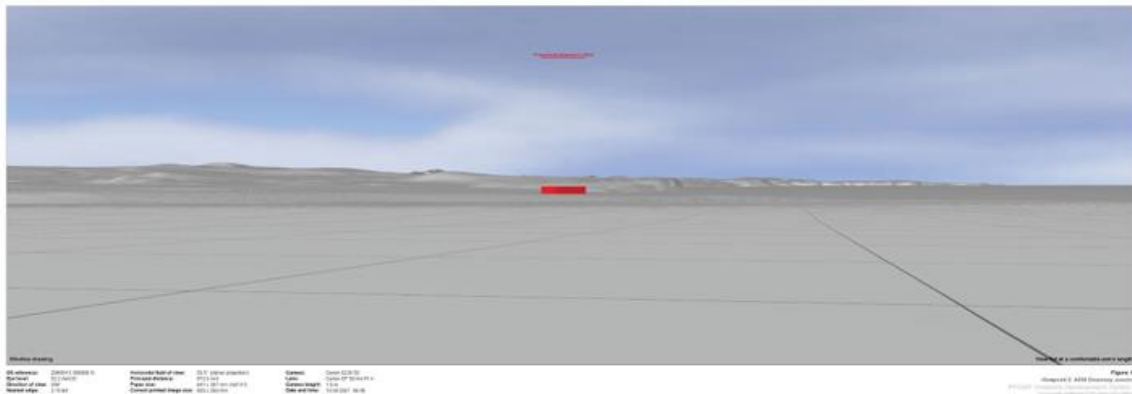




Figure 10: Aerial photograph of the Pentland Floating Offshore Wind Farm area, showing the coastline, wind farm layout, and surrounding land use.

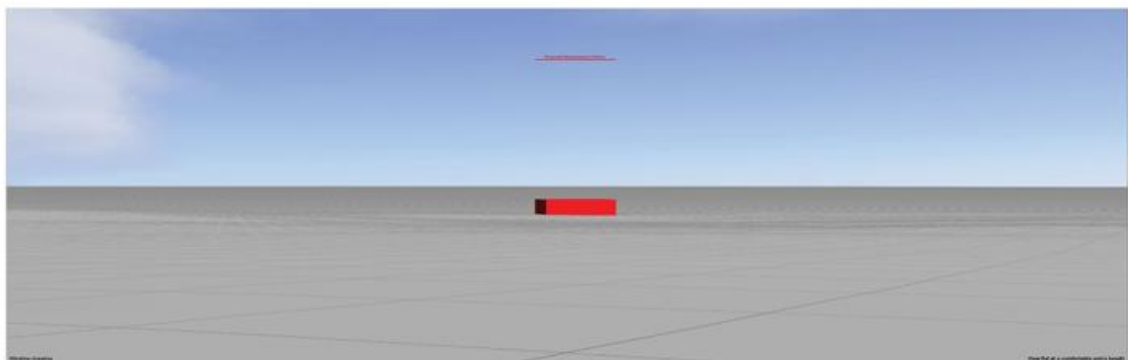
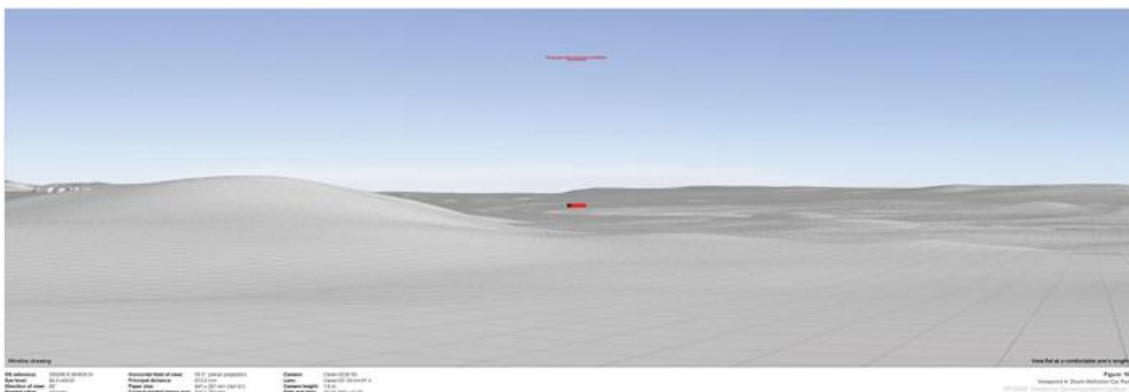
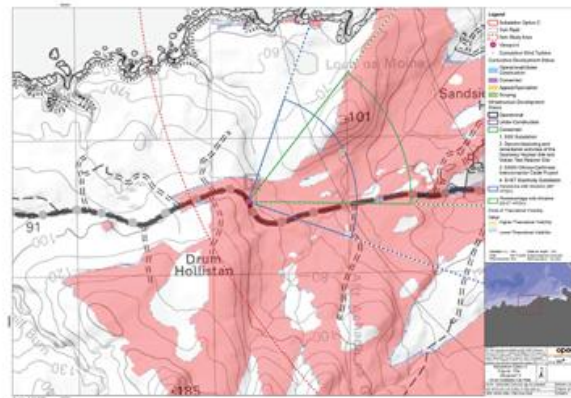
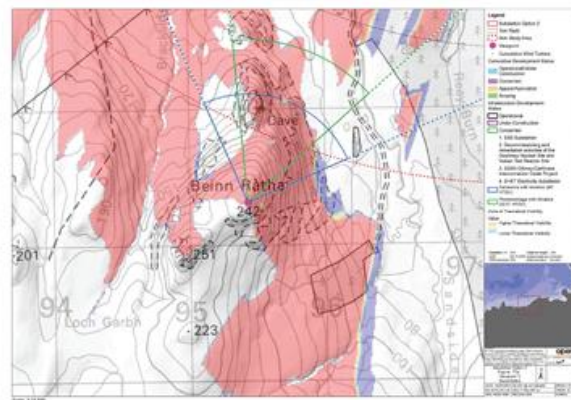


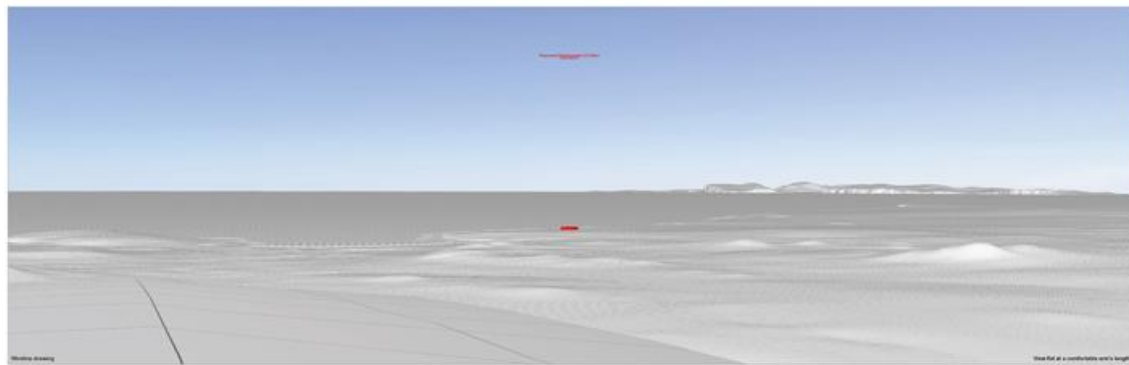
Figure 11: Aerial photograph of the Pentland Floating Offshore Wind Farm area, showing the coastline, wind farm layout, and surrounding land use.



Figure 12: Aerial photograph of the Pentland Floating Offshore Wind Farm area, showing the coastline, wind farm layout, and surrounding land use.









BENEFITS TO THE COMMUNITY

We want to ensure the Pentland Floating Offshore Wind Farm provides long term benefits to communities local to the development. We are working with local schools and universities to provide support to skills development in the renewable industry. We have conducted consultation on the design of a community benefit fund. We have also completed a supply chain assessment and socio-economic studies to understand the benefits the project will bring to the community through jobs and value created.



COMMUNITY BENEFIT FUND

We are at the early stages of developing a community benefit fund for the Pentland Floating Offshore Wind Farm, which would likely become available on commissioning of the array project. The fund will support local projects that are focused on climate smart initiatives.

We commissioned Foundation Scotland to consult on the development of this fund. Consultation ended in July 2022. The views collected during the consultation will form part of the considerations when finalising the design of the fund. More information is available at: www.foundationscotland.org.uk/pentland

SUPPLY CHAIN ASSESSMENT & LOCAL VALUE CREATION

The Pentland Floating Offshore Wind Farm is committed to supporting local suppliers where possible and developing the project so that it promotes the welfare, livelihood and sustainability of local communities. In 2021, the project team met with a number of local suppliers and negotiated a Memorandum of Understanding with Scrabster Harbour Trust, to work together on the development of operations and maintenance requirements, services and facilities. This shows a commitment to work collaboratively to investigate the potential for construction support services and major component change out for the floating wind turbines.

In 2021, we undertook a social and economic study in partnership with the University of the Highlands and Islands (UHI) and leading industry experts, to understand the positive impacts the project will have (both directly and indirectly) on the community, for example, through providing jobs, Gross Value Added (GVA) potential and demand for local services. We have also commissioned a supply chain study to inform the socio-economic work in order to assess local supply chain capability and identify opportunities to support the project.

It is anticipated that during the lifetime of the Pentland Floating Offshore Wind Farm, between 750-800 FTE job-years in Caithness and between 2,400-3,300 FTE job-years in the Highlands and Islands will be created. The Pentland Floating Offshore Wind Farm is anticipated to create around £50 million for Caithness and £150-200 million for Highlands and Islands of Gross Value Added at 2021 prices. These numbers will be updated as we finalise the detailed design, procurement activities and construction and operations and maintenance strategies. The socio-economic impacts of the project will be assessed in detail within the Environmental Impact Assessment, as set out on Board 4: Consents & Assessments.

Pentland Floating Offshore Wind Farm has recently launched a supply chain registration portal. A link to this portal and information on how to register can be found at: www.pentlandfloatingwind.com/work-with-us

SKILLS DEVELOPMENT

The Pentland Floating Offshore Wind Farm is supporting an Education and Training Fund which will award scholarships to selected students from Thurso and Farr High Schools, who are going on to study higher education and training programmes focussed on Science, Technology, Engineering and Mathematics.

We are proud to have students from the University of Highland and Islands (UHI) and the University of Strathclyde interning with the project, enabling them to gain offshore wind industry experience. Meet Grant, an intern on the Pentland Floating Offshore Wind Farm:



GRANT ANDERSON

I am currently in my final year of Energy Engineering at the UHI Outer Hebrides and working as an

intern on the Pentland Floating Offshore Wind Farm. The internship has allowed me to be fully involved with a range of different disciplines including engineering, health and safety and project management. I have been able to apply many elements of my degree during the internship including data analysis, report writing and computer modelling. More importantly, it has allowed me to get relevant hands-on experience on a current project which will be valuable for any future employment in the offshore wind world. I have really enjoyed being part of a dynamic and motivated team.

INDICATIVE DEVELOPMENT TIMELINE



THE DEVELOPMENT PROCESS

PREPARATION OF THE EIA REPORT – CURRENT STAGE

The Pentland Floating Offshore Wind Farm is currently at the stage of preparing the EIA report for submission. Within the EIA report, impacts of the proposed onshore project design will be assessed by competent experienced professionals, using the relevant baseline information collected, various guidance, good practice guidelines and expert judgement. All the findings and proposed mitigation measures identified through the EIA process will be presented in the onshore EIA report. Desk based assessments and field studies helped to define the baseline environment and identify receptors for consideration and the assessments are supported by detailed modelling and technical studies.

The project design and EIA scope draws on the feedback from statutory consultees and the comments received during the public consultation events. Your views and feedback during this consultation period will continue to help shape the development of our project proposals.

SUBMISSION OF APPLICATIONS

An application for planning permission in principle for the onshore transmission works for the Pentland Floating Offshore Wind Farm under the Town and Country Planning (Scotland) Act 1997 will be submitted to The Highland Council. At this point, there will be a period for the public to formally comment on the proposals, information to the public on how to respond will be advertised through local press.

DETERMINATION OF APPLICATION

It is anticipated that it will take four months for the applications to be determined. During this time the project will continue with engineering studies to finalise the project requirements. During this time, the project will continue with engineering studies to finalise the project requirements and detailed supply chain discussions will also be held and we will finalise community benefits associated with the project.

PREPARATION FOR CONSTRUCTION

The application will be for planning permission in principle. If consent is granted, further applications will be made to The Highland Council with the detailed design and layout. This process is known as approval of matters specified in conditions.

The consents granted will likely have a number of conditions associated with them. Information on the detail of the project will be submitted in order to ensure they are in line with the consented project. Construction and environmental management and monitoring plans detailing how the project will be delivered will also be submitted for approval.

CONSTRUCTION

It is anticipated that construction will commence in 2024. The construction of the project is anticipated to take place within a two year period. An independent environmental clerk of works will be employed to ensure that the construction is carried out in line with the consent.



FAQS

Q: Who are Highland Wind Limited?

A: Pentland Floating Offshore Wind Farm is being developed by Highland Wind Limited which is majority owned by a fund managed by Copenhagen Infrastructure Partners (CIP) with Hexion AB as a minority shareholder. Copenhagen Infrastructure Partners P/S (CIP) is a fund management company focused on energy infrastructure including offshore wind, onshore wind, solar photovoltaic (PV), biomass and energy-from-waste, transmission and distribution, reserve capacity and storage, and other energy assets like Power-to-X. It was founded in 2012 and currently has approximately EUR 16 billion under management. CIP is a major investor in the offshore wind sector and has significant investments in a number of offshore wind projects around the world. Copenhagen Offshore Partners (COP), which conducts offshore wind development activities on behalf of the funds managed by CIP, has recently opened an office in Edinburgh to support the funds' increasing engagement in Scotland, with a particular focus on floating wind.

Q: What are the benefits of floating wind and do we need it?

A: Almost 80% of the world's wind resource is in water deeper than 60 metres. It is where windspeeds are stronger and more consistent meaning higher capacity factors. It is looking extremely likely that floating wind will be essential to meet the UK's net-zero emission targets and is needed to deliver on ambitions set by the Committee on Climate Change.

Q: How does Dounreay Tri Project fit in with your proposal?

A: The Pentland Floating Offshore Wind Farm project is an update to the Dounreay Tri Project that was granted key consents and a site lease in 2017. The original Dounreay Tri Project consisted of a two-turbine offshore wind farm, with an installed capacity of between 8 to 12 MW, approximately 6 km off Dounreay, Caithness. Highland Wind Limited acquired the Project and associated consent, licences and site lease in 2021. The Pentland Floating Offshore Wind Farm will be built out under a new consent that is the subject of this exhibition.

Q: What are your plans?

A: The primary objective of the Pentland Floating Offshore Wind Farm is to test and demonstrate a technology solution for floating wind in Scotland. By developing the project in stages, through deploying the single turbine followed by the remaining turbines a year later, the capabilities of the local supply chain in Scotland will be better understood. This understanding will allow us to support the development of a strong local supply chain for floating wind in Scotland, helping to meet climate change targets, and providing highly skilled jobs and energy security. Highland Wind Limited firmly believes that this project will be an enabler for larger scale developments resulting from the current ScotWind Leasing Round and in turn will result in knowledge exchange and export opportunities in relation to the global floating offshore wind market.

Q: What technology are you using?

A: Highland Wind Limited will develop the project using the optimal technical, environmental and commercial solution. Currently this technology is still evolving so the exact technological requirements for the project are still under consideration. We will look to establish our selected technology and suppliers once we have gathered all the information from our metocean and seabed surveys to ensure the most efficient and technically feasible options are taken forward. Nonetheless, we are planning on using up to 7 turbines, with the maximum height of the turbine blade tip from the sea surface being 300 metres.

Q: Will I see the Pentland Floating Offshore Wind Farm from the shore?

A: The Pentland Floating Offshore Wind Farm Application Boundary will be approximately 7.5 km from shore, this distance has been increased from the previously consented boundary for the Dounreay Tri Project in order to further reduce any visual impacts.

Q: Will there be disruptions during construction?

A: We are working to engage closely with landowners, local residents, the Maritime Coastguard Authority, ports and harbours and Traffic and Transport Scotland to ensure the development minimises disruptions to local communities as far as possible. We already understand there are some concerns regarding construction and operational traffic in the local area. This will be taken into account in our application.

Q: What about environmental impacts on seabirds and other marine life?

A: Renewable energy technologies are key to combating the effects of climate change, which is considered one of the biggest threats to marine life. Floating wind is part of the solution for a greener and safer future. Nonetheless, any development activity in the marine environment has the potential to impact marine life and seabirds. We are committed to following best practice and have proactively undertaken environmental surveys and have conducted assessments, monitoring and modelling to minimise any impact on wildlife during the project's development. The project team continues to engage with key environmental and conservation stakeholders and other relevant consultees in order to inform the scope of the Environmental Impact Assessments (EIA) and detail of the project related to the EIA.

Q: When will the Pentland Floating Wind Farm be completed?

A: The single turbine demonstrator is planned to be deployed as the first stage of the Pentland Floating Offshore Wind Farm to allow time to test and demonstrate the floating wind technology. We are planning to finish construction and installation of the remaining turbines during 2026.

Q: How many homes will you power?

A: The Pentland Floating Offshore Wind Farm will provide enough green energy for approximately 70,000 homes per year, equivalent to approximately 65% of households in The Highland Council Area (based on 2020 figures). This would offset up to 125,000 tonnes of CO₂ when considering all types of fossil fuels (<https://www.gov.scot/publications/renewable-and-conversioncalculators/>).

Q: What are the benefits to the local community?

A: Highland Wind Limited is committed to ensuring this project provides long term benefits to the local community. We have undertaken social and economic studies with involvement of the University of the Highlands and Islands (UHI) and leading industry experts to understand the positive impacts the project will have (both directly and indirectly) on the community, for example, through providing jobs, Gross Value Added (GVA) potential and demand for local services. Furthermore, we have commissioned a supply chain study to complement the socio-economic work in order to assess local supply chain capability and identify opportunities to support the project. We have completed a consultation process on the Community Benefit Fund and the views collected will form part of the considerations when finalising the design of the fund.

Q: How many jobs will this development provide to the local community?

A: It is anticipated that during the lifetime of the Pentland Floating Offshore Wind Farm, between 750-800 FTE job-years in Caithness and between 2400-3300 FTE job-years in the Highlands and Islands will be created.

Q: Who else are you engaging with in the application process?

A: To date we have been in contact with a number of stakeholders including the Highland Council, Marine Scotland, Scrabster and Wick Harbour Authorities, local fisheries, NatureScot, Northern Lighthouse Board, the Maritime Coastguard Authority, SEPA, landowners, Dounreay Site Restoration Limited, NRTT Vulcan, Crown Estate Scotland, RSPB, Dounreay Stakeholder Group, Caithness West Community Council and Melvich Community Council. We plan to continue engagement as the application progresses towards submission.

Q: I want to keep informed on project updates, how do I do this?

A: Updates on the project will be provided on our website at www.pentlandfloatingwind.com. There will be an opportunity for the community to make formal comment on the onshore proposals to The Highland Council once our application has been submitted. Details on how to go about this will be provided in a local newspaper and published on our website at the time of submission.

Appendix E: Feedback Forms

September 2021

Contact us / Feedback	
<p>The feedback received from this virtual exhibition is paramount to the success of the project. We need your feedback in order to understand what is important to you and ensure that your views and suggestions are heard so that this proposal brings benefits to the local community as well as the wider public.</p> <p>How did you find the quality of information provided at today's event?</p> <p>Excellent <input type="radio"/></p> <p>Good <input type="radio"/></p> <p>Average <input checked="" type="radio"/></p> <p>Poor <input type="radio"/></p> <p>Did you find the virtual exhibition accessible and easy to navigate?</p> <p>Yes <input type="radio"/></p> <p>No <input type="radio"/></p> <p>If no, what could we do better?</p> <div><div></div><div></div></div> <p>Do you agree with Highland Wind Limited's proposals for the Pentland Floating Offshore Wind Farm?</p> <p>Agree <input type="radio"/></p> <p>Disagree <input type="radio"/></p> <p>Unsure <input type="radio"/></p> <p>Could you please provide more information?</p> <div><div></div><div></div></div> <p>Do you have any concerns with the proposed location of the onshore substation for the Pentland Floating Offshore Wind Farm?</p> <p>None <input type="radio"/></p> <p>Concerned about the location <input checked="" type="radio"/></p> <p>Unsure <input type="radio"/></p>	<p>Could you please provide more information?</p> <div><div></div><div></div></div> <p>Do you have any concerns with the proposed offshore elements for the Pentland Floating Offshore Wind Farm?</p> <p>None <input type="radio"/></p> <p>Concerned about the elements <input type="radio"/></p> <p>Unsure <input type="radio"/></p> <p>Could you please provide more information?</p> <div><div></div><div></div></div> <p>Do you have any concerns on the level of engagement undertaken to date from Highland Wind Limited?</p> <p>Not enough <input type="radio"/></p> <p>Correct level <input type="radio"/></p> <p>Unsure <input type="radio"/></p> <p>Would you like kept informed of project updates? If so, please confirm your e-mail address.</p> <p>Do you have any specific concerns regarding the proposals you would like the project team to consider?</p> <div><div></div><div></div></div> <p>Contact Us</p> <p>If you have any additional comments, feedback or would like to get in touch with the project team then please email us at pentland-stakeholder@cop.dk. Alternative methods to contact us are listed on our website at www.pentlandfloatingwind.com.</p> <p>Please do not disclose sensitive personal data (race, ethnicity, health information, religion, sexuality or sex life, political opinion, philosophical belief, and trade union membership) or other confidential information such as national identification number or information related to criminal offences or convictions.</p> <p>Information is collected and stored in accordance with Highland Wind Limited's Privacy Policy.</p>

Virtual Exhibition – May 2022

Contact us / Feedback		
<p>The feedback received from this consultation is taken into consideration during the development of the project. We need your feedback in order to understand what is important to you, understand your concerns and ensure that your views and suggestions are heard so that the proposal brings benefits to the local community as well as the wider public.</p> <p>Which public consultation event did you attend?</p> <p>Online Virtual Exhibition <input type="radio"/></p> <p>In person event (Reay and Thurso) <input type="radio"/></p> <p>Live Chat Question and Answer Session Online <input type="radio"/></p> <p>How did you find the quality of information provided?</p> <p>Excellent <input type="radio"/></p> <p>Good <input type="radio"/></p> <p>Average <input type="radio"/></p> <p>Poor <input type="radio"/></p> <p>Did you find the exhibition accessible and easy to navigate?</p> <p>Yes <input type="radio"/></p> <p>No <input type="radio"/></p> <p>If no, what could we do better?</p> <p>Do you agree with Highland Wind Limited's proposals for the Pentland Floating Offshore Wind Farm?</p> <p>Agree <input type="radio"/></p> <p>Disagree <input type="radio"/></p> <p>Unsure <input type="radio"/></p> <p>Could you please provide more information?</p> <p>Do you have any concerns with the proposed location of the onshore infrastructure for the Pentland Floating Offshore Wind Farm?</p>	<p>None <input type="radio"/></p> <p>Concerned about the location <input type="radio"/></p> <p>Unsure <input type="radio"/></p> <p>Could you please provide more information?</p> <p>None <input type="radio"/></p> <p>Concerned about the elements <input type="radio"/></p> <p>Unsure <input type="radio"/></p> <p>Could you please provide more information?</p> <p>Do you have any concerns on the level of engagement undertaken to date from Highland Wind Limited?</p> <p>Not enough <input type="radio"/></p> <p>Correct level <input type="radio"/></p> <p>Unsure <input type="radio"/></p> <p>If you have previously provided feedback, how well has this consultation responded to your feedback?</p> <p>Not enough <input type="radio"/></p> <p>Correct level <input type="radio"/></p> <p>Unsure <input type="radio"/></p> <p>Not applicable <input type="radio"/></p> <p>Could you please provide more information?</p>	<p>Would you like to be kept informed of project updates? If so, please confirm your e-mail address</p> <p>Do you have any specific concerns regarding the proposals you would like the project team to consider?</p> <p>Contact Us</p> <p>If you have any additional comments, feedback or would like to get in touch with the project team then please email us at pentlandstakeholder@cop.uk. Alternative methods to contact us are listed on our website at www.pentlandfloatingwind.com.</p> <p>Please do not disclose sensitive personal data (race, ethnicity, health information, religion, sexuality or sex life, political opinion, philosophical belief, and trade union membership) or other confidential information such as national identification number or information related to criminal offences or convictions.</p> <p>Information is collected and stored in accordance with Highland Wind Limited's Privacy Policy.</p>

In-Person Exhibition – May 2022



The feedback received from this consultation is taken into consideration during the development of the project. We need your feedback in order to understand what is important to you, understand your concerns and ensure that your views and suggestions are heard so that this proposal brings benefits to the local community as well as the wider public.

1. Which public consultation event(s) did you attend?

- Online Virtual Exhibition ☐
In person event (Reay / Thurso) ☐
Live Chat Question and Answer Session Online ☐

2. How did you find the quality of the information provided?

- Excellent ☐
Good ☐
Average ☐
Poor ☐

3. Did you find the exhibition accessible and easy to navigate?

- Yes ☐
No ☐

If no, what could we do better?

4. Do you agree with Highland Wind Limited's proposals for the Pentland Floating Offshore Wind Farm?

- Agree ☐
Disagree ☐
Unsure ☐

Could you please provide more information?

5. Do you have any concerns with the proposed location of the onshore infrastructure for the Pentland Floating Offshore Wind Farm?

- None ☐
Concerned about the location ☐
Unsure ☐

Could you please provide more information?

6. Do you have any concerns with the proposed offshore elements for the Pentland Floating Offshore Wind Farm?

None ☐
Concerned about the location ☐
Unsure ☐

Could you please provide more information?

7. Do you have any concerns on the level of engagement undertaken to date from Highland Wind Limited?

Not enough ☐
Correct level ☐
Unsure ☐

8. If you have previously provided feedback, how well has this consultation responded to your feedback?

Not enough ☐
Correct level ☐
Unsure ☐
Not Applicable ☐

Could you please provide more information?

9. Would you like to be kept informed of project updates? If so, please confirm your e-mail address.

10. Do you have any specific concerns regarding the proposals you would like the project team to consider?

Contact Us

If you have any additional comments, feedback or would like to get in touch with the project team then please email us at pentland-stakeholder@cop.dk. Alternative methods to contact us are listed on our website at www.pentlandfloatingwind.com.

The feedback form can also be filled out online at: www.openplans.uk/pentland/

Please do not disclose sensitive personal data (race, ethnicity, health information, religion, sexuality or sex life, political opinion, philosophical belief, and trade union membership) or other confidential information such as national identification number or information related to criminal offences or convictions. Information is collected and stored in accordance with Highland Wind Limited's Privacy Policy (<https://www.pentlandfloatingwind.com/privacy/privacy-policy.html>).

Virtual Exhibition – August 2022

Contact us / Feedback

The feedback received from this consultation is taken into consideration during the development of the project. We need your feedback in order to understand what is important to you, understand your concerns and ensure that your views and suggestions are heard so that this proposal brings benefits to the local community as well as the wider public.

Please note that this consultation specifically relates to the onshore elements of the proposal, including the substation and onshore export cables. The offshore elements of the Pentland Floating Offshore Wind Farm have been subject to a different planning application process through Marine Scotland. We are not able to take any further feedback on the offshore elements at this stage. There will be an opportunity to provide comments to Marine Scotland on the offshore elements of the project and this will be advertised on the Pentland Floating Offshore Wind Farm website: pentlandfloatingwind.com.

We will review the comments received together with the results of the environmental assessments to be undertaken to inform the final design of the project. Details of how your comments may have influenced the final design will be explained in the application submissions.

Please note that any comments made on the proposals at this stage are not representations to the planning authority. If a planning application is subsequently submitted to The Highland Council, normal neighbour notification and publicity will be undertaken at that time and you will have an opportunity then to make formal representations to the Council.

Did you find the virtual exhibition accessible and easy to navigate?

Yes ☐

No ☐

If no, what could we do better?

Do you have any concerns with the proposed locations of the onshore infrastructure for the Pentland Floating Offshore Wind Farm?

None ☐

Concerned about the location ☐

Unsure ☐

Could you please provide more information?

Do you have any concerns with the elements of the proposed onshore infrastructure for the Pentland Floating Offshore Wind Farm?

None ☐

Concerned about the elements ☐

Unsure ☐

Could you please provide more information?

Do you have any concerns on the level of engagement undertaken to date from Highland Wind Limited?

Not enough ☐

Correct level ☐

Unsure ☐

Would you like to be kept informed of project updates? If so, please confirm your e-mail address

Do you have any specific concerns regarding the onshore proposal you would like the project team to consider?

Contact Us

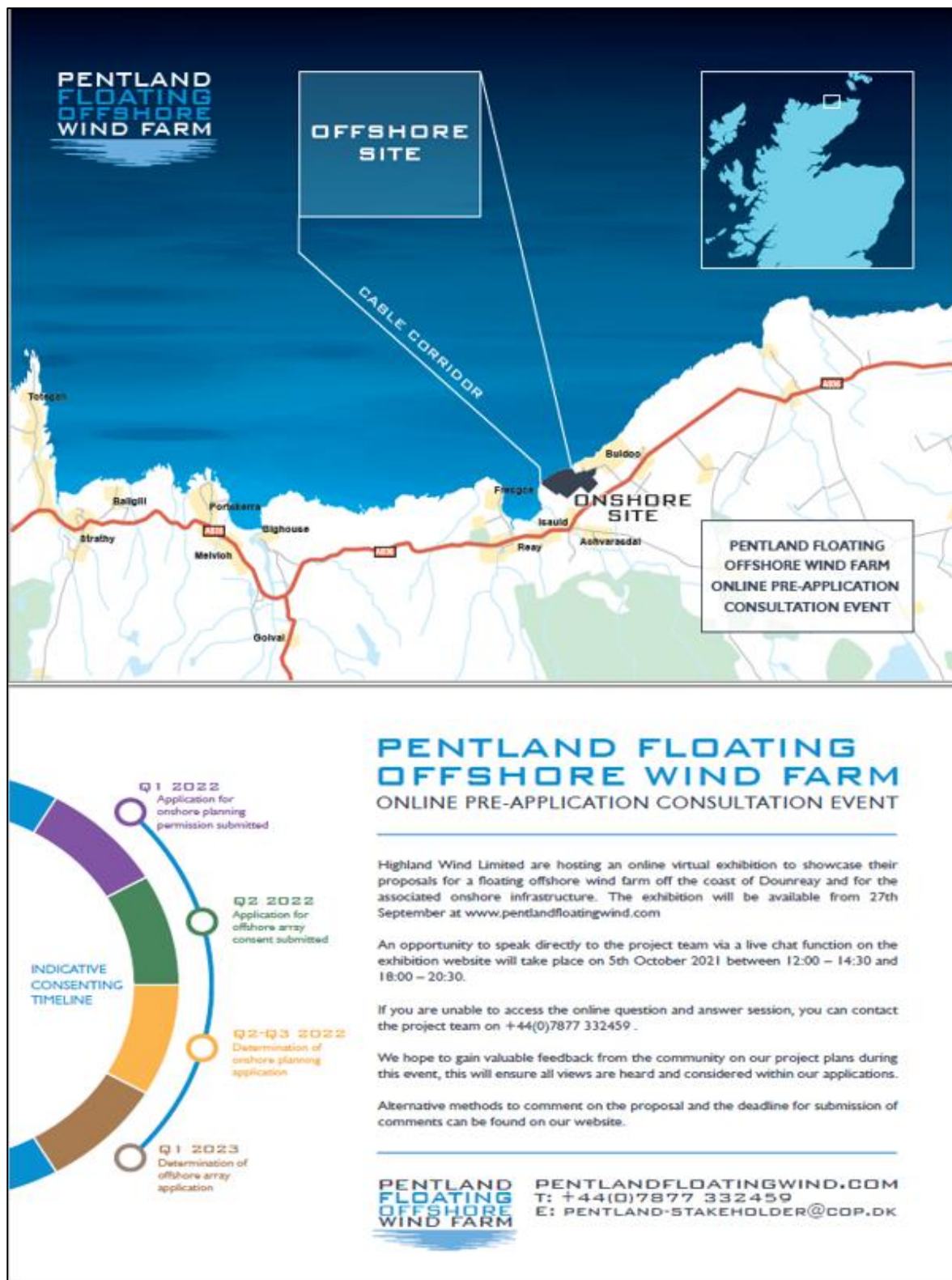
If you have any additional comments, feedback or would like to get in touch with the project team then please email us at pentland-stakeholder@cop.dk. Alternative methods to contact us are listed on our website at www.pentlandfloatingwind.com.

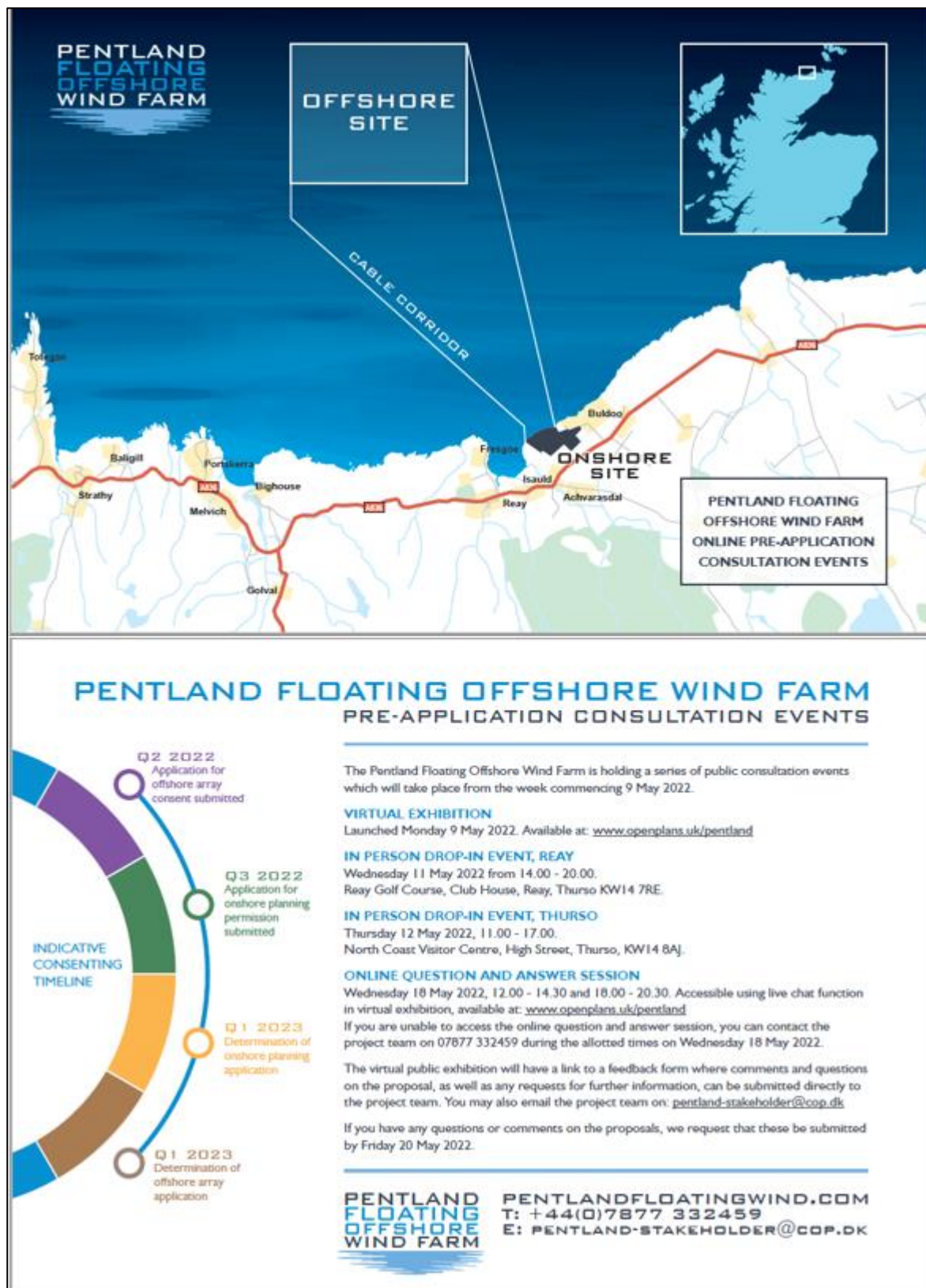
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Appendix F: Flyers and Posters





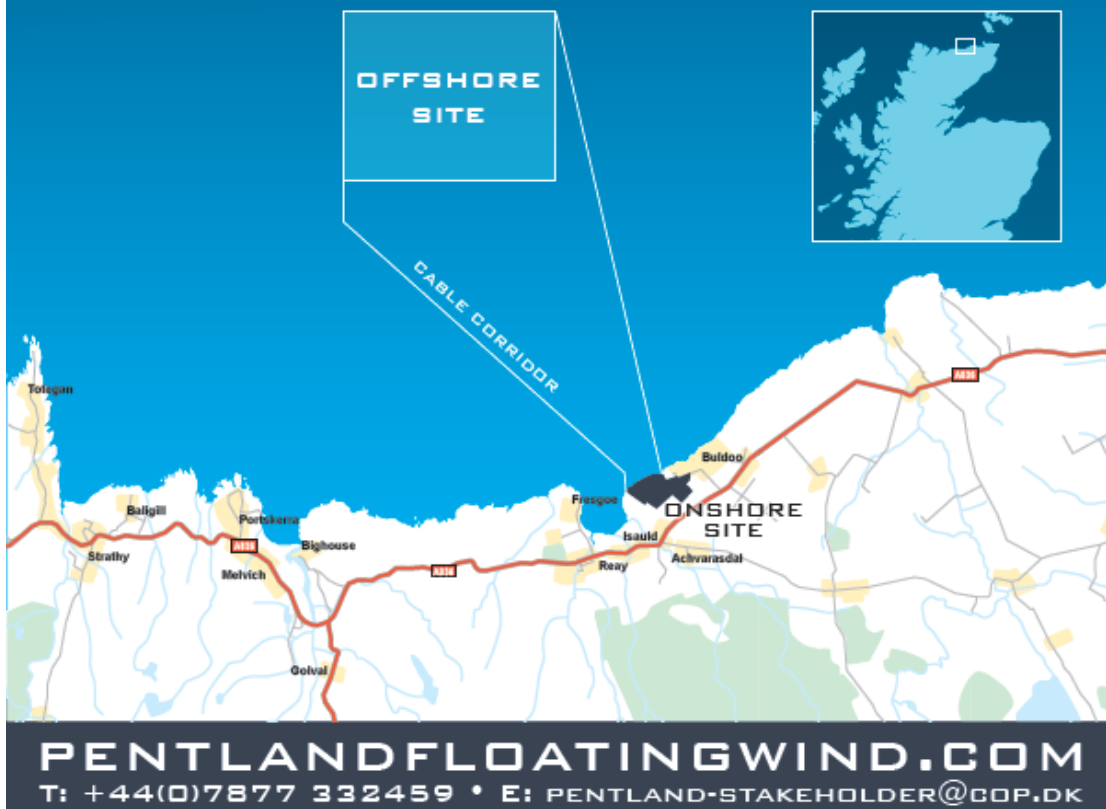
**PENTLAND
FLOATING
OFFSHORE
WIND FARM**

ONLINE PRE-APPLICATION CONSULTATION EVENT

An online virtual exhibition to showcase proposals for a floating offshore wind farm off the coast of Dounreay and for the associated onshore infrastructure.

**From 27th September 2021
at pentlandfloatingwind.com**

On 5th October 2021 between 12:00 - 14:30 and 18:00 - 20:30 you can join the project team for a live-chat question and answer session in the virtual exhibition room which is accessible via a link on our website.



**PENTLAND
FLOATING
OFFSHORE
WIND FARM**

PRE-APPLICATION CONSULTATION EVENTS

VIRTUAL EXHIBITION

Launched Monday 9 May 2022

IN PERSON DROP-IN EVENTS

Reay Golf Course Club House, Reay

Wednesday 11 May 2022, 14.00 - 20.00

North Coast Visitor Centre, Thurso

Thursday 12 May 2022, 11.00 - 17.00

ONLINE QUESTION AND ANSWER SESSION

Wednesday 18 May 2022, 12.00 - 14.30 and 18.00 - 20.30

For more information visit: www.pentlandfloatingwind.com



PENTLANDFLOATINGWIND.COM

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