Eastern Green Link 3

Pre-application Consultation Report

Prepared for: Scottish Hydro Electric Transmission plc (SHE-T)

Scottish & Southern Electricity Networks
TRANSMISSION

collaborative environmental advisers

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This document has been checked in line with internal quality control requirements.

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Abbreviations/Glossary

DCO	Development Consent Order
EGL 3	Eastern Green Link 3
ESO	Electricity System Operator
FLO	Fisheries Liaison Officer
GW	Gigawatt
HND	Holistic Network Design
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
JNCC	Joint Nature Conservation Committee
km	Kilometre
MCGA	Maritime and Coastguard Agency
MD-LOT	Marine Directorate Licensing Operations Team
MEAp	Marine Environmental Appraisal
MMO	Marine Management Organisation
NETS	National Electricity Transmission System
NGET	National Grid Electricity Transmission
NLB	Northern Lighthouse Board
NM	Nautical Miles
NOA	Network Options Assessment
OWF	Offshore Wind Farm
PAC	Pre-Application Consultation
RLB	Red Line Boundary
SFF	Scottish Fishermen's Federation
SHE-T	Scottish Hydro Electric Transmission
SWFA	Scottish White Fish Producers Association
UNCLOS	United Nations Convention on the Laws of the Sea

1. Introduction

1.1. Purpose of Document

The Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013, describe the marine licensable activities that require pre-application consultation (PAC) and, in combination with sections 22-24 of the Marine (Scotland) Act 2010, outline the pre-application process and statutory reporting requirements. The Eastern Green Link 3 (EGL 3) is subject to these regulations as it involves the installation of subsea cable within Scottish territorial waters (out to 12 nautical miles (NM)).

For the purposes of seeking the necessary consents, EGL 3 has been split into different 'Schemes' i.e. English Onshore Scheme, English Offshore Scheme, Scottish Onshore Scheme and Scottish Offshore Scheme (with the latter hereinafter referred to as 'the Proposed Development'). Collectively all components are referred to as 'the Project'. The Proposed Development comprises approximately 145 km of subsea High Voltage Direct Current (HVDC) cable to be installed between the landfall at Sandford Bay, Aberdeenshire and the boundary with adjacent English waters. The scope of this PAC Report is limited to activities of the Proposed Development, however details of the wider Project have been provided where needed for context and information.

This PAC Report records the consultation process for the Proposed Development which has been undertaken prior to submission of the application for a Marine Licence, in accordance with the above legislation and in the manner prescribed in the Schedule to the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013, the Schedule form is also submitted alongside this report for compliance however the detail is contained within this report. The aim of the programme of consultation was to engage with statutory and non-statutory consultees, local communities, commercial fishers, landowners and individual residents to gain feedback on the Proposed Development. The report also describes the key responses received and details the actions taken in response to the feedback.

1.2. Document Structure

This PAC Report is comprised of eight parts as follows:

1. Introduction – sets out the purpose of the PAC Report.
2. Proposed Licensable Marine Activities – outlines Proposed Development background and provides a description of key elements.

- Applicant and Licensee details.

3. The Consultation Process – describes consultation framework and methods used.
4. Responses and Key Issues – summarises the range of responses, key comments, and issues raised throughout the consultation process.
5. Responses to Consultations – describes how the comments and issues raised during consultation will be addressed.
6. Conclusions –a summary of the conclusions reached and identification of any actions going forward.

- Certification.

The main body of this PAC Report is supported by a series of appendices for reference.

2. Proposed Licensable Marine Activities

2.1. Project Overview

To assist in distributing Scotland's vast reserves of renewable energy around the UK, the National Grid Electricity System Operator (ESO), Network Options Assessment (NOA) (National Grid ESO, 2022), the Pathway to 2030 Holistic Network Design (HND) recommended four new HVDC Links, further details are provided in **Chapter 2**.

Figure 2-1). EGL 3 comprises approximately 580 km ± 5 km of subsea and underground HVDC cables between new converter stations at each end of the electricity transmission link. These in turn are connected to the existing National Electricity Transmission System (NETS) via High Voltage Alternating Current (HVAC) cables between the new converter stations and new substations.

The existing electricity distribution networks in Scotland operate using predominantly HVAC systems. However, transmission projects such as EGL 3 use HVDC technology because it is more efficient at transmitting large volumes of electricity over longer distances with lower losses compared to an equivalent HVAC system. A HVDC system also provides a greater degree of control over the magnitude and direction of flow and this flexibility delivers complementary operational benefits. For large scale transmission projects such as EGL 3, specialised electrical plant and equipment contained within converter stations is required at either end of the transmission link to convert electricity from HVAC to HVDC (or vice versa).

This Marine Environmental Appraisal (MEAp) is written with specific regard to the Proposed Development, from which a single application for a Marine Licence will be made to the Marine Directorate Licensing Operations Team (MD-LOT). The Proposed Development comprises the components proposed from the Mean High Water Spring (MHWS) mark at the proposed landfall in Sandford Bay, Peterhead to the border between the limit of the Scottish territorial seas and the and the English adjacent waters. The Proposed Development is being developed by SHE-T operating and known as Scottish and Southern Electricity Networks Transmission (SSEN Transmission) (the Applicant). For the purposes of seeking the necessary consents, the Project has been split into different 'Schemes' i.e. English Onshore Scheme, English Offshore Scheme, Scottish Onshore Scheme and the Scottish Offshore Scheme (hereinafter referred to as the Proposed Development. The Red Line Boundary (RLB) encompasses the Proposed Development as shown in **Figure 2-1**. Within English jurisdiction, consent is being sought for the English Onshore and Offshore Schemes by way of a Development Consent Order under the Planning Act 2008.

The United Nations Convention on the Law of the Sea (UNCLOS) is equally applicable in England and Scotland within territorial waters and provides levels of protection at an international level for all international submarine cables. Amongst other provisions UNCLOS provides the freedom to lay, maintain and repair cables on the continental shelf (beyond 12 Nautical Miles (NM)). Article 79 of UNCLOS provides this freedom and states that the coastal States (i.e. Marine Management Organisation (MMO) and MD-LOT when exercising their licensing functions) may not impede the laying or maintenance of such cables or pipelines. To ensure compliance with this provision of UNCLOS, section 81 of the Marine and Coastal Access Act 2009 (MCAA), applicable in relation to both English and Scottish waters beyond 12 NM, sets out an exemption for such projects.

2.1.1. Scottish Onshore Scheme

There is a proposed converter station located to the west of Peterhead at Netherton. From this, there would be an underground HVDC cable to a proposed landfall at Sandford Bay. The proposed converter station would be connected to a substation by underground HVAC cables. The substation would connect the Proposed Development to the existing Scottish transmission system.

2.1.2. Scottish Offshore Scheme

The Proposed Development comprises approximately 145 km of subsea HVDC cable from the landfall at Sandford Bay to the boundary with adjacent English waters. The subsea cable system would consist of two bundled HVDC cables and a fibre optic cable (up to the first offshore joint) for control and monitoring purposes. The minimum and maximum cable burial depth would vary along the Proposed Development, depending on numerous factors such as soil type, presence/absence of sub-cropping or outcropping rock, shipping and fishing activity and the type of burial tool utilised. Indicatively, cable burial in the seabed can be achieved for 135 km of the cable route.

At the time of writing, the infrastructure which would be crossed by the Proposed Development includes up to seven crossings:

- 1 Interconnector (EGL 2) (co-located at landfall ,consent has expired for NorthConnect KS interconnector, licence being taken on by OWF developer and currently in application stage, noted below)
- Up to 3 x offshore wind export cables (Cenos offshore wind farm, Aspen offshore wind farm and MarramWind offshore wind farm)
- 1 active telecoms cable (Tampnet)
- 1 active pipeline and 1 abandoned pipeline – Forties pipelines

There are two out of service cables present so agreements will be made to cut and remove sections of this infrastructure to allow unimpeded burial.

External cable protection may be required in various areas along the Proposed Development such as areas of infrastructure crossings and areas where depth of burial cannot be achieved. Potential protection could include rock placement, concrete mattresses, flow dissipation devices, protective coverings, rock bags and sand backfill.

More detail on the Proposed Development's licensable marine activities can be found in **MEAp Chapter 3: Project Description.**

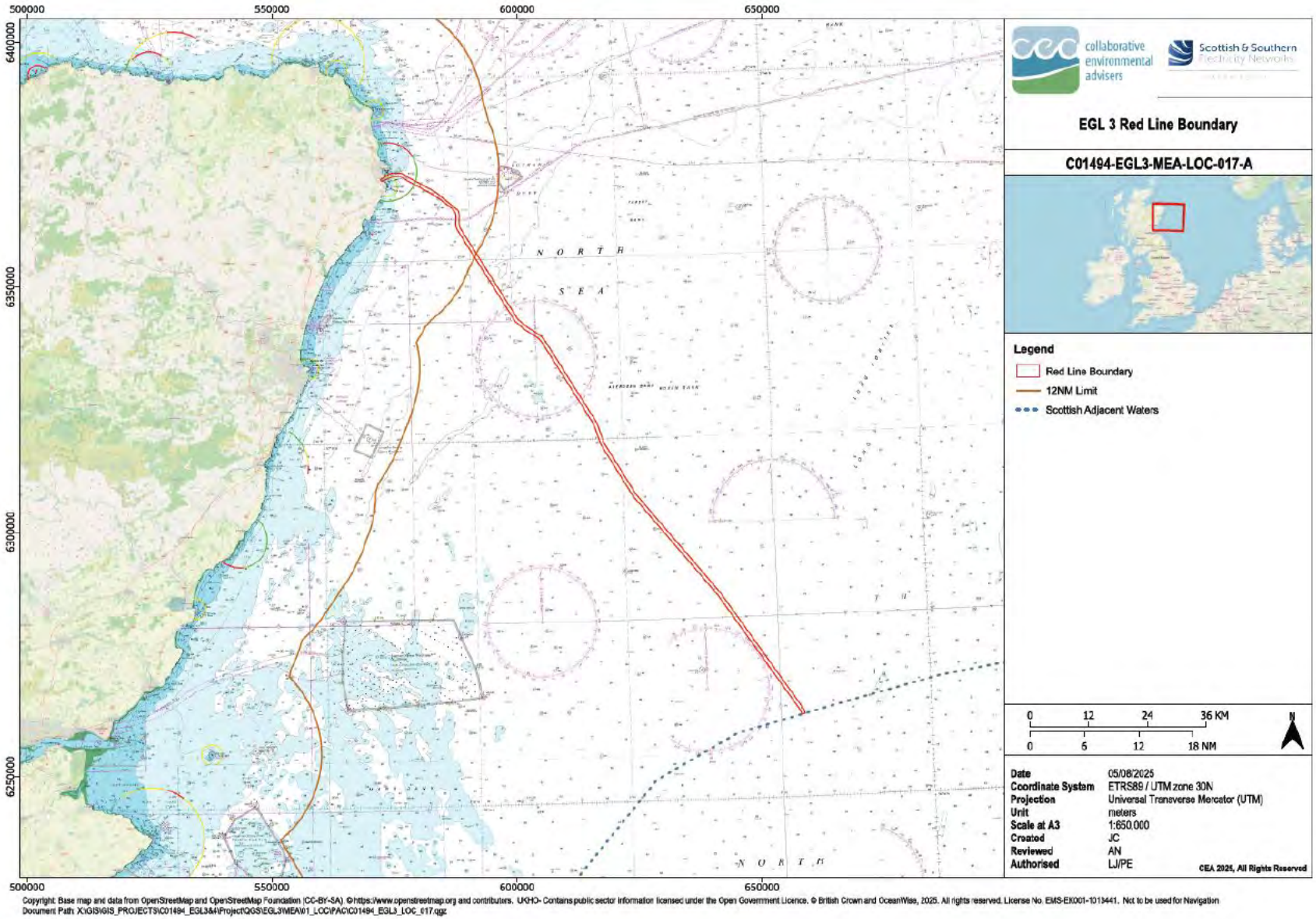

Figure 2-1 Red Line Boundary of the Proposed Development

3. The Consultation Process

3.1. Overview

This section describes the methods employed during the consultation process and provides information on meetings and exhibitions held with stakeholders in order to obtain feedback on the application prior to submission.

A series of events have been held regarding the Proposed Development, including:

- Non-statutory public consultation event on 14 June 2023 at 14:00-19:00 at Peterhead Football Club, Balmoor Stadium, Balmoor Terrance, Peterhead, AB42 1EQ
- Community information events on 5 March 2025 at 10:00-12:30 at Buchan Braes Hotel, Boddam, Peterhead, AB42 3AR and 15:00-19:00 at Longside Parish Church Hall, 4-13 Inn brae, Longside, Peterhead, AB42 4XN
- Statutory PAC event on 22 May 2025 at 15:00-19:00 at Peterhead Football Club, Balmoor Stadium, Balmoor Terrance, Peterhead, AB42 1EQ

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3.2. Notification and Advertisement of PAC Events

In accordance with The Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013, Regulation 7(2), a PAC event must be held no earlier than six weeks following the later of the date notice is given in a local newspaper of the planned event, containing key information as outlined under Regulation 7(1(b)), or the date of notification that an application for a marine licence is to be submitted is given to the statutory consultees. Duty to notify the appropriate stakeholders and delegates of the marine region in which activities are proposed, as required under Regulation 6(2), has been complied with.

The event was formally advertised by way of the following methods:

- Emails to the mailing list (See **Appendix 2)** which included the Maritime and Coastguard Agency, NatureScot, Northern Lighthouse Board, JNCC and MD-LOT.
- Email notification to local community councils (See **Appendix 2** for example email):
    - Fraserburgh Community Council
    - Rathen, Memsie and Cortes
    - Invercairn Community Council
    - Buchan East Community Council
    - Peterhead community Council
    - Longside and district Community Council
    - Boddam community Council
- Correspondence to fisheries stakeholders (including the Scottish Fishermen's Federation (SFF) and the Scottish Whitefish Producers Association, **See Appendix 2**).
- Newspapers:
    - On Tuesday, 13 May 2025 the PAC event was advertised in The Buchan Observer (See Appendix 1)
    - On both Wednesday 14 May 2025 and Monday 19 May 2025, the PAC event was advertised in The Press and Journal (Appendix 1).
- A postcard notified 16,000 households and businesses of the PAC event (**Appendix 1**).
- The Local Authority Engagement Team and Corporate Affairs notified Aberdeenshire Cllrs and local Members of Parliaments/ Members of the Scottish Parliament.
- **Project webpage** – A dedicated webpage was set up by SSEN Transmission to share Project information including PAC event details (https://www.ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/).

All parties were invited to share notice of the event through their own contacts and channels.

3.3. Statutory PAC Event

The public event provided an opportunity for members of the public, local stakeholders and statutory authorities to view information about the Project and Proposed Development, ask questions and provide feedback. A series of exhibition banners and information brochures were on display at the event to explain the proposals and to provide contact details and comments forms for attendees. The information brochures, including contact details, were available in booklet format for attendees to take away. Further information is provided in **Section 4.4** with copies of the exhibition information boards, and information brochure are included in **Appendix 3.**

Attendees were invited to ask questions and give comments at the event, as well as give feedback via comments forms and / or online via the project website or email. Consultation ran from 22 May 2025 with final responses requested by 6 July 2025.

A total of 29 people attended the PAC event. These individuals were made up of local residents and businesses, a small number of fishermen, representatives from SFF and representatives from two local community councils.

3.4. Information Provided at the PAC Events

The PAC event was held on 22 May 2025 at Peterhead Football Club, Balmoor Stadium, and the format involved the display of exhibition banners and the attendance of the EGL 3 Project Team. The event was held as open-door where any member of the public could attend when it suited them. The event was open between 3-7pm.

The PAC event banners provided the following information, with a copy of the boards available in **Appendix 3**:

- Introduction to SHE-T, NGET and an overview of the Proposed Development;
- The background and need for the Proposed Development;
- An overview of works, including marine surveys, carried out to date and a description of the proposed subsea cable installation techniques;
- Anticipated timelines for the Proposed Development;
- Consideration of alternatives;
- Environmental considerations; and
- Details on how to contact the Project team and provide feedback.

The PAC event provided an opportunity for public involvement and encouraged participation by people who may be discouraged from contributing in the forum of a conventional public meeting. The PAC event provided attendees direct access to the Project team, who were able to discuss technical and environmental questions that were raised (see **Appendix 4** which shows the set up of the PAC event). After the attendees had read the exhibition boards and discussed their concerns or queries with the Project team, they were provided with supplementary feedback forms to provide written feedback either at the event or a later date via post, email or directly via the website. A copy of the feedback form can be found in the Consultation Booklet in **Appendix 5**.

4. Responses and Key Issues

Four written responses were received after the PAC event, along with queries raised during the event, which were dealt with by the Applicant's Community Liaison Manager and the wider team.

The topics raised and feedback received are outlined in **Table 4-1.** Note that Question 1 ('*Now that we have shared updated plans for the subsea cable element of the EGL3 project, is there anything you'd like to bring to our attention that you believe we may not have already considered during project development?*') received no response. The update on the website advertising the PAC event details confirmed that the closing date for feedback on the Proposed Development was 6 of July 2025, which could be submitted either by post or email or directly through the website.

At the time of writing feedback had been received from JNCC, one fisherman and members of the public.

Table 4-1 Information and comments received from the feedback forms

Feedback Form Questions	Public Response	Applicant Response
PAC event Feedback Form		
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?	Public feedback highlighted issues on the Proposed Development's potential impact on local fisheries. In particular, the future impact on the lobster and brown crab fishery. Additionally, there was notable concern regarding the deterioration of the old harbour quay on the east side of Burnhaven burn and the visible infrastructure at low tide west of the burn.	The Applicant acknowledges this feedback. Where possible, the Proposed Development, through embedded mitigation, will avoid impacting local fisheries; impacts are considered in **Chapter 12 Commercial Fisheries** of the MEAp. The Applicant acknowledges the deterioration of the old harbour quay on the east side of Burnhaven burn and infrastructure visible at low tide and confirms that there will be no impact to the old harbour quay.
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?	Public feedback implied that they believed that the area in which the Proposed Development would be constructed would have a negative social community impact as they felt excluded from the countryside. The feedback indicated a desire for an accessible walking path during construction.	The Applicant acknowledges this feedback which is relevant to the onshore development rather than the Proposed Development. Community benefit is addressed in detail within the Pathway to 20230 Projects Documents and Handouts at https://www.ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/#panel-2, see document titled "Community Benefits". It is not anticipated that there would be a need to restrict public access to Sandford Bay at any time during works.
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?	Public feedback was that they had a good understanding of the Proposed Development. The feedback again indicated that was negativity around not having access to certain areas and being unable to freely roam in nature.	The Applicant acknowledges this feedback which is relevant to the onshore development rather than the Proposed Development.

Q5. Do you fish in the area affected by the proposed EGL3 HVDC subsea cable? **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.**	Public feedback confirmed that some members of the public do fish in this proposed area and that it primarily occurs from Peterhead Breakwater to Sandford Bay and east from Sandford Bay to the East of Skerry Rock. The main type of fishing is static gear fishing targeting lobster, brown crab and velvet crab. Feedback also highlighted that fishing can occur year-round in the installation corridor, depending on weather.	Where possible, the Proposed Development, through embedded mitigation, will avoid impacting local fisheries. Impacts are considered in **Chapter 12 Commercial Fisheries** of the MEAp.
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?	Public feedback showed that they had experience with the Hywind Scotland Wind Farm cable. Most notably they recalled a reduction of shellfish along the cable corridor.	The applicant acknowledges this feedback. Where possible, the Proposed Development, through embedded mitigation, will avoid impacting local fisheries, including shellfish; impacts are considered in **Chapter 12 Commercial Fisheries** of the MEAp.
Q7. Do you have any other comments regarding the proposed Eastern Green Link 3 subsea cable?	Public feedback indicated a generally negative opinion of the Proposed Development. In particular, the opinion was that Scotland's natural resources are being exploited primarily for the benefit of England and private entities, while many Scottish households struggle with unaffordable energy costs.	The Applicant maintains that the Proposed Development is mutually beneficial for both English and Scottish households. Pathway to 2030 Projects Documents Handouts at https://www.ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/#panel-2 provide useful information with regard to how SSEN are regulated and the caps that are set on revenue allowed to be earned to cover the costs of maintenance, repair and renovation of the transmission network in the north of Scotland (see "How SSEN Transmission Earn Our Income"); and the benefits the project offers including security of supply, jobs and skills development opportunities and the overarching need to support the Uks commitment to achieve net zero (see "Delivering Legacy benefits through Pathway to 2030 Projects"); and why the Project is needed (see "Pathway to 2030 – Why are these projects needed").
Supplementary Feedback	Public feedback expressed the opinion that Scotland already generates sufficient green energy and is self-sufficient in its generation. The belief that the Proposed Development will primarily benefit England while Scottish households continue to face disproportionately high electricity costs, was reiterated. The feedback also criticised the allocation of funds to GB Energy, suggesting it will not benefit Scotland despite being based there. They viewed the consultation process as ineffective and believed that decisions had already been made, undermining democratic engagement.	The Applicant maintains that the Proposed Development is mutually beneficial for both English and Scottish households (see Pathway to 2030 Projects Documents and Handouts referenced above which includes information on the need project need, benefits and why the approach proposed is being taken.
JNCC PAC Response		
Q1. Now that we have shared updated plans for the subsea cable element of the	JNCC advise that the Applicant should consider Annex I habitat, OSPAR protected and/or declining species and Scottish Priority Marine Features (PMFs) in the routing of the cables within the	The Applicant has considered the presence of Annex I habitat, OSPAR species and PMFs in **Chapter 7 -Intertidal and Subtidal**

EGL3 project, is there anything you'd like to bring to our attention that you believe we may not have already considered during project development?	cable corridor as far as possible, in addition to the consideration of avoidance of Marine Protected Areas (MPAs).	**Benthic Ecology**. The Applicant has sought to avoid these features as far as possible and minimise interaction where avoidance is not possible.

5. Response to Feedback

5.1. Overview

All queries raised during the PAC event were answered at the time and are not considered to require any specific responses or changes to the development design. The small number of additional comments received after the events were also not considered to require any specific response or changes.

This section provides a summary of questions raised during the consultation period and how the Applicant has responded to the consultation responses raised by stakeholders through the consultation process.

Much of the feedback from the public concerned the onshore aspects of the Project and is therefore not relevant in the context of this MEAp and Marine Licence Application.

5.2. Public Engagement

Stakeholders expressed a range of concerns regarding the consultation process, including dissatisfaction with the way consultations were conducted, a lack of transparency and inadequate presentation of project details. Some stakeholders felt neglected due to not receiving updates or responses to their concerns. Several respondents specified their preferred methods for receiving updates on the Proposed Development, including text messages, public meetings, and newsletters. More positively, some stakeholders have expressed support for the Proposed Development, acknowledging its necessity and expressing satisfaction with the consultation events they attended. They also made suggestions for community benefits. This feedback also indicates a desire for continued engagement and information sharing throughout the development stage of the Proposed Development and the Applicant acknowledges this and will continue to engage with stakeholders.

6. Conclusions

The approach to the consultations events has ensured that the local community and stakeholders have been given the opportunity to comment on proposals and provide feedback. This has enabled locally important issues and concerns to be identified and subsequently considered.

Much of the feedback from the public concerned the onshore aspects of the Project and is therefore not relevant in the context of this MEAp and Marine Licence Application.

Appendix 1. PAC Event Notices (Advertisements)

1.1 Newspaper advertisement

1.1.1 The Buchan Observer

Eastern Green Link 3

Scottish & Southern Electricity Networks
TRANSMISSION

Marine licence pre-application event

We are holding a statutory pre-application consultation event for the marine element of our proposed Eastern Green Link 3 project. The pre-application process is undertaken in advance of our Marine Licence application to the Marine Directorate.

During this consultation event, you will be able to meet the project team and view information on our proposal to install a 580km subsea high voltage direct current (HVDC) cable between landfalls at Sandford Bay in Peterhead and the Lincolnshire coast in England.

The feedback period is open until **6 July 2025** and you can provide feedback using the details provided on the back of this card or on the project webpage.

Non-statutory land cable information sharing

During the event, we will also share information on the preferred alignment of the Scottish land cable element of this project. Land cables are classed as Permitted Development and do not form part of the marine pre-application consultation process, and are shared for information only.

You are invited to attend the following event:

Thursday 22 May, 3–7pm
Peterhead Football Club, Balmoor Stadium,
Balmoor Terrace, Peterhead, AB42 1EQ

Please contact our Community Liaison Manager if you have any questions:

[redacted]

Find out more, register for project updates and provide feedback by scanning the QR code or visit:
www.ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/

@ssentransmission @SSETransmission

1.1.2 The Press and Journal

14/05/2025

Eastern Green Link 3

Scottish & Southern Electricity Networks
TRANSMISSION

Marine licence pre-application event

We are holding a statutory pre-application consultation event for the marine element of our proposed Eastern Green Link 3 project. The pre-application process is undertaken in advance of our Marine Licence application to the Marine Directorate.

During this consultation event, you will be able to meet the project team and view information on our proposal to install a 580km subsea high voltage direct current (HVDC) cable between landfalls at Sandford Bay in Peterhead and the Lincolnshire coast in England.

The feedback period is open until **6 July 2025** and you can provide feedback using the details outlined below or via the project webpage.

Non-statutory land cable information sharing

During the event, we will also share information on the preferred alignment of the Scottish land cable element of this project. Land cables are classed as Permitted Development and do not form part of the marine pre-application consultation process, and are shared for information only.

You are invited to attend the following event:

Thursday 22 May, 3–7pm

Peterhead Football Club, Balmoor Stadium, Balmoor Terrace, Peterhead, AB42 1EQ

Please contact our Community Liaison Manager if you have any questions:

[redacted]

[redacted]

Find out more information and to sign up for project updates, please visit our website: **ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/**

@SSETransmission @ssentransmission

1.2 Postcard

Eastern Green Link 3

Scottish & Southern Electricity Networks
TRANSMISSION

Marine licence pre-application event

We are holding a statutory pre-application consultation event for the marine element of our proposed Eastern Green Link 3 project. The pre-application process is undertaken in advance of our Marine Licence application to the Marine Directorate.

During this consultation event, you will be able to meet the project team and view information on our proposal to install a 580km subsea high voltage direct current (HVDC) cable between landfalls at Sandford Bay in Peterhead and the Lincolnshire coast in England.

The feedback period is open until **6 July 2025** and you can provide feedback using the details provided on the back of this card or on the project webpage.

Non-statutory land cable information sharing

During the event, we will also share information on the preferred alignment of the Scottish land cable element of this project. Land cables are classed as Permitted Development and do not form part of the marine pre-application consultation process, and are shared for information only.

More information overleaf.

You are invited to attend the following event:

Thursday 22 May, 3–7pm
Peterhead Football Club, Balmoor Stadium,
Balmoor Terrace, Peterhead, AB42 1EQ

Find out more, register for project updates and provide feedback by scanning the QR code or visit:
www.ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/

Please contact our Community Liaison Manager if you have any questions:

[redacted]

[redacted]

@ssentransmission @SSETransmission

Appendix 2. Statutory Public Notices (Letters / Emails)

2.1 Email template to Community Councillors

EGL3 marine cable consultation

- communications to stakeholders

9/5/2025

Dear Community Councillors

Eastern Green Link 3 – Marine licence pre-application consultation event

I am writing to share information about a statutory pre-application consultation event for the marine cable element of our proposed Eastern Green Link 3 project in Scottish waters. The pre-application event is undertaken in advance of our Marine Licence application to the Marine Directorate.

The feedback period closes on 6 July 2025.

Non-statutory underground land cable information sharing

We will also take the opportunity to share information on the preferred alignment of the land cable element of this project. This is the same information that we presented during consultation events in Longside and Boddam in March this year. The proposed underground cable would link the landfall at Sandford Bay and Netherton Hub.

The event

The community are being invited to attend the following event:

Thursday 22 May, 3-7pm

Peterhead Football Club, Balmoor Stadium, Balmoor Terrace, Peterhead, AB42 1EQ

Advertising the events

The events are being advertised in local press, via email distribution lists, and via mail drop.

Also attached is a colour poster that you are invited to circulate online or locally via your established channels.

Find out more

The consultation and information material, including maps showing the onshore and offshore cable route, is now live on our website and can be viewed on the Documents tab of the following webpage: www.ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/

Our public events are a good opportunity to learn more about our proposals by meeting the team in person, viewing our information materials and asking any questions you may have.

Should you wish to discuss any details about the project or the event, please do not hesitate to get in touch.

Best wishes

[redacted]

2.2 Email template to Community

Email to community – Tractivity

19 May 2025

Good morning

Eastern Green Link 3 – Marine licence pre-application consultation event

You are invited to attend a drop-in consultation event in connection with Eastern Green Link 3 (EGL3) on Thursday 22 May.

This statutory pre-application consultation event is for the marine cable element of our proposed EGL3 project in Scottish waters. The pre-application event is undertaken in advance of our Marine Licence application to the Marine Directorate.

EGL3 is being jointly developed by SSEN Transmission and National Grid Energy Transmission. During this consultation event, you will be able to meet the project team and view information on our proposal to install a 580km subsea high voltage direct current (HVDC) cable between landfalls at Sandford Bay in Peterhead and the Lincolnshire coast in England.

The feedback period is open until 6 July 2025 and you can provide feedback via the online form on the project webpage at ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/.

The event

The community are being invited to attend the following event:

- Thursday 22 May, 3-7pm
  Peterhead Football Club, Balmoor Stadium, Balmoor Terrace, Peterhead, AB42 1EQ

Find out more

If you can't attend the event, the consultation and information material is now live on our website and can be viewed on the Documents tab of the following webpage: www.ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/

Our public events are a good opportunity to learn more about our proposals by meeting the team in person, viewing our information materials and asking any questions you may have.

Non-statutory underground land cable information sharing

We will also share information on the preferred alignment of the land cable element of this project. This is the same information that we presented during consultation events

in Longside and Boddam in March this year. The proposed underground cable would link the Eastern Green Link 3 landfall site at Sandford Bay and Netherton Hub.

Should you wish to discuss any details about the project or the event, please do not hesitate to get in touch.

Best wishes

[redacted]

2.3 Email template to Maritime and Coastguard Agency (MCGA)

2.4 Email template to Nature Scot

Outlook

EGL3 PAC consultation event

From [redacted]
Date Thu 4/10/2025 4:34 PM
To [redacted]

1 attachment (39 KB)
EGL3_PAC event information.pdf;

Dear Sir / Madam,

I am writing to inform you that SSE's Eastern Green Link 3 project will be hosting a Pre-Application Consultation (PAC) event in advance of submission of our marine licence application for the construction of a subsea power cable between Sandford Bay, Peterhead and Lincolnshire.

The event will take place:
Peterhead Football Club
Balmoor Stadium
Balmoor Terrace
AB42 1EQ
22nd May 2025, 3-7pm

We would like to invite you to comment on the project information we will have displayed. Following the event, a consultation report will be written to accompany our marine licence application at which point formal representation to the Scottish ministers may be made.

Should you have any questions, please don't hesitate to get in touch.

Kind regards
Euan

[redacted]
Senior Marine Environment & Consents Manager
SSEN Transmission
10 Henderson Rd, Inverness, IV1 1SN
E: [redacted]
www.ssen-transmission.co.uk
Please note, I work flexibly and do not expect an email response outside of the working hours of others

Scottish & Southern Electricity Networks

2. 7 Email template to Northern Lighthouse Board (NLB)

Outlook

EGL3 PAC consultation event

From [redacted]
Date Thu 4/10/2025 4:34 PM
To [redacted]

1 attachment (39 KB)
EGL3_PAC event information.pdf;

Dear Sir / Madam,

I am writing to inform you that SSE's Eastern Green Link 3 project will be hosting a Pre-Application Consultation (PAC) event in advance of submission of our marine licence application for the construction of a subsea power cable between Sandford Bay, Peterhead and Lincolnshire.

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Scottish & Southern Electricity Networks

2.6 Email template to SFF

Outlook

EGL3 PAC consultation event

From [redacted]
Date Thu 4/10/2025 4:35 PM
To [redacted]

1 attachment (39 KB)
EGL3_PAC event information.pdf;

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[redacted]
Senior Marine Environment & Consents Manager
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10 Henderson Rd, Inverness, IV1 1SN
E: [redacted]
www.ssen-transmission.co.uk
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Scottish & Southern Electricity Networks

2.7 Email template to Scottish White Fish Producers Association (SWFA)

Outlook

EGL3 PAC consultation event

From [redacted]
Date Thu 4/10/2025 4:35 PM
To [redacted]

1 attachment (39 KB)
EGL3_PAC event information.pdf;

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Kind regards
Euan

[redacted]
Senior Marine Environment & Consents Manager
SSEN Transmission
10 Henderson Rd, Inverness, IV1 1SN
E: [redacted]
www.ssen-transmission.co.uk
Please note, I work flexibly and do not expect an email response outside of the working hours of others

Scottish & Southern Electricity Networks

2.8 Email template to MD-LOT

Outlook

EGL3 PAC consultation event

From [redacted]
Date Thu 4/10/2025 4:47 PM
To [redacted]

1 attachment (39 KB)
EGL3_PAC event information.pdf;

Dear Sir / Madam,

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10 Henderson Rd, Inverness, IV1 1SN
E: [redacted]
www.ssen-transmission.co.uk
Please note, I work flexibly and do not expect an email response outside of the working hours of others

Scottish & Southern Electricity Networks

2.9 Email template to Fisheries Liaison Officer (FLO)

Outlook

FW: SSEN Transmission - Eastern Green Link 3 marine licence event

From [redacted]
Date Wed 5/21/2025 5:03 PM
To [redacted]

Hi Euan, see email from Sunderland fishermen. Can you pass on to FLO's or contact them yourself if required.

[redacted]
www.ssen-transmission.co.uk

From: [redacted]
Sent: 21 May 2025 17:01
To: [redacted]
Subject: [EXTERNAL] Re: SSEN Transmission - Eastern Green Link 3 marine licence event

Myself.

[redacted]

[redacted]

[redacted]

[redacted]

Thanks Gillian.

Sent from Outlook for Android

From: [redacted]
Sent: Wednesday, May 21, 2025 4:07:49 PM
To: [redacted]
Subject: RE: SSEN Transmission - Eastern Green Link 3 marine licence event

Thanks for getting in touch, [redacted]. If you could tell me your vessel name(s) then I will pass on to our fisheries liaison team who will note your interest. All the consultation material is available on the EGL3 website, and you are welcome to submit your feedback or contact me with any questions that you may have.

Thanks
[redacted]

[redacted] **| Community Liaison Manager**
SSEN Transmission
E: [redacted]
Grampian House, 200 Dunkeld Road, Perth, PH1 3GH
www.ssen-transmission.co.uk

From: [redacted]
Sent: 21 May 2025 10:06
To: [redacted]
Subject: [EXTERNAL] Re: SSEN Transmission - Eastern Green Link 3 marine licence event

Thank you for your email, due to the distance of the consultation I am unable to attend, I have attached a screenshot of the journey I would have to take on such short notice and work commitments, I also noticed that the other consultations were also a long way to travel, I understand that these areas are local to the land construction of this project and I'm aware that it will only affect me and two other full-time offshore commercial fishermen from the Port of Sunderland, myself,
[redacted]
So I can understand why the consultations aren't held local to us, if you would like to reach out to us please don't hesitate to contact us to exchange thoughts on the matter.

Best regards.
[redacted]

Sent from Outlook for Android

From: Gillian Doig [redacted]
Sent: Monday, May 19, 2025 9:58:46 AM
To: Bryan Little <[redacted]
Subject: SSEN Transmission - Eastern Green Link 3 marine licence event

Good morning

Eastern Green Link 3 – Marine licence pre-application consultation event

You are invited to attend a drop-in consultation event in connection with Eastern Green Link 3 (EGL3) on Thursday 22 May. This statutory pre-application consultation event is for the marine cable element of our proposed EGL3 project in Scottish waters. The pre-application event is undertaken in advance of our Marine Licence application to the Marine Directorate. EGL3 is being jointly developed by SSEN Transmission and National Grid Energy Transmission. During this consultation event, you will be able to meet the project team and view information on our proposal to install a 580km subsea high voltage direct current (HVDC) cable between landfalls at Sandford Bay in Peterhead and the Lincolnshire coast in England. The feedback period is open until 6 July 2025 and you can provide feedback via the online form on the project webpage at ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/.

The event
The community are being invited to attend the following event:
Thursday 22 May, 3-7pm
Peterhead Football Club, Balmoor Stadium, Balmoor Terrace, Peterhead, AB42 1EQ

Find out more
If you can't attend the event, the consultation and information material can be viewed on the Documents tab of the webpage: www.ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/
Our public events are a good opportunity to learn more about our proposals by meeting the team in person, viewing our information materials and asking any questions you may have.

Non-statutory underground land cable information sharing
We will also share information on the preferred alignment of the land cable element of this project. This is the same information that we presented during consultation events in Longside and Boddam in March this year. The proposed underground cable would link the Eastern Green Link 3 landfall site at Sandford Bay and Netherton Hub.

Should you wish to discuss any details about the project or the event, please do not hesitate to get in touch.

[redacted]

[redacted] **Community Liaison Manager**
SSEN Transmission
E: [redacted]
Grampian House, 200 Dunkeld Road, Perth, PH1 3GH
www.ssen-transmission.co.uk

Appendix 3. PAC Event Materials

3.1 Marine Consultation Booklet 2025

Scottish & Southern Electricity Networks

TRANSMISSION

Eastern Green Link 3

Subsea Cable Pre-Application Consultation

May 2025

ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/

Contents

The consultation event will take place on:

Thursday 22 May, 3–7pm

Peterhead Football Club, Balmoor Stadium, Balmoor Terrace, Peterhead AB42 1EQ

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 over £20 billion into our region's energy infrastructure this decade, with the potential for this to increase to over £30 billion. This investment will deliver a network capable of meeting 20% of the UK's Clean Power 2030 target and supporting up to 37,000 jobs, 17,500 of which will be here in Scotland.

Scan the QR code with your smartphone to find out more about how these policies have been assessed and determined.

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 a significant acceleration of work 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.

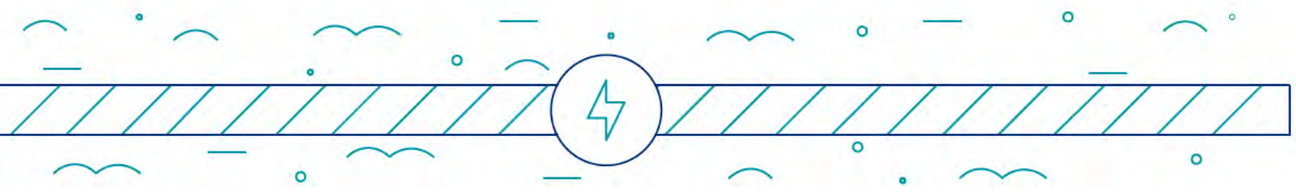
The UK Government's British Energy Security Strategy further underlines the need for this infrastructure, setting out plans to accelerate homegrown power for greater energy independence. The strategy aims to reduce the UK's dependence on and price exposure to global gas wholesale markets through the 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 Beauly and Peterhead, and Beauly and Caithness, and for offshore subsea cables between Caithness and Peterhead, and between Peterhead and England, which include Eastern Green Link 3. 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, Beauly, 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.

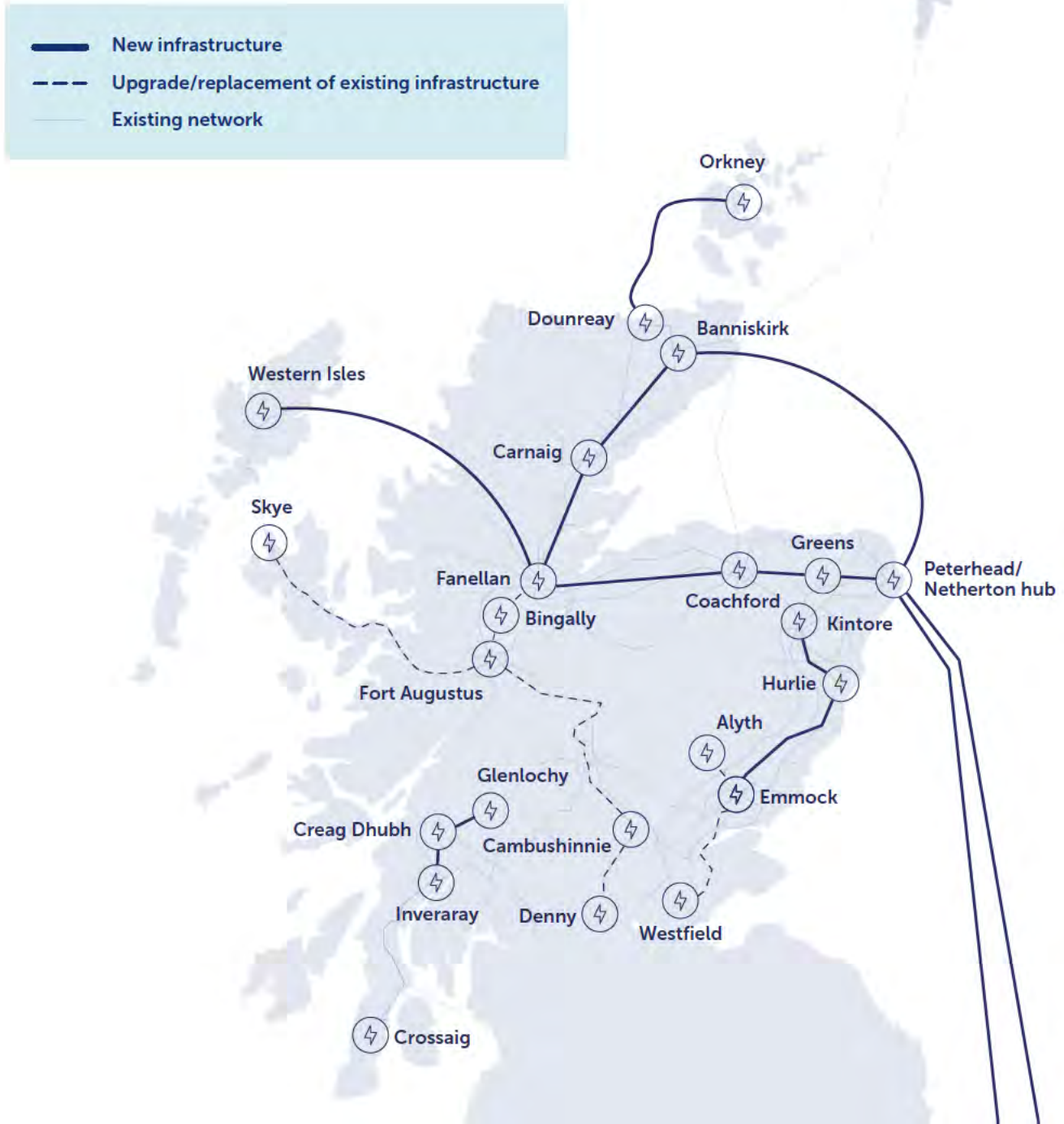


Eastern Green Link 3 - May 2025

Future network investment requirements

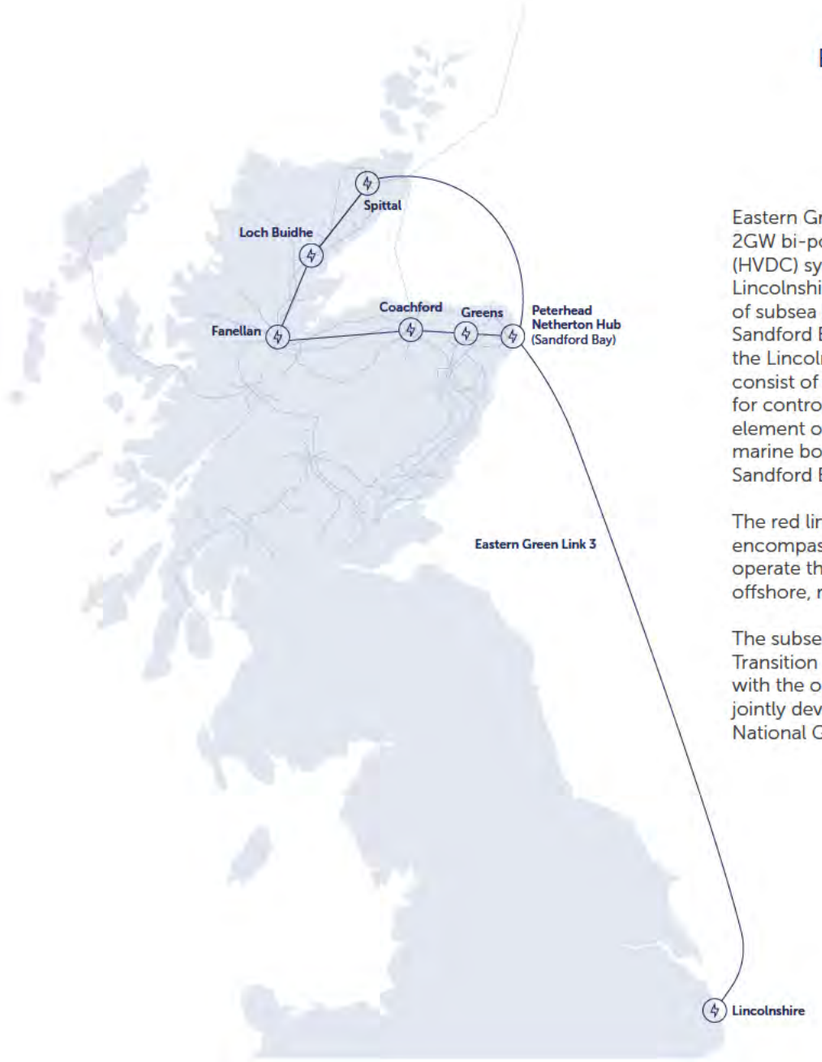
Our 2030 targets are the first step on the transition to net zero. The UK Government has a target to decarbonise our electricity system by 2035 and fully decarbonise our economy by becoming net zero by 2050, with the Scottish Government committing to net zero five years earlier, by 2045.

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

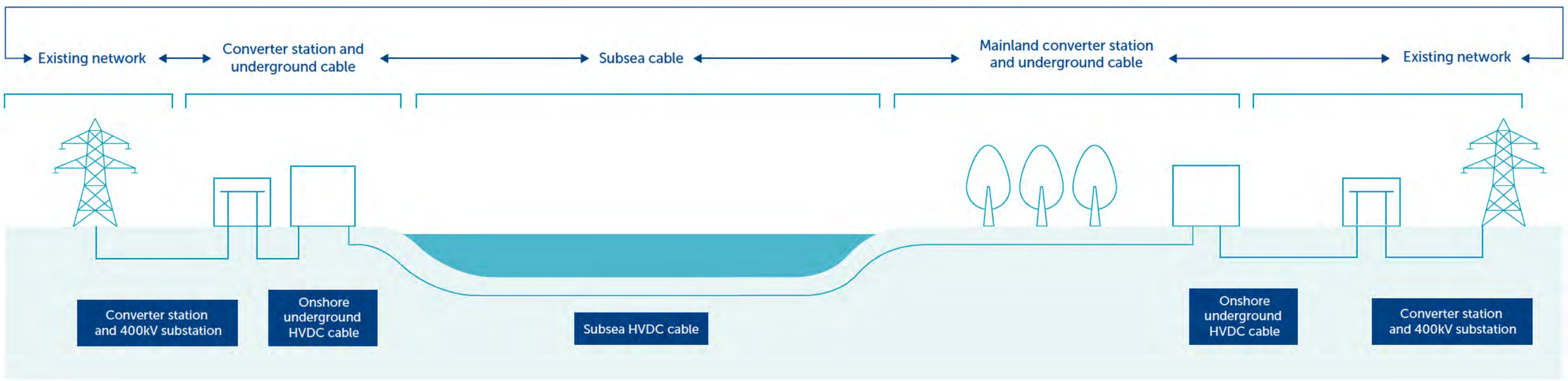
We're leading some exciting projects to power change in the UK and Scotland. To support the delivery of 2030 offshore wind targets set by the UK and Scottish governments, and to power local communities, we need to upgrade our existing network. In some key areas, we need to develop entirely new infrastructure,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



Eastern Green Link 3 (EGL3) comprises a 2GW bi-pole, 525kV high voltage direct current (HVDC) system linking Peterhead in Scotland and Lincolnshire in England. Approximately 580 km of subsea HVDC cable from a proposed landfall at Sandford Bay in Peterhead to a proposed landfall on the Lincolnshire coast. The subsea cable system will consist of two HVDC cables and a fibre optic cable for control and monitoring purposes. The Scottish element of the marine scheme extends from the marine border with English Waters up to MHWS at Sandford Bay, the route is approximately 145 km.

The red line boundary for the Project encompasses all activities to construct and operate the project and is nominally 500m in width offshore, narrowing as it approaches the landfall.

The subsea cables will come onshore into a Transition Joint Bay where they will connect with the onshore cables. This project is being jointly developed by SSEN Transmission and National Grid Electricity Transmission (NGET).



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 a public consultation event in Peterhead in 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.

This event complies 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 **Thursday 6 July 2025.**

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.

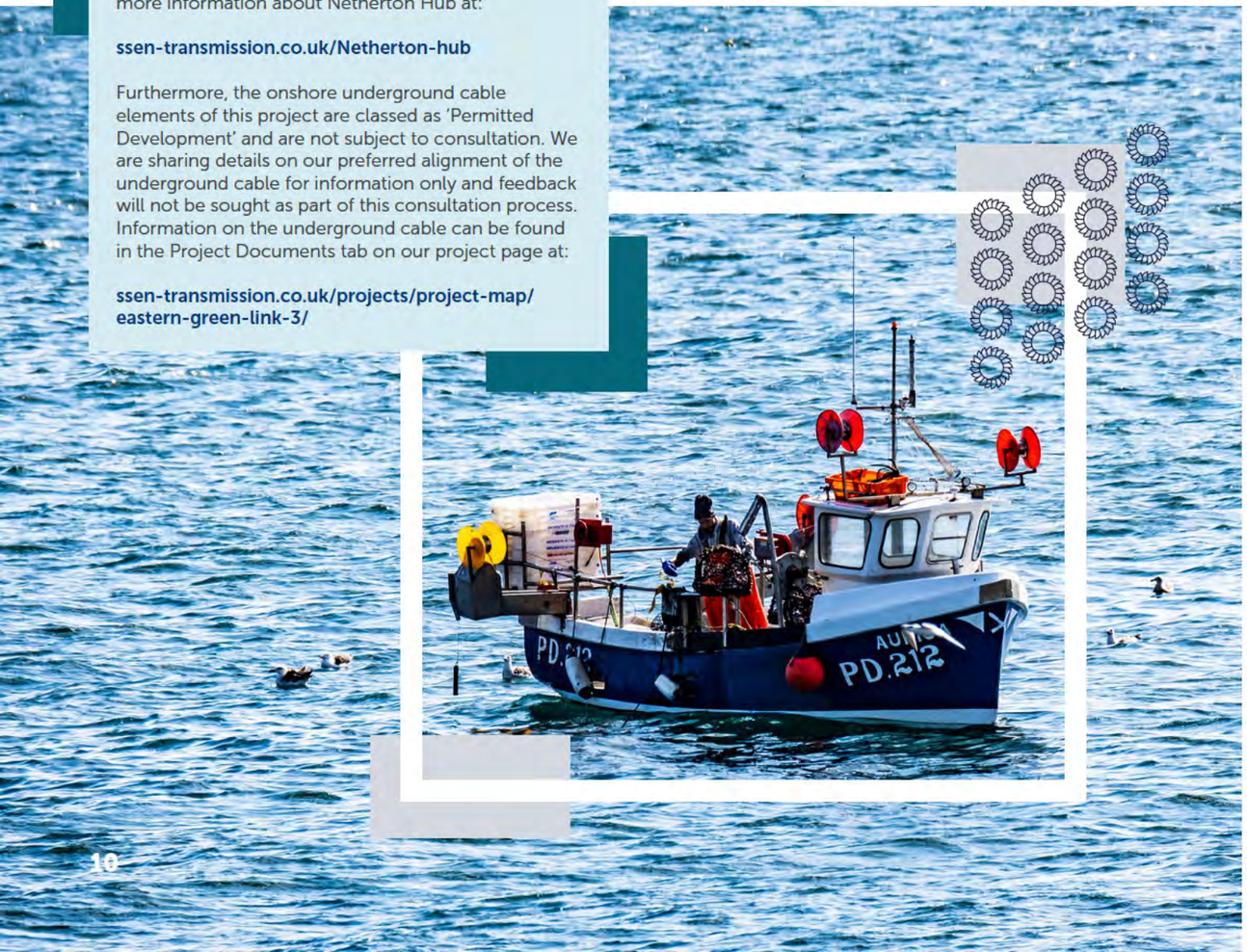
We have also engaged with Crown Estate Scotland to obtain an option to lease agreement for the subsea cable installation corridor within Scottish territorial waters. Closer to the time of cable installation, the project will step from an option to lease to the full lease agreement, which provides SSEN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

Note that consultation on the EGL3 converter station at Netherton Hub has already been completed and is not part of this consultation. You can find more information about Netherton Hub at:

ssen-transmission.co.uk/Netherton-hub

Furthermore, 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/projects/project-map/eastern-green-link-3/



Eastern Green Link 3 - May 2025

How we've selected our proposed subsea cable route and landfalls

In our previous consultation on the EGL3 marine cable in June 2023, we presented potential subsea cable corridors between various landfall locations.

Several subsea cable corridors have been 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

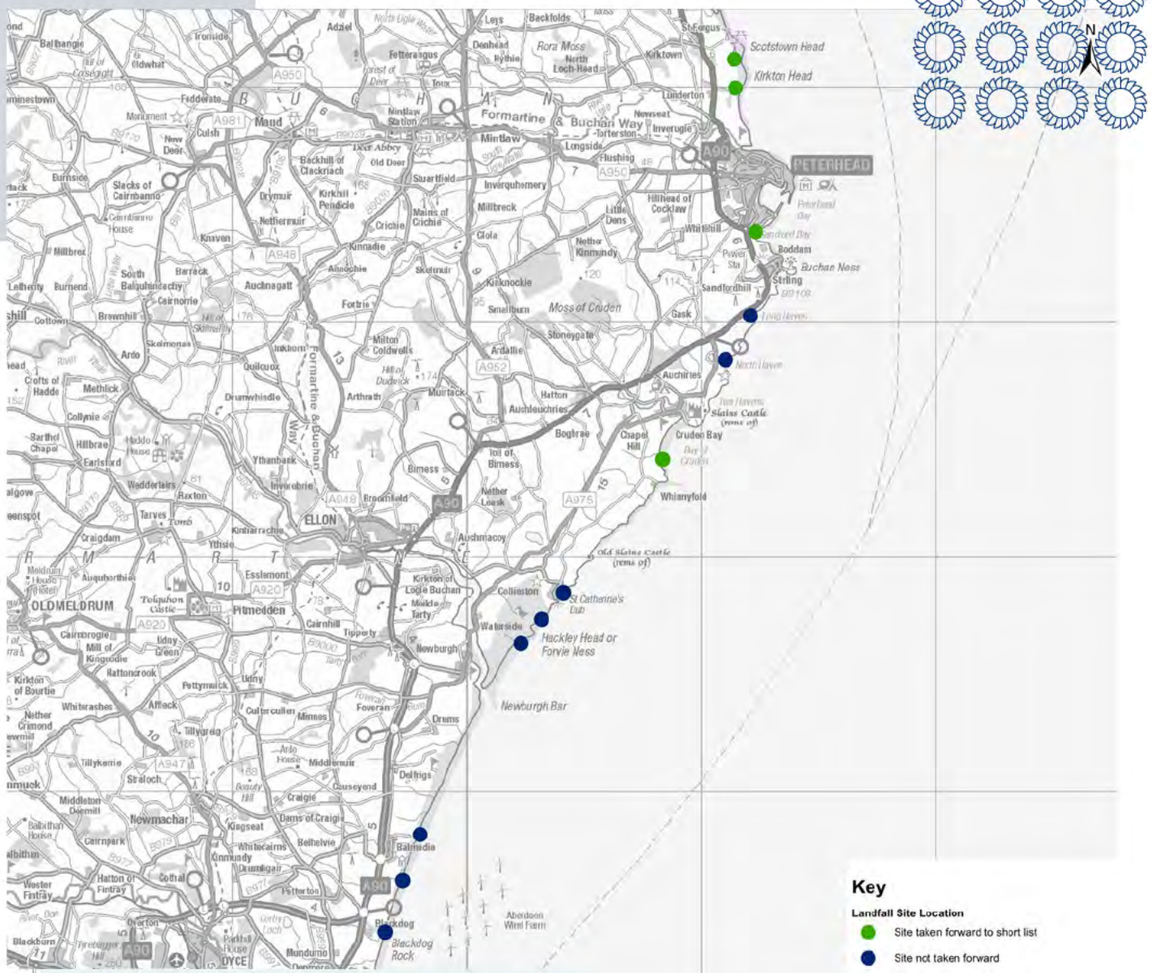
Corridor Optioneering, identifying potential subsea cable corridors based on relative impacts on constraints identified in Stage 2.

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 Aberdeenshire were:

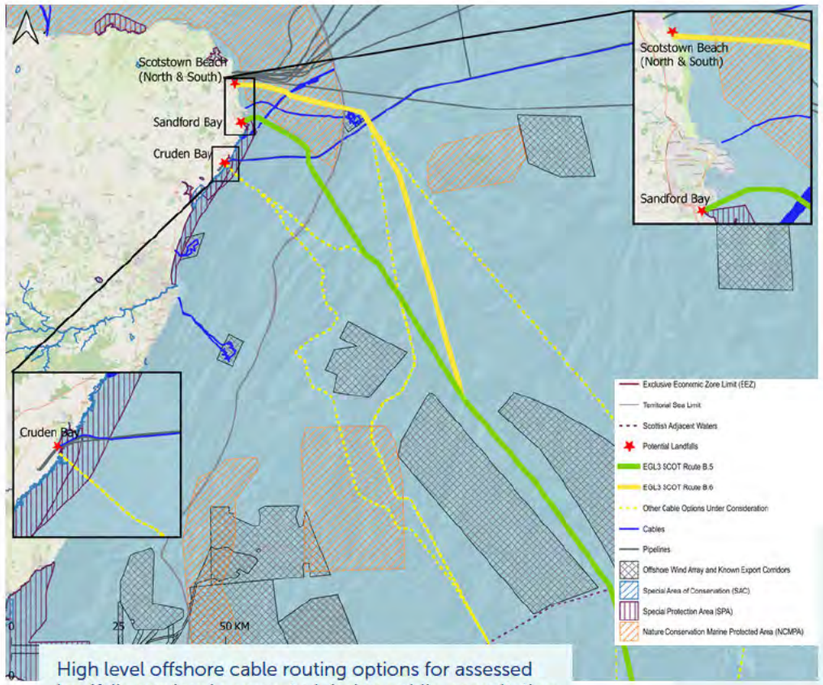
- Sandford Bay
- Cruden Bay
- Scotstown Beach South
- Scotstown Beach North



Subsea Cable Landfall Options - original assessment areas

Eastern Green Link 3 - May 2025

Subsea Cable Landfall Options - landfalls carried forward for further assessment



High level offshore cable routing options for assessed landfalls previously presented during public consultation

Selecting a corridor between proposed landfall locations

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 Sandford Bay in Aberdeenshire and the Lincolnshire coast was selected as the least constrained option because:

- It minimised interactions with protected areas and sensitive habitats and species to the greatest extent
- It maximised the potential for subsea cable burial throughout the cable corridor and minimised the number of crossings of third-party assets required
- It minimised the length of onshore underground cable required to connect to substations at each end
- It minimised coastline development disturbance due to the shared landfall with the EGL2 project.

Since our last consultation, we have carried out a marine survey campaign to gather additional data on the proposed subsea cable corridor between Sandford Bay and Lincolnshire. 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.

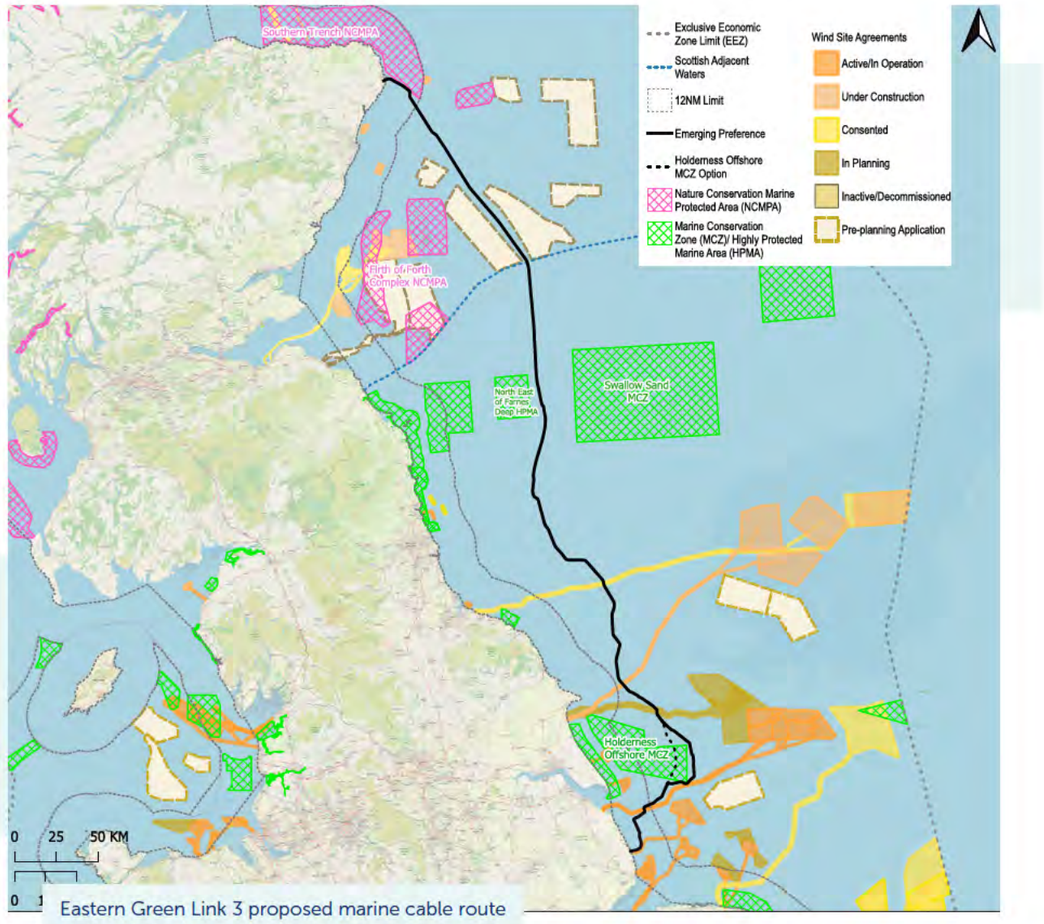
Sandford Bay, the preferred northern landfall location

Eastern Green Link 3 - May 2025

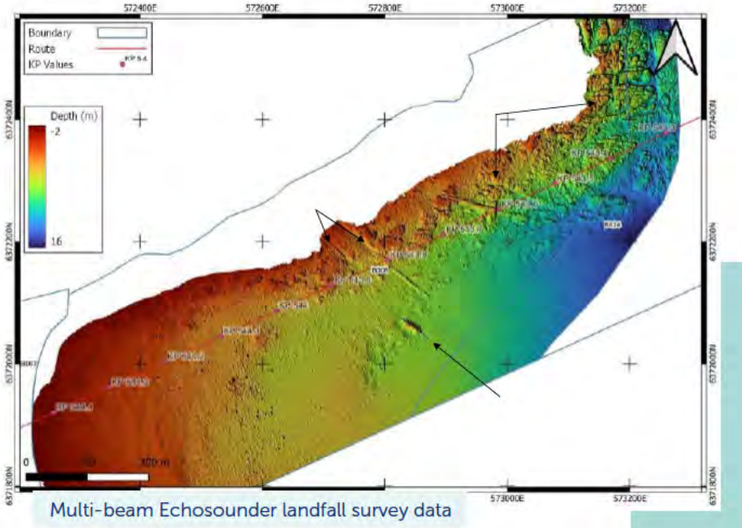
Marine surveys

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:

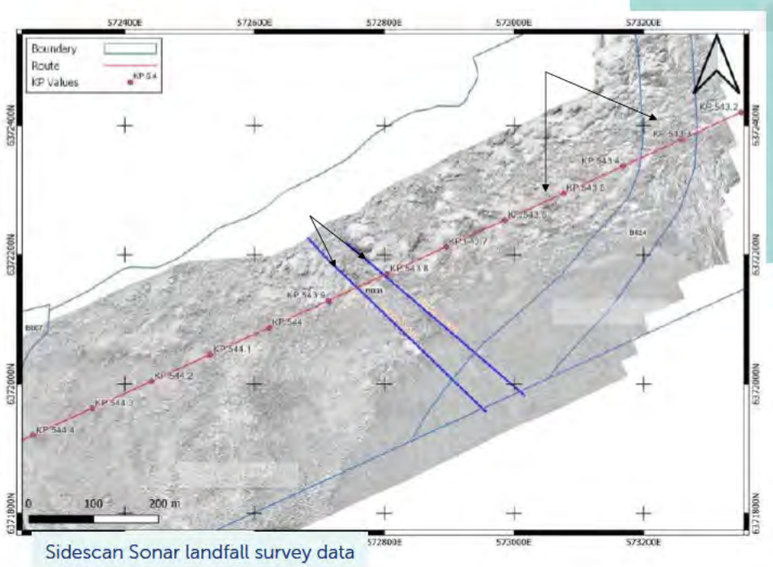
1. Geophysical survey to determine water depths, seabed features, shallow geology, cable crossing positions, intertidal topography, and to detect objects on the seabed. Instruments used include Multi-Beam Echosounder (MBES), Side Scan Sonar (SSS), Sub-Bottom Profiler (SBP), magnetometer, and Unmanned 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).



Eastern Green Link 3 proposed marine cable route



Multi-beam Echosounder landfall survey data



Sidescan Sonar landfall survey data

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 ordinance.
- 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.

Eastern Green Link 3 - May 2025

Subsea cable installation

The subsea cable system will be installed within a Marine Installation Corridor approximately 500m wide and 580km long (145km in Scottish waters). 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 ordinance 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; and
- Cutting and removing sections of out of service cables.

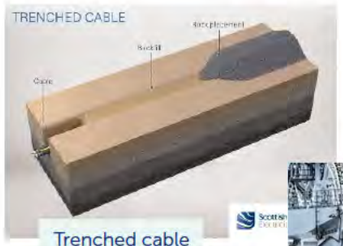
Cable lay and burial

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:

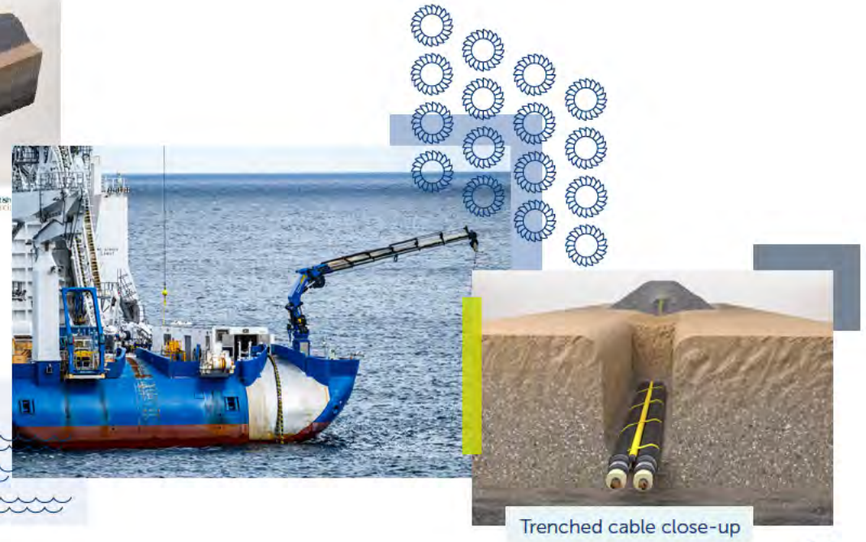
Burial in seabed sediments, using a trenching tool which follows the cable along the seabed using water jets or a plough to lower the cable into the seabed.

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.



Trenched cable



Trenched cable close-up

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.

Eastern Green Link 3 - May 2025

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

Benthic ecology and physical environment

The intertidal environment across the Sandford Bay survey area is considered moderately diverse with a number of different habitats identified. The shoreline is characterised by sand dunes and vegetated sea-cliffs. The coastline is fairly exposed and kelp debris can be found on the beach due to the influence of seasonal storm surge. Further down the beach the area changes to a mixture of shingle, cobbles, pebbles and coarse substrata closer to the low water mark. Either side of the bay presented areas of moderately exposed rocky shores dominated by barnacles and seaweed leading to kelp habitats on shingle, boulders and bedrock. The landfall is situated near to anthropogenic infrastructures, such as pathways, adjacent power station and a car park however the coastal habitats are listed as protected habitats.

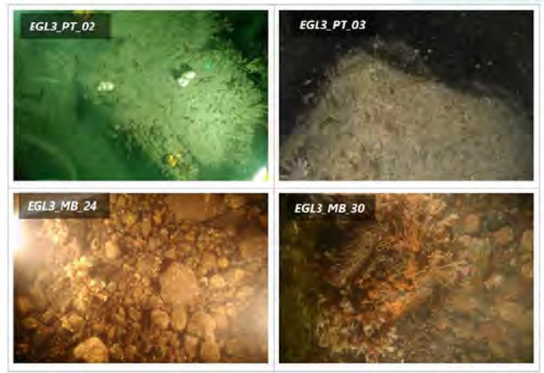
Water depths across the EGL3 route transitioned from a minimum of 1.7m in the nearshore to a maximum of 104m before gradually shallowing to approximately 74m at the Scottish and English maritime border.

The study area passes a number of designated sites, which are designated for marine species and habitats, however the subsea cable avoids direct interaction with them.

The EGL3 route also contains bedrock and boulder fields which provide a potential habitat for other species.

The ross worm (Sabellaria spinulosa) is a protected species which forms reef structures. A number of patches of sabellaria reef were identified during the site surveys, although these were all low reef structures. The presence of ocean quahog which is classed as a priority marine feature was also noted during the surveys.

Protected species and habitats will be avoided wherever possible.



Example images of 'Faunal Turf Communities on Atlantic Circalittoral Rock' Habitat

Fish and shellfish ecology

The study area is important for commercial fish species including herring, mackerel and horse mackerel, in addition a number of shellfish species of note are within the study area including nephrops, scallops, crabs, squid and lobster.

There are a couple of notable types of fish that are present within the cable corridor which include herring and fish that are electrosensitive (elasmobranchs).

Herring are a widespread pelagic fish, listed as a United Kingdom Biodiversity Action Plan (UKBAP) priority marine species of principal importance. Herring spawning grounds are prevalent around the Scottish north and east coasts, with high intensity nursery grounds close to shore, and low intensity nursery grounds widespread throughout the North Sea. Elasmobranchs are amongst the most vulnerable marine fish. This is due to their slow growth rates, late maturity, low reproductive productivity which limits their ability for population recovery should it decline. All sharks and rays are on the OSPAR list of threatened or declining species (OSPAR Commission, 2024). There are several elasmobranchs which are regularly caught by commercial fisheries along the Proposed Submarine Cable Corridor. These include cuckoo ray (Leucoraja naevus), dogfish (Scyliorhinus canicula), spurdog (Squalus acanthias), thornback ray (Raja clavata), and spotted ray (Aetobatus narinari).

A number of nursery grounds are also present within the study area for a variety of different species. These are areas that fish return to each year to spawn and rear young.

Common Sun Star

Dragonet

Plumose anemone

Edible crab

Red Gurnard

Dahlia anemones

Marine mammals and megafauna

Scottish waters are home to an abundant array of marine mammals. Within the study area there are a number of marine mammal species to note. A number of marine mammals have been noted within the study area including harbour porpoise, short-beaked common, bottlenose and white-beaked dolphin, minkem humpback, fin, long-finned pilot and northern bottlenose whales as well as grey seal, harbour seal and leatherback turtles. Bottlenose dolphin we recorded most regularly, followed by harbour porpoise. Eurasian otters have also been recorded along the coastline within the study area.

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.

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 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 for the marine elements of the project. All work will be carried out following relevant guidance, including the Joint Nature Conservation Committee guidance and the Scottish Marine Wildlife Watching Code.

Marine ornithology

The landfall at Sandford Bay crosses the Buchan Ness to Collieston Coast SPA which is designated for a number of breeding birds including Fulmar, herring gull, kittiwake and guillemot which are present in summer months. The Buchan Ness to Collieston Coast SPA includes a variety of marine habitats that supports breeding bird populations. The area is characterised by varied coastal vegetation on the ledges and the cliff tops include maritime heath, grassland and brackish flushes. There are a number of other neighbouring designations hosting a variety of bird species.

During the breeding season, the sea in the southeast of Scotland is internationally important for at least thirteen breeding bird species, namely northern gannet (Morus bassanus), Manx shearwater (Puffinus puffinus), cormorant (Phalacrocorax carbo), shag (Phalacrocorax aristotelis), herring gull (Larus argentatus), lesser black-backed gull (Larus fuscus), black-legged kittiwake (Rissa tridactyla), common tern (Sterna hirundo), Arctic tern (Sterna paradisaea), Sandwich tern (Sterna sandvicensis), common guillemot (Uria aalge), razorbill (Alca torda) and Atlantic puffin (Fratercula arctica)).

Marine archaeology

Submerged prehistory

A series of melt water channels and moraines have been mapped crossing the Study Area up to c. 60km offshore from the Scottish landfall and lake deposits at the northernmost part of the Study Area.

Maritime and intertidal archaeology

There are two records within the Study Area that are subject to statutory protection as Scheduled Monuments. Both are situated within the onshore zone in Aberdeenshire Aviation archaeology.

There are 19 wreck sites recorded by the UKHO. Two of these are recorded as 'foul ground'. A further seven are recorded as 'dead', indicating that they have not been detected by repeated surveys. Four wrecks are recorded as 'lifted' indicating no, or little, remains on the seabed. Six (6) wreck sites are recorded by the UKHO within Scottish waters of the Study Area beyond 12 NM. One (1) of these is recorded as 'dead', indicating that they have not been detected by repeated surveys.

Aviation archaeology

One UKHO record relates to an aircraft crash site in Scottish waters, situated within the Study Area beyond 12 NM. Three aircraft loss records held by Canmore have been identified at sea in Scottish waters of the Study Area; two within 12 NM and one beyond. No further crash sites are recorded by the HERs. As these are recorded losses, the positional data is unreliable and serves only to provide an indication of the types of aircraft that flew over this coastline, and the potential to identify remains within the Study Area. The hinterland of Peterhead, Scotland, was home to several airfields, operational during both World Wars, resulting in significant aircraft traffic in the area during the first half of the 20th century.

Shipping, navigation and other sea users

The key navigational features found in the study area are:

- Peterhead Port Authority
- Port Erroll (Cruden Bay)
- Boddam Harbour
- Pilotage station (2.5 km to East of Boddam)
- Offshore wind farms (OWFs) (Morven, Ossian, Thistle Wind, Hywind)
- Military Practice Area - Areas of Intense Aerial Activity

Nearing the landfall, there is an increase in marine traffic nearshore due to higher vessel activity related to the Aberdeen and Peterhead ports, particularly to service oil and gas infrastructure in the North Sea, where hotspots can be identified.

The study area navigates between areas that are proposed for two new wind farms (Morven and Ossian OWFs). The current levels of marine traffic in this area are low; these windfarms are not yet constructed but are currently in development. Over the coming years, this area is likely to have significantly higher levels of marine traffic, particularly with the increasing spatial pressures off the east coast of the UK.

Although just outside the Study Area, it is noted that vessels are present in a high concentration by the peninsula near Fraserburgh. This can be contributed to a high ratio of fishing vessels.

There are sixteen operational or planned OWFs in proximity of the study area, there is one planned inter connector two planned reinforcement power cables and one active telecommunications project. The EGL3 project is proposed to make landfall within the similar location as the Eastern Green Link 2 reinforcement cable. There is one active and one abandoned gas pipeline which crosses the study area and one Carbon Capture and Storage project within the study area.

A number of MOD practice and exercise areas are also present within the study area.

Recreational use around the landfall is generally low but there may be some use of the nearshore area by divers, sailors and other water sports.

The subsea installation corridor crosses a number of pieces of infrastructure which includes pipelines associated with the oil and gas industry. Where this occurs, appropriate crossing and proximity agreements will be put in place.

Eastern Green Link 3 - May 2025

Commercial fisheries

The study area is very important for commercial fisheries with a number of registered and licensed fishing vessels operating in the vicinity of the subsea cable corridor. These vary in size from the smaller (under 10m) vessels and larger (over 10m) vessels with the main port for fish landings being Peterhead. The majority of the smaller vessels hold a shellfish license with lobster and crabs being the target species. Some of the larger vessels also target scallops, however the main type of fishing for the larger vessels demersal and pelagic catches, targeting species such as haddock, herring and mackerel. Over the 5-year period (2018 to 2022), 18,764 tonnes of fish were landed with a value of over £36 million.

A large area off eastern Scotland has restrictions on catching sandeel. This is not a permanent ban or byelaw but has been something that the Scottish Government has put in place for the last three years to benefit the wider marine ecosystem including marine mammals and sea birds who feed on sandeel. **(gov.uk, 2023a).**

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.

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.

Project timeline

May 2025
- Marine Licence Pre-application consultation event.

6 July 2025
- Final date for comments on the PAC event.

August 2025
- UXO marine campaign 1.

September 2025
- Intended marine licence application.

September 2026
- Anticipated marine licence determination

2027
- UXO marine campaign 2.

2028
- UXO marine campaign 3.

October 2028
- Sandford Bay landfall construction begins.

April 2029
- Offshore Cable laying campaigns begin.

Note: Timeline subject to change

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 **6 July 2025.**

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/projects/project-map/eastern-green-link-3/**

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 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:

@ssentransmission @SSETransmission

Underground land cable

Note that information on the proposed land cable alignment for the underground cable between the proposed landfall at Sandford Bay to the converter station to be located in 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/projects/project-map/eastern-green-link-3/**

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

Recite me

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

[redacted]

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/projects/project-map/eastern-green-link-3/**

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 subsea cable element of the EGL3 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 EGL3 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 Eastern Green Link 3 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/projects/project-map/eastern-green-link-3/

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 may 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.

3.2 Marine Banners

Scottish & Southern Electricity Networks
TRANSMISSION

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 over £20 billion into our region's energy infrastructure this decade, with the potential for this to increase to over £30 billion. This investment will deliver a network capable of meeting 20% of the UK's Clean Power 2030 target and supporting up to 37,000 jobs, 17,500 of which will be here in Scotland.

Scan the QR code with your smartphone to find out more about how these policies have been assessed and determined.

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**

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ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/

Scottish & Southern Electricity Networks
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The Pathway to 2030

Building the energy system of the future will require a significant acceleration of work 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 Beauly and Peterhead, and Beauly and Caithness, and for offshore subsea cables between Caithness and Peterhead, and between Peterhead and England, which include Eastern Green Link 3. 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, Beauly, 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.

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Scottish & Southern Electricity Networks

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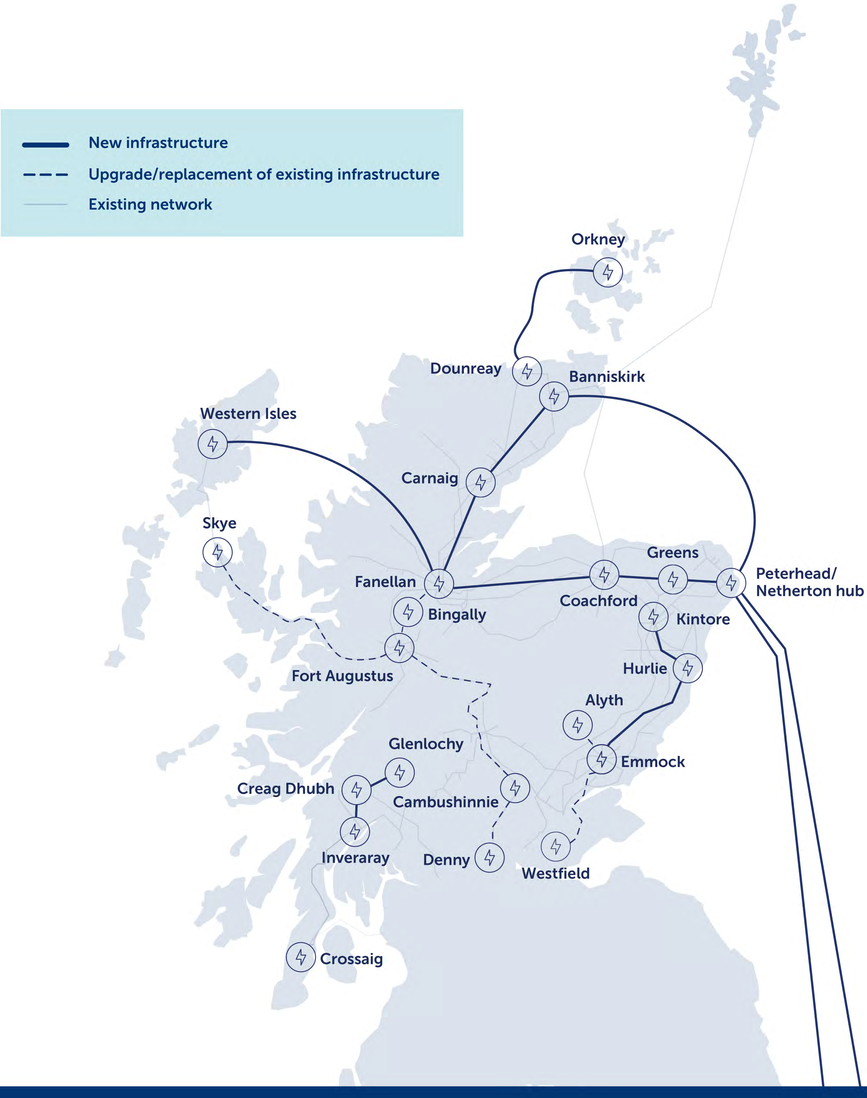
The Pathway to 2030

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.



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Scottish & Southern Electricity Networks

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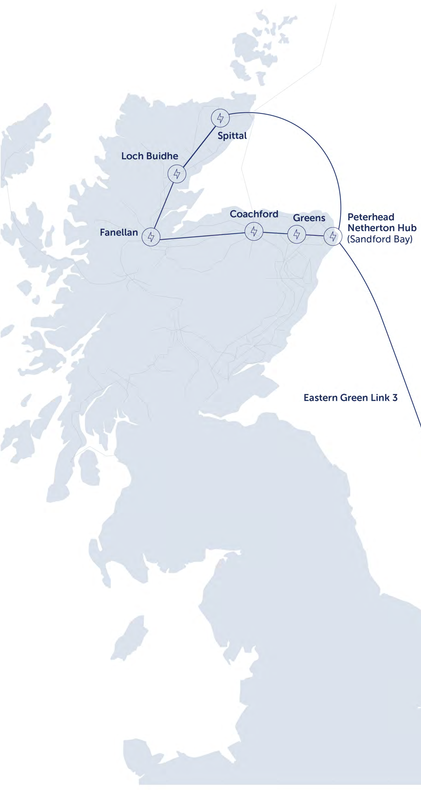
Project overview

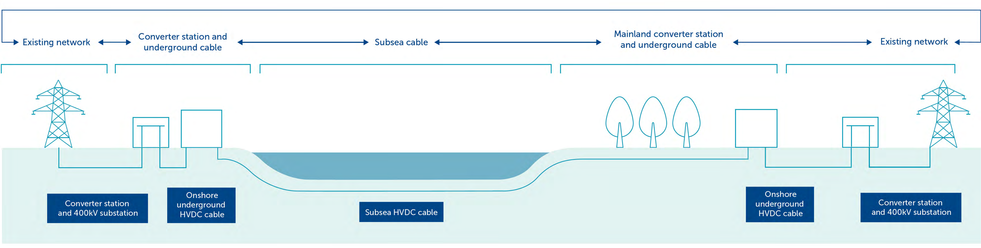
We're leading some exciting projects to power change in the UK and Scotland. To support the delivery of 2030 offshore wind targets set by the UK and Scottish governments, and to power local communities, we need to upgrade our existing network. In some key areas, we need to develop entirely new infrastructure,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



Eastern Green Link 3 (EGL3) comprises a 2 GW bi-pole, 525kV high voltage direct current (HVDC) system linking Peterhead in Scotland and Lincolnshire in England. Approximately 580km of subsea HVDC cable from a proposed landfall at Sandford Bay in Peterhead to a proposed landfall on the Lincolnshire coast. The subsea cable system will consist of two HVDC cables and a fibre optic cable for control and monitoring purposes. The Scottish element of the marine scheme extends from the marine border with English Waters up to MHWS at Sandford Bay, the route is approximately 145km.

The red line boundary for the Project encompasses all activities to construct and operate the project and is nominally 500m in width offshore, narrowing as it approaches the landfall.

The subsea cables will come onshore into a Transition Joint Bay where they will connect with the onshore cables. This project is being jointly developed by SSEN Transmission and National Grid Electricity Transmission (NGET).



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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 a public consultation event in Peterhead in 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.

This event complies 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 **Thursday 6 July 2025.**

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.

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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 EGL3 converter station at Netherton Hub has already been completed and is not part of this consultation. You can find more information about Netherton Hub at:

ssen-transmission.co.uk/Netherton-hub

Furthermore, 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/projects/project-map/eastern-green-link-3/

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How we've selected our proposed subsea cable route and landfalls

In our previous consultation on the EGL3 marine cable in June 2023, we presented potential subsea cable corridors between various landfall locations.

Several subsea cable corridors have been 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.

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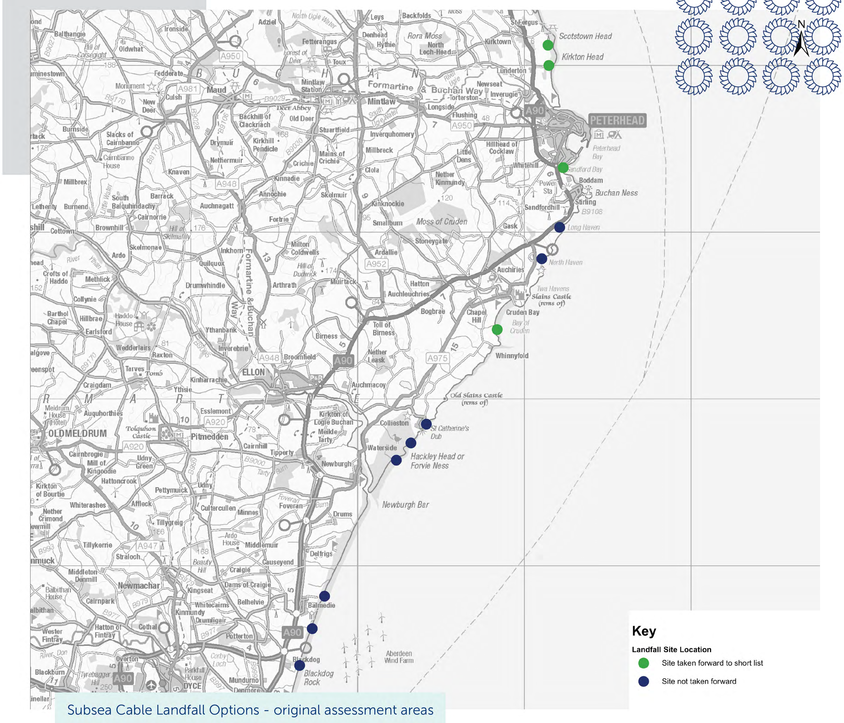
How we selected our proposed subsea cable route and landfalls

The landfall options in Aberdeenshire were:

- Sandford Bay
- Cruden Bay
- Scotstown Beach South
- Scotstown Beach North



Subsea Cable Landfall Options - original assessment areas

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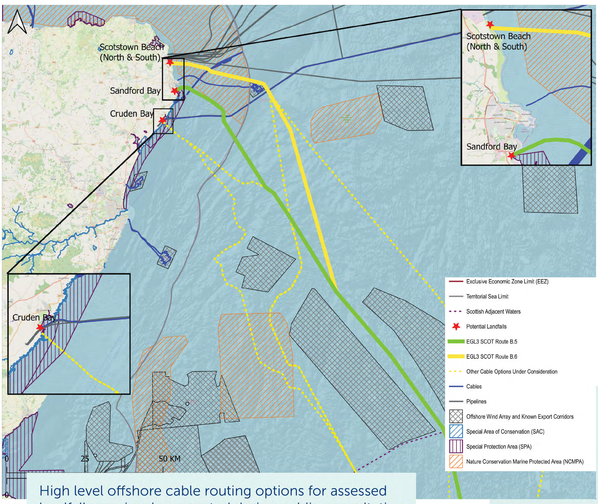
How we selected our proposed subsea cable route and landfalls

Subsea Cable Landfall Options - landfalls carried forward for further assessment



High level offshore cable routing options for assessed landfalls previously presented during public consultation

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Selecting a corridor between proposed landfall locations

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

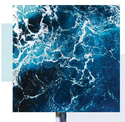
- Minimising subsea cable length, subject to avoiding important constraints
- Engineering factors that may affect cable laying feasibility and cost effectiveness have been considered as much as possible
- Avoidance (wherever possible) of interactions with designated sites, sensitive habitats and wrecks. 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 Sandford Bay in Aberdeenshire and the Lincolnshire coast was selected as the least constrained option because:

- It minimised interactions with protected areas and sensitive habitats and species to the greatest extent
- It maximised the potential for subsea cable burial throughout the cable corridor and minimised the number of crossings of third-party assets required
- It minimised the length of onshore underground cable required to connect to substations at each end
- It minimised coastline development disturbance due to the shared landfall with the EGL2 project.

Since our last consultation, we have carried out a marine survey campaign to gather additional data on the proposed subsea cable corridor between Sandford Bay and Lincolnshire. 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.



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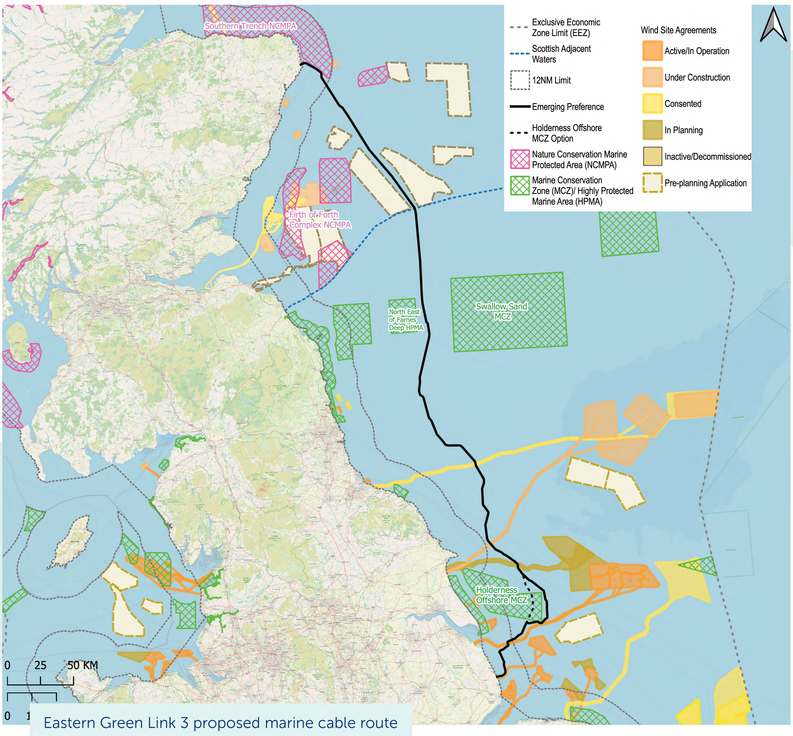
Marine surveys

To support development of the subsea cable installation corridor, we carried out a series of intertidal, near shore, 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 Echo sounder (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).



Eastern Green Link 3 proposed marine cable route

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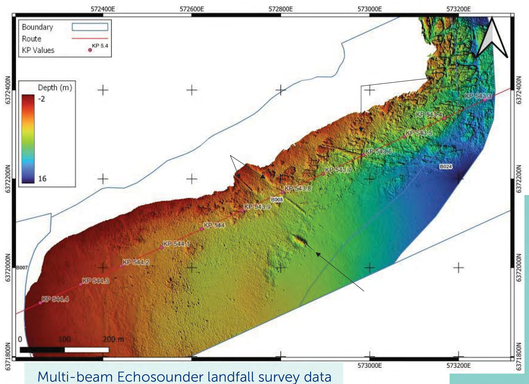
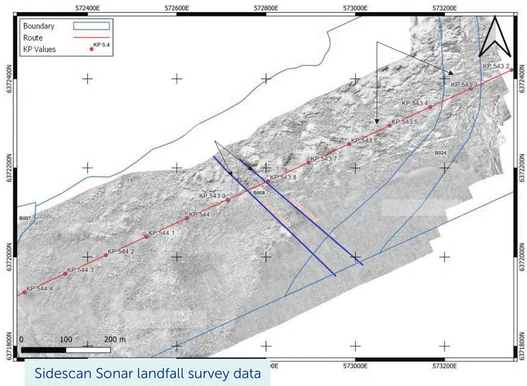
Marine surveys



Multi-beam Echosounder landfall survey data



Sidescan Sonar landfall survey data

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 ordinance.
- 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.

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Subsea cable installation

The subsea cable system will be installed within a Marine Installation Corridor approximately 500m wide and 580km long (145 km in Scottish waters). 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 ordinance 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 sand waves using a Mass Flow Excavator (MFE);
- Boulder clearance using grabs or ploughs;
- Debris clearance using a Pre-Lay Grapnel run (PLGR) and/or ROV; and
- Cutting and removing sections of out of service cables.

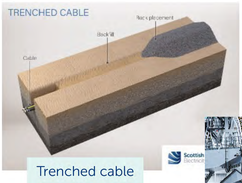
Cable lay and burial

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:

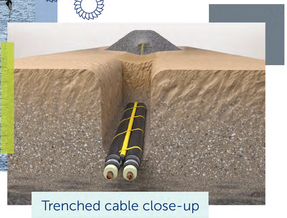
Burial - Burial in seabed sediments, using a trenching tool which follows the cable along the seabed using water jets or a plough to lower the cable into the seabed.

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.



Trenched cable



Trenched cable close-up

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Subsea cable installation

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.

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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

Benthic ecology and physical environment

The intertidal environment across the Sandford Bay survey area is considered moderately diverse with a number of different habitats identified. The shoreline is characterised by sand dunes and vegetated sea-cliffs. The coastline is fairly exposed and kelp debris can be found on the beach due to the influence of seasonal storm surge. Further down the beach the area changes to a mixture of shingle, cobbles, pebbles and coarse substrata closer to the low water mark. Either side of the bay presented areas of moderately exposed rocky shores dominated by barnacles and seaweed leading to kelp habitats on shingle, boulders and bedrock. The landfall is situated near to anthropogenic infrastructures, such as pathways, adjacent power station and a car park however the coastal habitats are listed as protected habitats.

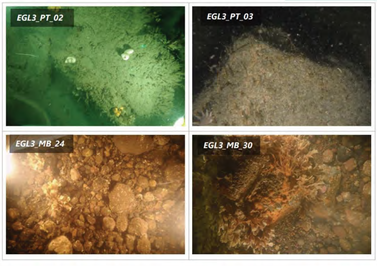
Water depths across the EGL3 route transitioned from a minimum of 1.7m in the nearshore to a maximum of 104m before gradually shallowing to approximately 74m at the Scottish and English maritime border.

The study area passes a number of designated sites, which are designated for marine species and habitats, however the subsea cable avoids direct interaction with them.

The EGL3 route also contains bedrock and boulder fields which provide a potential habitat for other species.

The ross worm (Sabellaria spinulosa) is a protected species which forms reef structures. A number of patches of sabellaria reef were identified during the site surveys,although these were all low reef structures. The presence of ocean quahog which is classed as a priority marine feature was also noted during the surveys.

Protected species and habitats will be avoided wherever possible.



Example images of 'Faunal Turf Communities on Atlantic Circalittoral Rock' Habitat

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Fish and shellfish ecology

The study area is important for commercial fish species including herring, mackerel, in addition a number of shellfish species of note are within the study area including nephrops, scallops, crabs, squid and lobster.

There are a couple of notable types of fish that are present within the cable corridor which include herring and fish that are electrosensitive (elasmobranchs).

Herring are a widespread pelagic fish, listed as a United Kingdom Biodiversity Action Plan (UKBAP) priority marine species of principal importance. Herring spawning grounds are prevalent around the Scottish north and east coasts, with high intensity nursery grounds close to shore, and low intensity nursery grounds widespread throughout the North Sea. Elasmobranchs are amongst the most vulnerable marine fish. This is due to their slow growth rates, late maturity, low reproductive productivity which limits their ability for population recovery should it decline. All sharks and rays are on the OSPAR list of threatened or declining species (OSPAR Commission, 2024). There are several elasmobranchs which are regularly caught by commercial fisheries along the Proposed Submarine Cable Corridor. These include cuckoo ray (Leucoraja naevus), dogfish (Scyliorhinus canicula), spurdog (Squalus acanthias), thornback ray (Raja clavata), and spotted ray (Aetobatus narinari).

A number of nursery grounds are also present within the study area for a variety of different species. These are areas that fish return to each year to spawn and rear young.

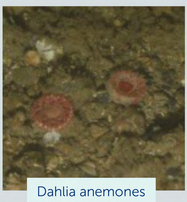

Common Sun Star

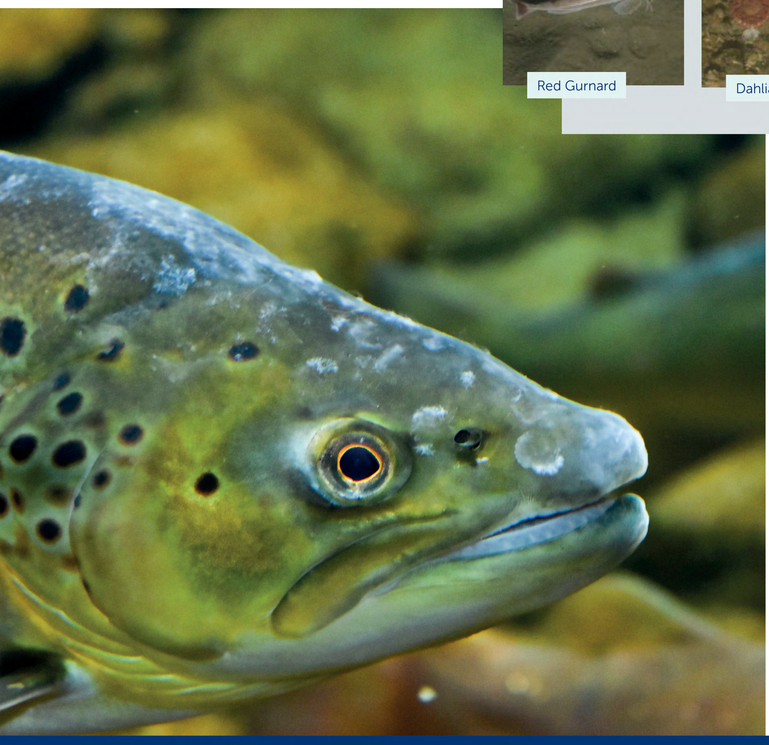

Dragonet


Plumose anemone


Edible crab


Red Gurnard


Dahlia anemones



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Marine mammals and megafauna

Scottish waters are home to an abundant array of marine mammals. Within the study area there are a number of marine mammal species to note. A number of marine mammals have been noted within the study area including harbour porpoise, short-beaked common, bottlenose and white-beaked dolphin, minkem humpback, fin, long-finned pilot and northern bottlenose whales as well as grey seal, harbour seal and leatherback turtles. Bottlenose dolphin we recorded most regularly, followed by harbour porpoise. Eurasian otters have also been recorded along the coastline within the study area.

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.

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 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 for the marine elements of the project. All work will be carried out following relevant guidance, including the Joint Nature Conservation Committee guidance and the Scottish Marine Wildlife Watching Code.

Marine ornithology

The landfall at Sandford Bay crosses the Buchan Ness to Collieston Coast SPA which is designated for a number of breeding birds including Fulmar, herring gull, kittiwake and guillemot which are present in summer months. The Buchan Ness to Collieston Coast SPA includes a variety of marine habitats that supports breeding bird populations. The area is characterised by varied coastal vegetation on the ledges and the cliff tops include maritime heath, grassland and brackish flushes. There are a number of other neighbouring designations hosting a variety of bird species.

During the breeding season, the sea in the southeast of Scotland is internationally important for at least thirteen breeding bird species, namely northern gannet (Morus bassanus), Manx shearwater (Puffinus puffinus), cormorant (Phalacrocorax carbo), shag (Phalacrocorax aristotelis), herring gull (Larus argentatus), lesser blackbacked gull (Larus fuscus), black-legged kittiwake (Rissa tridactyla), common tern (Sterna hirundo), Arctic tern (Sterna paradisaea), Sandwich tern (Sterna sandvicensis), common guillemot (Uria aalge), razorbill (Alca torda)

Marine archaeology

Submerged prehistory

A series of melt water channels and moraines have been mapped crossing the Study Area up to c. 60km offshore from the Scottish landfall and lake deposits at the northernmost part of the Study Area.

Maritime and intertidal archaeology

There are two records within the Study Area that are subject to statutory protection as Scheduled Monuments. Both are situated within the onshore zone in Aberdeenshire Aviation archaeology.

There are 19 wreck sites recorded by the UKHO. Two of these are recorded as 'foul ground'. A further seven are recorded as 'dead', indicating that they have not been detected by repeated surveys. Four wrecks are recorded as 'lifted' indicating no, or little, remains on the seabed. Six (6) wreck sites are recorded by the UKHO within Scottish waters of the Study Area beyond 12 NM. One (1) of these is recorded as 'dead', indicating that they have not been detected by repeated surveys.

Aviation archaeology

One UKHO record relates to an aircraft crash site in Scottish waters, situated within the Study Area beyond 12 NM. Three aircraft loss records held by Canmore have been identified at sea in Scottish waters of the Study Area; two within 12 NM and one beyond. No further crash sites are recorded by the HERs. As these are recorded losses, the positional data is unreliable and serves only to provide an indication of the types of aircraft that flew over this coastline, and the potential to identify remains within the Study Area. The hinterland of Peterhead, Scotland, was home to several airfields, operational during both World Wars, resulting in significant aircraft traffic in the area during the first half of the 20th century.

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Shipping, navigation and other sea users

The key navigational features found in the study area are:

- Peterhead Port Authority
- Port Erroll (Cruden Bay)
- Boddam Harbour
- Pilotage station (2.5km to Easy of Boddam)
- Offshore wind farms (OWFs) (Morvan, Ossian, Thistle Wind, Hywind)
- Military Practice Area - Areas of Intense Aerial Activity

Nearing the landfall, there is an increase in marine traffic nearshore due to higher vessel activity related to the Aberdeen and Peterhead ports, particularly to service oil and gas infrastructure in the North Sea, where hotspots can be identified.

The study area navigates between areas that are proposed for two new wind farms (Morven and Ossian OWFs). The current levels of marine traffic in this area are low; these windfarms are not yet constructed but are currently in development. Over the coming years, this area is likely to have significantly higher levels of marine traffic, particularly with the increasing spatial pressures off the east coast of the UK.

Although just outside the Study Area, it is noted that vessels are present in a high concentration by the peninsula near Fraserburgh. This can be contributed to a high ratio of fishing vessels.

There are sixteen operational or planned OWFs in proximity of the study area, there is one planned inter connector two planned reinforcement power cables and one active telecommunications project. The EGL3 project is proposed to make landfall within the similar location as the Eastern Green Link 2 reinforcement cable. There is one active and one abandoned gas pipeline which crosses the study area and one Carbon Capture and Storage project within the study area.

A number of MOD practice and exercise areas are also present within the study area.

Recreational use around the landfall is generally low but there may be some use of the nearshore area by divers, sailors and other water sports.

The subsea installation corridor crosses a number of pieces of infrastructure which includes pipelines associated with the oil and gas industry. Where this occurs, appropriate crossing and proximity agreements will be put in place.

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Commercial fisheries

The study area is very important for commercial fisheries with a number of registered and licensed fishing vessels operating in the vicinity of the subsea cable corridor. These vary in size from the smaller (under 10m) vessels and larger (over 10m) vessels with the main port for fish landings being Peterhead. The majority of the smaller vessels hold a shellfish license with lobster and crabs being the target species. Some of the larger vessels also target scallops, however the main type of fishing for the larger vessels demersal and pelagic catches, targeting species such as haddock, herring and mackerel. Over the 5-year period (2018 to 2022), 18,764 tonnes of fish were landed with a value of over £36 million.

A large area off eastern Scotland has restrictions on catching sandeel. This is not a permanent ban or byelaw but has been something that the Scottish Government has put in place for the last three years to benefit the wider marine ecosystem including marine mammals and sea birds who feed on sandeel. (gov.uk, 2023a).

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.

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.

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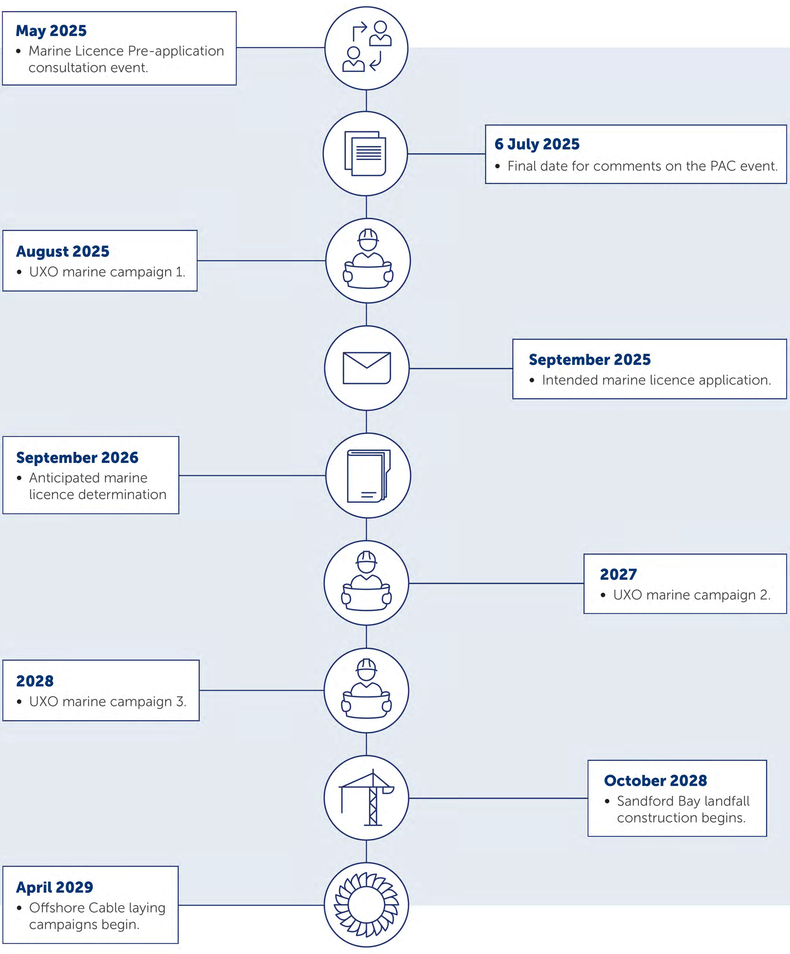
Project timeline



Note: Timeline subject to change

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Have your say

Feedback
We will accept feedback from now until **6 July 2025.**

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/projects/project-map/eastern-green-link-3/**

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 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.

Underground land cable
Note that information on the proposed land cable alignment for the underground cable between the proposed landfall at Sandford Bay to the converter station to be located in Netherton Hub is outlined in a separate document that can be found on the Documents tab of the project webpage at: **ssentransmission.co.uk/projects/project-map/eastern-green-link-3/**

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

Recite me

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/projects/project-map/eastern-green-link-3/**

You can also follow us on social media:

@ssentransmission @SSETransmission

[redacted] [redacted]

[redacted]transmission.co.uk/projects/project-map/eastern-green-link-3/

3.3 Land Cable Booklet

Scottish & Southern Electricity Networks

TRANSMISSION

Eastern Green Link 3 Underground land cable

Information event

March 2025

ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/

Eastern Green Link 3 – Underground land cable

To support the continued growth in onshore and offshore renewables across the north of Scotland and the country's drive towards net zero and energy security, investment in our network infrastructure is needed to connect this renewable power and transport it from source to areas of demand across the country.

Extensive system studies have been completed to inform the National Energy System Operator's 'Pathway to 2030 Holistic Network Design', confirming the requirement to develop new direct connections between the networks in Scotland and England.

To transfer the renewable power generated in the north of Scotland to demand centres in the south, a 2GW bi-pole 525kV high voltage direct current (HVDC) subsea cable link between Peterhead and Lincolnshire is required and will be known as Eastern Green Link 3. This project is being jointly developed by SSEN Transmission and National Grid Electricity Transmission.

The Eastern Green Link 3 project will use the latest technology to enable the efficient transmission of high volumes of power which can then be further distributed to demand centres throughout the UK, as required.

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 Peterhead and Lincolnshire, depending on the directional flow of power.

The subsea portion of the HVDC cable is subject to a marine licence application and a statutory consultation process, and we will be holding marine consultation events later in 2025 to support this. The onshore underground cable elements are classed as 'Permitted Development' and are not subject to statutory consultation.

This booklet provides details of our latest alignment of the underground cable, and we invite residents and stakeholders to contact us with information that you feel we should consider as we finalise this aspect of the project.

Our Eastern Green Link 3 project webpage can be found at **ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/**

Find more information about our other Pathway to 2030 projects here: **ssen-transmission.co.uk/2030-need**


Scottish & Southern
Electricity Networks


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Project overview

The Eastern Green Link 3 project will provide a 2GW bi-pole 525kV high voltage direct current (HVDC) subsea cable link between Peterhead and Lincolnshire.

At each end of the HVDC link, 400kV AC substations will supply power to (or receive power from) proposed new high voltage AC/DC converter stations at Netherton Hub in Peterhead and one in Lincolnshire, depending on the directional flow of power.

Connections between these assets will be via HVDC cables buried either underground or below the seabed. In Peterhead, the proposed land cable route will stretch approximately 10 km between Netherton Hub (the location of the proposed AC/DC converter station) to Sandford Bay (the landfall location in Scotland) where it will transition to the subsea cable.

The subsea cable route would cover up to 550km before making the transition back to land cable again in Lincolnshire.

Consultation for the Eastern Green Link 3 converter station site at Netherton Hub has already occurred, and an application for Planning Permission in Principle was submitted to Aberdeenshire Council in October 2024.

This information event relates to the development of our land cable alignment for Eastern Green Link 3 project.

The story so far

June 2023 We presented our potential 2km-wide land cable corridors, our proposed landfalls and indicative converter station sites at Peterhead Football Club as part of early consultation on Netherton Hub.

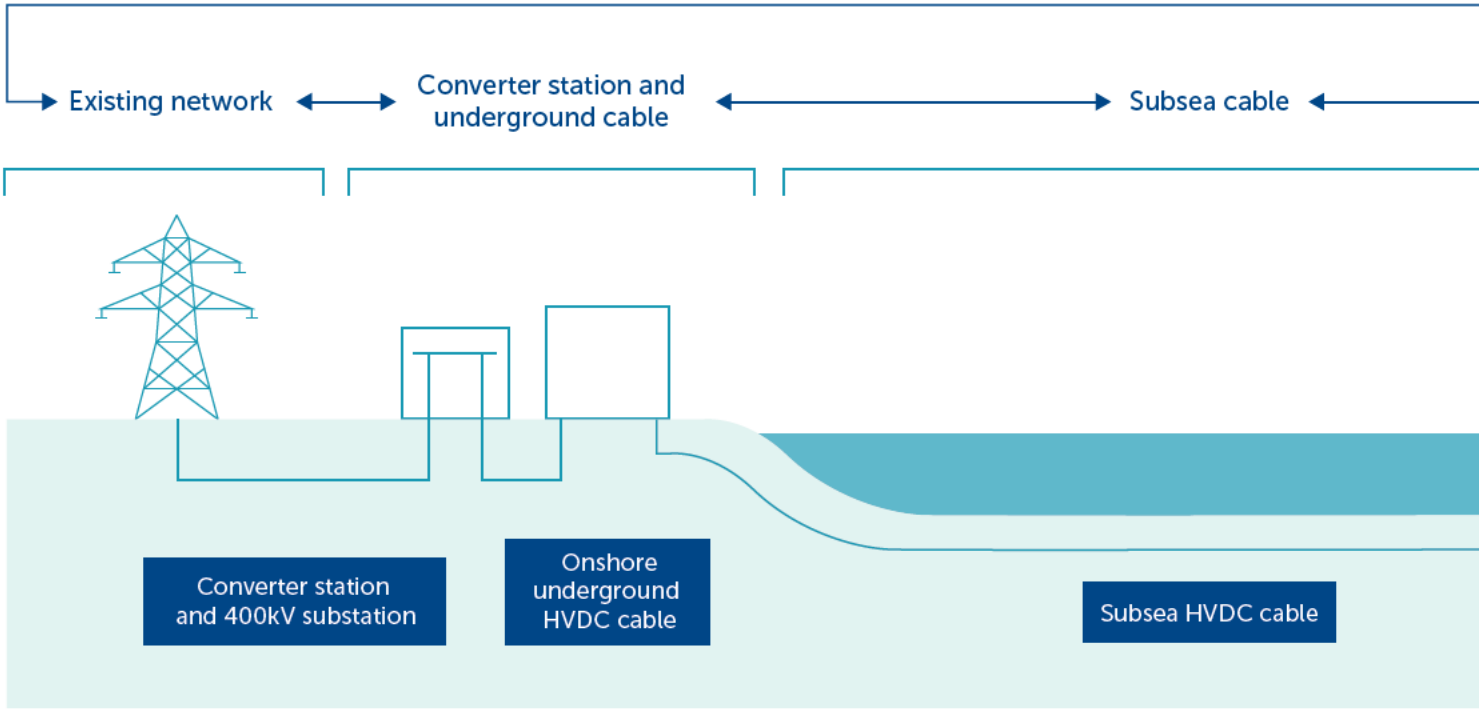
February 2024 We presented the proposed 500m-wide land cable route at Longside Parish Church Hall at the Netherton Hub consultation event.

May 2024 We presented the proposed 500m-wide land cable route at Longside Parish Church Hall at the Netherton Hub consultation event.

March – August 24 We carried out ground investigations to inform us of the suitability of ground conditions for the cable installation.

October 2024 We submitted an application for Planning Permission in Principle for the Netherton Hub, which includes the Eastern Green Link 3 converter station.

November 2024 Refinement of cable routes to 200m-wide preferred alignment.



Why we're here today

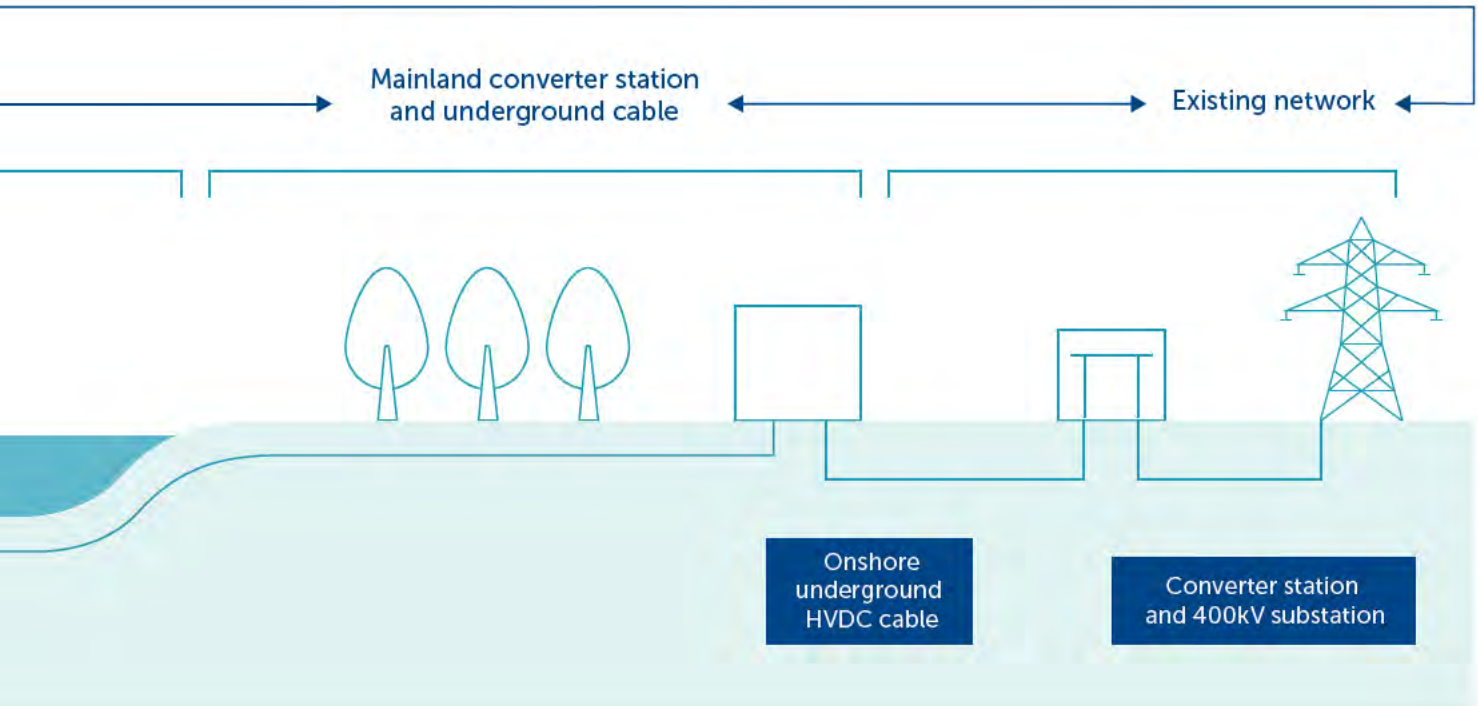
Our development of the land cable routes has seen us progress from conceptual route corridors over 1km wide linking various potential converter sites to multiple landfall locations. This has led us to refine our alignments to 200m wide.

Getting to this stage has involved a lot of engagement with key stakeholders including landowners, tenants, and statutory bodies. We have undertaken multiple engineering studies, ecological surveys and ground investigations, which have led to every section of the route being adjusted to take account of our stakeholders' feedback and the findings from our surveys.

Although the underground cable works are classed as Permitted Development, and do not require a planning application to the Local Authority, or a formal consultation process, we still consider it important to offer all our stakeholders the opportunity to consider our plans and provide feedback. While not all feedback can be acted upon, it is always considered.

We are now ready to share the outcome with the broader communities who may also have an interest in this project. We are therefore presenting our latest route alignment for information, and we welcome your questions or comments on anything that should be brought to the attention of the project team.

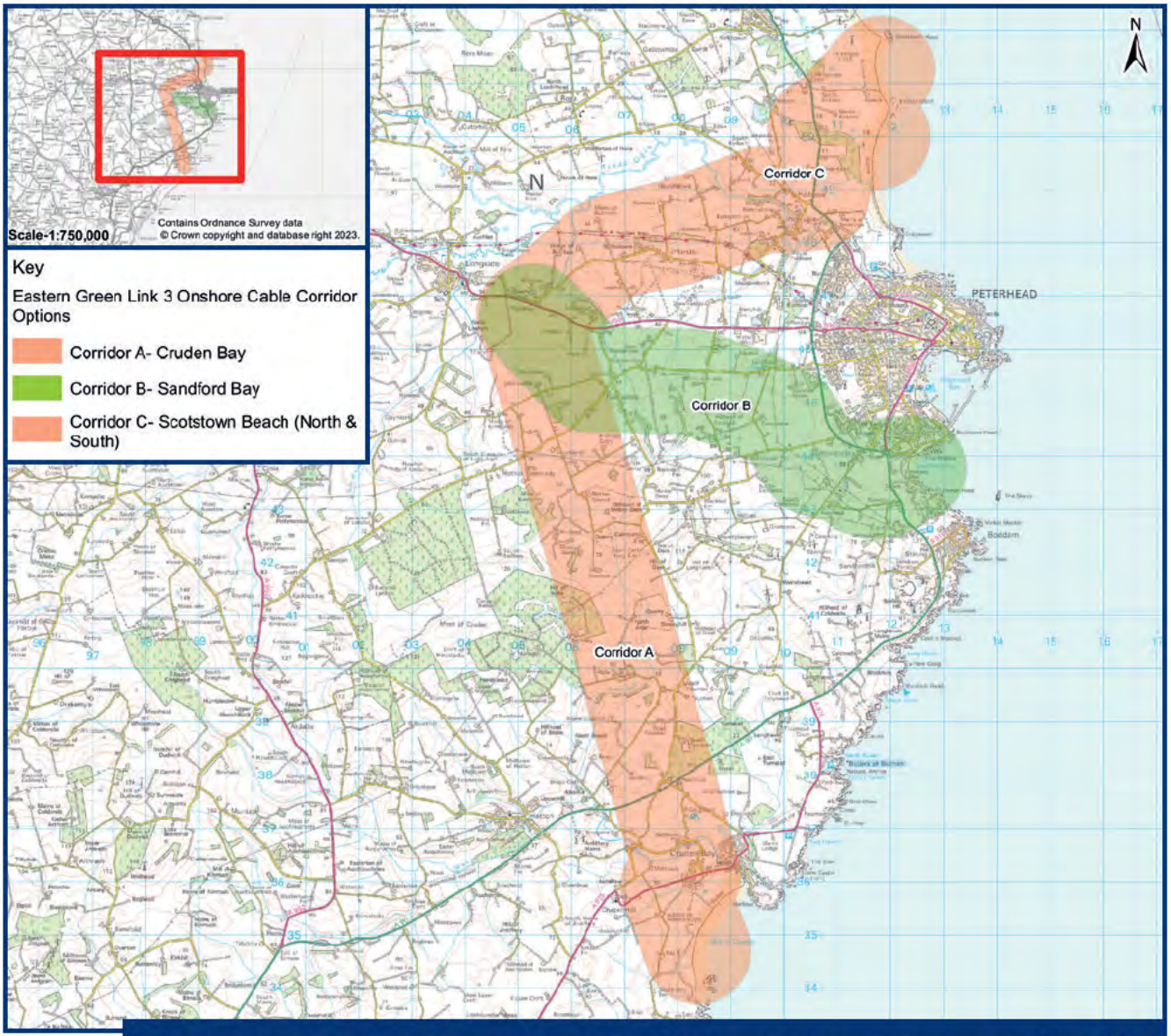
Some areas of the route continue to be under refinement and therefore we cannot present all the route in its final alignment, but the team would be happy to answer any questions you might have about particular sections.



Determining the onshore cable routes

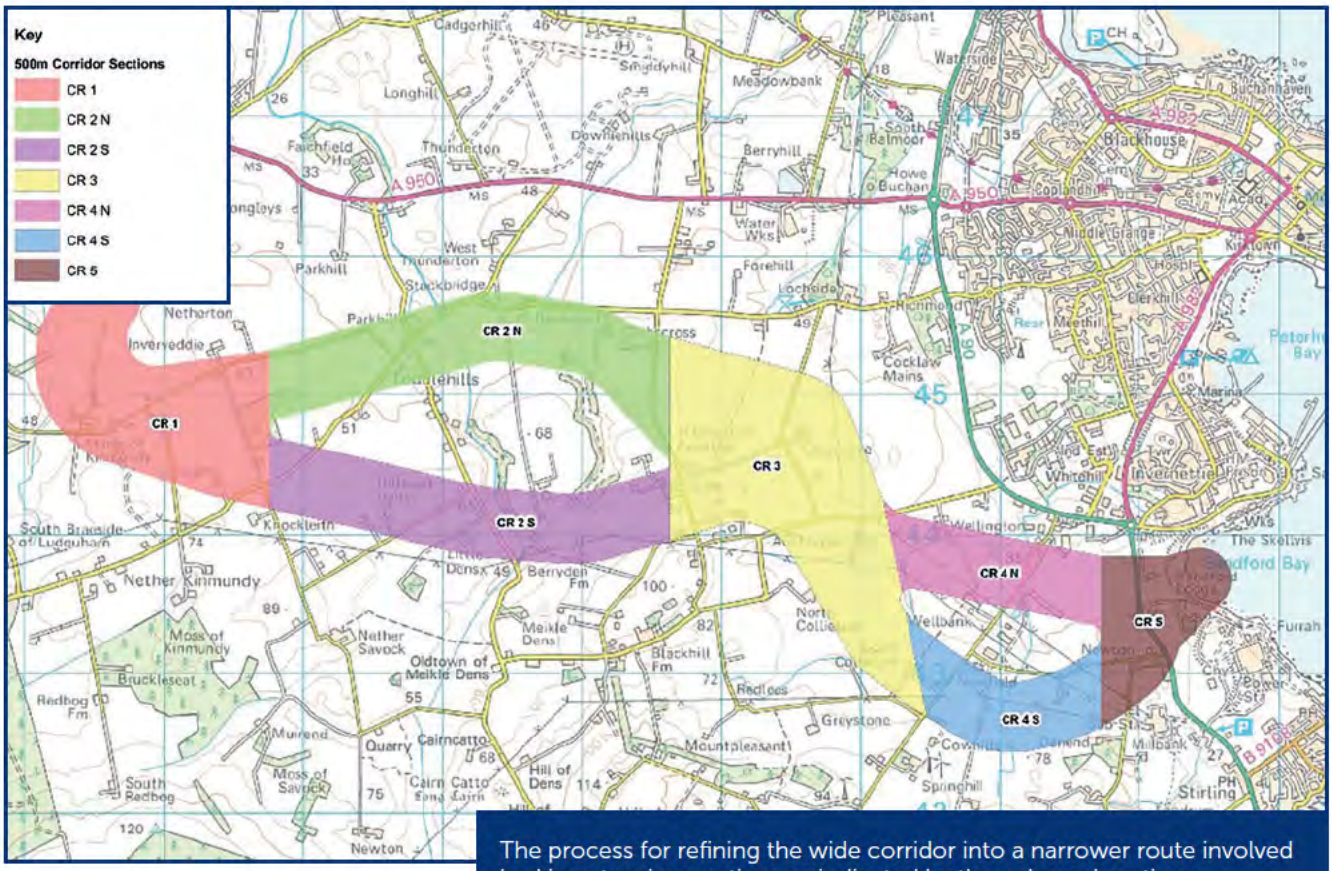
We first shared information about Eastern Green Link 3 in June 2023. This map shows the three corridor (2km width) options into the area of Netherton Hub from the top four evaluated landfalls.

At the time we considered the route from Sandford Bay as the least constrained and following consultation we have retained this as our favoured cable corridor.

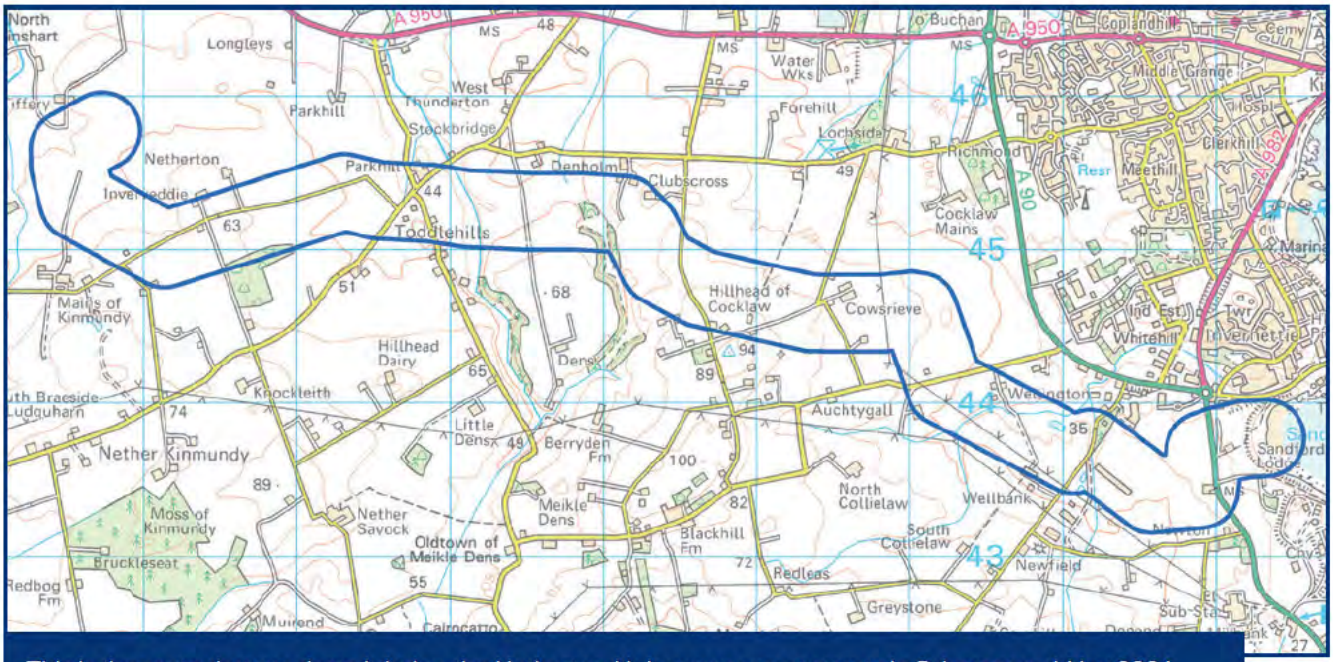


Cable route corridor options that were presented during our previous consultation events in June 2023.

These maps shows the refinement of the corridor to a route (500m width) and how they have been assessed by splitting the route into different options. The second image is the route that has been developed following public engagement and landowner discussions. It was shared during the Netherton Hub engagement events in February and May 2024.



The process for refining the wide corridor into a narrower route involved looking at various options as indicated by the coloured sections.

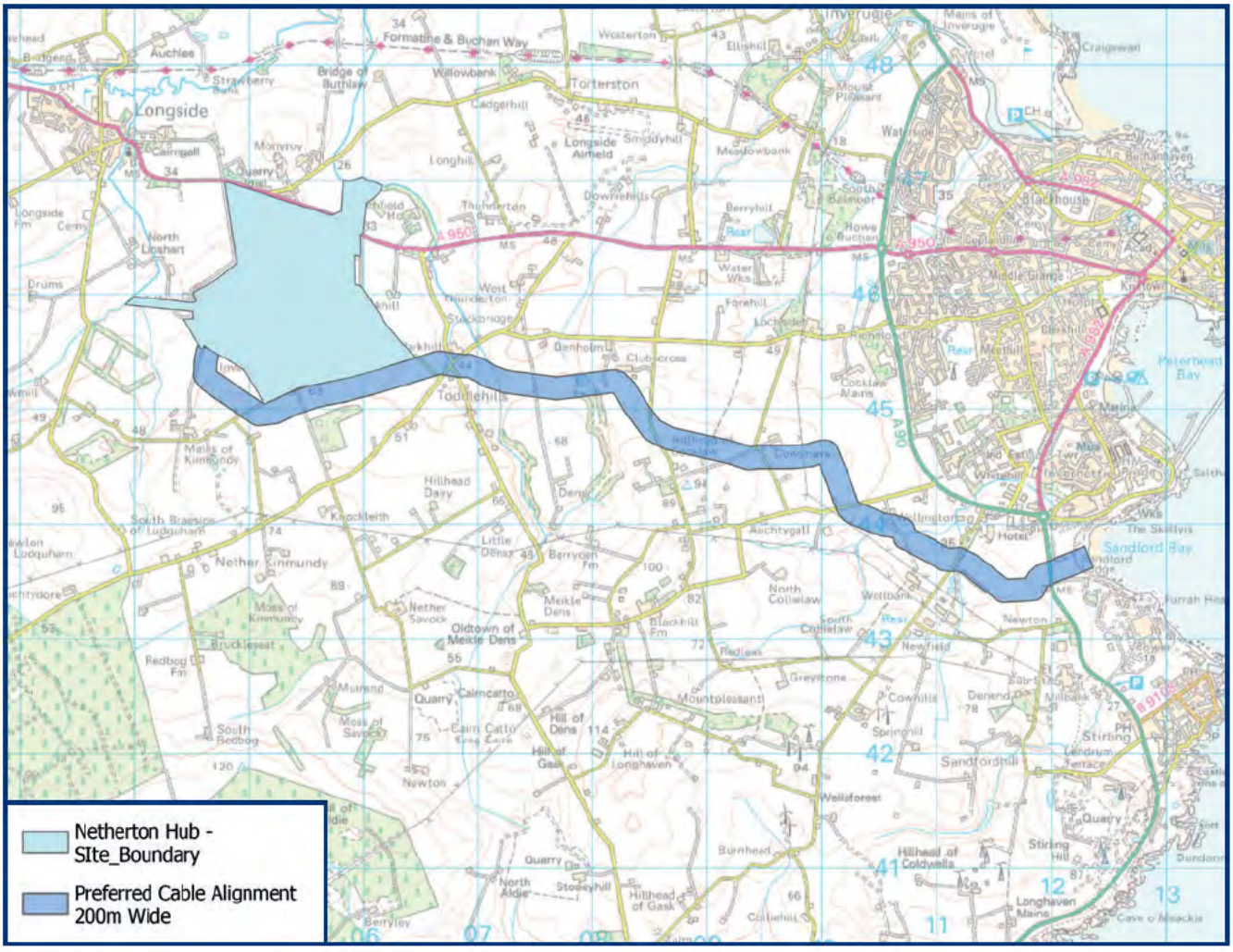


This is the route that we shared during the Netherton Hub engagement events in February and May 2024.

Our latest cable alignment

Our onshore cable alignment spans approximately 10km between Sandford Bay to the south of Peterhead and the proposed Netherton Hub near Longside.

The land cable will connect into one of the two converter stations within the proposed Netherton Hub.



Underground cable route between Netherton Hub and Sandford Bay

View large scale maps: Visit our webpage at: **ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/** or scan the QR code to access the large-scale maps of our cable alignments

Construction

The development of the onshore cable aspect of the project will not commence until we receive approval of the Marine Licence Application for the offshore works. We are scheduled to submit our Marine Licence application in August 2025 with an anticipated determination on this application by October 2026. If successful, the onshore cable installation is to begin no earlier than 2028.

Construction methods

The construction will be undertaken in stages. Prior to any cable installation, accesses will be formed from public roads where required. Some of these accesses may be retained permanently with the majority expected to be temporary. From these accesses a temporary road of either stone or matting will be created allowing the cable trench to be excavated.

Once excavated a series of ducts for each of the assets will be laid side by side and then surrounded in a robust backfill material such as CBS (Cement Bound Sand) to protect them from any external forces they may encounter. Following installation of the ducts, the surface of the ground is reinstated in accordance with landowner's agreement.

Along the route there will be areas where each of the cable sections will be jointed. This is something that is subject to ongoing and detailed design, however in these areas there will be open excavations where each cable will enter the duct and pulled via a winch to the next joint bay.

Once cables have been jointed and the system has been tested, these joint bays will also be backfilled and reinstated. In some instances, there will be a permanent link box above ground. These will be in a mutually suitable area for both our own operations team and the landowner and will be fenced off with stock proof fencing. It may be necessary for our fibre optics to also have similar jointing locations however it is not likely for any link boxes to be required. In some more technically challenging areas, we may need to cross existing utility assets (e.g. gas pipelines, trunk roads and railways) or environmentally sensitive habitats such as rivers or peatland. It is yet to be fully determined if the standard laying methodology described on the previous page can be applied in any of these scenarios but an alternative method under consideration is known as HDD (Horizontal Directional Drilling).

Where necessary to HDD, it is the intention to drill and insert ducts at greater depths minimising impact to the environment. Where HDD is present, a drilling rig will be located within a hard standing compound. The preparation of this hard standing will likely require the import of stone or other hard materials which will later be removed with a view to full reinstatement of the area again.

Note, it is likely that a joint bay will be present in this HDD area.

Minimising our impacts

Impacts associated with the onshore underground cable are likely to be during the construction phase and therefore temporary in nature. As part of understanding and managing potential impacts to residents, we will work closely with the appointed contractors to review all activities that could cause disturbance.

This includes any noise that may be generated as part of our drilling activities. Noise assessments have been carried out around Sandford Bay with more planned along the cable route to allow us to understand, and therefore minimise, our impact. All working arrangements will be done in accordance with the relevant guidance.

Environmental considerations

Throughout the development of the cable route, including the initial identification of suitable corridors and the ongoing refinement process, the sensitivity of the environment is a key consideration for the project.

Various surveys looking for the presence of protected species and habitats including bats, otters, water vole, birds etc, have been undertaken and where identified these areas have been considered as constraints that the project has tried to avoid.

It is imperative that the project mitigates any impacts that it is likely to have through construction methods.

We have chosen our proposed alignment as it has the least constraints across engineering, environment and land topics. Specifically, we avoid designated Ancient Woodland and reduce the number of complex infrastructure crossings.

We will be carrying out a voluntary environmental assessment to understand any environmental impacts from installing and operating the underground cable and mitigation measures that will be in place during construction and operation of the scheme.

Many of these mitigations require input from our contract partners and the specifics of how we will manage the installation in these areas remains under consideration.

The nature of our cable installation means that although we will create some short-term disruption to the land, the design allows the ground reinstatement to minimise any impact.

As we expand the transmission network in the north of Scotland, we have a responsibility to design and build our projects to protect and enhance the environment.

Scan this QR code to read more about how we minimise impacts from our activities and achieve Biodiversity Net Gain.
ssen-transmission.co.uk/legacy-benefits

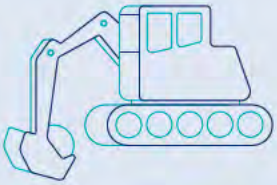
Engineering considerations

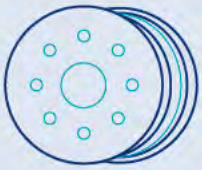
There are various engineering aspects to take into consideration when developing a cable route. Whilst there are different techniques to install cables there are still preferences to de-risk the installation, to minimise impact to the environment and to ensure a quality asset that will meet the intended lifespan.

Our ground investigation works give particularly good information for us to decide what method we choose and the route we take.

Below are some examples of technical challenges we take into consideration:

- **Cable bending radii**
  The cables have limited bending ability so sharp angles either on the horizontal or vertical axis can cause problems when installing and if the design parameters are exceeded, there is a risk to the cable integrity.
- **Thermal properties of soils**
  All electricity cables generate heat to some extent. If the soils around the cable do not allow the heat to dissipate then this can impact on the ability to run the cable at its intended capacity.
- **Ground conditions**
  It is typically favoured to put a cable through arable farmland as this is usually the best soil conditions with enough soil to bury in. If we encounter shallow rock for example, this means we will need to do more work to get the ducts and cables in the ground.
- **Access**
  The project will require large vehicles to carry plant and the cable drums. Access into the cable site can be limiting so where possible we try to stay close to main roads where access can be easier achieved without causing issues on minor or single-track roads.
- **Drilling**
  In areas such as utility or river crossings where we anticipate HDD is required, we must consider the available area of land for drilling platforms, the ground conditions for drilling and the angle of the drill to crossing the utility. In some cases (e.g. gas pipelines), it is important that crossings are close to a 90-degree angle to minimise any impact.





Working with landowners, occupiers and other stakeholders

Throughout the corridor selection and route refinement journey we have had numerous discussions with landowners, tenants, residents and other stakeholders directly impacted. It remains important to have all our stakeholders up to date on our progress, to be engaged in our discussions and to understand any concerns or issues that they may have, allowing us the opportunity to address these issues in whatever way is appropriate. These ongoing discussions are key to us finding a route that is acceptable to all and allows voluntary agreements to be reached.

More information on how we work with landowners is available at **ssen-transmission.co.uk/landowners-and-occupiers** or by scanning this QR code.

We understand that works of this nature can be disruptive to the local community, and we are committed to keeping local residents informed, which is why we are sharing the latest alignment today.

Information on our project's progress can be found at the following webpage:

ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/

If you have questions

If you would like to be kept informed about this project, please register using the "Register for Project updates" section on our project webpage.

Thank you for taking the time to read this information booklet. If you have any questions about the project or information that you believe would assist the planning and delivery of this project, then please email or write to the Community Liaison Manager by **16 April 2025.**

Community Liaison Manager

[redacted]

Additional information

The best way to keep up to date is to sign up to project updates via the project webpage: ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/

You can also follow us on social media

@ssentransmission @SSETransmission

Recite me

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Notes


Scottish & Southern
Electricity Networks
TRANSMISSION

3.4 Marine Consultation Booklet 2023

Eastern Green Link 3 (EGL3) High Voltage Direct Current (HVDC) Cable Scheme

Consultation Booklet

June 2023

Scottish & Southern Electricity Networks

TRANSMISSION

Contents

Who we are

We are SSEN Transmission, the trading name for Scottish Hydro Electric Transmission. We are responsible for the electricity transmission network in the north of Scotland, maintaining and investing in the high voltage 132kV, 220kV, 275kV and 400kV electricity transmission network.

Our network consists of underground and subsea cables, overhead lines on wooden poles or steel towers, and electricity substations. It extends over a quarter of the UK's land mass, crossing some of its most challenging terrain.

Our first priority is to provide a safe and reliable supply of electricity to our communities. We do this by taking the electricity from generators and transporting it at high voltages over long distances through our transmission network for onwards distribution to homes and businesses in villages, towns and cities.

Our operating area is home to vast renewable energy resources and this is being harnessed by wind, hydro and marine generation. Working closely with National Grid, the GB transmission System Operator, we also enable these electricity generators to connect to the transmission system by providing their connections and allowing the electricity generated by them to be transported to areas of demand across the country.

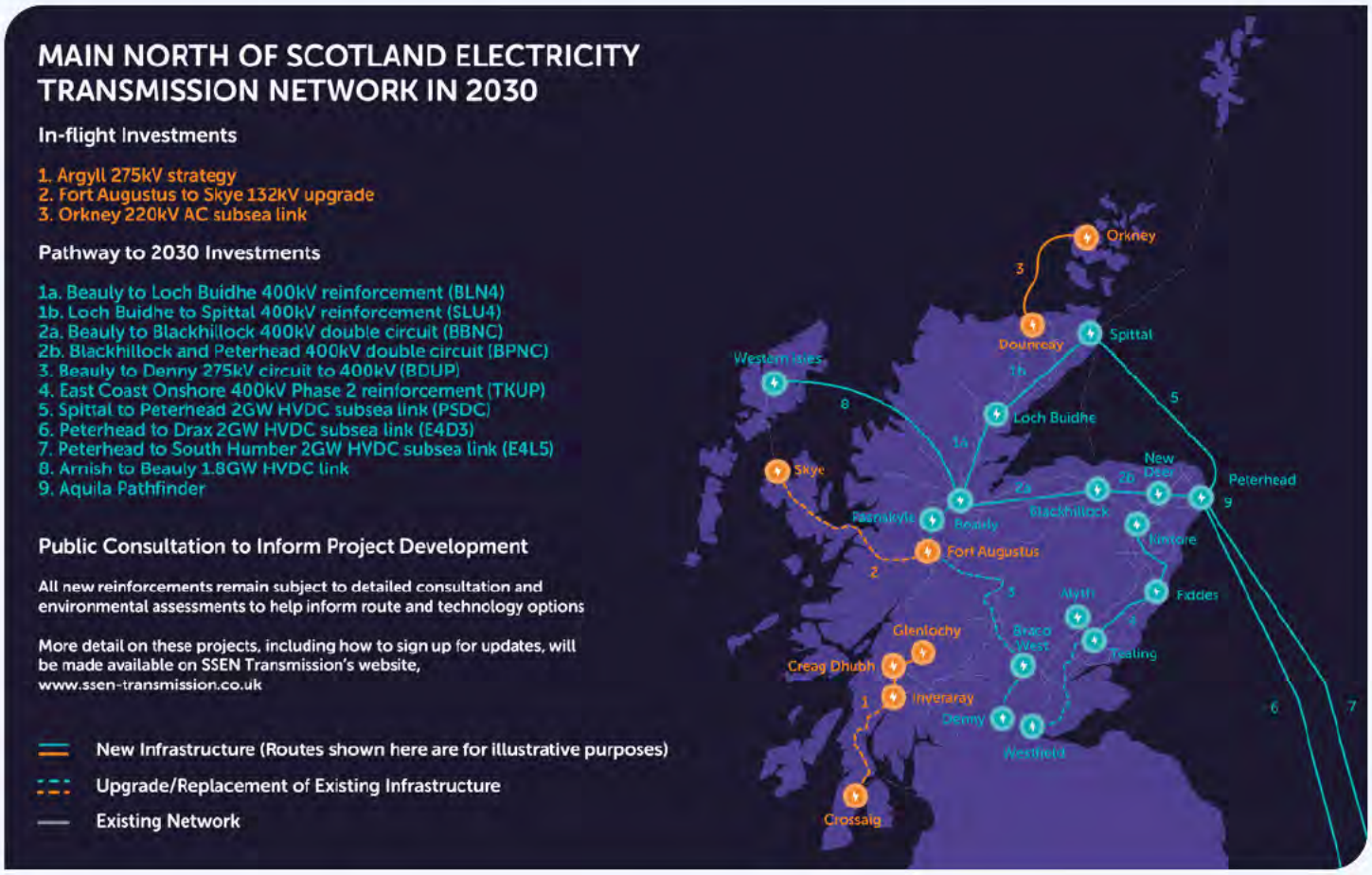
Scotland's transmission network has a strategic role to play in supporting delivery of the UK and Scotland's Net Zero targets. We're already a mass exporter of renewable energy, with around two thirds of power generated in our network area exported to demand centres further south. By 2050, the north of Scotland is expected to need 40GW of low carbon energy capacity to support net zero delivery. For context, we currently have around 8GW of renewable generation connected in the north of Scotland.

As a natural monopoly, we are 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 in the north of Scotland. These costs are shared between all those using the transmission system, including generation developers and electricity consumers. Following a minority stake sale which completed in November 2022, we are now owned 75% by SSE plc and 25% by Ontario Teachers' Pension Plan Board.

As a stakeholder-led business, SSEN Transmission is committed to inclusive stakeholder engagement, and we conduct this at an 'Advanced' level as assessed by AccountAbility, the international consulting and standards firm.

The Pathway to 2030 Holistic Network Design

In July 2022, National Grid, the Electricity System Operator (ESO) who are responsible for making sure that the electricity flows across the UK's system, balancing supply and demand at all times, set out how the transmission network needs to develop to accommodate the growth in renewable electricity across Great Britain. This also included the UK and Scottish Government's 2030 offshore wind targets of 50GW and 11GW. For the north of Scotland, this needs over £7 billion of investment in the transmission network to deliver the 2030 targets and help the country on its pathway to net zero and greater energy independence.



What does this mean for the North and North East of Scotland specifically?

Extensive studies informing the ESO's Pathway to 2030 Holistic Network Design confirmed the need for Eastern Green Link 3 to support continued growth in renewable generation both onshore and offshore in the North East of Scotland to feed demand centres in the South of England and will enable the connection of multiple ScotWind schemes considered in the HND.

Constructing a 525kV subsea cable connection between Peterhead and Lincolnshire provides the significant capacity required to take power generated from large scale renewable energy schemes in the North of Scotland to demand centres located in England and throughout the UK.

To enable this connection and also ensure sufficient generation capacity throughout the transmission system, new 400kV substations are required at key locations as shown on the map above. At Peterhead, high voltage Alternating Current/Direct Current (AC/DC) converter stations are also required to convert AC electricity to DC (and vice versa), from the EGL 3 offshore subsea connections from Peterhead south into England, and between Spittal and Peterhead. These 'hub' areas will also allow offshore and onshore renewable generation to connect to the reinforced electricity network. These projects are critical to enable the delivery of the UK and Scottish Governments 2030 net zero targets, and have a requirement for accelerated development and delivery.

EGL3 HVDC project need and overview

Project need

To meet the requirements of increasing renewable energy generation multiple projects are being developed by SSEN Transmission and others are being jointly developed between SSEN Transmission and National Grid. Extensive system studies have been completed to inform the ESO's 'Pathway to 2030 Holistic Network Design', confirming the requirement to develop new direct connections between the networks in Scotland and England.

To transfer the renewable power generated in the North of Scotland to demand centres in the South a 525kV HVDC link, via a subsea cable from Peterhead to the Lincolnshire area is required and will be known as Eastern Green Link 3. Additional transmission infrastructure is also being developed as part of other projects to support onward transfer of power, such projects include the Eastern Green Link 2.

Further information on the Eastern Green Link 2 project can be found on our website: **ssen-transmission.co.uk/projects/project-map/eastern-green-link-2**

Project overview

The Eastern Green Link 3 project will use the latest technology to provide a 2GW bi-pole, 525kV HVDC link between Peterhead in Aberdeenshire and the Lincolnshire area in England. This will enable the efficient transmission of high volumes of power which can then be further distributed to demand centres throughout the UK, as required.

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 Peterhead and Lincolnshire, depending on the directional flow of power. Consultations for the converter station sites have begun and future consultations will be held throughout 2023 and 2024.

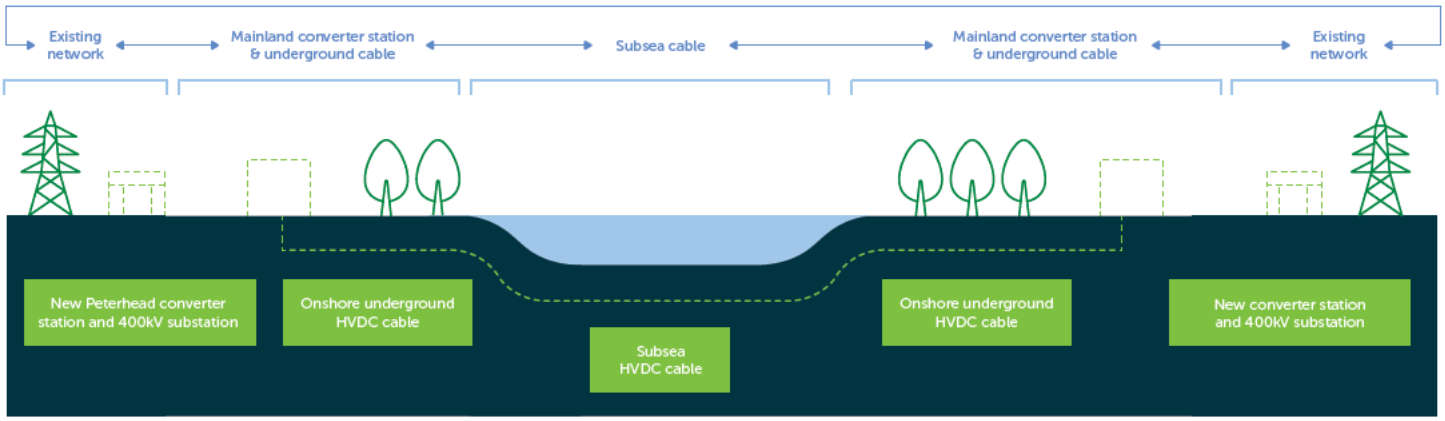
Peterhead Net Zero 2030 Developments

To achieve the planned Pathway to 2030 investments there is a requirement to develop a second 400kV substation, a second 132kV substation, and two HVDC link converter stations at Peterhead. All of these developments will occur at a single site to help to minimise impact on the local community. Further information about the Peterhead Net Zero:

ssen-transmission.co.uk/projects/project-map/peterhead-net-zero-2030-developments

Connections between these assets will be via HVDC cables buried either underground or below the seabed. In Peterhead, the land cable corridor could stretch up to 12km between the Peterhead Net Zero 2030 Development site and the associated landfall. The cables will also pass through a neighbouring HVDC switching station which will provide further resilience to the network. The subsea cable route is currently being developed, including making a final determination of preferred landfalls in Scotland and England however the subsea cable may cover up to 550km before making the transition back to land cable again. The length of the land cable corridor to grid connection in England will also depend on the final landfall location.

EGL3 HVDC project need and overview



Project timeline

2023
- Consultations with stakeholders and statutory consultees.
- Onshore, offshore, and engineering surveys commence.

2024
- Marine Licence Pre-Application Consultation.
- Marine Environmental Assessment and Licence Application submission.
- Onshore Voluntary Environmental Assessment completion.

2025
- 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.

Our consultation process

At SSEN Transmission, we are committed to delivering a robust and transparent consultation process underpinned by inclusion and accessibility. As a stakeholder led business, we understand the importance of involving communities and key stakeholders throughout each stage of our development process.

This period of engagement in the development phase is vital in shaping our proposals and to do this effectively, we need to capture feedback from stakeholders, harness local knowledge to identify key risks and explore potential community benefit opportunities. Today we are presenting our approach to developing this project, including environmental considerations, preliminary landfall selection, routing processes, and presenting maps which aim to give all stakeholders a better visual representation of the project to date.

This event is intended to provide a high-level overview of the project, and to specifically present information about the potential locations of landfall for the marine scheme elements and associated cables. If you require additional support to submit your views, please contact our Lead Community Liaison Manager Dav Lynch who will happily assist you.

What we're consulting on today

Desktop surveys and early analysis have enabled us to identify our preferred options for this project's marine cable landfall locations, onshore cable corridors and potential subsea cable corridors. Sharing our approach to developing this project and the rationale behind our early proposals, we are keen to hear stakeholder views around these proposals and if there are further considerations you believe need to be included during the next stage of the development process.

Who we're consulting with

We are interested in hearing feedback from a broad range of stakeholders including, but not limited to, local residents, landowners, businesses, non-statutory consultees and statutory consultees including local authorities, SEPA, Nature Scot, Historic Scotland, the Maritime and Coastguard Agency, Northern Lighthouse Board, and Marine Scotland.

Subsea cables and landfall

Why are subsea cables important?

Subsea electricity transmission cables are important critical infrastructure that carry power from areas where power is generated to areas of high demand where the power is consumed. Subsea cables provide an alternative to onshore power transmission and can help to increase redundancy and security of the energy system.

The proposed HVDC system will include approximately 550km of subsea cable linking landfall sites in Scotland and England. The subsea HVDC system is expected to consist of two conductor cables and one fibre optic communications cable these will be installed either bundled within a single trench, or separately in two separate trenches. These cables will be installed within one of the marine cable corridor options currently being considered. These identified corridor options are approximately 1km wide to allow for route refinement throughout the project development, which will be informed by detailed landfall assessment, marine surveys and engineering activities.

Wherever possible, the offshore cables will be buried in the seabed to protect them. Where burial is not possible, they will be protected using rock berms placed on top of the cables or an external cable protection system.

Cable landfall

Cable landfalls, or landing points, are the locations where our subsea cables come ashore.

Where possible, subsea cables are buried under the seabed to protect the cable from damage. When bringing the cable ashore, a section of the shoreline is excavated and ducts that will carry the cable from under the seabed onto land are installed. The cable is then pulled through the ducts, which are then buried and the shoreline is reinstated. This method is called 'open-cut trenching'.

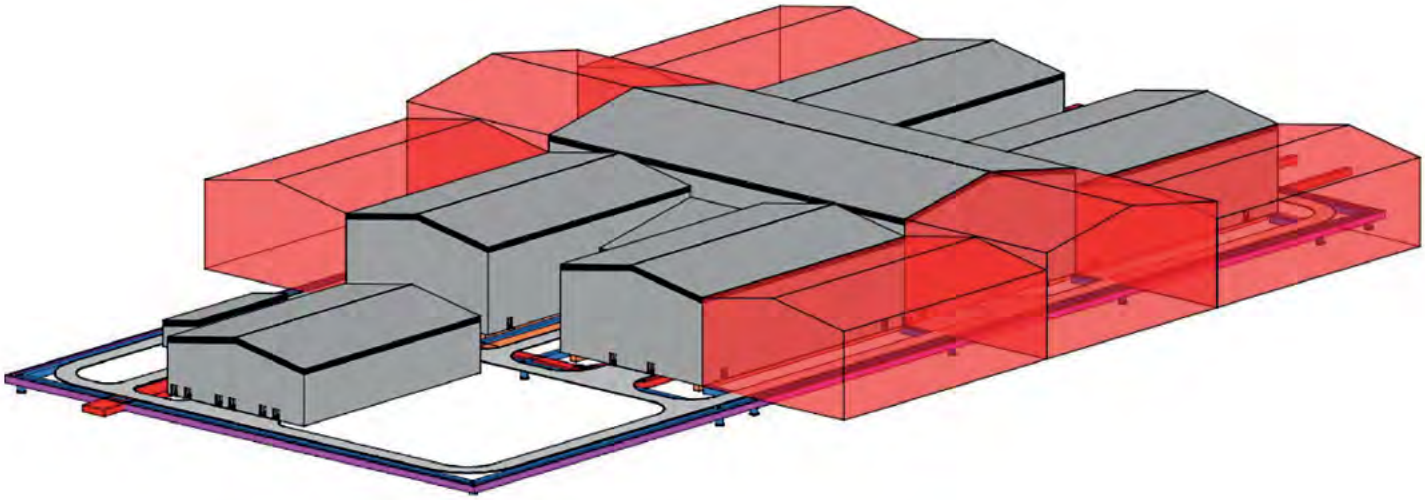
Where open-cut trenching is not possible, a horizontal directional drilling (HDD) approach can be used to drill and install ducts underground through the shoreline, providing an alternative method for cable landfall in areas of bedrock or challenging geology.

DC switching station

What is a DC switching station?

A modern component in the UK's energy network, switching stations facilitate the option to connect and disconnect DC transmission lines or other components such as generation to and from the system through a series of switches providing redundancy in the network. The switching station will provide redundancy in the network by allowing connections to the northern and southern elements of the UK network while providing uninterrupted connections for maintenance and similar works.

Conceptual drawing of a 4 bay DC switching station with provisional expansion



Switching station requirements

A switching station requires a large area of level ground similar to that required for a HVDC converter station.

All equipment would be contained within a large metal cladded, climate-controlled building, with other smaller auxiliary buildings adjacent.

The buildings would typically consist of suitably coloured steel cladding with a pitched roof.

All of the finished building designs are subject to approval with the local planning authority.

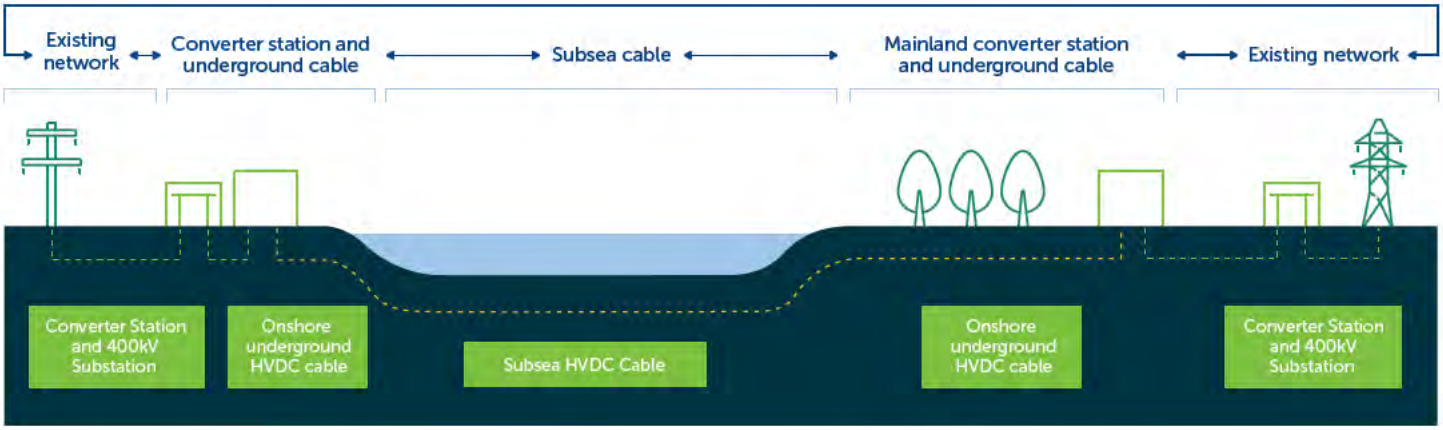
Switching stations are located along the DC transmission network between converters to provide the facilities described above.

This project will connect to a DC switching station at the Peterhead Net Zero 2030 Developments.

HVDC converter station

What is a converter station?

This is a site which converts Direct Current (DC) to Alternating Current (AC) or AC to DC. AC is how our houses and businesses use electricity from the grid. HVDC is a well-established technology that allows the efficient transmission of large quantities of electricity across long distances, with much reduced electrical losses compared with AC. It also introduces greater flexibility and resilience in the operation of the network and the management of variable outputs from renewable generation. A converter station needs to connect to a substation or switching station to access the AC network.



Converter station requirements

A Converter station requires a large area of generally level ground. Approximately 290m x 325m. Most of the equipment would be contained within a large metal cladded, climate controlled building, with other smaller auxiliary buildings adjacent.

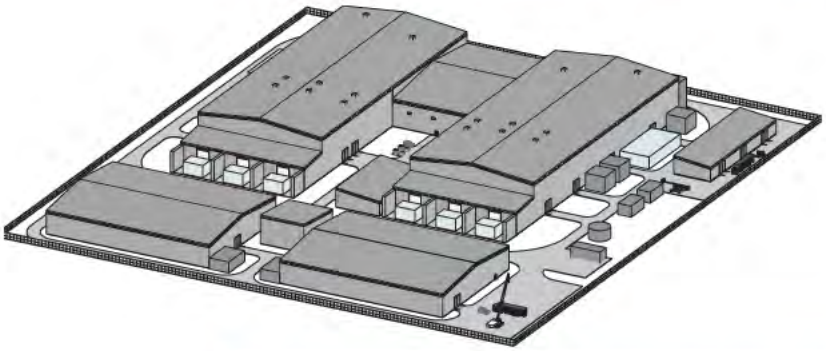
The buildings would typically consist of suitably coloured steel cladding with a pitched roof.

The proposed rating of the subsea links requires the main building to be taller than the other buildings being proposed.

This is due to the clearance distance required between the high voltage equipment and the buildings' structure.

All of the finished building designs are subject to approval with The Aberdeenshire Council.

Converter stations need to be located as close to the AC transmission network as is practicableto minimise additional infrastructure and improve network operation.



Indicative conceptual design for 2GW 525kV Bipole converter station

The 320kV DC 1200MW Blackhillock HVDC converter station

Our landfall selection and routing process

SSEN Transmission's approach to cable landfall selection and cable routing is underpinned by our statutory obligations and industry recommended practice.

As defined by our statutory obligations, SSEN Transmission aims to: 'Develop and maintain an efficient, coordinated and economical electricity transmission system in its licenced area' and in so doing, to 'have regard to the desirability of preserving the natural beauty, of conserving flora, fauna and geological and physiographical features of special interest and protecting sites, buildings and objects of architectural, historic or archaeological interest; and do what we reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites buildings or objects'.

These duties capture the principal objective of the landfall selection and routing process which is to:

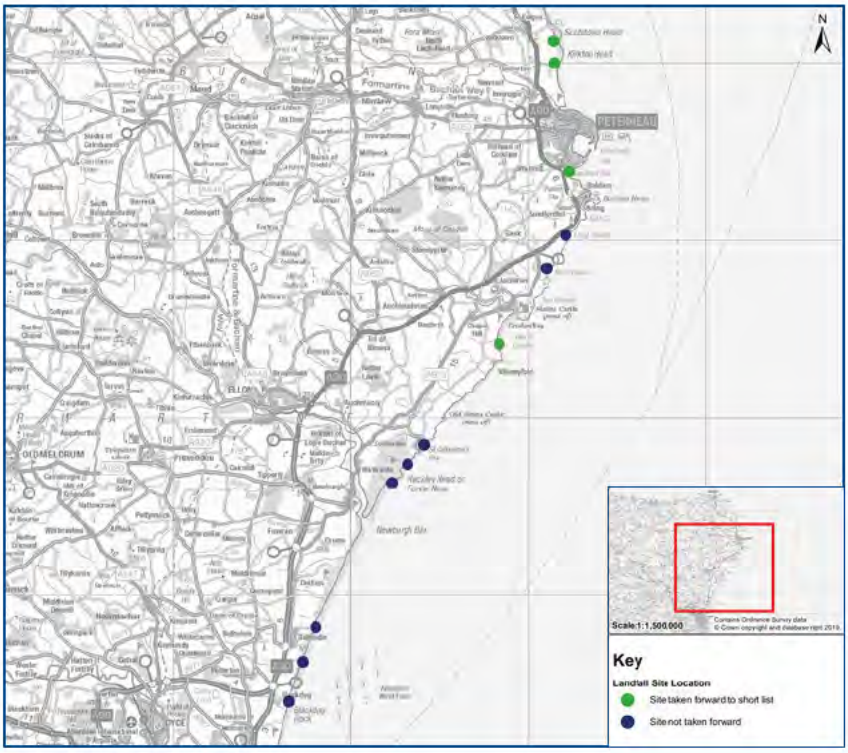
- Balance technical and cost considerations with environmental considerations;
- Select a proposed alignment which is economically viable and technically feasible;
- Minimise impacts on important resources or features of the environment to reduce disturbance to those living in it, working in it, visiting it or using it for recreational purposes.

The starting point for all marine cable projects is to establish the need for the project and to select the preferred strategic option to deliver it. This process is triggered by the preparation of several internal assessments and documents which identify the cable technology to be used and the point on the existing transmission network where a connection can be made. The Peterhead Net Zero 2030 Developments site has been identified as the key connection point in Scotland, for this project.

Once connection points have been identified, cable landfall selection and associated onshore and offshore routing follows a number of refinement stages to determine the most appropriate landfall locations. When selecting subsea cable routes and landfall locations, SSEN Transmission follows industry-wide guidance provided by regulatory bodies and standards organisations including DNV-GL, NatureScot, and SEPA.

Landfall selection: what we considered

Preliminary marine cable landfall search areas were identified along the Aberdeenshire coastlines to allow for a new connection at the Peterhead Net Zero 2030 Development. Within these search areas, potential landfalls characterised by soft sediment (sandy or gravelly) bays which could potentially accommodate either soft landings, or HDD were initial identified. As much of the Aberdeenshire coastline within the search area comprises cliffs, consideration was also given to cliff heights likely to be encountered, which were identified and assessed using a 'Red/Amber/Green (RAG) assessment approach considering high, medium and low impacts.



All potential landfalls identified for this project are illustrated in the map above. Blue dots represent landfalls that were not taken forward for detailed investigation. Green dots are potential landfall sites that have been taken forward for further investigation.

A RAG assessment is an evidence based, qualitative evaluation method based on a series of agreed criteria that allow for comparison and differentiation between options. Through this process, each potential landfall was assessed as red, amber or green based on the following criteria:

- Onshore environment: designated areas and features such as Special Site of Scientific Interest (SSSI), Special Protected Areas (SPA), Special Area of Conservation (SAC) and nature reserves, and features determined through landscape character assessments (LCAs), cultural heritage, water designations.
- Marine environment: seabed conditions and constructability, designated areas and features such as Marine Protected Areas (MPAs), interactions with other sea users (e.g. commercial fisheries, offshore wind farms, shipping/navigation), cultural heritage, and marine cable length.
- Geotechnical: both onshore and offshore considerations including sediment depth, presence of bedrock, glacial till, deposits, blown sand
- Landfall engineering: constructability, site access, cliff gradients, environmental effects on cable ratings

A summary of the outcomes of these preliminary RAG assessments can be found in the tables that follow.

Landfall site options

Following identification of suitable landfall zones, 12 potential landfall locations were taken forward for further investigation, of which 4 were subjected to a detailed RAG assessment:

- Cruden Bay is a long bay located south of Peterhead. It has an established dune system and has significant recreational use. Within the vicinity of the landfall area is a settlement and a golf course.
- Sandford Bay is located immediately south of Peterhead, set within a more industrial land use. The bay itself is soft sediment with rocky cliffs surrounding the site. There is some agricultural use near to the landfall area.
- Scotstown Beach (south) is located north of Peterhead and south of the gas terminal. It is a long beach with established dunes and recreational use.
- Scotstown Beach (north) is located north of Peterhead and south of the gas terminal (closer to the gas terminal than the south option). It is a long beach with established dunes and recreational use.

The following table summarises the outcomes of the RAG assessment for the potential four landfall locations:

Category	Cruden Bay	Sandford Bay	Scotstown Beach (south)	Scotstown Beach (north)
Marine environment landfall and offshore cable	M	M	M	M
Environment and consent landfall	M	M	M	M
Geotechnical engineering	L	M	L	L
Engineering landfall	M	L	M	M

Cruden Bay

There are potential marine consenting constraints due to congestion with other marine space users including oil pipeline and telecoms cabling already using bay as landfall. The geotechnical assessment showed this location to have potentially deep soft sediments. Buchan Ness to Collieston Coast SPA extends into low water, but does not cover the beach itself. The Buchan Ness to Collieston SAC and Bullers of Buchan Coast SSSI designations extends to protect the cliffs either side of the bay. Any impacts to these features will need to be considered.

Sandford Bay

Is a wide soft sediment bay. There could be marine consenting challenges due to potential for congestion of other infrastructure, existing and planned, coming into the bay. There are known bedrock geology challenges (the weathered and fractured granite) with a fragment rocky coast.

Scotstown Beach (south)

There are marine routing challenges due to the Southern Trench MPA and potential interaction with the designated features of this site. There are established dune systems and in places pockets of designated ancient woodland. There are soft sediments but further investigation would be required to increase confidence that there is not hard sediment.

Scotstown Beach (north)

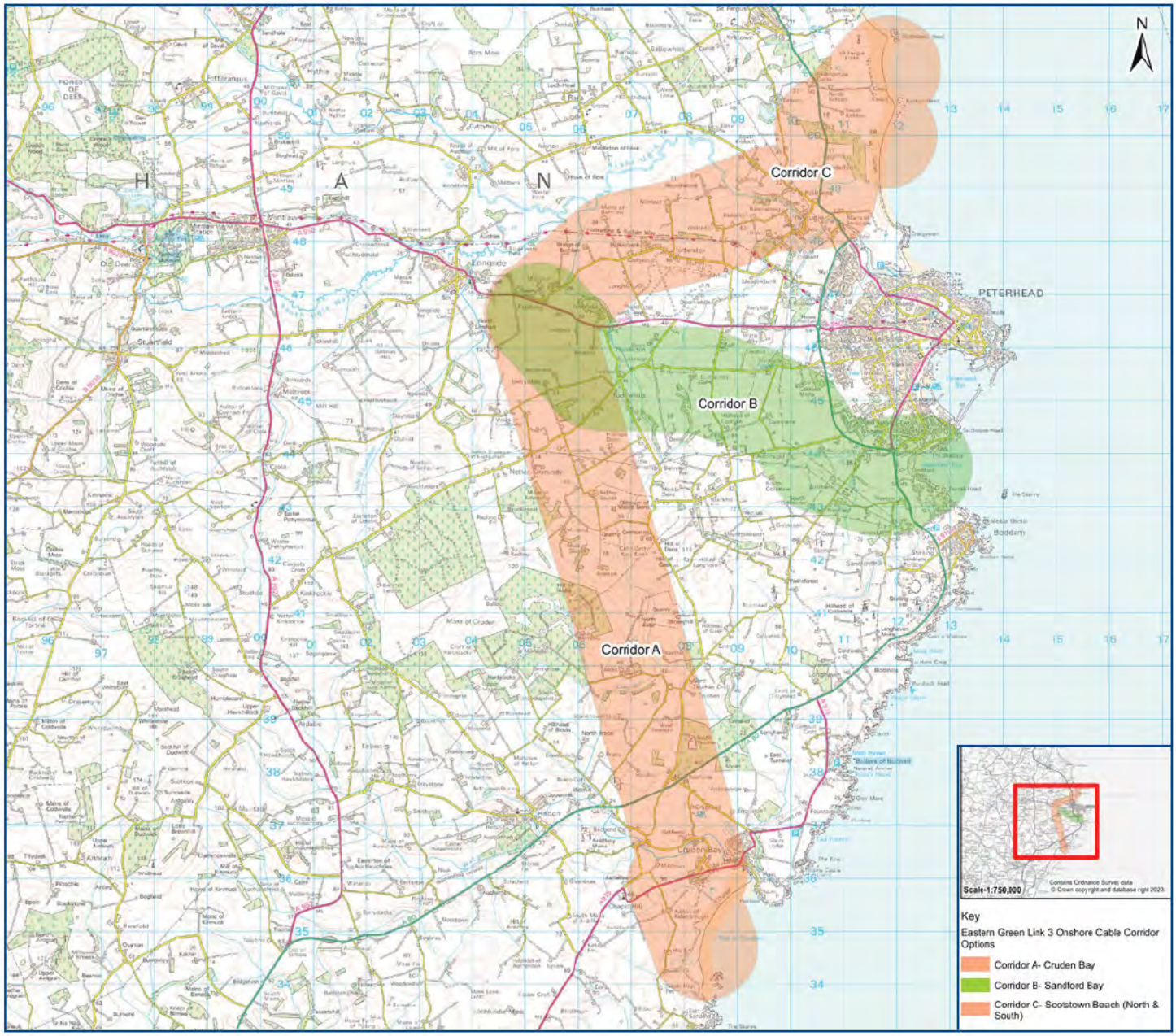
At this stage of the landfall selection process there is little to separate Scotstown Beach south and north options, as such the findings are the same. There are marine routing challenges due to the Southern Trench MPA and potential interaction with the designated features of this site. There are established dune systems and in places pockets of designated ancient woodland. There is soft sediments but further investigation would be to be confident there is not hard sediment.

Overall Findings: The options were considered fairly similar but on balance Sandford Bay is considered to be the option with the least constraints across engineering, environmental onshore and offshore constraints. Further investigations will be undertaken to choose a preferred location and site for the landfall. This process will be informed by stakeholder feedback and further technical analysis.

Onshore cable corridor options

Onshore cable corridors were developed connecting the four landfall options to the Peterhead Net Zero 2030 Development:

- Corridor A: From Cruden Bay this corridor, which is the longest option, would cross the A975 and the A90 and head north towards the Peterhead Net Zero 2030 development.
- Corridor B: From Sandford Bay, located immediately south of Peterhead, the corridor would move north west towards the Peterhead Net Zero 2030 development.
- Corridor C: Serving the two landfall options at Scotstown Beach (south and north), this corridor would move west crossing the A90 and then south towards Longside into the Peterhead Net Zero 2030 development.



The following table summarises the outcomes of the RAG assessment for the three corridors:

Category	Cruden Bay Corridor A	Sandford Bay Corridor B	Scotstown Beach Corridor C
Natural Heritage Designations	H	H	H
Cultural Heritage Designations	H	M	M
Landscape Designations	M	L	M
Agriculture	M	M	M
Forestry	L	L	L
Infrastructure Crossings	H	H	H
Environmental Design	L	L	L
Ground Conditions	H	M	M
Construction/Maintenance	L	L	L
Proximity to other infrastructure	M	M	M
Design	L	L	L

Corridor A is longer than Corridors B and C and is therefore more likely to contain a greater number of environmental features. There are more natural heritage and cultural designations along Corridor A.

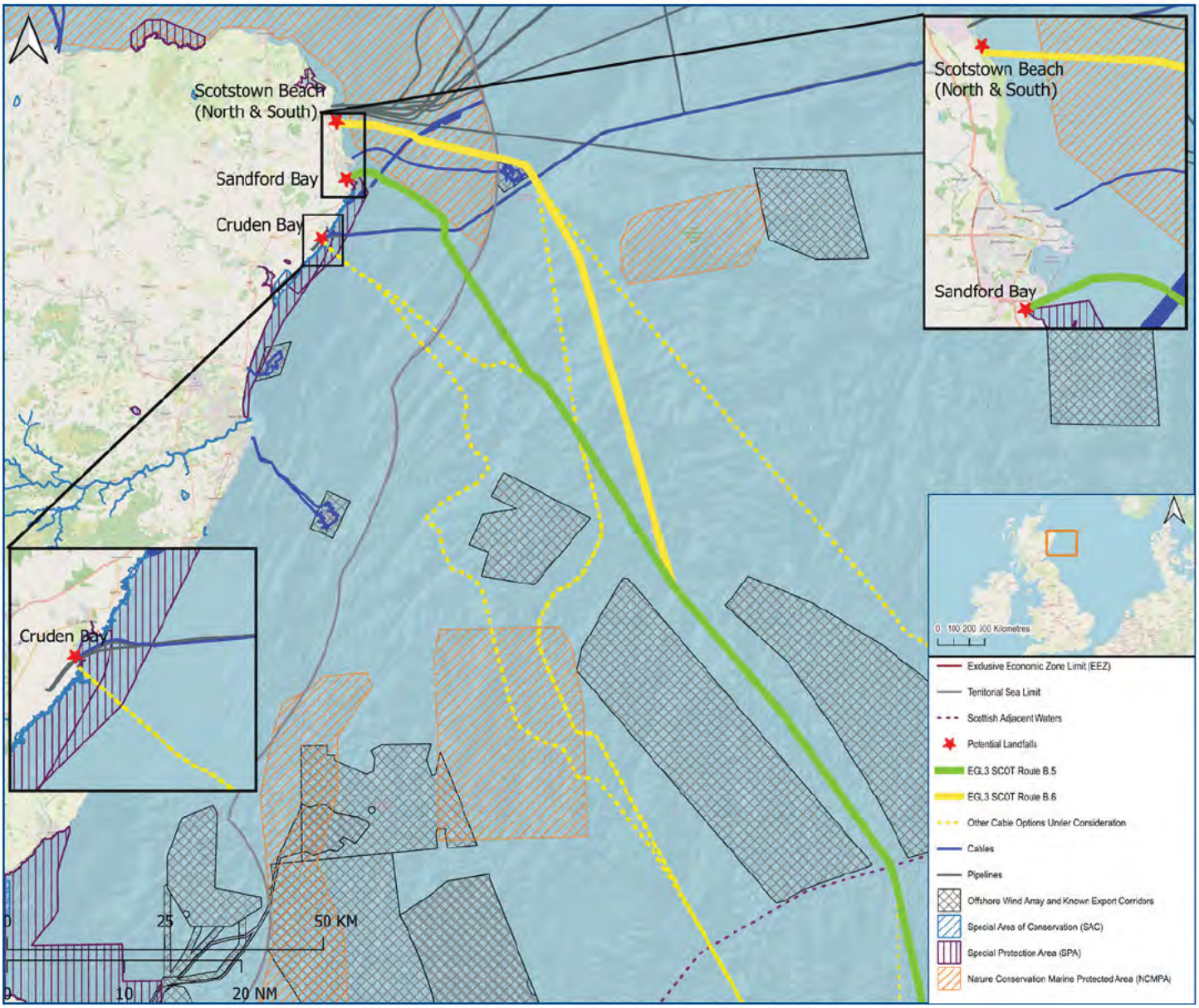
All corridors lie in close proximity to designated sites (international, national and local) and all corridors contain habitat suitable to support protected species and features and birds. It is expected that through further detailed routing it will be possible to minimise or avoid impacts to these habitats and features.

Corridor B does not fall within any designated landscape areas, heritage landscape assets or ancient woodland. Whereas Corridors A and C both fall within designated areas.

From an engineering perspective, the crossing of other infrastructure being the largest challenge across all corridor options. All routes would require multiple infrastructure crossings, including gas pipelines, overhead lines, rivers, and roads. There is a greater potential for peat along Corridor A, but with routing impacts may reduce the impact.

Overall Corridor B is considered to present the fewest engineering and environmental constraints. Further investigations will be undertaken to choose a preferred corridor and this process will be informed by stakeholder feedback, further technical analysis and the location of the preferred landfall.

Subsea cable route options - overview



Subsea cable corridors giving access to each of the shortlisted possible landfall areas are currently under investigation. Each potential corridor has been identified according to key technical, environmental, economic, and permitting criteria. A preferred route corridor will be further refined over the coming months, informed by technical and stakeholder feedback received including from this community consultation, and by additional information gathered during marine survey.

Criteria for subsea cable corridors

Technical criteria

The subsea cable corridors have been selected to avoid:

- Known seabed hazards and obstructions such as wrecks and dumping grounds;
- Areas where installation would be difficult or hazardous, such as steep slopes or irregular rocks;
- Areas of marine activity such as shipping lanes, anchorages and fishing grounds;
- Areas of geological instability such as earthquake zones and landslips; and,
- Areas where recovery of the cable for maintenance would be difficult.

Permitting criteria

The subsea cable corridor must be acceptable to:

- The owners of the offshore seabed;
- The owners of the foreshore; and,
- Military authorities.

Environmental criteria

The subsea cable corridors have been selected to avoid:

- Known areas of environmental concern, such as designated areas (MPAs, SACs, SPA), marine conservation areas, and fishing grounds; and
- Areas where prevailing climatic or sea conditions would make installation and maintenance activities difficult or hazardous.

Economic criteria

The corridors also make careful consideration of the number and type of potential crossings of other infrastructure and make appropriate consideration of proximity to other infrastructure. They will also be reviewed for UXO (Unexploded Ordnance) and other potentially dangerous areas.

What happens now and how do I have my say?

We understand and recognise the value of the feedback provided by members of the public during all engagements and consultations. Without this valuable feedback, the project development team would be unable to progress projects and reach a balanced proposal.

We are keen to receive your views and comments in regards to the following questions:

- Has the requirement for the project been clearly explained?
- Have we adequately explained the approach taken to select our proposed cable landfall locations, onshore and subsea cable routes?
- Are there any additional factors or environmental features that you consider to be important and that should be brought to the attention of the project team?
- Do you fish in the area affected by any of the proposed subsea cable routes?
  - Please provide details of the type of fishing you do, i.e. mobile or static and the locations; and
  - Please provide an estimate of how often you fish in this area and the time of year.
- Do you have any other comments regarding the proposed EGL3 HVDC Cable Scheme?
- Overall, how do you feel about the EGL3 HVDC Cable Scheme project?

Comments

Your views and comments can be provided to the project team by completing the feedback form or by writing to our Community Liaison Manager. All feedback received will be assessed and the proposed options adapted where necessary.

[redacted]
Lead Community Liaison Manager
[redacted]
[redacted]
[redacted]

Additional information

Information will also be made available via the project webpage and social media channels:

Project website:
www.ssen-transmission.co.uk/projects/project-map/eastern-green-link-3

Follow us on Facebook:
@ssencommunity

Follow us on Twitter:
@ssetransmission

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 Has the requirement for the project been clearly explained?

☐ Yes ☐ No ☐ Unsure

Comments:

Q2 Have we adequately explained the approach taken to select our proposed cable landfall locations, onshore and subsea cable routes?

☐ Yes ☐ No ☐ Unsure

Comments:

Q3 Are there any additional factors or environmental features that you consider to be important and that should be brought to the attention of the project team?

Comments:

Q4 Do you fish in the area affected by any of the proposed subsea cable routes?

- Please provide details of the type of fishing you do, i.e. mobile or static and the locations; and
- Please provide an estimate of how often you fish in this area and the time of year.

☐ Yes ☐ No ☐ Unsure

Comments:

Q5 Do you have any other comments regarding the proposed EGL3 HVDC Cable Scheme project?

Comments:

Q6 Overall, how do you feel about the EGL3 HVDC Cable Scheme project?

Comments:

Full name

Address

Telephone

Email

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

If you would like your comments to remain anonymous 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: Grampian House, 200 Dunkeld Road, Perth, PH1 3GH

Email: [redacted]

Online: www.ssen-transmission.co.uk/projects/project-map/eastern-green-link-3

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

The feedback form and all information provided in this booklet can also be downloaded from the project websites.

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.

Appendix 4. PAC Event Photographs

4.1 PAC Event Photographs

Appendix 5. PAC Event Feedback Form

5.1 Feedback Form

Found on page 26-28 of the Consultation Booklet

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 subsea cable element of the EGL3 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 EGL3 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 Eastern Green Link 3 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: [redacted]

Online: ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/

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 may 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.

collaborative
environmental
advisers