# Eastern Green Link 3

## Marine Environmental Appraisal

## Chapter 2 - Project Need and Alternatives

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

collaborative environmental advisers

Date: August 2025
Document Reference: C01494a_NGET_REP_D0575
Version Number: 0

Point of Contact: Patrica Elder
Tel: [Redacted]
Email: [Redacted]

Collaborative Environmental Advisers
Registered in England at Mountbatten House, 1 Grosvenor Square,
Southampton, SO15 2JU
Registered number: 11114584

[Redacted]
Email: info@ceaenvironmental.co.uk
www.ceaenvironmental.co.uk

## Record of Changes

| Rev # | Date | Description | Approved |
|---|---|---|---|
| 0 | 29/08/2025 | Issued for Submission | Anna Farley |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |

| Responsible for | Job Title | Name | Date | Signature |
|---|---|---|---|---|
| Content | Technical Director | Julie Drew Murphy | 29/08/2025 | [Redacted] |
| Checked | Principal | Patricia Elder | 29/08/2025 | [Redacted] |
| Approved | Technical Director | Anna Farley | 29/08/2025 | [Redacted] |
| Copyright: | CEA © | Document Reference: | C01494a_NGET_REP_D0575 | |

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

# Table of Contents

## Abbreviations/Glossary

| | |
|---|---|
| ASTI | Accelerated Strategic Transmission Investment |
| BEIS | Department for Business, Energy & Industrial Strategy |
| EGL | Eastern Green Link |
| GB | Great Britain |
| GW | Gigawatt |
| HND | Holistic Network Design |
| HVAC | High Voltage Alternating Current |
| HVDC | High Voltage Direct Current |
| km | Kilometre |
| MEA | Marine Environmental Assessment |
| MEAp | Marine Environmental Appraisal |
| MPA | Marine Protected Area |
| NESO | National Energy System Operator |
| NGET | National Grid Electricity Transmission |
| NOA | Network Options Assessment |
| RLB | Red Line Boundary |
| SHE-T | Scottish Hydro Electric Transmission plc |
| SPA | Special Protection Area |
| UK | United Kingdom |

# 2. Project Need and Alternatives

## 2.1. Need for the Project

The United Kingdom (UK) is a world leader in offshore wind energy and the target for becoming net-zero nations by 2050 for England and Wales and 2045 for Scotland are enshrined in Law. The Energy White Paper (2020) (Department for Business, Energy & Industrial Strategy (BEIS), 2020a) sets out UK government targets of increasing offshore wind capacity to 40 gigawatt (GW) by 2030 to accelerate the transition to net-zero. This target has since been increased to 50 GW by 2030, as detailed in the UK Government's Energy Security Strategy (2022) (Department for Energy Security and Net Zero, DESNZ, 2022). In addition, the Scottish Government, in its Draft Energy Strategy and Just Transition Plan (Scottish Government, 2023), has set a new target for an additional 20 GW of new low carbon renewable electricity generation by 2030, including 12 GW of new onshore wind and potentially increasing its current offshore wind target of 11 GW by 2030 on which it has consulted. The final Energy Strategy and Just Transition Plan was originally expected to be published by summer 2024, however it is still awaiting publication.

North Sea developments, including offshore wind, interconnectors and transmission system reinforcements will be essential in meeting these climate change targets and driving economic growth across the UK. The end-to-end Project will form an integral part of the UK transmission network as a High Voltage Direct Current (HVDC) link. Within this chapter all references to the Project refer to the end-to-end cable from Norfolk to Aberdeenshire, with the Proposed Development forming the Scottish Offshore Scheme part of the Project.

As the UK moves away from using traditional fossil fuels to power vehicles and heat homes, there will be a greater need for renewable and low carbon energy. To be able to move to these renewable and low carbon forms of energy, the UK needs to increase the capability of the electricity transmission network to be able to accommodate increases in demand.

The British Energy Security Strategy sets out the Government's ambition to connect up to 50 GW of offshore generation to the electricity network by 2030. This will require additional network capacity and greater power transfer capability across the Anglo-Scottish border. To assist in bringing Scotland's vast reserves of renewable energy to the rest of the UK, the National Energy System Operator (NESO) Network Options Assessment (NOA) (NESO, 2022a), and the Pathway to 2030 Holistic Network Design (HND) (NESO, 2022b) recommended four new HVDC Links, to allow the transfer of 20 GW by 2030 and 30 GW by 2035, between Scotland and England to be progressed. Further details are provided in **Section 2.2**. These are: Eastern Green Link 1 (EGL 1) which will run from Torness in East Lothian to Hawthorn Pit in County Durham; Eastern Green link 2 (EGL 2) which will run from Peterhead in Aberdeenshire to Drax, North Yorkshire; Eastern Green Link 3, (EGL 3, this Project), which would run between Peterhead in Aberdeenshire to Walpole, Norfolk (via an English landfall at Anderby Creek, Lincolnshire); and Eastern Green Link 4 (EGL 4) which would run between Fife in Scotland to Walpole, Norfolk (via an English landfall at Anderby Creek, Lincolnshire).

In 2022, Ofgem (the UK energy regulator) undertook consultation to determine how they could support the accelerated delivery of the strategic electricity transmission network upgrades needed to meet the UK Government's 2030 targets. This led to the introduction of a new Accelerated Strategic Transmission Investment (ASTI) framework, a regulatory framework established to streamline the regulatory approval process for crucial electricity transmission projects in Great Britain (GB). The EGL 3 project has been listed as an ASTI project, which means it will benefit from an accelerated regulatory framework, recognising its importance in supporting the UK to meet its Net Zero targets.

## 2.2. Objectives of the Project

As outlined in **Chapter 1: Introduction**, the objectives for the Project have been derived from the UK and Scottish Government net-zero targets, the objectives of NOA and the UK HND, the UK Marine Policy Statement and Scotland's National Marine Plan. **Table 2-1** outlines these objectives.

*Table 2-1: Objectives of the Project*

| Objective | | Basis of Objective |
|---|---|---|
| **Core Objectives** | | |
| 1 | Develop a reinforcement link between the Scottish and the English electricity transmission networks. | To meet the power transfer requirements of over 20 GW by 2030 and 30 GW by 2035 across the Anglo-Scottish border.<br>(NESO, 2022a). |
| 2 | Project commissioning by 2030/31. | To provide a recommended onshore and offshore network to meet the UK Government's ambitions of connecting 50 GW of offshore wind in GB by 2030.<br>(NESO, 2022a). |
| 3 | Seek to coordinate and co-locate infrastructure to minimise the impacts on the environment and communities as far as possible. | To facilitate the objectives set out in government policy, the Offshore Transmission Network Review and HND, and to mitigate negative |

| Objective | | Basis of Objective |
|---|---|---|
| | | impacts on local communities, environment and landscape, in accordance with the joint statement dated 7 July 2022. (See paragraph 3.3.80 Overarching National Policy Statement for Energy (NPS EN-1) (DESNZ, 2024) |
| 4 | Project infrastructure should be realistic to consent and deliver. | Proposals will consider all environmental and technical constraints to ensure that the Project can be delivered both economically and with a minimal environmental impact to allow it to be permitted responsibly in line with key guidance and policy. |
| **Secondary Objectives** | | |
| 5 | Deliver the most efficient offshore and onshore cable routes. | Develop the shortest and least constrained route, balancing length, environmental, technical and economic constraints. Route should be optimised to allow burial in seabed sediments and avoid features where burial is not possible. Avoid constraints that cannot be physically moved in order to install the cables or will have severe/major financial and legal implications e.g., constrained navigation channels, wrecks, offshore oil and gas platforms, or physical implications on the route e.g., large expanses of rock or areas of sandwaves. Avoid areas of seabed used by others e.g., marine aggregate sites, disposal sites, renewable energy sites, ports and anchorage areas. Avoid or minimise the number of third-party asset crossings. |
| 6 | Ensure that the construction, operation and eventual decommissioning of the Project can be undertaken in a safe and efficient manner. | The safety and amenity of neighbours and workers is central to its design, delivery and decommissioning. |
| 7 | To minimise disruption to onshore communities. | The Applicant will endeavour to minimise long term disruption, either alone or in combination, with other developments in the region, through consultation with local authorities and communities and the design and management of the Project. |
| 8 | To avoid where possible, or otherwise minimise the distance through which the route crosses protected sites. | Minimise likely significant effects or adverse effects on protected sites designated or habitats and/or species, in accordance with conservation policy and legislation, and the conservation objectives of the protected site. |
| 9 | To minimise disruption to shipping | Through consultation with the local Port Authorities and other navigation stakeholders, the design and management of the Project seeks to not give rise to unsatisfactory risk to other sea users, particularly in areas of higher use and it safeguards protected navigable depths within port authority waters. |
| 10 | To minimise disruption to commercial fishing. | Through consultation with appropriate fisheries associations, that the design and management of the Project does not give rise to long term displacement either alone or in combination with other developments in the region. |

## 2.3. Alternative Solutions

As outlined in **Chapter 1: Introduction**, to support the identification of the route for EGL 3, an initial strategic options appraisal which considered the need and alternatives for the end to end project was undertaken. A Marine Route Options Appraisal was then conducted to identify the offshore route from landfall to landfall (NGET, 2024).

This considered the following aspects:

- Alternative Technology
- Alternative National Connection Points
- Alternative Landfall Sites
- Alternative Offshore Cable Routes
- Alternative Construction Techniques

A number of scenarios were discounted as they do not support UK or Scottish Government policy; these were:

- **Do nothing** – This option dictates that the transmission system must remain the same which will constrain the transmittal of electricity when generation exceeds demand. It does not meet the UK policy objectives, nor does it meet the project need or deliver any of the core project objectives.
- **Alternative transmission options** – As part of the review for the connection of a new HVDC link, the Applicant considered whether currently available alternative technology options, including High Voltage Alternating Current (HVAC) and HVDC based onshore options using overhead line technology solutions, should be further investigated. Findings from this review were that:
  - HVDC links over the proposed distance have comparable capital costs to the required HVAC solution, but much lower lifetime costs over this distance than the alternative onshore HVAC option. HVAC options are often the most economic when their distance is under multiple hundreds of kilometres, but in this case the proposed connections are in the order of 500 km or greater where HVDC represents the economical and viable technology choice.
  - A fully onshore solution would consist of a substantially long route length, carrying a much higher delivery risk than the HVDC subsea cable reinforcement proposals that are currently being progressed, and this would not be possible to deliver by the 2030 timescale that is required by the system need.
  - Consequently, an option using overhead line technology is not considered to be the right alternative in this case as the distances involved make subsea HVDC a more viable, economical, deliverable, and electrically controllable solution.
- **Reduce electricity demand** - This solution would not meet the project need or deliver any of the core project objectives and serves as a complementary measure rather than an alternative to the Project. The National Energy and Climate Plan (BEIS, 2020b) states that "*to meet the UK's 2050 net zero climate change target, emissions from buildings will need to be near zero, coupled with action on industrial processes*." Noting in Scotland, the Climate Change (Emissions Reduction targets) (Scotland) Act 2019 reduced the timeframe setting a target of 2045 to achieve net zero. To meet the drive for decarbonisation, sectors across the economy are switching to electricity, driving up electrical demand. Energy demand management will play an important role in the future energy balance but cannot on its own deliver the decarbonised energy system. Different pathways will need to be developed concurrently such as reduced use of high carbon fossil fuels, increased energy efficiency, investment in renewables, more decentralised energy and a greater level of interconnection and transmission. This solution is therefore akin to 'do nothing' as it does not meet the UK policy objectives for decarbonisation on its own, does not meet the project need and does not entirely deliver any of the core project objectives.

### 2.3.1. Alternative Technology

There are two viable options for transporting electricity: HVDC technology and HVAC technology.

The UK onshore electricity transmission networks operate as HVAC systems in which the direction of the current changes on average fifty times a second. The capacity of HVAC subsea cables reduces significantly with distance, with long lengths of HVAC cable requiring electrical compensation to be installed, typically every 50 km. Electrical compensation requires a large shunt reactor which needs to be installed on a small, fixed platform (like that used by the oil and gas industry). HVDC does not require electrical compensation (reducing the footprint of the Project) and operates over much longer distances more efficiently. As a result of this higher efficiency of power transmission in HVDC cables, fewer materials (e.g., copper or aluminium) are required for cable manufacture, ultimately leading to fewer cables being required. Whilst HVDC equipment may be more expensive, due to the ability to transmit electricity over longer distances more efficiently, costs are lower compared to using HVAC over the same distance.

The Project proposes the use of HVDC technology because it is more effective at transmitting high electricity capacity over longer distances with lower energy losses than an equivalent HVAC system. Additionally, the HVDC technology system provides a greater degree of control over the magnitude and the direction of power flow, eliminating the requirement for synchronisation between the electricity systems at either end of the link. This is because the HVDC technology allows for the flow of power to be reversed which can aid in the management of demand and supply.

### 2.3.2. Alternative National Connection Points

The first stage of the project development process is to identify where both ends of the reinforcement cables will connect to the transmission network in Scotland and England. The Applicant identified Aberdeenshire, Scotland and Lincolnshire, England as the optimal connection points for the Project.

For the connection in England, Lincolnshire was initially identified as the National Grid Electricity Transmission (NGET) connection point, whereby a connection node for the Project and for other NGET customers would be constructed. However, after understanding that a number of other projects that were looking to connect terrestrially to this same area, including offshore wind farms and other cable reinforcement projects, it was deemed that there needed to be a scope change to avoid a delay in delivery of EGL 3, as the construction of this connection point was reliant on the completion of another project.

For the Project to meet system capability needs, NGET made the decision to reduce the level of interaction with other projects and improve scheme deliverability by relocating the connection point of EGL 3 to a new substation in the Walpole area. This in-turn reduces the power infeed to the originally considered connection point, which was in the East Lindsey area of Lincolnshire.

A HVDC converter station is proposed as the cable connection point in Scotland, located in Aberdeenshire, approximately 7.5 km to the west of Peterhead and 1 km to the south-east of Longside. This site, named the Netherton Hub, is proposed to be the central hub, for a number of new transmission links feeding into the northeast of Scotland area. The aim of the collective development of these projects is to avoid a dispersed pattern of development and minimise the landscape impact and impact to the local community.

The site in Aberdeenshire was identified as the preferred location of the proposed Netherton Hub through a site selection process whereby 13 initial feasible site options were identified. An assessment of technical and environmental impact considerations ruled out nine sites to take forward for further evaluation. From the four options progressed into Stage 2 consultation, the proposed Netherton site emerged as the preferred option when assessing environmental and technical factors. Further information in respect to the Netherton Hub options appraisal can be found in the Netherton Hub Environmental Impact Assessment Non-Technical Summary (SSEN-T, 2024).

### 2.3.3. Alternative Landfall Sites

#### 2.3.3.1. Introduction

Landfall locations were initially identified through a review of publicly available and purchased mapped data. Data was classified according to whether it was a potential planning, physical, environmental, or human constraint on the development of the Project. Landfalls were identified based on the following criteria, (in no particular order of importance):

- Access to an onshore grid connection;
- Ground condition suitability;
- Site access, both onshore and offshore;
- Alternative access available for landowners;
- Avoidance of existing infrastructure where possible;
- Potential environmental or socio-economic constraints (e.g., designated sites, populated areas, archaeological restrictions or shipping activity);
- Topography; and
- Coastal sediments.

Each landfall was assessed based on its own merits, technically and environmentally, taking into consideration any information available from other major developments in the region. They were also assessed in combination with the merits of the associated onshore and offshore cable route(s), to prove that the end-to-end solution met the Project objectives.

The English landfall was confirmed as Anderby Creek and information in respect to the decision process supporting this is presented in the Preliminary Environmental Information Report (NGET, 2025).

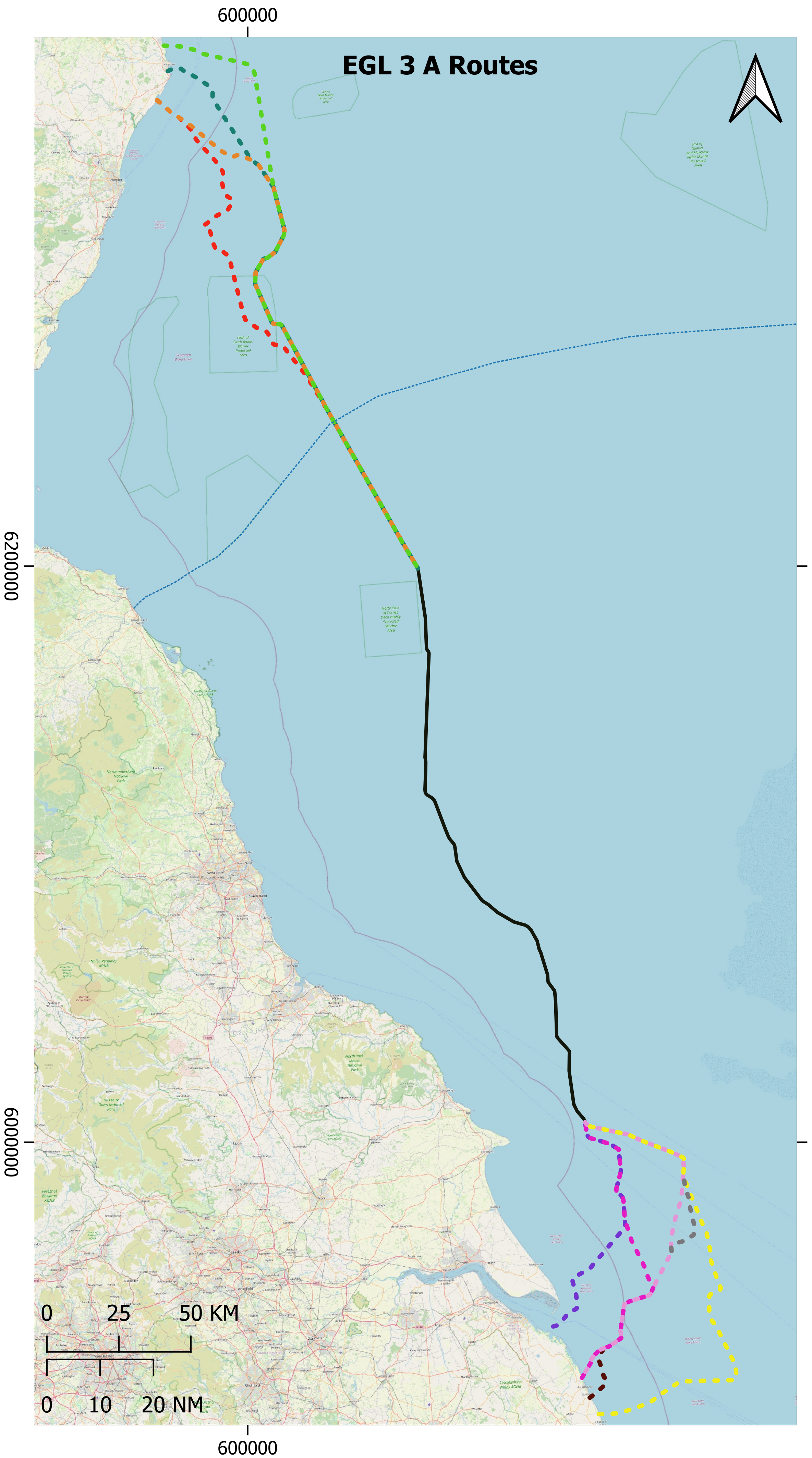
#### 2.3.3.2. Scottish Landfall

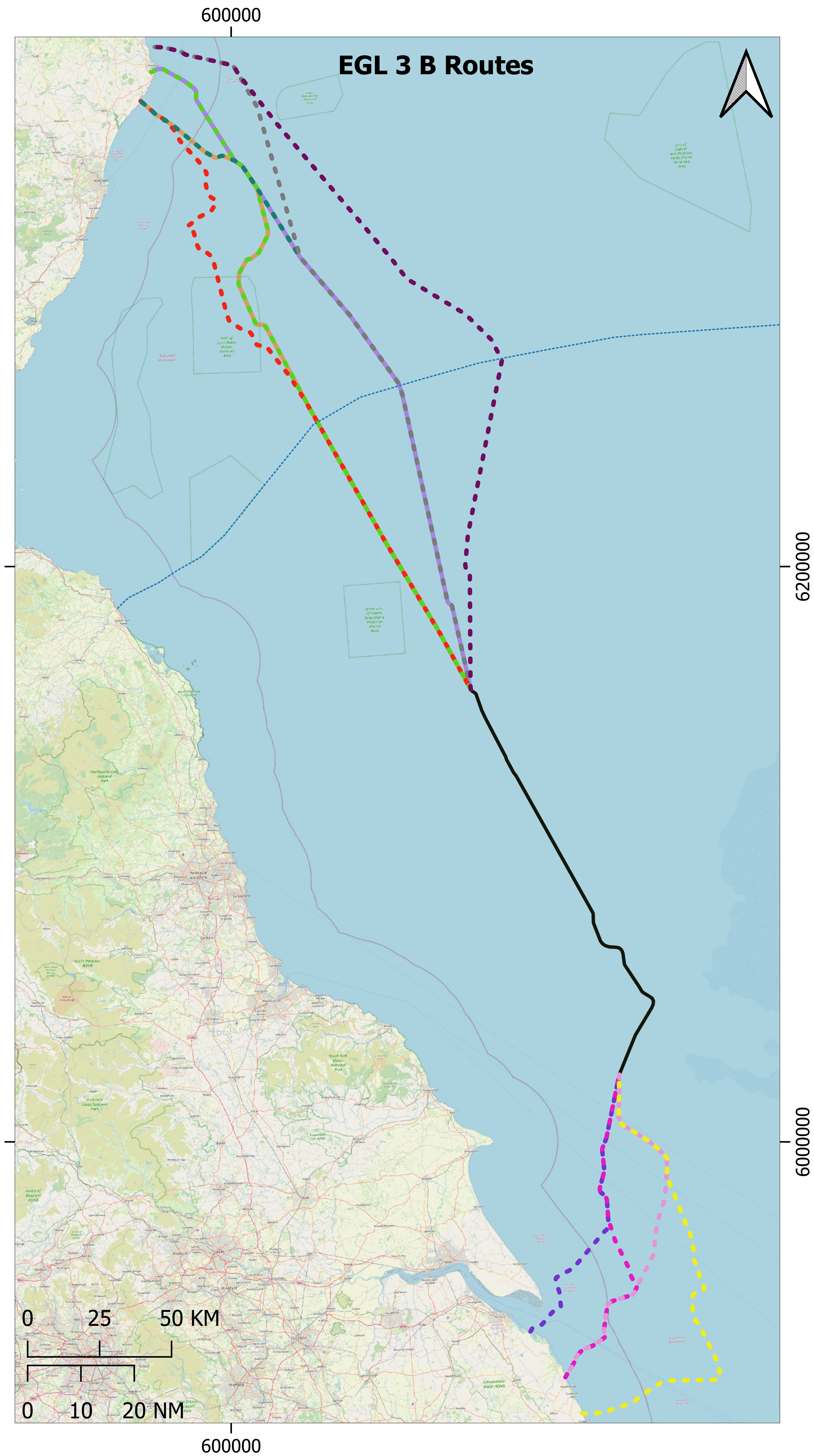
In Scotland, Scottish Hydro Electric Transmission plc (SHE-T) has identified northeast Scotland as a location for one of several strategic hubs within its licence area. The Project is expected to connect into SHE-T's existing network through the proposed Netherton Hub. Consequently, a landfall location was required to allow appropriate onward onshore connection to the Netherton Hub. A preliminary landfall search area was identified covering the broad extent of coastline north of Aberdeen, between Aberdeen and Fraserburgh. This area was chosen as a broad, reasonable area within which the landfall could connect directly to the Netherton Hub and was subdivided into four zones. A long list of 12 possible landfalls was identified in this search area following review of constraints by the terrestrial and marine technical and environmental teams. A detailed assessment is presented in the Marine Route Options Appraisal (NGET, 2024). The routes assessed within the options appraisal are shown in **Figure 2-1 (Drawing reference C01494-EGL3-LOC-012-B).**

An initial comparative Red Amber Green assessment was conducted based on the constructability of the landfall (due to technical and environmental constraints). The assessment excluded eight of the long list of landfalls from further consideration, identifying a short-list of four landfalls, namely Sandford Bay, Cruden Bay and two landfalls at Scotstown Beach.

Of the four short-listed landfall options, Sandford Bay emerged as the preferred option. The marine approach to the landfall avoids direct interaction with the Buchan Ness to Collieston Coast Special Protection Area (SPA). Further offshore it is feasible that the marine route can avoid the Southern Trench Marine Protected Area (MPA). The landfall has been consented by the Applicant for the EGL 2 project. Other constraints identified can be managed through best practice and industry standard measures.

The marine approaches to Cruden Bay and Scotstown Beach, whilst technically feasible, could not avoid interaction with protected sites, namely the Buchan Ness to Collieston Coast SPA, Ythan Estuary, Sands of Forvie and Meikle Loch SPA and the Southern Trench MPA. Several other major developments are known to be targeting the coastline north of Peterhead and analysis of scoping boundaries indicated that the installation of EGL 3 through the Southern Trench MPA to Scotstown Beach would likely result in infrastructure crossings with one or more of these developments in the future, with resultant permanent loss of habitat in the MPA due to cumulative effects.

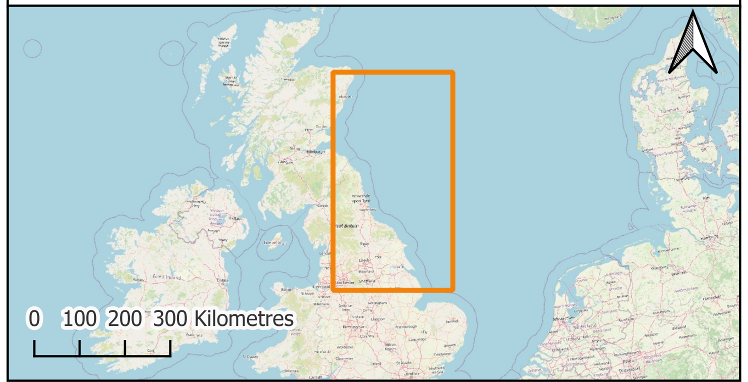



collaborative environmental advisers

# Marine Route Alignments Phase I

## C01494-EGL3-LOC-012-B




Scottish Adjacent Waters

| EGL3 A Routes | EGL3 B Routes |
|---|---|
| EGL3 Offshore Route A | EGL3 Offshore Route B |
| EGL3 ENG Route Option 1 | EGL3 SCOT Route B.1 |
| EGL3 ENG Route Option 2 | EGL3 SCOT Route B.3 |
| EGL3 SCOT Route A.1 | EGL3 SCOT Route B.4 |
| EGL3 SCOT Route A.2 | EGL3 SCOT Route B.5 |
| EGL3 SCOT Route A.3 | EGL3 SCOT Route B.6 |
| EGL3 SCOT Route A.4 | EGL3 SCOT Route B.7 |
| EGL3 ENG Route A.1 | EGL3 ENG Route B.1 |
| EGL3 ENG Route A.2 | EGL3 ENG Route B.2 |
| EGL3 ENG Route A.3 | EGL3 ENG Route B.3 |
| EGL3 ENG Route A.4 | EGL3 ENG Route B.4 |
| | EGL3 SCOT Route B.2 |

Note: All landfall segments are connected to the relevant Offshore Route segment. Due to several segments taking a common route at points not all coloured lines may be visible if several are overlain.

| | |
|---|---|
| **Date** | 08/08/2023 |
| **Coordinate System** | WGS 84 / UTM zone 30N |
| **Projection** | Universal Transverse Mercator (UTM) |
| **Unit** | meters |
| **Scale at A3** | 1:1,800,000 |
| **Created** | J Cunningham |
| **Reviewed** | S Pearce |
| **Authorised** | A Farley |




Document Path: X:\GIS\GIS_PROJECTS\C01494_EAGL3&4\Project\QGS\EGL3\01_LOC\C01494_EGL3_LOC_012_NO_LABELS.qgz
Export Date: 08/08/2023

### 2.3.4. Alternative Offshore Cable Routes

Following the identification of potential landfall sites, it was possible to start identifying potential marine cable route options. The aim was to create the shortest marine cable route possible which will optimise the route to ensure the cable can be buried along its extent, minimise the length of cable needed, reduce the manufacturing and installation costs, and minimise the environmental footprint of the Project. It was also designed to:

- Avoid environmentally sensitive areas, where possible.
- Avoid areas which would represent restrictions to vessel movement e.g., anchorages, restricted navigation channels.
- Avoid areas of archaeological importance and wrecks.
- Avoid existing offshore infrastructure e.g., offshore wind farms, oil and gas infrastructure, marine aggregate extraction areas, aquaculture sites.
- Minimise the crossing of in-service cables and pipelines. Where it is not possible to avoid a crossing altogether, then to seek to optimise the crossing angle and to ensure that navigational safety or water depth is not adversely affected.
- Avoid hazardous seabed e.g., mobile sediments or bedrock outcrops and sub crops.
- Minimise any impact on third party considerations such as seasonal fishing activities or local tourism.

To ensure an end-to-end solution for the Project, marine route alignments were developed in three distinct areas: England landfalls, an offshore section, and Scotland landfalls. The marine route options started at the English landfalls and merged to a common point approximately 100 km offshore. From the first common point in English waters, the offshore routes extended to another common point in Scottish waters before splitting into further options leading to the landfalls in Scotland. This led to two offshore marine route alignments being developed (Offshore Route A and Offshore Route B), and six marine route alignments to English landfalls and seven to Scottish landfalls from each offshore route.

Each marine route alignment was assessed based on its own merits, technically, socio economically and environmentally, taking into consideration any information available from other major developments in the region. They were also assessed in combination with the merits of the associated landfall and co-joining marine cable route alignments, to prove that the end-to-end solution met the Project objectives.

An iterative, phased process was used to assess these marine route alignments which consisted of workshops (including input from technical and environmental disciplines from both the marine and terrestrial teams), key marine statutory stakeholders and industries consultation followed by either a second set of workshops or refinement of marine route alignments with further targeted stakeholder engagement and follow-up decision-making workshop. This process resulted in two phases of marine route alignment before the emerging preferred marine cable route option was selected, which is assessed in this Marine Environmental Appraisal (MEAp).

Further route refinements were made in Scotland ensuring that the red line boundary (RLB) minimised any overlap with designated sites. Minor amendments were made to remove any overlap with the Southern Trench MPA. There remains an unavoidable, minimal overlap with the Buchan Ness to Collieston Coast SPA.

### 2.3.5. Alternative Construction Techniques

There are a variety of alternative construction techniques for power cables. The decision as to which combination of techniques to choose influences how the Proposed Development will affect the physical, biological and socio economic environment. Typically, the selection of alternatives will depend on the individual constraints and environmental conditions at specific points along the cable route, meaning that different techniques may be appropriate at different locations. For example, surface cable lay with external cable protection may be necessary where ground conditions (e.g., outcropping bedrock) will not allow burial in the seabed, however, burial in the seabed may be the most feasible solution for the remainder of the cable route.

Site-specific surveys have been carried out to inform engineering decisions and the selection of installation solutions. The full design parameters considered in the Marine Environmental Assessment (MEA) process are presented in **Chapter 3: Project Description**, which further outlines the alternative techniques being considered within this MEAp.

## References

BEIS (2020a). Energy White Paper, Powering our Net Zero Future. Available at: https://assets.publishing.service.gov.uk/media/5fdc61e2d3bf7f3a3bdc8cbf/201216_BEIS_EWP_Command_Paper_Accessible.pdf [Accessed August 2025]

BEIS (2020b). The UK's Integrated National Energy and Climate Plan. Available at: https://assets.publishing.service.gov.uk/media/60bdd2d2e90e0743ae8c284e/uk-integrated-national-energy-climate-plan-necp-31-january-2020.pdf

DESNZ (2022). British Energy Security Strategy. Available at : https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy [Accessed August 2025]

DESNZ (2024). Overarching National Policy Statement for Energy (EN-1). Available at: https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1/overarching-national-policy-statement-for-energy-en-1https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1/overarching-national-policy-statement-for-energy-en-1 [Accessed August 2025]

NESO (2022a). Network Options Assessment 2021/22 Refresh. Available at: https://www.neso.energy/document/262981/download [Accessed August 2025]

NESO (2022b). Pathway to 2030 Holistic Network Design summary report. Available at: https://www.neso.energy/document/262676/download [Accessed August 2025]

NGET (2024). Marine Route Options Appraisal Non-Technical Summary. Available at: https://www.nationalgrid.com/document/151596/download [Accessed August 2025]

NGET (2025). Eastern Green Link 3 (EGL 3) and Eastern Green Link 4 (EGL 4) Preliminary environmental information report (PEIR). Available at: https://www.nationalgrid.com/the-great-grid-upgrade/eastern-green-link-3-and-4/document-library#4257225834-179637554 [Accessed August 2025]

Scottish Government (2023). Draft Energy Strategy and Just Transition Plan. Available at: https://www.gov.scot/publications/draft-energy-strategy-transition-plan/ [Accessed August 2025]

SSEN-T (2024). Netherton Hub Environmental Impact Assessment Report. Volume 1| Non-Technical Summary (NTS). Available at: https://www.ssen-transmission.co.uk/globalassets/projects/netherton-hub-environmental-impact-assessment-documents/volume-1-non-technical-summary/volume-1-non-technical-summary-nts.pdf [Accessed August 2025]