



Scottish & Southern
Electricity Networks

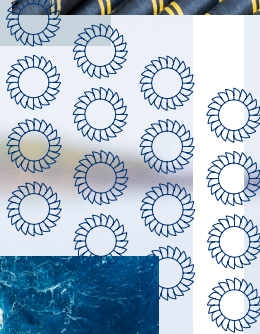
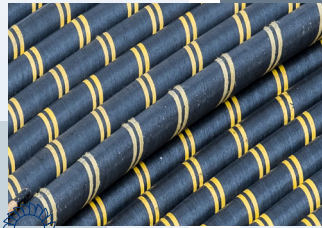
TRANSMISSION



Spittal to Peterhead High Voltage Direct Current (HVDC) Link Project

Subsea Cable Pre-Application Consultation

September 2024



ssen-transmission.co.uk/spittal-peterhead-subsea-cable-link/



Contents

Powering change together	03		
The Pathway to 2030	04		
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Project overview	06	Environmental considerations	20
Help shape our plans	08	Physical environment	21
Marine Licensing in Scotland	10	Benthic ecology	22
Project timeline	11	Fish and shellfish ecology	23
How we selected our proposed subsea cable route and landfalls	12	Marine mammals and megafauna	24
Selecting a corridor between Sinclair's Bay and Rattray Head	14	Shipping and navigation	26
Marine surveys	16	Other sea users	27
Subsea cable installation	18	Have your say	29
		Feedback	30

The consultation events will take place on:

Aberdeenshire:

Tuesday 3 September, 3–7pm
Dalrymple Hall, Fraserburgh, AB43 9BD

Wednesday 4 September, 3–7pm
St Fergus Village Hall, Peterhead, AB42 3QD

Thursday 5 September, 3–7pm
Longside Parish Church Hall, Peterhead, AB42 4XN

Caithness:

Monday 9 September, 3–7pm
Keiss Village Hall, Wick, KW1 4XB

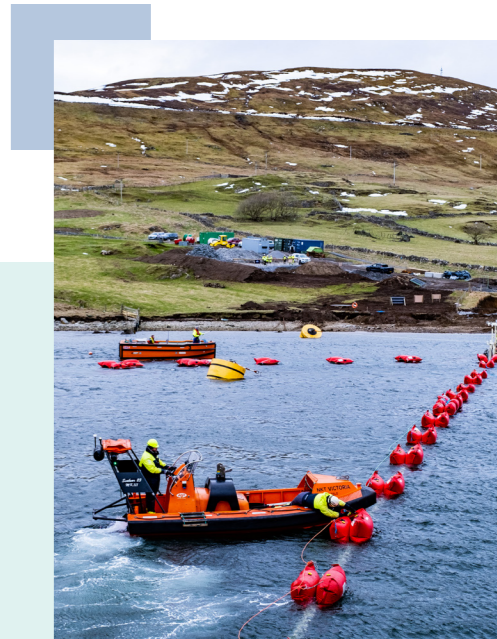
Tuesday 10 September, 3–7pm
Norseman Hotel, Wick, KW1 4NL

Wednesday 11 September, 11–1pm
Spittal Village Hall, Wick, KW1 5XR

Wednesday 11 September, 3–7pm
Watten Village Hall, Watten, KW1 5XN



Powering change together



The time has come to further enhance Scotland's energy infrastructure, providing power for future generations as we move towards net zero.

The shift to a cleaner, more sustainable future is about more than climate change. It's about ensuring future generations have the same opportunities to thrive as we have all had.

Countries around the world are investing in their energy infrastructure to support the demands of modern economies and meet net zero targets. The UK is leading the way in building a modern, sustainable energy system for the future.

We all have a part to play

When it comes to net zero, we have to be in it together. The UK and Scottish governments have ambitious net zero targets, and we're playing our part in meeting them.

We work closely with the National Grid Electricity System Operator to connect vast renewable energy resources—harnessed by solar, wind, hydro and marine generation—to areas of demand across the country. Scotland is playing a big role in meeting this demand, exporting two thirds of power generated in our network.

But there's more to be done. By 2050, the north of Scotland is predicted to contribute over 50GW of low carbon energy to help deliver net zero. Today, our region has around 9GW of renewable generation connected to the network.

At SSEN Transmission, it is our role to build the energy system of the future.

We're investing £20 billion into our region's energy infrastructure this decade, powering more than ten million UK homes and 20,000 jobs, 9,000 of which will be here in Scotland.



More information about the policies and documents driving the need for the energy system for the future can be found here:

Who we are

We're responsible for maintaining and investing in the electricity transmission network in the north of Scotland. We're part of SSE plc, one of the world's leading energy companies with a rich heritage in Scotland that dates back more than 80 years. We are also closely regulated by the GB energy regulator Ofgem, who determines how much revenue we are allowed to earn for constructing, maintaining and renovating our transmission network.

What we do

We manage the electricity network across our region which covers a quarter of the UK's land mass, crossing some of the country's most challenging terrain. We connect renewable energy sources to our network in the north of Scotland and then transport it to where it needs to be. From underground and subsea cables and overhead lines to electricity substations, our network keeps your lights on all year round.

Working with you

We understand that the work we do can have an impact on communities. So we're committed to minimising our impacts and maximising all the benefits that our developments can bring to your area. We're regularly assessed by global sustainability consultancy AccountAbility for how we engage with communities. That means we provide all the information you need to know about our plans and how they will impact communities like yours. The way we consult is also a two-way street. We want to hear people's views, concerns, or ideas and harness local knowledge so that our work benefits their communities: today and long into the future. You can share your views with us at: ssen-transmission.co.uk/talk-to-us/contact-us/

The Pathway to 2030

Building the energy system of the future will require delivery of significant infrastructure over the next few years. In partnership with the UK and Scottish governments, we're committed to meeting our obligation of connecting new, renewable energy to where it's needed by 2030.

Achieving Net Zero

By 2030, both the UK and Scottish governments are targeting a big expansion in offshore wind generation of 50GW and 11GW respectively. The Scottish Government has also set ambitious targets for an additional 12GW of onshore wind by 2030.

Across Great Britain, including the north of Scotland, there needs to be a significant increase in the capacity of the onshore electricity transmission infrastructure to deliver these 2030 targets and a pathway to net zero.

Securing our energy future

And it's not just about net zero. It's also about building a homegrown energy system, so that geopolitical turmoil around the world doesn't severely impact the UK and push up energy prices.

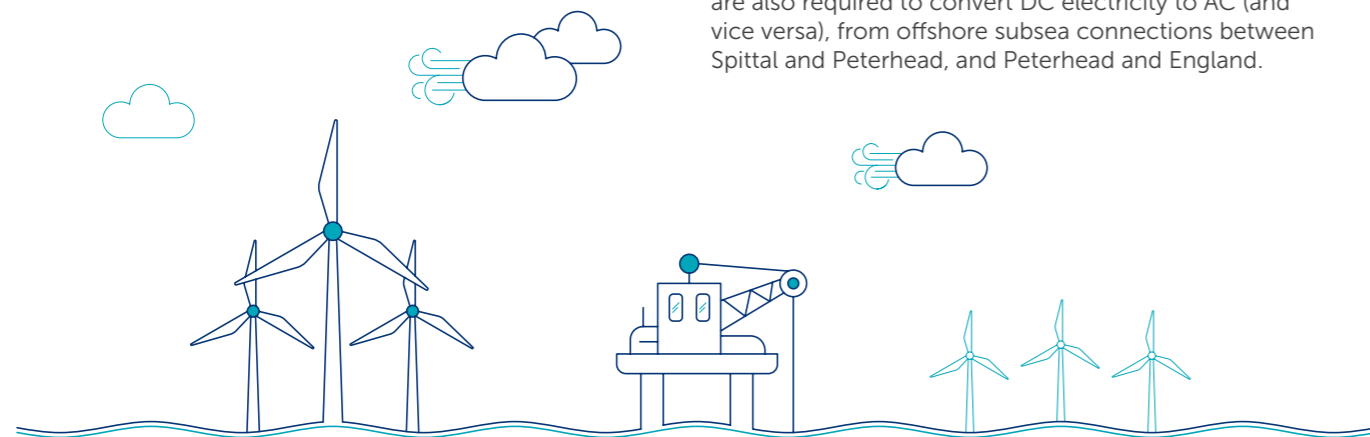
The UK Government's British Energy Security Strategy further underlines the need for this infrastructure, setting out plans to accelerate homegrown power for greater energy independence. The strategy aims to reduce the UK's dependence on and price exposure to global gas wholesale markets through the deployment of homegrown low carbon electricity generation supported by robust electricity network infrastructure.

Meeting our 2030 targets

In July 2022, National Grid, the Electricity System Operator (ESO), published the Pathway to 2030 Holistic Network Design (HND). This set out the blueprint for the onshore and offshore transmission infrastructure that's required to support the forecasted growth in the UK's renewable electricity. It's an ambitious plan that will help the UK achieve net zero.

What does this mean for the north and north-east of Scotland?

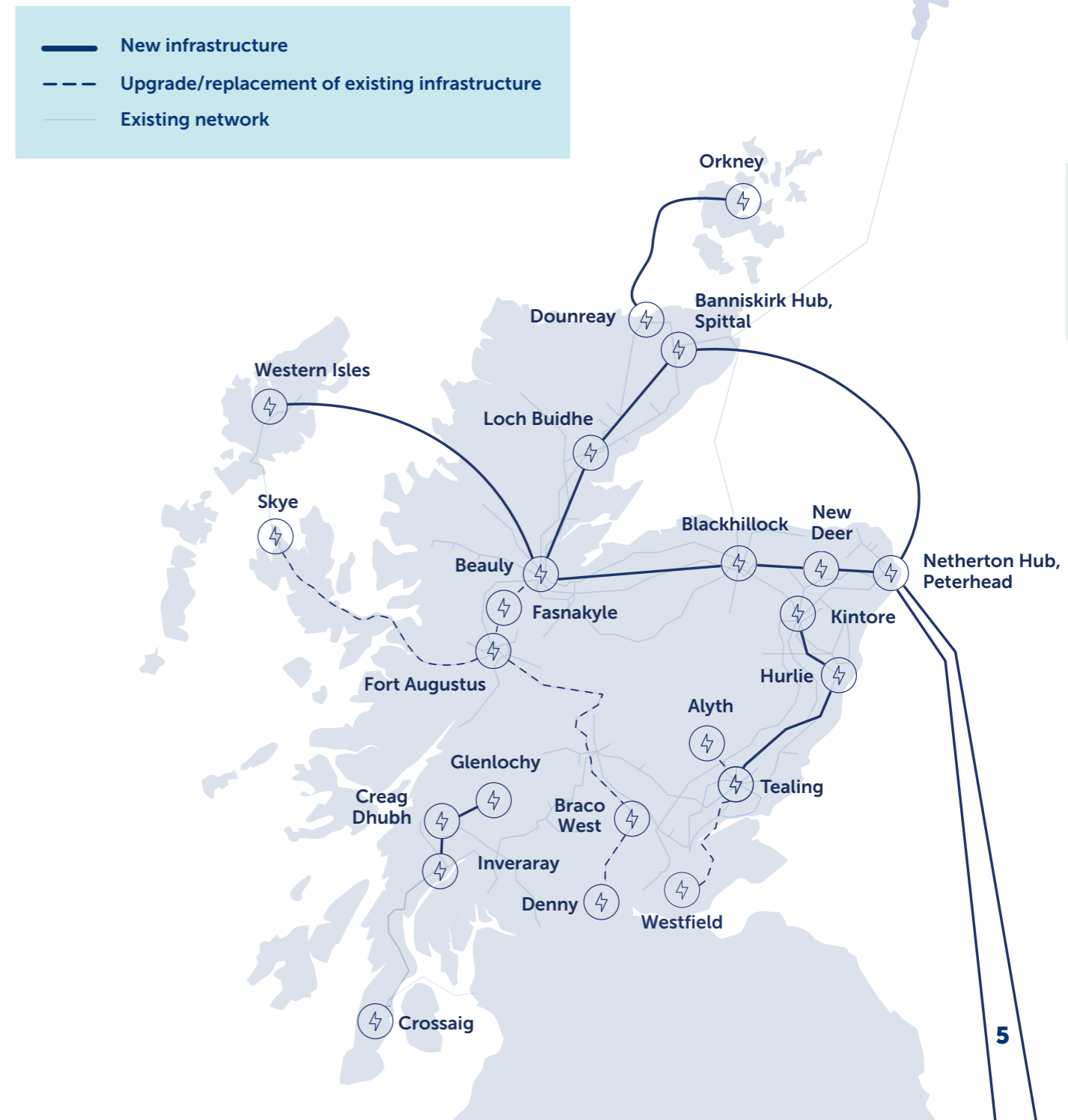
The north and the north-east of Scotland will play a key role in meeting these goals. The extensive studies that informed the ESO's Pathway to 2030 Holistic Network Design confirmed the requirement to reinforce the onshore corridors between Beaulieu and Peterhead, Beaulieu and Spittal in Caithness, and for an offshore subsea cable between Spittal and Peterhead. Providing a 400kV overhead line and high voltage subsea cable (HVDC) connection between these sites provides the significant capacity required to take power from large-scale onshore and offshore renewable generation to the north-east of Scotland. From there, it will be transported to demand centres via HVDC subsea cables. To support these developments, new 400kV substations are also required at key locations. At Spittal, Beaulieu, and Netherton near Peterhead, high voltage converter stations are also required to convert DC electricity to AC (and vice versa), from offshore subsea connections between Spittal and Peterhead, and Peterhead and England.



Future network investment requirements

Our 2030 targets are the first step on the transition to net zero. The UK Government has a target to decarbonise our electricity system by 2035 and fully decarbonise our economy by becoming net zero by 2050, with the Scottish Government committing to net zero five years earlier, by 2045.

To achieve these targets, further investment in new low carbon electricity generation and the enabling electricity transmission network infrastructure will be required. The next stage of strategic network planning across Great Britain has now been outlined in the independent Electricity System Operator, National Grid ESO's, 'Beyond 2030' report, published in March this year. For the north of Scotland, the ESO's plan recommends several new and upgraded onshore and offshore reinforcements that the ESO has assessed are required to help deliver net zero targets. These projects, which will be subject to extensive public consultation, are at the very early stages of development and further details will be set out in due course.



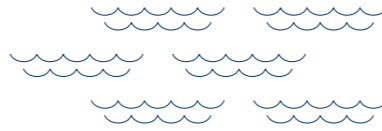
Project overview

We're leading some exciting projects to power change in the UK and Scotland. To support the delivery of 2030 offshore wind targets set by the UK and Scottish Governments, and to power local communities, we need to upgrade our existing network. In some key areas, we need to develop entirely new infrastructure, and quickly.

This project will provide a 2GW bi-pole, 525kV HVDC link between Spittal in Caithness and Peterhead in Aberdeenshire.

At each end of the HVDC link, 400kV AC substations will supply power to (or receive power from) newly constructed high voltage AC/DC converter stations at Spittal (Banniskirk Hub) and Peterhead (Netherton Hub), depending on the directional flow of the power. Consultation for the converter station sites has already occurred, and planning applications will be submitted later this year.

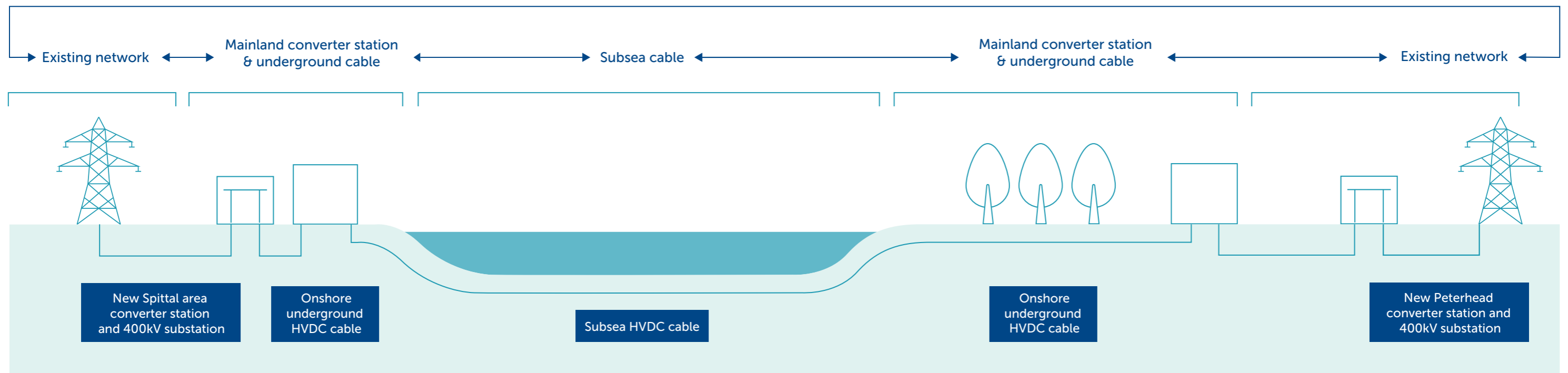
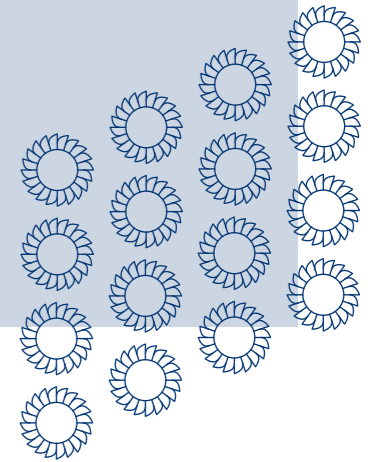
Connections between these assets will be via HVDC cables buried either underground or below the seabed. In Caithness, the land cable corridor is likely to stretch approximately 20 km between the Spittal converter station and the area of Sinclair's Bay where it will transition to the subsea cable.

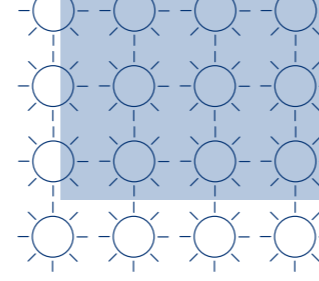


The subsea cable route will extend from horizontally directionally drilled (HDD) landfalls between Sinclair's Bay in Caithness, and Rattray Head in Aberdeenshire. The subsea portion of the cable will be approximately 165km in length, through the Moray Firth and the North Sea.

The cable route in Aberdeenshire extends to approximately 16km between Rattray Head and the converter station at Netherton, near Longside.

Unlike previous projects, the design of this system requires the inclusion of an additional cable to reinforce the network in the event of a cable or other equipment fault. This additional cable is referred to as the Dedicated Metallic Return (DMR) and will be installed alongside the standard bi-pole arrangement of two HVDC cables and a fibre optics cable for communications.





Help shape our plans

The work we have planned is significant and has the potential to deliver massive benefits in your community, Scotland, and beyond. Yet we know that achieving our goals will require a lot of work that will impact your lives. That's why we want to work with you every step of the way throughout the planning and delivery stages of these essential and ambitious works.

We're committed to delivering a meaningful consultation process that actively seeks the views of everyone affected by our plans. That means making our plans clear and easily accessible, so that you can give us input throughout each stage of the development process.

Throughout the consultation, we'll present our approach to developing the project, including changes made since we last consulted with you. We will also provide some visualisations and maps to show you where everything will be located.

We want you to share your thoughts and opinions on our plans, where you think we can make improvements, concerns about the impact of our work and what you think of any changes and refinements we've made. By telling us what you think, you will help shape our proposals. We want to harness your local knowledge so that we spot any unforeseen challenges early and maximise the potential benefits and opportunities for your communities.

Because, ultimately, we want you to work with us to ensure that the energy infrastructure we build will be the best it can possibly be.

The marine pre-application process

We are holding public consultation events in Caithness and Aberdeenshire to provide information about the proposed subsea cables in Scottish waters, prior to submitting Marine Licence applications to the Marine Directorate Licensing and Operations Team.

These events comply with the Marine Licensing (Pre-Application Consultation) (Scotland) Regulations 2013, which apply to Marine Licence applications in the Scottish Territorial Waters, from Mean High Water Springs out to 12 nautical miles from the shore. You are invited to comment on the material presented in this document and the proposed development prior to the submission to the Marine Directorate Licensing Operations Team. Consultation responses must be returned before the **15 October 2024**.

What we're consulting on

We are holding public consultation events in Caithness and Aberdeenshire to provide information about the proposed subsea cables in Scottish waters, prior to submitting Marine Licence applications to the Marine Directorate Licensing and Operations Team.

Who we're consulting with

As well as communities, we are keen to hear feedback from a broad range of other stakeholders including but not limited to landowners, businesses, non-statutory consultees and statutory consultees such as Marine Directorate, NatureScot, Scottish Environment Protection Agency (SEPA), The Maritime and Coastguard Agency, and The Commissioners of Northern Lighthouses.



What next?

Following today's event, a Pre-Application Consultation Report will be prepared which will be submitted to support the Marine Licence application. The report will describe the comments received during these events and how we have responded to those, including any additional mitigation or amendments to the project.

Marine Licensing in Scotland

Scotland's National Marine Plan sets out how developments in Scottish inshore waters (out to 12 nautical miles) and offshore waters (12 to 200 nautical miles) will be managed, including objectives and marine planning policies for subsea cables.

Subsea power cables in Scottish waters require a marine licence to be granted by the Marine Directorate Licensing and Operations Team (MD-LOT), on behalf of the Scottish Ministers. Cables longer than 1853m and which cross the intertidal boundary are also subject to pre-application consultation requirements, hence our current consultation on the subsea cable elements of this project.

Although subsea electricity transmission cables are not subject to a formal Environmental Impact Assessment process, the Marine Scotland Act requires that we consider the scale and nature of the project, and provide a proportionate environmental assessment. With this in mind, a non-statutory marine environmental appraisal (MEA) will accompany our application for a marine licence. The MEA will detail the assessments that we have carried out, including our subsea cable routing studies and assessments of our potential impacts on the environment, cultural heritage, navigation, and other maritime activities.

We have also engaged with Crown Estate Scotland to obtain an option to lease agreement for the subsea cable installation corridor within Scottish territorial waters. Closer to the time of cable installation, the project will step from an option to lease to the full lease agreement, which provides SSEN Transmission with the seabed rights required to install and maintain the cable.

Note that consultation on the converter stations at Banniskirk Hub and Netherton Hub has already been completed and is not part of this consultation. You can find more information about Netherton Hub and Banniskirk Hub at:

ssen-transmission.co.uk/banniskirk
ssen-transmission.co.uk/Netherton-hub

The onshore underground cable elements of this project are classed as 'Permitted Development' and are not subject to consultation. We are sharing details on our preferred alignment of the underground cable for information only and feedback will not be sought as part of this consultation process. Information on the underground cable can be found in the Project Documents tab on our project page at:

ssen-transmission.co.uk/spittal-peterhead-subsea-cable-link/



Project timeline

2023

- Consultations with stakeholders and statutory consultees.
- Onshore, offshore and engineering surveys commence.



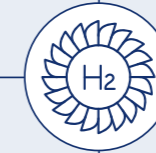
2024

- Marine Licence Pre-Application Consultation.
- Marine Environmental Assessment.
- Onshore Voluntary Environmental Assessment completion.



2025

- Marine Licence Application submission.
- Project receives Marine Licence.
- Commencement of cable manufacture.



2026

- Commence onshore cable installation.
- Marine pre-installation activities.



2027-2028

- Continue onshore cable installation.
- Marine cable installation.



2029-2030

- Marine cable installation completed.
- Onshore cable installation complete.
- Commissioning and energization.



How we selected our proposed subsea cable route and landfalls

In our previous consultation in May and June 2023, we presented potential subsea cable corridors between various landfall locations.

Several subsea cable corridors were developed and considered as part of the selection process. These options were based on identifying pairs of landfalls linked by a subsea cable corridor.

The process of identifying subsea cable corridors followed the stages below:

The process for selecting our proposed landfall and marine cable corridors:

Stage.1



Preliminary landfall option identification, focussing on identifying potential landfall locations meeting essential construction characteristics.

Stage.2



Constraints identification, identifying environmental, social, and technical constraints associated with each landfall.

Stage.3



Corridor Optioneering, identifying potential subsea cable corridors based on relative impacts on constraints identified in Stage 2.

Stage.4



Corridor Development and Selection, including a multi-disciplinary review of constraints and interactions between them to develop a suitable subsea cable corridor.



The landfall options in Caithness were:

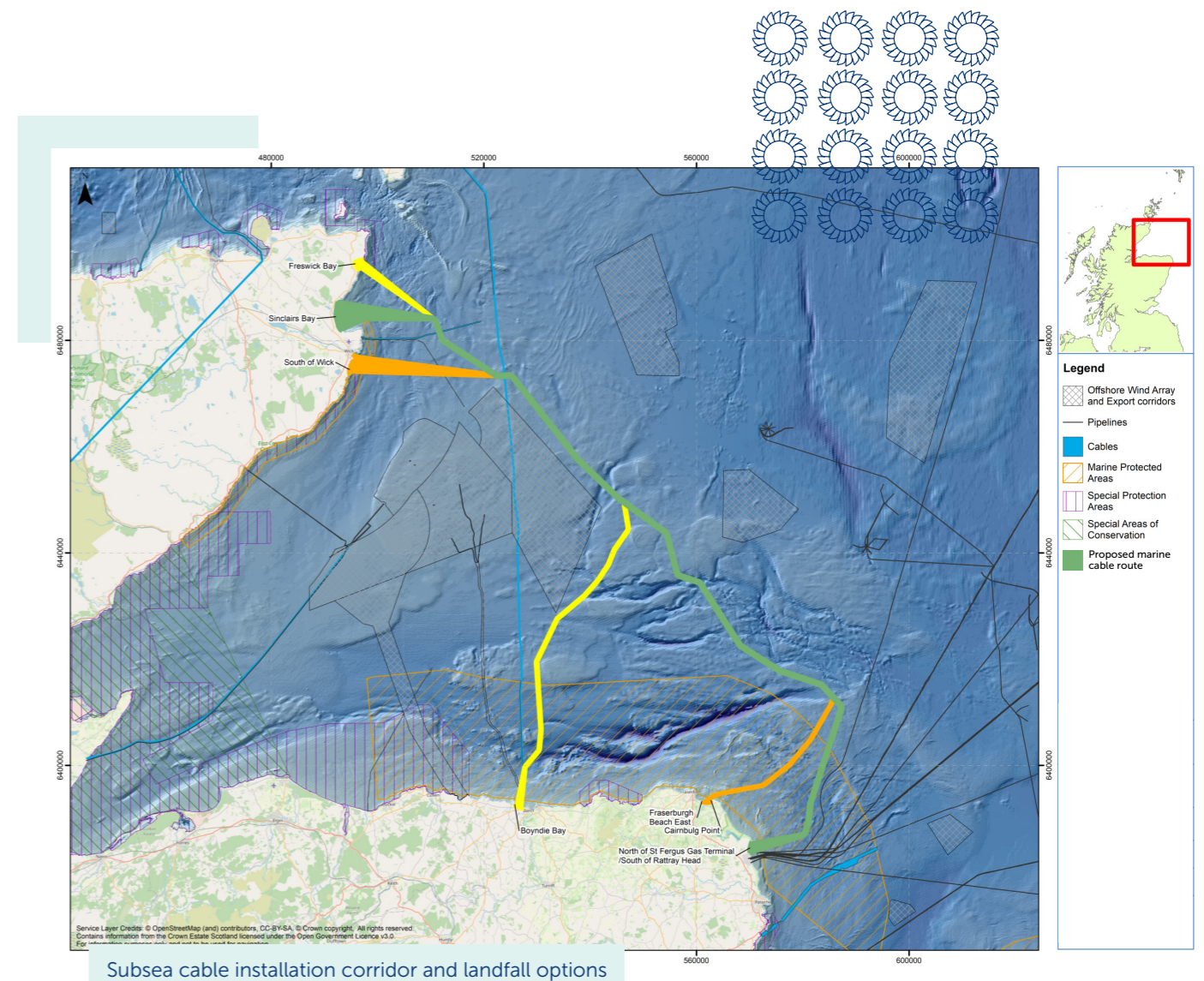
- Freswick Bay
- Sinclair's Bay
- South of Wick

The landfall options in Moray and Aberdeenshire were:

- Boyndie Bay
- Fraserburgh Beach East
- Cairnbulg Point
- Rattray Head, north of the St Fergus gas terminal



The subsea cable installation corridor options we presented joined each of the landfall options in Caithness to each of the landfall options in Moray and Aberdeenshire. Refer to map below.



Subsea cable installation corridor and landfall options

Selecting a corridor between Sinclair's Bay and Rattray Head

The following key assessment principles were used during the preliminary corridor development process:

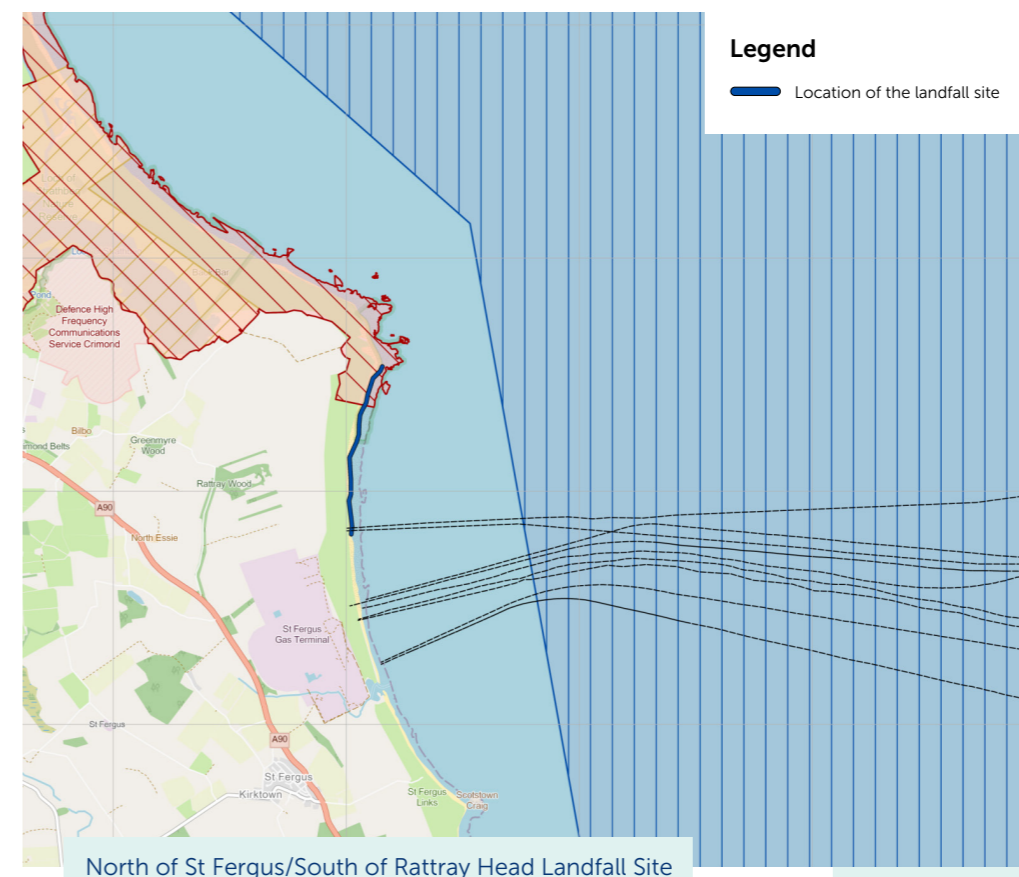
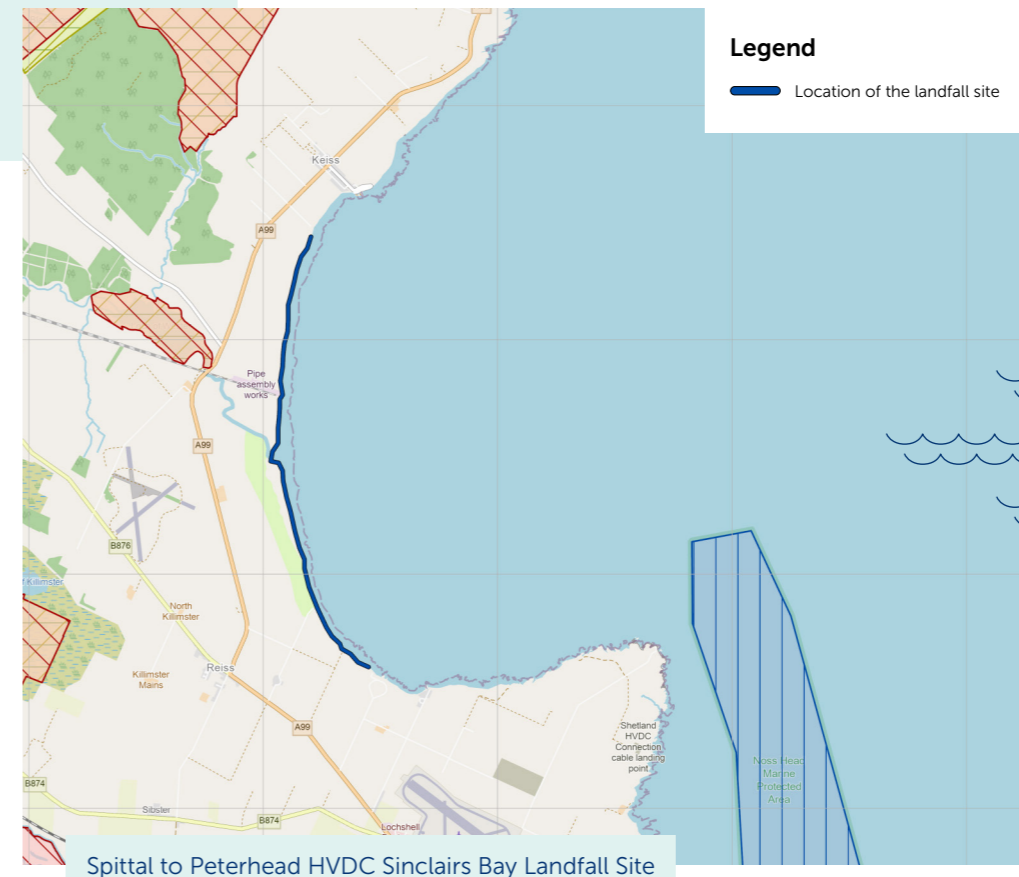
- Minimising subsea cable length, subject to avoiding important constraints
- Engineering factors that may affect cable laying feasibility and cost effectiveness have been considered as much as possible
- Avoidance (wherever possible) of interactions with designated sites, sensitive habitats and wrecks. Where avoidance is not possible, optimisation of the corridor to minimise impacts.
- Minimising disruption/interactions with other marine infrastructure and sea users including shipping, commercial fisheries, cables, pipelines and oil and gas stakeholders.

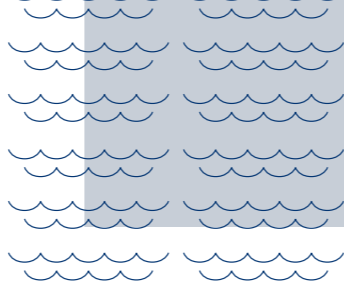
Following our previous consultation, a subsea cable installation corridor between Sinclair's Bay in Caithness and Rattray Head in Aberdeenshire was selected as the least constrained option because:

- It minimised interactions with protected areas and sensitive habitats and species to the greatest extent
- It minimised interactions with recreational use of the coastline, particularly in Moray and Aberdeenshire
- It maximised the potential for subsea cable burial throughout the cable corridor and minimised the number of crossings of 3rd party assets required.
- It minimised the length of onshore underground cable required to connect to substations at each end

Since our last consultation in May and June 2023, we have carried out a marine survey campaign to gather additional data on the proposed subsea cable corridor between Sinclair's Bay and Rattray Head. We have used this data to refine our cable installation corridor to maximise cable burial and to quantify and minimise the potential environmental impacts of our works.

We are preparing to apply to Marine Directorate for a marine licence for the installation and operation of the proposed subsea cable.

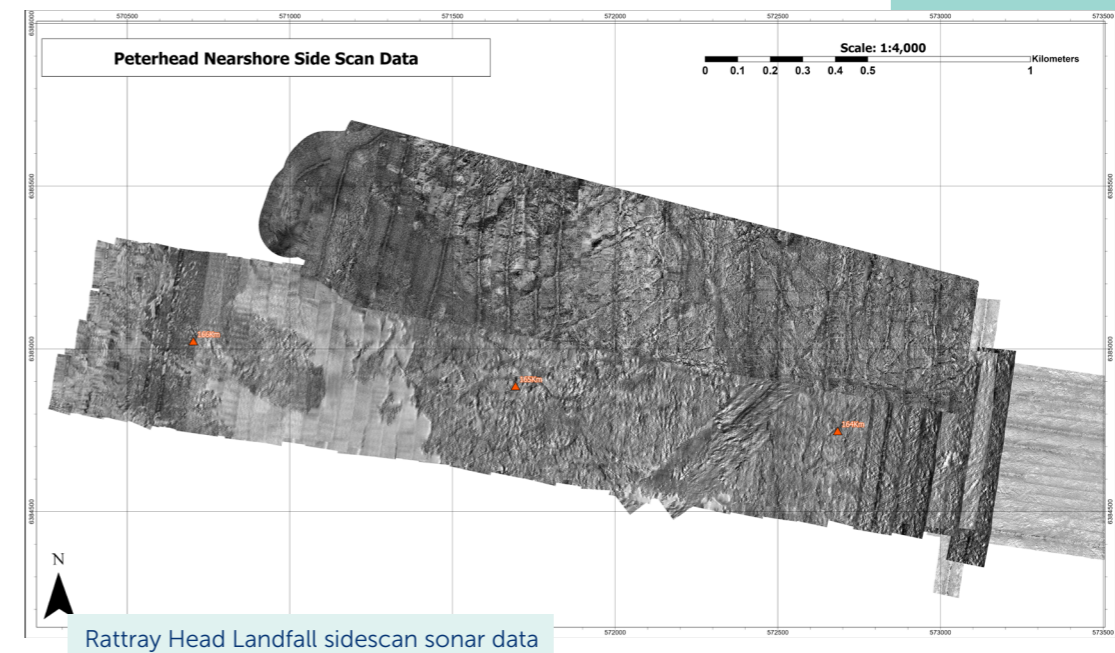
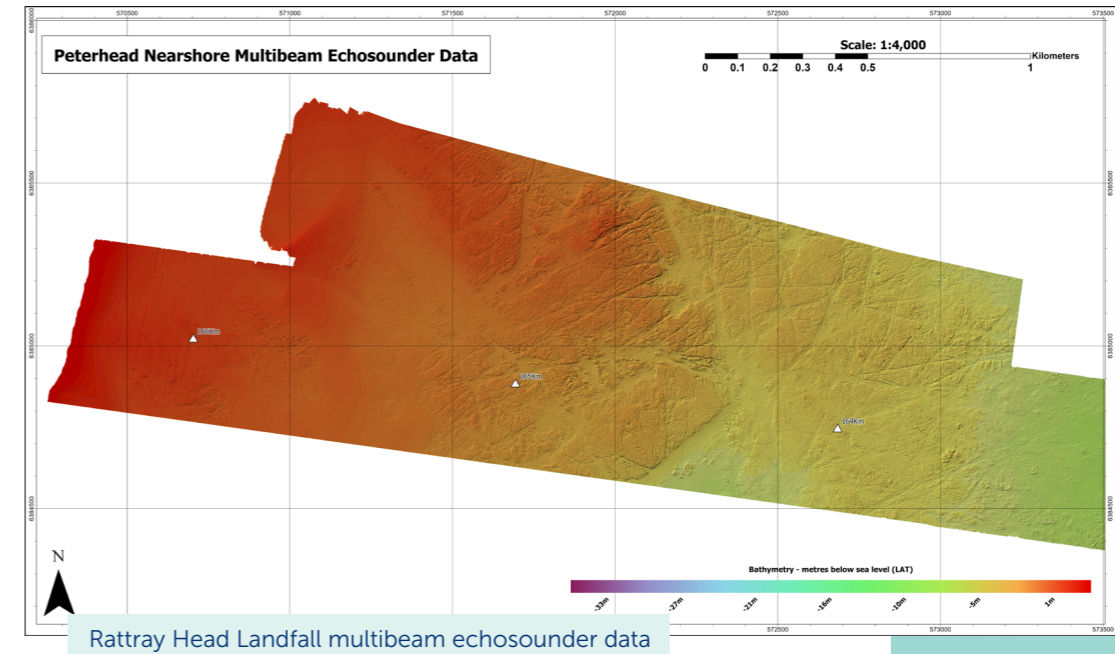
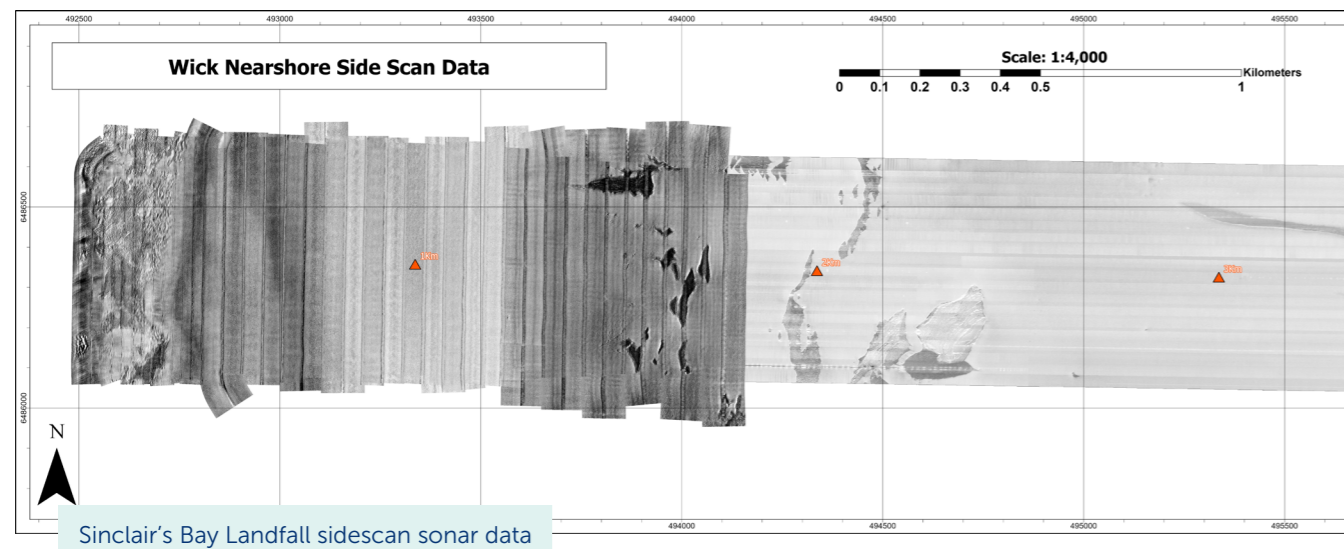
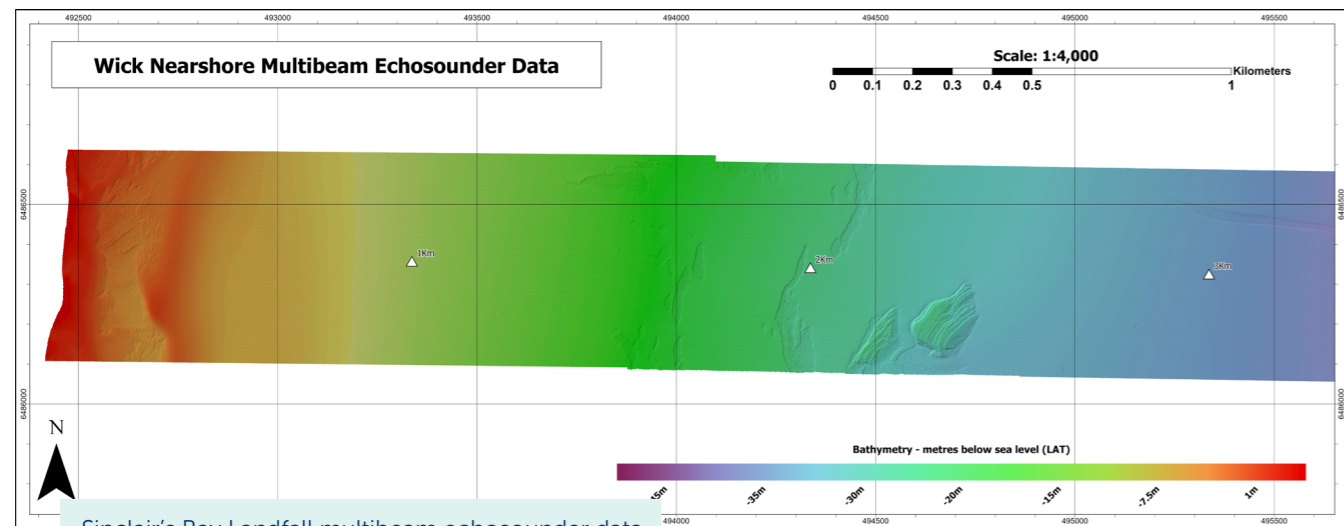




Marine surveys

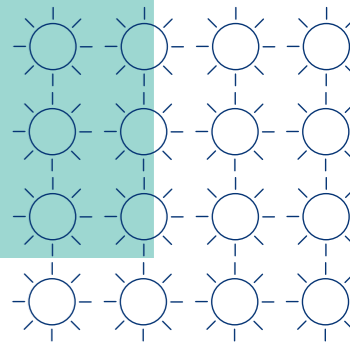
To support development of the subsea cable installation corridor, we carried out a series of intertidal, nearshore, and offshore surveys during 2023 and 2024. The purpose of these surveys was to gather detailed information about the seabed and any technical constraints or sensitive features. This included:

1. Geophysical survey to determine water depths, seabed features, shallow geology, cable crossing positions, intertidal topography, and to detect objects on the seabed. Instruments used include Multi-Beam Echosounder (MBES), Side Scan Sonar (SSS), Sub-Bottom Profiler (SBP), magnetometer, and Unmanned Aerial Vehicle (UAV).
2. Environmental survey to understand seabed habitats and species, using underwater cameras and sediment grab sampling. We use this information to create maps of the type and extent of seabed habitats throughout the corridor.
3. Geotechnical survey to determine the structure and physical properties of the surface and shallow sediment layers. Instruments used include a Vibrocorer and Cone Penetrometer Testing (CPT).



The data collected during the marine survey has allowed us to optimise the installation corridor to:

- Maximise cable burial by avoiding (wherever possible) obstacles, including boulders, rock outcrops, plough marks, and potential unexploded ordnance.
- Avoid (wherever possible) or minimise impacts to any additional sensitive habitats identified in the corridor.
- Avoid (wherever possible) mobile sediments including sandbanks and sandwaves. Where not possible, optimisation of the corridor to minimise any potential for exposure of the cable.
- Cross in-service subsea cables as near to 90° as possible.
- Minimise anchoring and navigation restrictions.



Subsea cable installation

The subsea cable system will be installed within a Marine Installation Corridor approximately 500m wide and 165km long. The installation of the cables will be split into the following campaigns.

Pre-lay survey

Prior to cable installation, additional marine surveys will be undertaken by the installation contractor within the subsea cable installation corridor to inform detailed route engineering and refinement. These surveys will aim to validate known constraints and identify any changes that could affect the cable installation including seabed sediments, sensitive environmental features, bathymetry, unexploded ordnance and other seabed features.

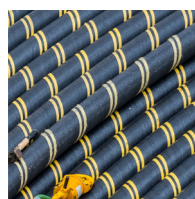
Cable route clearance

Debris and obstructions to the cable route will be cleared from the seabed before the subsea cable is laid. Cable route clearance may involve the following activities:

- Pre-sweeping sandwaves using a Mass Flow Excavator (MFE);
- Boulder clearance using grabs or ploughs;
- Debris clearance using a Pre-Lay Grapnel run (PLGR) and/or ROV
- Cutting and removing sections of out of service cables.



Trenched Cable.



Trenched Cable Closeup.

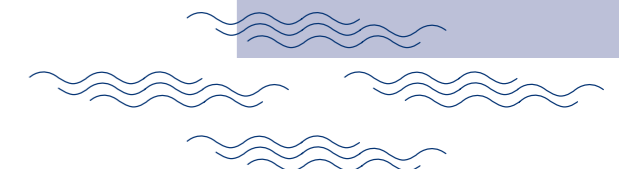
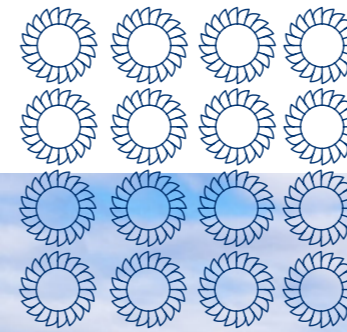
Cable lay and burial

Considering the dynamic environment in which our marine cables are installed, there are various hazards that pose a risk to the integrity of the cable. The cable will be protected from damage in one of the following ways:

Burial - Burial in seabed sediments, using a trenching tool which follows the cable along the seabed using water jets or a plough to lower the cable into the seabed.

Surface protection - By using surface protection such as rock berms or protective ducts. Rock berms are placed over the cable using a fall pipe, allowing the rock to be accurately placed and the berm profile to be carefully designed. In some areas protective ducts or specially designed mattresses may be used, i.e in areas of environmentally sensitive habitats.

Trenching/ducts - At the landfalls, the cable will be brought ashore using pre-installed ducts. The ducts are installed using a horizontal directional drill, where a bore hole is drilled from the shore, under the intertidal area, and emerging at circa 10m water depth, protecting the cable from damage and minimising impacts on sensitive intertidal environments.

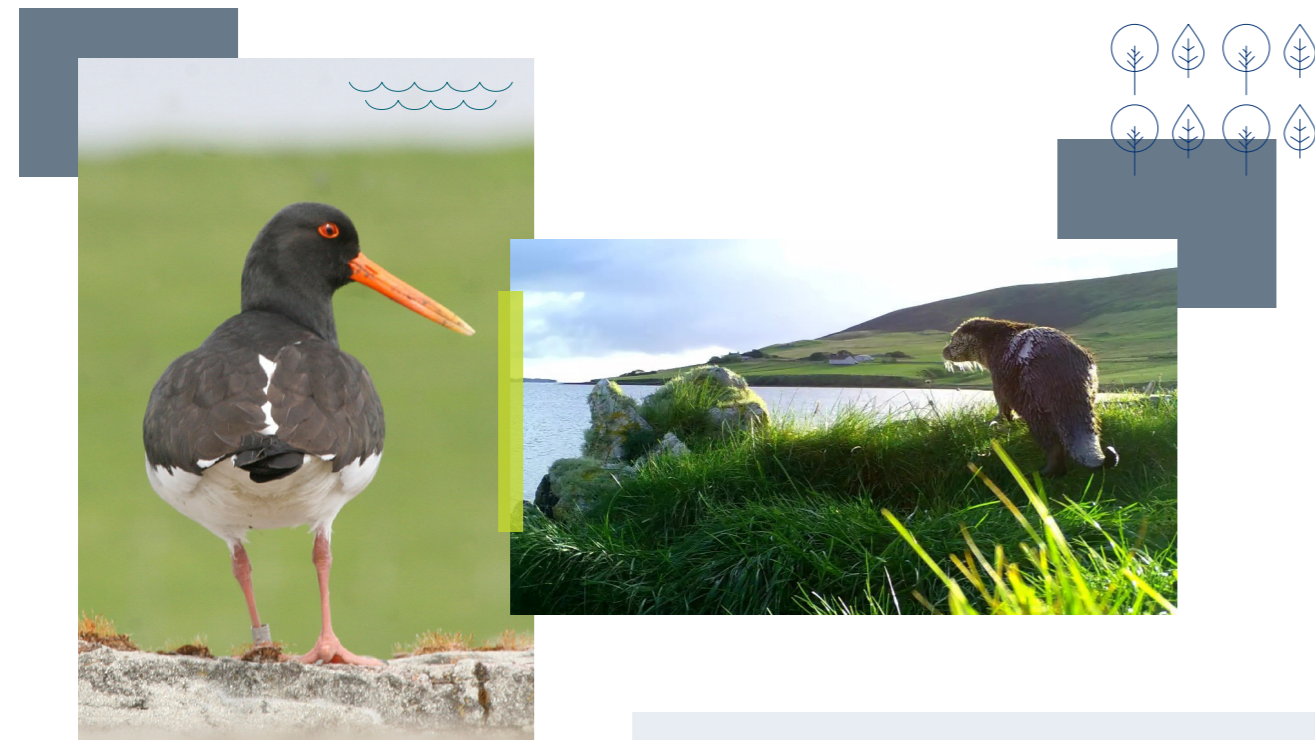


Post installation surveys

Detailed geophysical and imaging surveys will be undertaken to confirm the location of the installed cable and cable protection such as trenching and rock placement. Post-installation surveys will also be used to monitor seabed recovery, particularly in areas of sensitive habitats.

Environmental considerations

The possible effects of the installation, operation, and decommissioning of the subsea cable are considered within the project Marine Environmental Appraisal (MEA). Cumulative and in-combination effects are also considered where there is potential for effects from this project to overlap with the effects of other marine and coastal developments.



The following topics are included within the MEA, as summarised on the pages that follow:

- Physical environment
- Benthic ecology
- Fish and shellfish ecology
- Marine mammals
- Ornithology
- Marine archaeology
- Shipping and navigation
- Commercial fisheries
- Other sea users



Physical environment

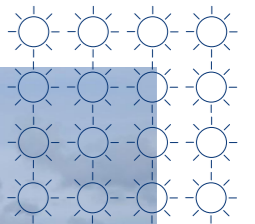
The seabed in the subsea cable installation corridor mainly consists of soft sediments, ranging from silt and silty sand to sandy gravel and gravelly sand. Outcropping rock and boulders are also present within the installation corridor; notably an area of outcropping bedrock in the vicinity of Rattray Head. Water depths throughout the route range from approximately 1m to 106m below Lowest Astronomical Tide.

The coastline at the southern landfall at St Fergus includes extensive sandy beaches backed by dune systems. Most of the coastline in this area is undefended, in part because of the low rate of erosion.

The coastline at the northern landfall at Sinclair's Bay is predominantly rocky, with a long stretch of beach backed by dunes where the landfall site is located.

At both landfalls, horizontal directional drilling will be used to minimise impact on coastal dune features.

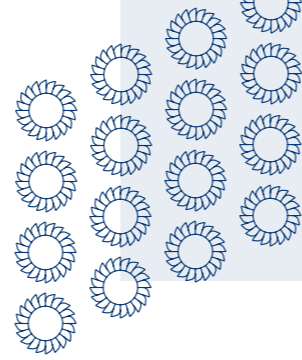
The marine installation corridor traverses the Southern Trench NCMPA which includes features protected for their geological diversity such as sub-glacial tunnel valleys, moraines, and a slide scar. Sub-glacial tunnel valleys are characterised by erosion-resistant geology and are not considered to be sensitive to cable installation, while the slide scar has been avoided and is more than 10km from the subsea cable installation corridor. Moraines were identified within the environmental assessment study area, and subsea cable installation methodologies will be selected to minimise any potential impacts to these features.



Rattray Head Landfall



Sinclair's Bay Landfall



Benthic ecology

The Moray Firth and North Sea area supports a range of intertidal and subtidal seabed habitats, many of which can be found within the Spittal to Peterhead HVDC subsea cable corridor.

The northern landfall area at Sinclair's Bay is comprised of sandy and rocky beaches backed by sand dunes and sea cliffs, while the southern landfall area at Rattray head is a sandy beach backed by an extensive sand dune community.

In the nearshore subsea areas of the route, the seabed mainly consists of coarse sediment, sand, bedrock, boulder and cobbles, while in offshore sections the seabed is mainly comprised of sand and coarse sediment.

Conspicuous benthic fauna observed within the installation corridor included the seapen *Pennatula phosphorea*, brittlestars *Ophiothrix fragilis*, the rugose squat lobster *Munida rugosa*, the Ross worm *Sabellaria spinulosa*, common starfish *Asterias rubens*, and edible sea urchin, *Echinus esculentus*.

The subsea cable installation corridor traverses one marine protected area that includes a designation for benthic features (burrowed mud): the Southern Trench NCMPA. Burrows and burrowing fauna were detected at 67km, 93 – 95km and 102-112.5 km along the installation corridor, but these only qualified as an OSPAR Seapen and Burrowing Megafauna Communities habitat at one station.

One additional NCMPA is located approximately 2.2km to the south of the installation corridor at Sinclair's Bay: the Noss Head NCMPA, which is designated for the protection of horse mussel *Modiolus modiolus* beds.

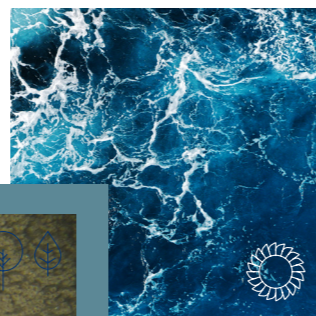
To reduce any potential impact to sensitive seabed habitats, micro-routing will be used where possible to avoid or minimise the footprint of cable installation in proximity to potentially sensitive habitats, and cable protection will only be deployed where adequate cable burial cannot be achieved.

Annex I Reef

Areas of 'low' and 'medium' annex I stony, rocky and biogenic reef formations were identified in the approach to the southern landfall at Rattray Head at approximately 3km to 6km from the shore.

Of interest was an area of patchy low and medium biogenic reef that included *Sabellaria spinulosa* aggregations growing on exposed bedrock and boulders.

In March 2024, we commissioned an additional survey to map the area of potential reef, to help us to understand its extent and its ecological value. This survey gathered high-resolution geophysical data and imagery which will allow us to undertake detailed route engineering and micro-siting in order to minimise our impacts to the seabed (including reefs) in this area.



Ross worms growing on exposed bedrock.

Fish and shellfish ecology

The Moray Firth supports a wide range of sharks, skate and ray species, many of which are characteristic of the sand-dominated seabed in this region. Diadromous fish such as Atlantic salmon and European eel may also undertake migrations in this area.

The subsea cable installation corridor traverses potential habitat and spawning grounds for sandeel and Atlantic herring. The seabed along much of the proposed survey corridor has been identified as 'preferred' sandeel habitat, which is consistent with what would be expected throughout the Moray Firth.

Other potential spawning grounds in the area intersected by the cable installation corridor include European plaice, cod and whiting. Fish that use the area as high intensity nursery grounds include for cod, whiting, anglerfish, monkfish, herring.

The proposed subsea cable installation corridor does not traverse any protected areas designated for fish or shellfish features, although it crosses the Southern Trench NCMPA which is designated for a seabed habitat characterised by burrowing species including the Norway lobster (burrowed mud).

It is expected that potential impacts to fish and shellfish habitat will be limited by the short duration of cable installation activities. To minimise fish and shellfish habitat loss, cable protection will only be deployed where the subsea cable cannot be adequately buried.



Marine mammals and megafauna

Many species of whales and dolphins are regularly recorded along the subsea cable installation corridor, including harbour porpoise, common dolphin, bottlenose dolphin, white-beaked dolphin, Risso's dolphin, killer whale, and minke whale.

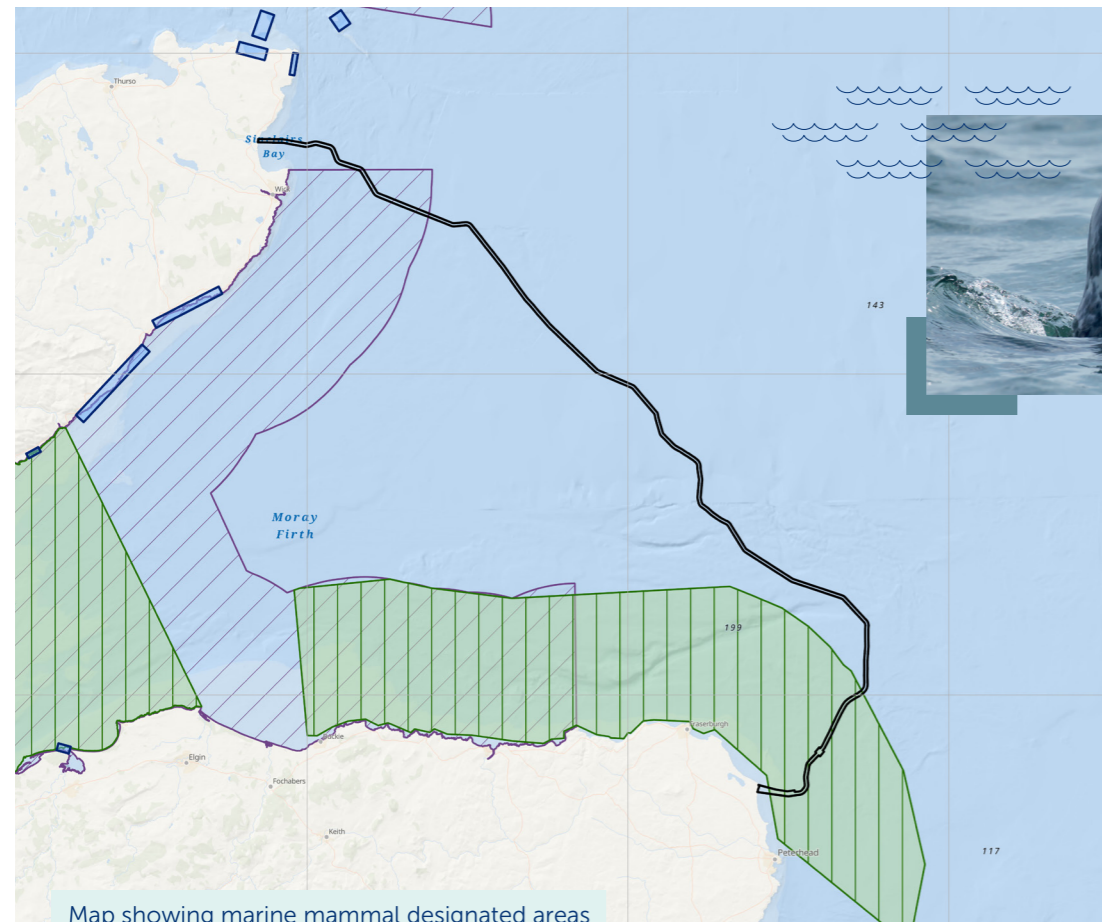
All cetaceans are protected under the Wildlife and Countryside Act 1981 and are European Protected Species under the Habitats Regulations. Minke whale are a designated feature of the Southern Trench NCMPA, which they use as a seasonal feeding ground.

Bottlenose dolphin are also a designated feature of the Moray Firth SAC. This population of bottlenose dolphins has an extensive range, extending beyond the boundary of the SAC and as far south as the Firth of Forth.

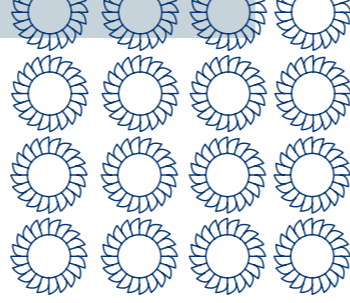
Grey and harbour seals are found in the vicinity of the subsea cable installation corridor, although grey seals are more numerous than harbour seals. The nearest designated seal haul out to the installation corridor is at Duncansby Head, which is situated approximately 10km away from the corridor. No effects on seal haul out sites are predicted. Basking shark are very rarely sighted in the Moray Firth, and are unlikely to interact with the project.

The proposed project work does not overlap with any designated otter habitat, including at landfalls. There is unlikely to be any significant interaction between Eurasian otters and the proposed project.

To minimise any disturbance to marine mammals, we will undertake a detailed assessment of potential impacts, which will inform a marine mammal mitigation plan. All work will be carried out following relevant guidance, including the Joint Nature Conservation Committee guidance and the Scottish Marine Wildlife Watching Code.



Map showing marine mammal designated areas



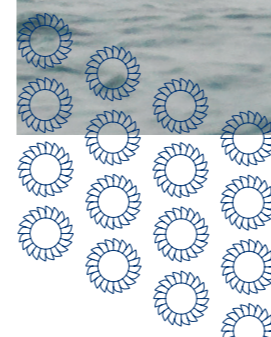
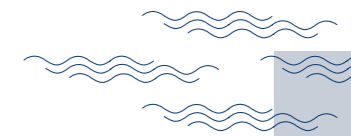
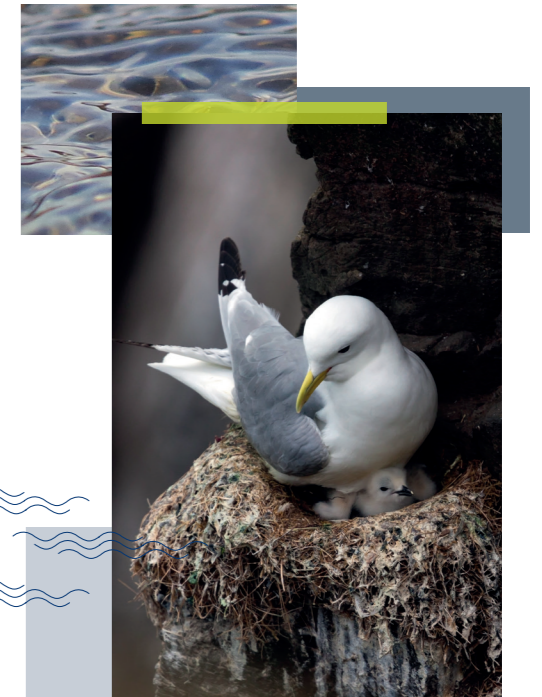
Marine ornithology

The subsea cable installation corridor does not pass directly through any areas which have been protected specifically for seabirds.

The nearest protected areas are the East Caithness Cliffs MPA (designated for black guillemots) and the East Caithness Cliffs SPA, designated for breeding seabird colonies such as cormorants, fulmar, gulls, guillemot, razorbill, and shag. Seabirds from other breeding colonies may also be found within the subsea cable installation corridor, particularly those with extensive feeding ranges. However, it is not possible to determine which designated sites these birds may originate from.

The Loch of Strathbeg SSSI and SPA extend into the intertidal zone at the Rattray Head landfall.

Horizontal directionally drilled landfalls at both ends of the subsea cable will minimise potential impacts to intertidal seabirds. Potential impacts on seabirds from installation of the subsea cable are also considered within the project's environmental assessment, and we will follow appropriate mitigation measures to be identified. Potential impacts on birds from activities above mean high water springs will be considered in a separate assessment carried out for the terrestrial elements of the project.

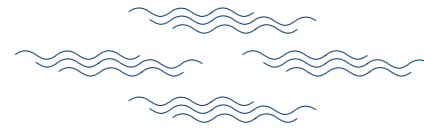


Marine archaeology

There are no identified designated historical assets in proximity to either landfall. At Sinclair's Bay, defensive anti-tank blocks are located near to the subsea cable landfall, and two identified wrecks may be present in the vicinity of the subsea cable installation corridor at the landfall or in the nearshore region. Two anti-tank ditches run parallel to the coastline at the St Fergus landfall.

Similarly, no designated historical assets were identified in the offshore part of the subsea cable installation corridor. Five shipwrecks and one wrecked aircraft have been identified in close proximity to the installation corridor. Thirty-seven other wrecks have been identified in the vicinity, suggesting that there is potential for additional archaeological finds within the corridor.

Avoidance of any archaeological assets will be prioritised in a thorough analysis of geophysical and geotechnical survey data and detailed route engineering incorporating the advice of a qualified marine archaeologist.



Shipping and navigation

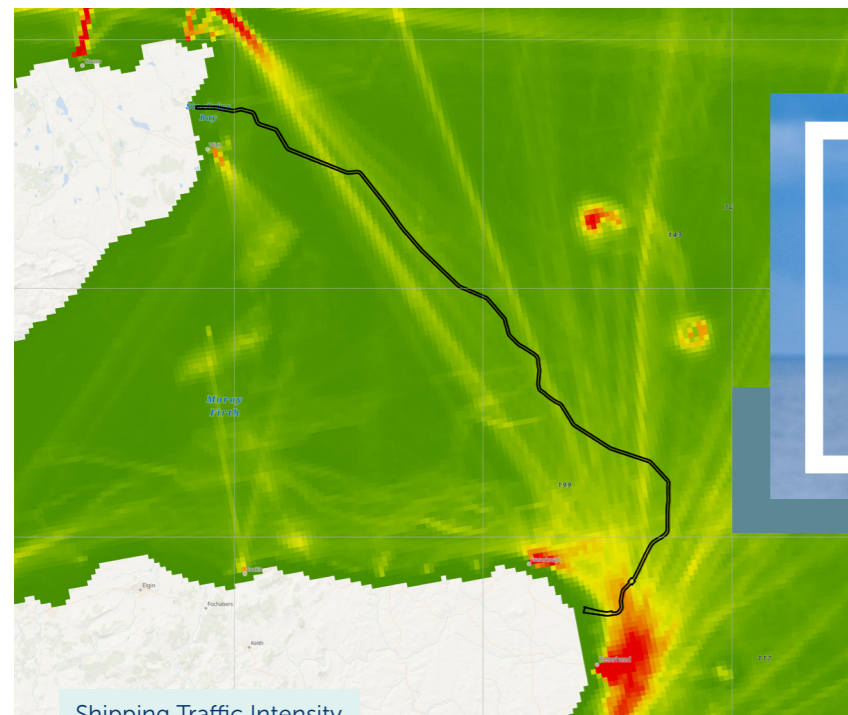
A large number of cargo ships transit the subsea cable installation corridor, and ferry traffic from Aberdeen crosses the corridor regularly.

The charted anchorage in Sinclair's Bay to the south of the northern landfall (Sinclair's Bay) affords fair anchorage in fine settled weather, but it is not safe in unsettled conditions. At the southern landfall (St Fergus) there is uncharted anchorage at Buchanhaven.

Recreational activity is mainly focused in the vicinity of the cable landfalls. There is little recreational activity in the offshore parts of the subsea cable installation corridor, and there are no identified offshore cruising routes.

We have included a number of mitigation measures in the design and operational planning for the subsea cable installation, including avoidance of main navigational features, timely publishing of Notice to Mariners, AIS broadcasts, and use of guard vessels and safety zones.

Stakeholder input has been incorporated into the Navigational Risk Assessment we carried out in support of the marine environmental assessment, so that any concerns and potential impacts are recorded and minimised wherever possible.



Commercial fisheries

The Moray Firth is an area of relatively dense commercial fishing in nearshore and offshore waters.

To foster good relationships with all shared users of the marine space, we have consulted with fisheries organisations including the Scottish Fisherman's Federation (SFF), Scottish White Fish Producers Association (SWFPA), and local fishers to improve our understanding of existing commercial fishing activity in the area. The results of these consultations have helped to inform the design of our subsea corridor.

The area is important for fisheries using static gear including pots and traps, particularly in the vicinity of and offshore from the Rattray Head landfall. In addition to pots and traps, towed fishing gear such as otter trawls and dredges are frequently used along the installation corridor.

Safety zones will be required around the subsea cable installation area to ensure the safety of all personnel involved in the cable installation, so access to certain areas along the cable route will be restricted for temporary periods of time. These areas will be communicated ahead of time and a Notice to Mariners will be issued prior to the installation of the subsea cable.

Other sea users

Impacts to other sea users have been assessed in the Navigation Risk Assessment carried out in support of the Marine Environmental Assessment.

Oil and Gas

The subsea installation corridor does not cross any of the oil fields situated in the Moray Firth, or any of their associated infrastructure.

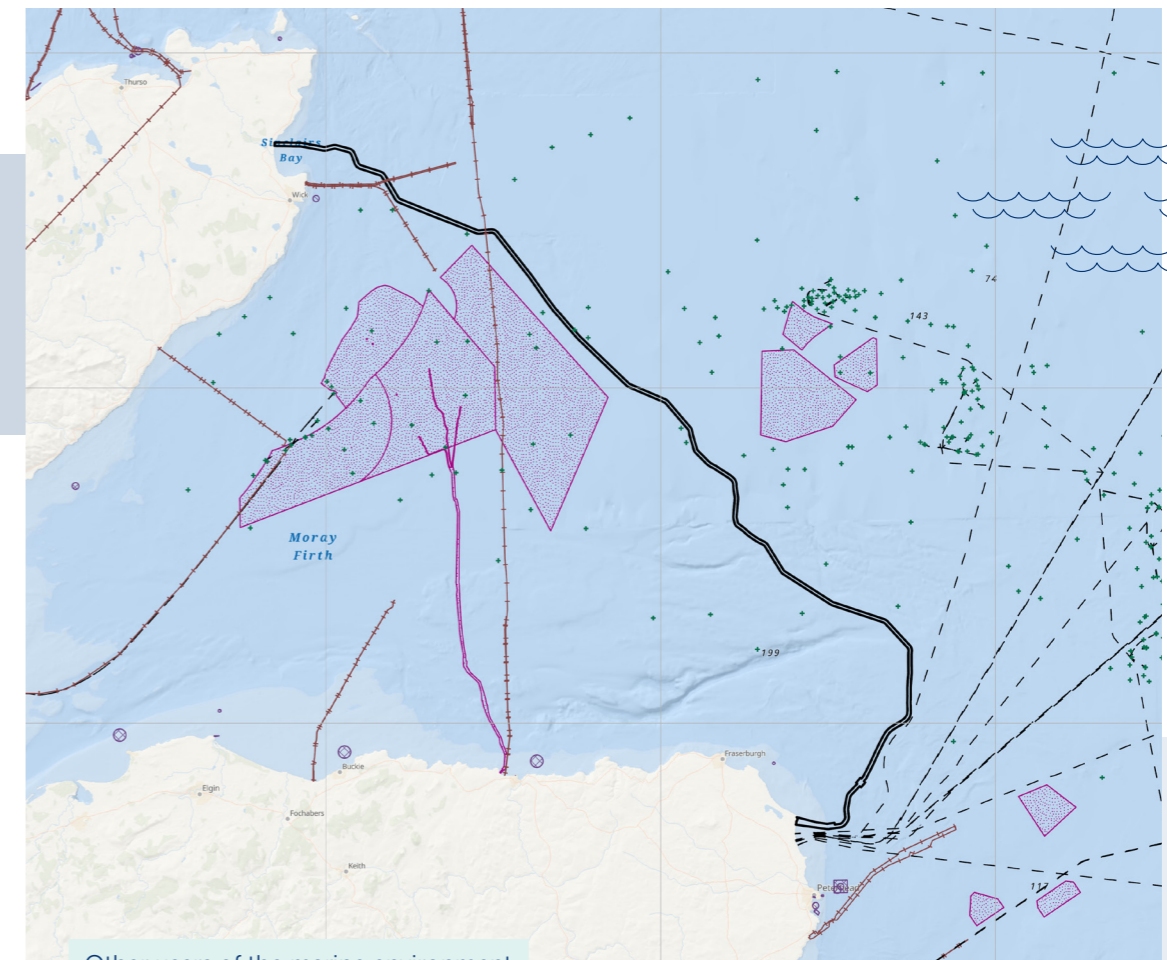
We have consulted with a number of development-phase offshore wind farms in the vicinity of the Spittal to Peterhead subsea cable project. Of these, the subsea installation corridor is likely to directly interact with the Ayre offshore wind farm and the Buchan offshore wind farm.

Renewable Energy

Within the Moray Firth there are two fully commissioned offshore wind farms: Beatrice and Moray East. The subsea installation corridor has been designed to avoid interaction with these developments, and will also avoid any interaction with the Moray West wind farm which is currently under construction.

Cables and Pipelines

The proposed subsea cable installation corridor crosses two existing subsea cables: the SSEN Transmission 320kV Shetland HVDC link and the SHEFA-2 telecommunications cable. The installation corridor also crosses the Subsea7 pipeline bundle tow out route.





Have your say

We value community and stakeholder feedback. Without this, we would be unable to progress projects and reach a balanced proposal.

Feedback

We will accept feedback from now until **15 October 2024**.

How to provide feedback

Submit your feedback online by scanning the QR code on this page or via the form on our project webpage at: ssen-transmission.co.uk/spittal-peterhead-subsea-cable-link/

Email the feedback form to the Community Liaison Manager, or write to us enclosing the feedback form at the back of this booklet.

Our Community Liaison team

Each project has a dedicated Community Liaison Manager who works closely with community members to make sure they are well informed of our proposals and that their views, concerns, questions or suggestions are put to our project teams.

Throughout the life of our projects, you will hear from us regularly. We aim to establish strong working relationships by being accessible to key local stakeholders such as community councils, residents' associations, and development trusts, and regularly engage with interested individuals.

What we're seeking views on

During our last public consultation events in May and June 2023, we wanted to understand your views on the proposed locations of the subsea cable landfalls and potential cable route. We also wanted to understand whether there were any significant factors or environmental features that you considered to be important, as well as your overall perspectives on the project.

We'll be actively looking to mitigate the impacts of this subsea cable project as much as possible over the coming months by scheduling the installation to have least impact to marine activities. It would be helpful to understand from marine users the location and timing of any activities to inform our plans. We would also like to understand if there are any opportunities to deliver a local community benefit.

You can also follow us on social media:

 @sentransmission  @SSETransmission

Underground land cable

Note that information on the proposed final route alignment for the underground cable between the landfall in Sinclair's Bay to the converter station located in Banniskirk Hub and from Rattray Head and the converter station at Netherton Hub is outlined in a separate document that can be found on the documents tab of the project webpage at ssen-transmission.co.uk/spittal-peterhead-subsea-cable-link/

It is provided for information and does not form part of this consultation process.




To support everyone online, we provide accessibility and language options on our website through 'Recite Me'. The accessibility and language support options provided by 'Recite Me' include text-to-speech functionality, fully customisable styling features, reading aids, and a translation tool with over 100 languages, including 35 text-to-speech.

Please select "Accessibility" on our website to try out our inclusive toolbar."

Community Liaison Manager

Gillian Doig

 gillian.doig@sse.com

 07879 288 666

Additional information:



Submit your feedback online by scanning the QR code on this page or via the form on our project webpage at: ssen-transmission.co.uk/spittal-peterhead-subsea-cable-link/



Your feedback

Thank you for taking the time to read this consultation booklet. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

Please complete in BLOCK CAPITALS. (Please tick one box per question only)

Q1. Now that we have shared updated plans for the project, is there anything you'd like to bring to our attention that you believe we may not have already considered during project development?

Comments:

Q2. Are there any marine features (environmental, historic, or other) that you consider to be important and should be brought to the attention of the project team?

Yes No Unsure

Comments:

Q3. What suggestions for social or environmental community benefit opportunities do you have that you would like us to consider, or are there any local initiatives you would like us to support?

Comments:

Q4. Following review of the provided information, how would you describe your understanding of the project and are there any aspects that you feel you require more information on?

Comments:

Q5. Do you fish in the area affected by the proposed HVDC subsea cable?

Yes No

A. If yes, please provide details of the type of fishing you do, i.e. mobile or static and the locations you fish

B. Please provide an estimate of how often you fish in the installation corridor area and the time of year

Q6. Have you had experience of other subsea cable projects? What has worked well in the past and has had the least effect on your maritime activity?

Yes No Unsure

Comments:

Q7. Do you have any other comments regarding the proposed Spittal to Peterhead HVDC subsea cable?

Comments:

Full name: **Email:**

Telephone: **Address:**

We would like to send you relevant communications via email such as invitations to stakeholder events, surveys, updates on projects, services and future developments from the Scottish and Southern Electricity Networks group listed below. If you are happy to receive email updates please opt in by ticking the box below. You can unsubscribe at any time by contacting us at stakeholder.admin@sse.com or by clicking on the unsubscribe link that will be at the end of each of our emails.

If you would like to be kept informed of progress on the project, please tick this box

**Thank you for taking the time to complete this feedback form.
Please submit your completed form by one of the methods below:**

Post: 200 Dunkeld Road, Perth PH1 3GH

Email: gillian.doig@sse.com

Online: ssen-transmission.co.uk/spittal-peterhead-subsea-cable-link/

For information on how we collect and process your data please see our privacy notice available at today's event. This can also be obtained online at: ssen-transmission.co.uk/privacy

Comments forms and all the information from today's event will also be available to download from the project website.

We intend to use Artificial Intelligence (AI) to assist our experienced teams in the analysis of your feedback, so we can categorise key points raised more quickly. You can learn more about how we're utilising AI at: ssen-transmission.co.uk/AIFAQ

Any information given on the feedback form can be used and published anonymously as part of Scottish and Southern Electricity Networks consultation report. By completing this feedback form you consent to Scottish and Southern Electricity Networks using feedback for this purpose.

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