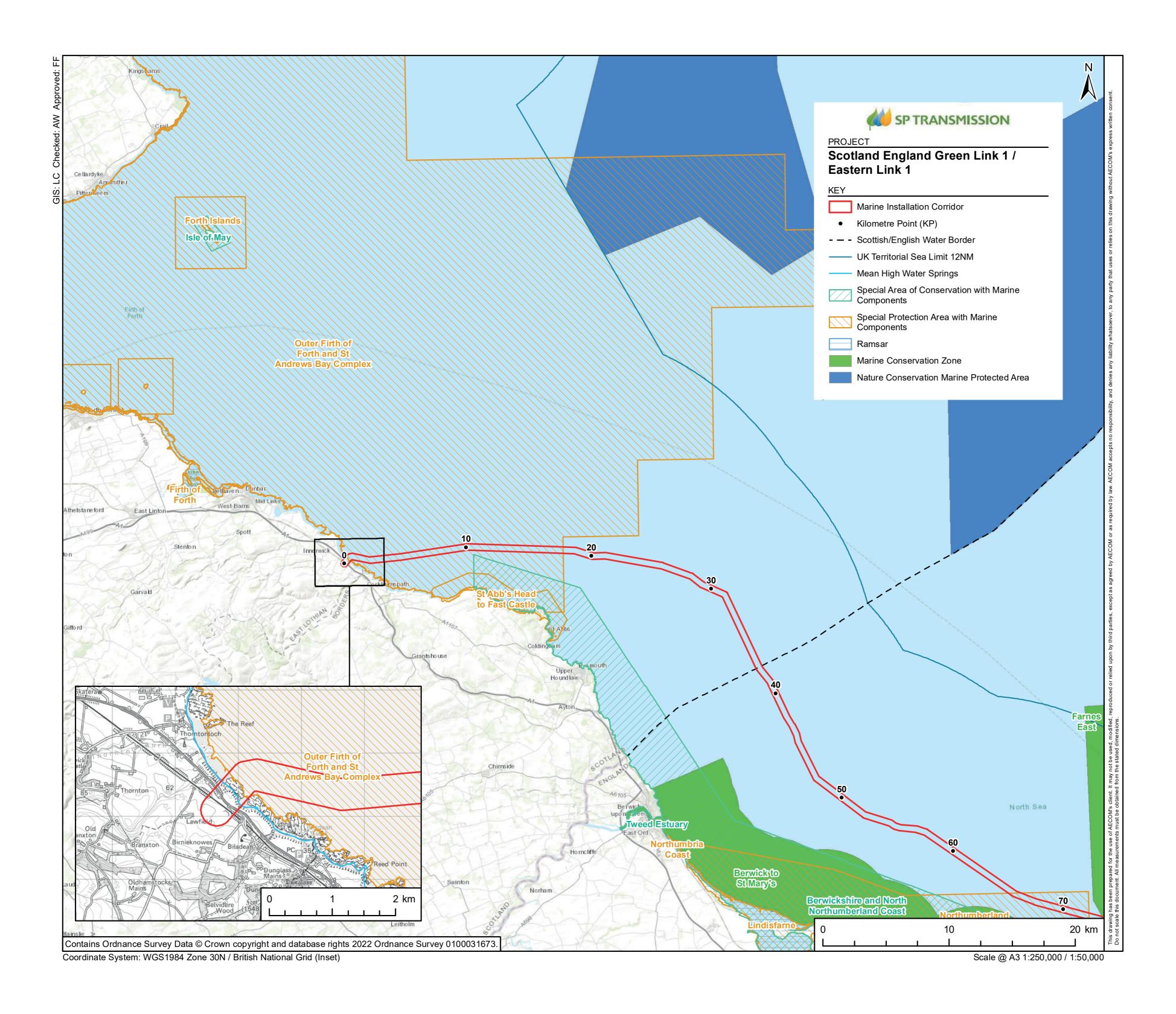
## Marine Cable Route & Installation

In addition to the onshore converter station, the marine cable route and installation is a vital part of the overall Eastern Link project and will allow for the transfer of electricity between each onshore site. The marine cables will be able to provide 2 Giga Watts (GW) of transmission capacity for transmission of electricity between Scotland and England.

The cable route comprises over 176 km of subsea HVDC cable systems, installed within a 500m installation corridor extending from the Scottish landfall site on Thorntonloch Beach, crossing through the Scottish and English territorial seas to the English landfall at Seaham.

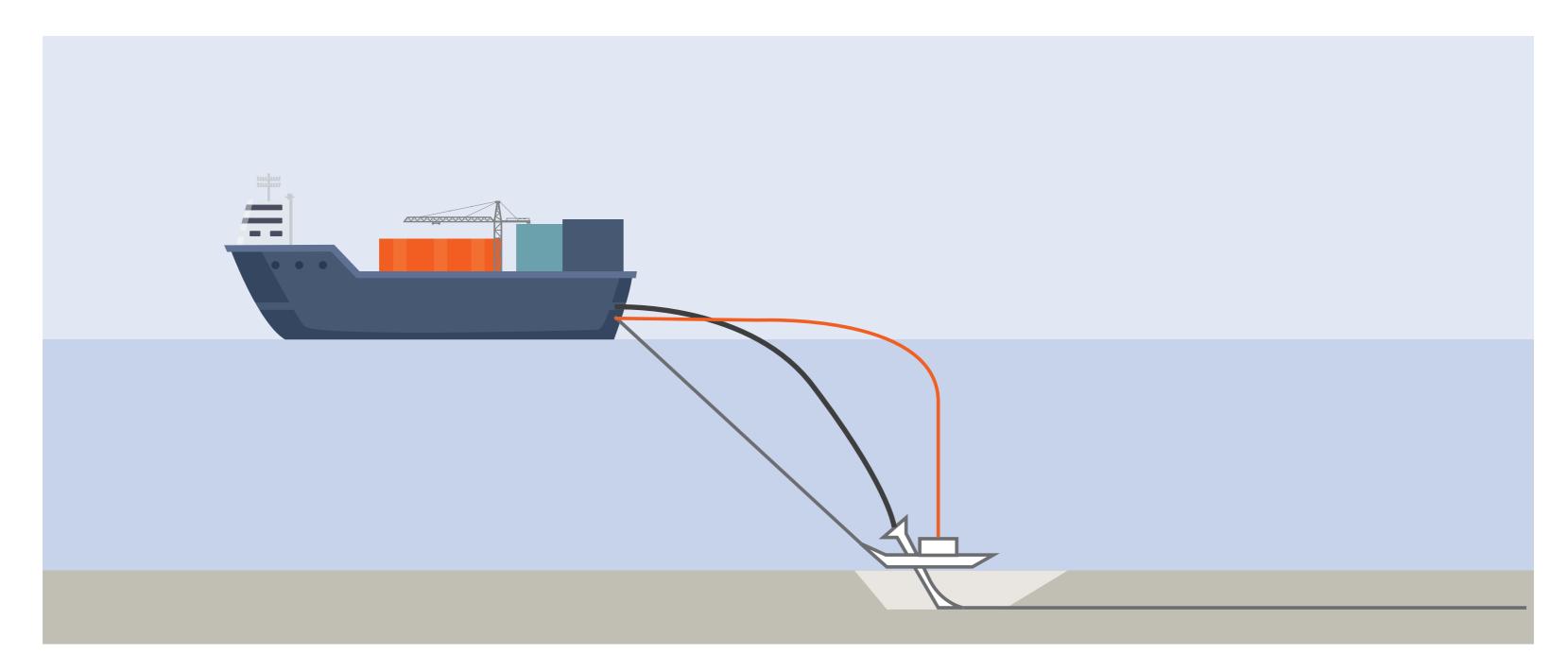
Approximately 37.5km of the cable corridor falls within Scottish waters, with the remainder within English waters. The entirety of the project is located within the 12 Nautical Mile (NM) territorial waters.





### Cable Route and Landfalls

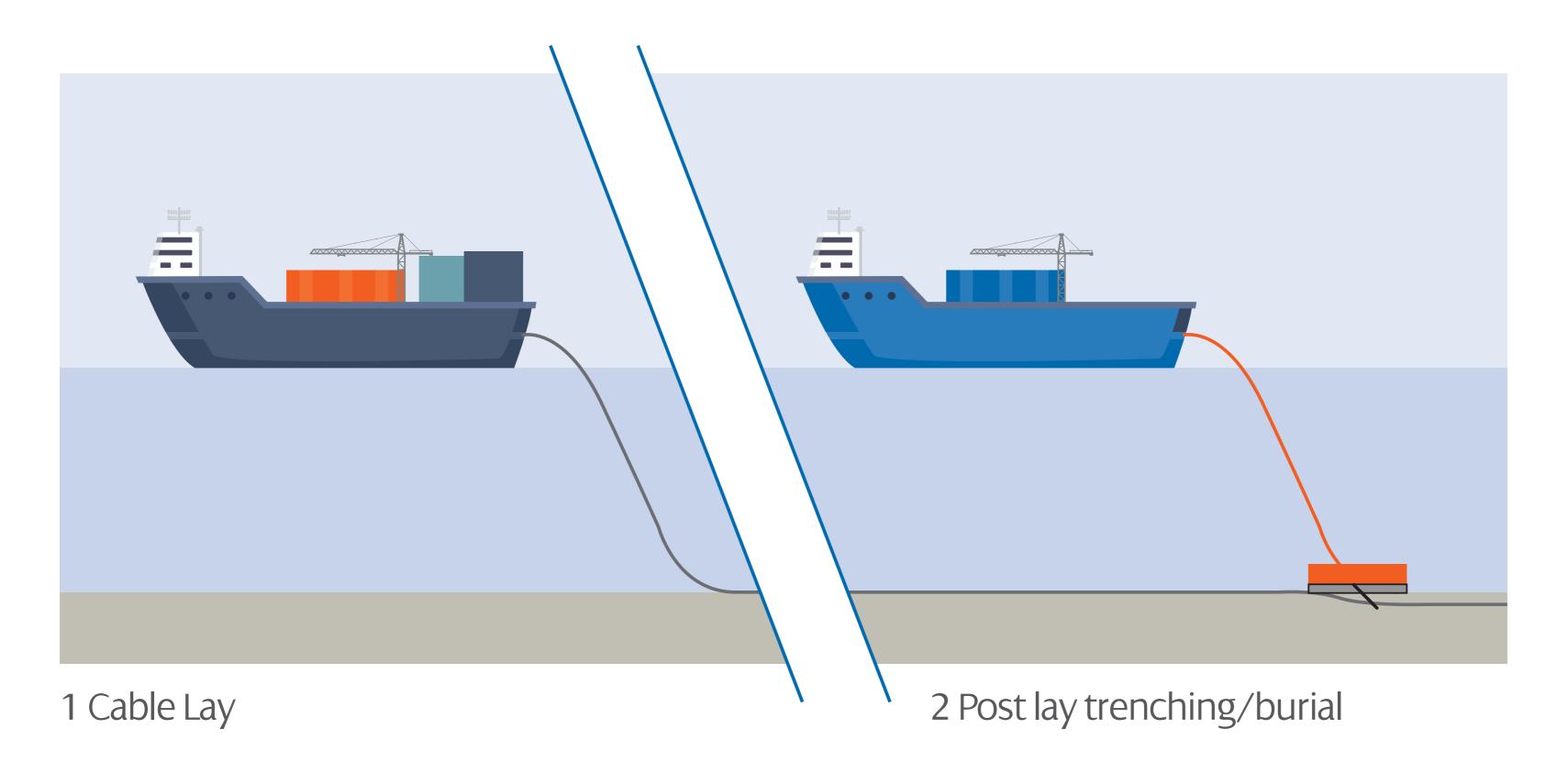
An iterative routeing process over several years has identified the route and cable landfalls. There will be two cables, plus a fibre optic cable, which will be installed in up to two trenches, each to a target burial depth of 1.5 m and minimum burial depth of 0.8m.



Simultaneous lay and burial

A 500m exclusion zone will be established around the cable lay vessel during installation to ensure safety for both the vessel and others operating in the area. In areas of high-density vessel traffic, a guard vessel will accompany the cable lay vessel to maintain the exclusion zone and provide additional support. Where it is not possible to achieve the minimum cable burial depth, material will be placed over the cable for protection.

To limit impact on the intertidal zone at landfalls, the cables will be installed using Horizontal Directional Drilling (HDD), via drilled conduits (tunnels) drilled under the seabed and intertidal zone to the landfall. This approach limits impacts in the intertidal zone to both environmental receptors protected species and habitats (i.e. birds, benthic communities' fish etc.) and socio-economic receptors such as recreational users (i.e. bathers, surfers etc.).





# Environment & Installation

The marine cables will encounter a number of marine receptors and assets, including five inservice cables and ecological designations: Farnes East Marine Conservation Zone (MCZ), Outer Firth of Forth and St Andrews Bay Complex Special Protected Area (SPA), and Northumberland Marine SPA, commercial fisheries, existing extraction grounds, harbour limits, and known wrecks.

Installation activities may have a number of interactions with the marine environment, including direct disturbance, underwater noise, suspended sediment etc. and these will be managed to remove, limit or mitigate potential impacts. This will be considered and assessed within an Environmental Appraisal report, which is currently being prepared.

A suite of surveys has been undertaken to inform route refinement and the environmental assessments presented in the Environmental Appraisal Report (EAR).

#### These include:

- Geophysical and geotechnical surveys to look at subsurface bathymetry, geology, seabed quality, and to support the identification of archaeological features and other marine cables.
- Environmental surveys, including grab samplings and camera transects, to look at quantity and quality of fauna and flora species.

#### **Fisheries**

The principal fishing activities undertaken in areas relevant to the Scottish section of the marine installation corridor include:

- Creeling
- Demersal trawling; and
- Scallop dredging.

**Creeling:** Vessels engaged in this fishery are generally under 10 m in length and target lobster and crabs using creels. Their activity takes place predominantly within the 6 NM limit although some vessels target grounds further offshore. Some level of creeling activity is anticipated to occur along much of the Scottish section of the marine cable installation corridor.

Demersal trawling: Nephrops is the main species targeted by demersal trawlers active in areas of relevance to the Scottish section of the marine cable installation corridor, although some vessels also target squid on a seasonal basis. These vessels typically range in length between 10 and 18 m. Their activity is for the most part undertaken around the Firth of Forth and in areas off Dunbar, although some vessels also target the Farn Deeps grounds in English waters.

**Scallop dredging:** Scallop dredging by local vessels takes place at relatively low levels within the Scottish section of the marine cable installation corridor where it is predominantly limited to nearshore areas.

### **Electromagnetic Fields**

The potential for electro-magnetic fields (EMF) and heat generated by the marine cables to affect marine species, including commercial finfish and shellfish species is being assessed within the environmental appraisal, which will be provided alongside a marine licence application to Marine Scotland.

The cables installed will be armoured, trenched or buried to a minimum depth of 0.8 m, and where reasonably practicable, a target depth of 1.4m. Burial of the cables reduces the potential for EMF and thermal impacts on marine species.



# How to respond

### How to respond

We would welcome your feedback about our proposals, and you can give us your feedback by filling in a form on our consultation page:

https://www.spenergynetworks.co.uk/pages/eastern\_link\_introduction.aspx The closing date for you to submit your feedback form is Monday 28th February 2022.

You will also be able to book a 1-1 meeting with the team and ask any questions you may have. You can book your 1-1 online at:

https://www.spenergynetworks.co.uk/pages/eastern\_link\_introduction.aspx

You can also view physical consultation materials at Innerwick Library, EH42 1SE between the 31st January and 28th February.

We will also be handing out information at the **Asda supermarket in Dunbar**, **EH42 1LE**, **on the 15th and 23rd of February between 10am and 2pm**.

If you would like a hard copy version of these boards, you can contact us using the details below. Our materials can also be made available in large print format.

You can contact us at: info@tornesseasternlink.com



