

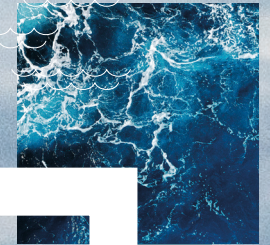


Scottish & Southern  
Electricity Networks

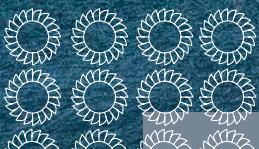
TRANSMISSION

# Constructing the Spittal to Peterhead Subsea Cable Link

Information booklet  
May 2026



[ssen-transmission.co.uk/spittal-peterhead-subsea-cable-link/](https://ssen-transmission.co.uk/spittal-peterhead-subsea-cable-link/)



# Introduction

Construction has begun on the underground and marine cables for SSEN Transmission’s Spittal to Peterhead Subsea Cable Link project.

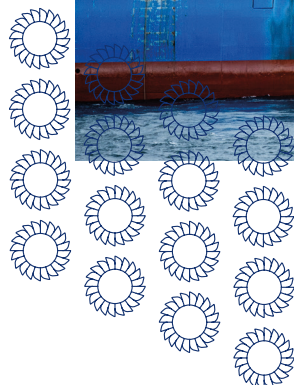
We have produced this resource to provide information for those living near the cable route about the key elements of this critical infrastructure project, and what local communities can expect during construction.

Visit our webpages to keep up with progress on the subsea cable and the converter stations in Banniskirk Hub and Netherton Hub:

**Spittal to Peterhead Subsea Cable:**  
[ssen-transmission.co.uk/spittal-peterhead](https://ssen-transmission.co.uk/spittal-peterhead)

**Banniskirk Hub:**  
[ssen-transmission.co.uk/banniskirk](https://ssen-transmission.co.uk/banniskirk)

**Netherton Hub:**  
[ssen-transmission.co.uk/netherton-hub](https://ssen-transmission.co.uk/netherton-hub)

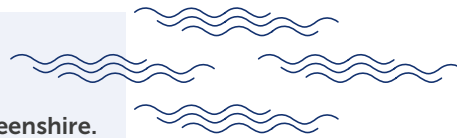


# About the Spittal to Peterhead Subsea Cable Link

The Spittal to Peterhead Subsea Cable Link is a long distance, high-speed subsea electricity transmission project that will transmit renewable energy between Banniskirk Hub in Caithness and Netherton Hub near Peterhead in Aberdeenshire.

## The project includes:

- 166 km subsea cable
- 22km underground cable in Caithness; 17km in Aberdeenshire.
- Two HVDC converter stations, one at each Hub.



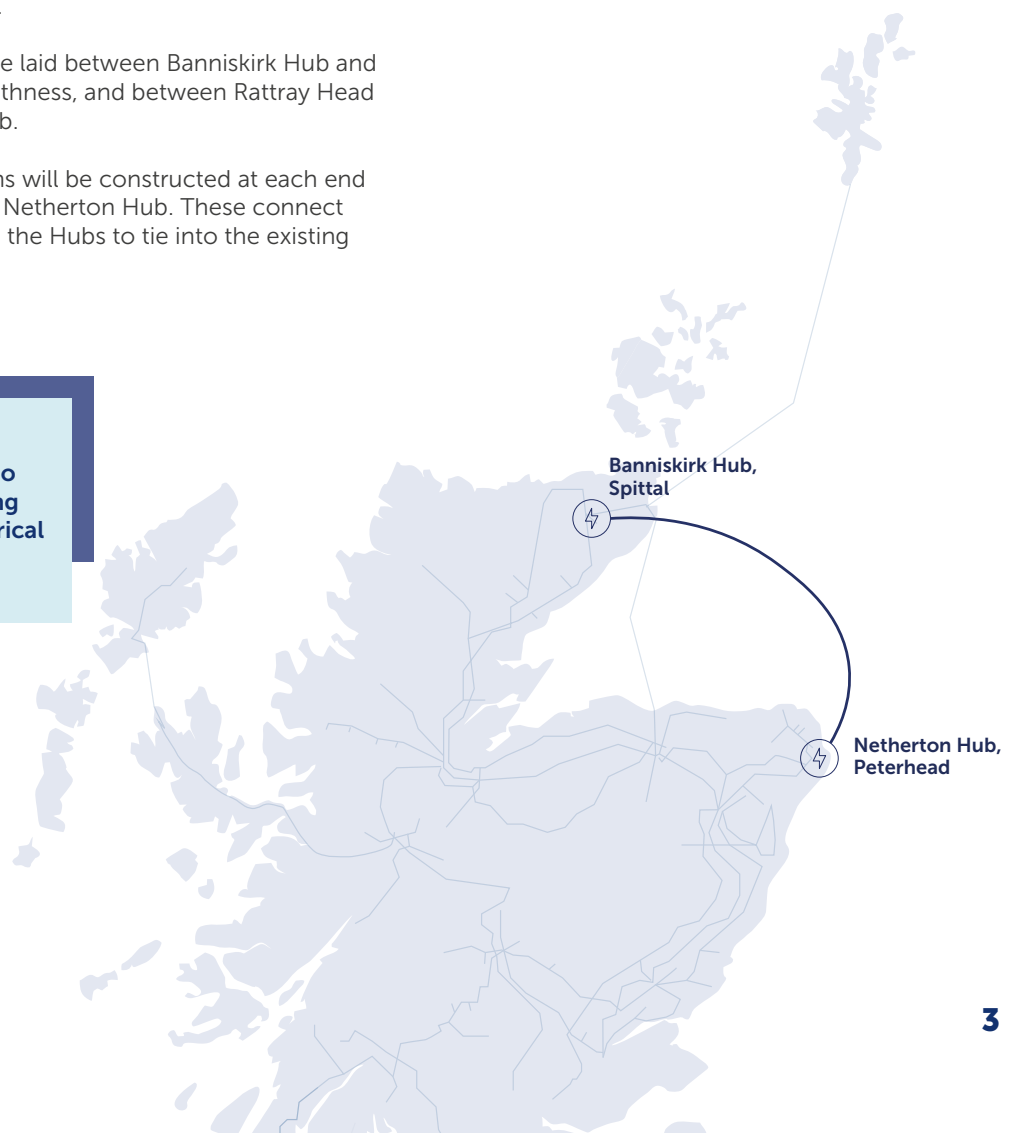
The 200km, 2-gigawatt high voltage direct current (HVDC) bi-pole cable will enter the sea at Sinclair's Bay, Caithness and make landfall at Rattray Head in Aberdeenshire.

Underground HVDC cables will be laid between Banniskirk Hub and the landfall at Sinclair's Bay in Caithness, and between Rattray Head near St Fergus and Netherton Hub.

Two new HVDC converter stations will be constructed at each end of the link, in Banniskirk Hub and Netherton Hub. These connect into 400kV AC substations within the Hubs to tie into the existing electricity grid.



Subsea HVDC cables allow large amounts of electricity to be moved efficiently over long distances with minimal electrical losses — essential for energy security and affordability.



# Constructing the Spittal to Peterhead Subsea Cable Link

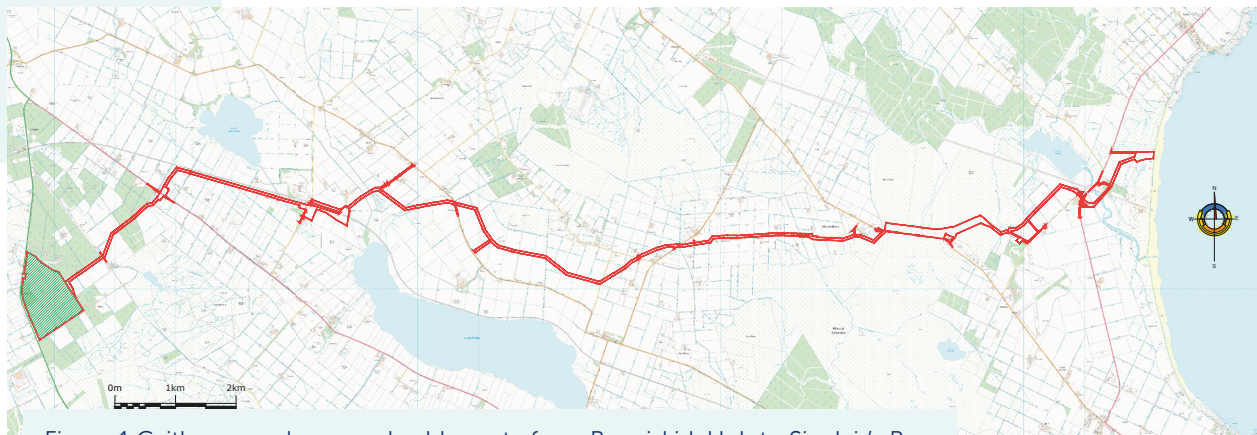


Figure 1 Caithness underground cable route from Banniskirk Hub to Sinclair's Bay

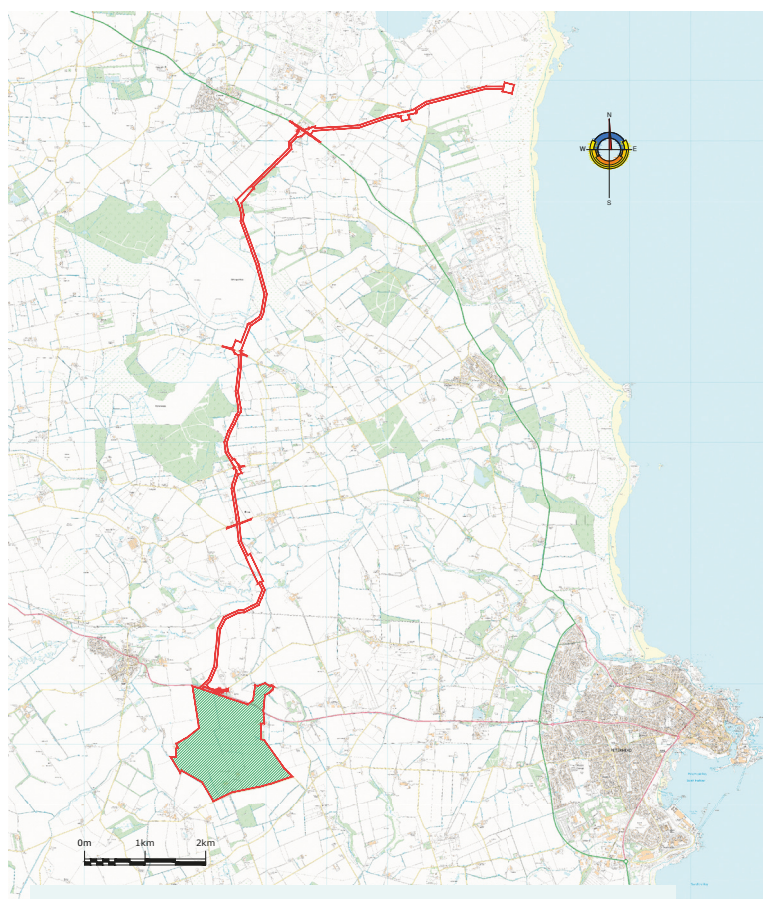
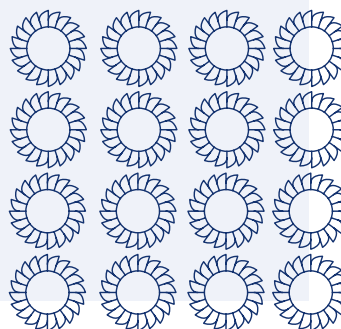


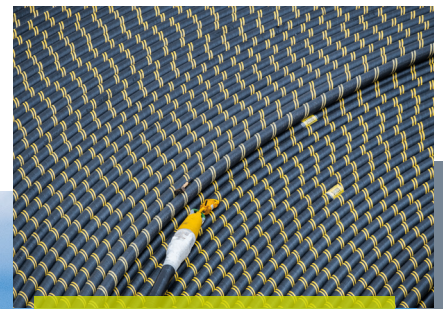
Figure 2 Aberdeenshire underground cable route from Rattray Head to Netherton Hub

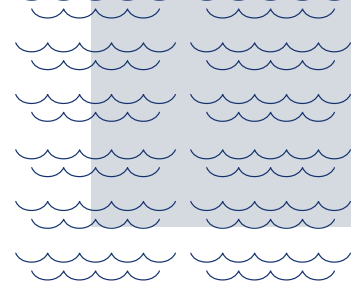
**Visit our  
webpage for  
larger maps**



# Constructing the Spittal to Peterhead Subsea Cable Link

Our principal contractor for the cable - NKT - will oversee cable manufacturing and installation. They have appointed local contractors John Gunn & Sons (Caithness) and Nicol of Skene (Aberdeenshire) to deliver the civil works. Working together they will deliver the project on behalf of SSEN Transmission.

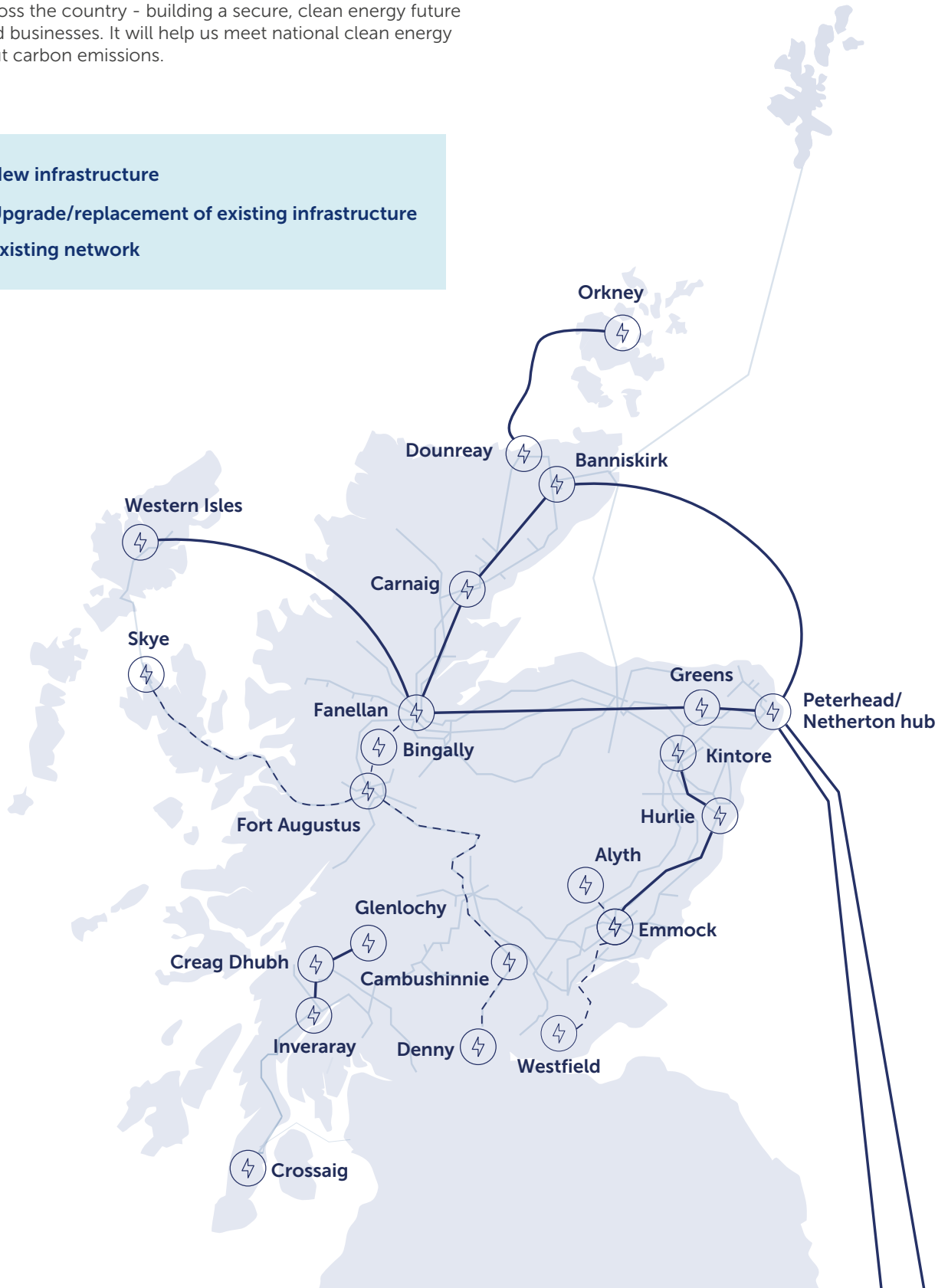




# Why this project is needed

This project is part of SSEN Transmission's £29 billion investment to upgrade the north of Scotland's electricity transmission grid. It is one of several major upgrades that are needed to connect homegrown, renewable electricity to the network and transport it to where it will be used right across the country - building a secure, clean energy future for homes and businesses. It will help us meet national clean energy targets and cut carbon emissions.

- New infrastructure
- - -** Upgrade/replacement of existing infrastructure
- Existing network



# Project development, planning and consents

We undertook extensive consultation to secure all consents required to proceed to the construction stage. Land cable route development began with the identification of potential corridors over 1km wide, which were later refined to around 40m based on ground investigations and stakeholder feedback.

Engagement included consultation events and meetings over a number of years with key stakeholders, such as:

- Landowners and tenants
- Community councils and residents
- Marine users including fisheries organisations
- Statutory consultees and environmental bodies.

Following a lengthy assessment process, landfall sites at Sinclair's Bay and Rattray Head were selected for technical, environmental, and safety reasons.

Extensive studies and consultation also informed our marine route. Our Marine Environmental Appraisal (MEA) details the assessments that we carried out, including our subsea cable routing studies and assessments of our potential impacts on the environment, cultural heritage, navigation, and other maritime activities.

Planning and marine licensing milestones included:

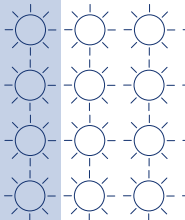
- Marine Licence granted by the Scottish Government Marine Directorate in November 2025.
- Netherton Hub planning permission in principle received in August 2025.
- Banniskirk Hub planning consent received in November 2025.



Sinclair's Bay



Rattray Head



# What to expect during construction

## How we install the marine cable

The subsea section of the cable route will be laid using a specialist cable-laying vessel. The cable will be loaded onboard in large reels and then carefully laid using one of two methods to ensure it is fully protected:

1. Burial – The cable is buried under the seabed using a trenching tool which follows the cable along the seabed using water jets or a plough to simultaneously bury it once it's been laid; or
2. Surface protection – The cable is protected by placing rocks or other materials such as specially designed mattresses on top of the cable.

**Pre-installation surveys:** Prior to laying the marine cable, nearshore and offshore seabed surveys and route clearance will take place to build an accurate picture of the seabed and any sensitive areas and address obstacles such as boulders and potential unexploded ordinance (UXO). Gathering this information will help us complete the detailed route engineering and refine the final alignment.

**Post-installation surveys:** Once the marine cable is laid, we will carry out detailed surveys to confirm the location of the cable and assess the cable protection, as well as monitor seabed recovery in areas of sensitive habitats.

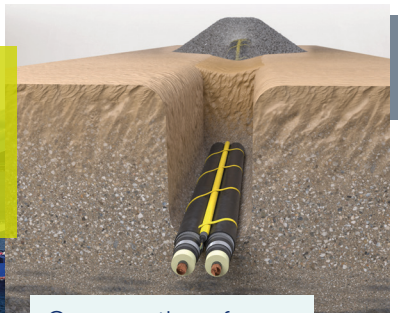
Most of the marine cable laying activities will take place far offshore, with only the landfall and nearshore activities likely to be visible by local communities.



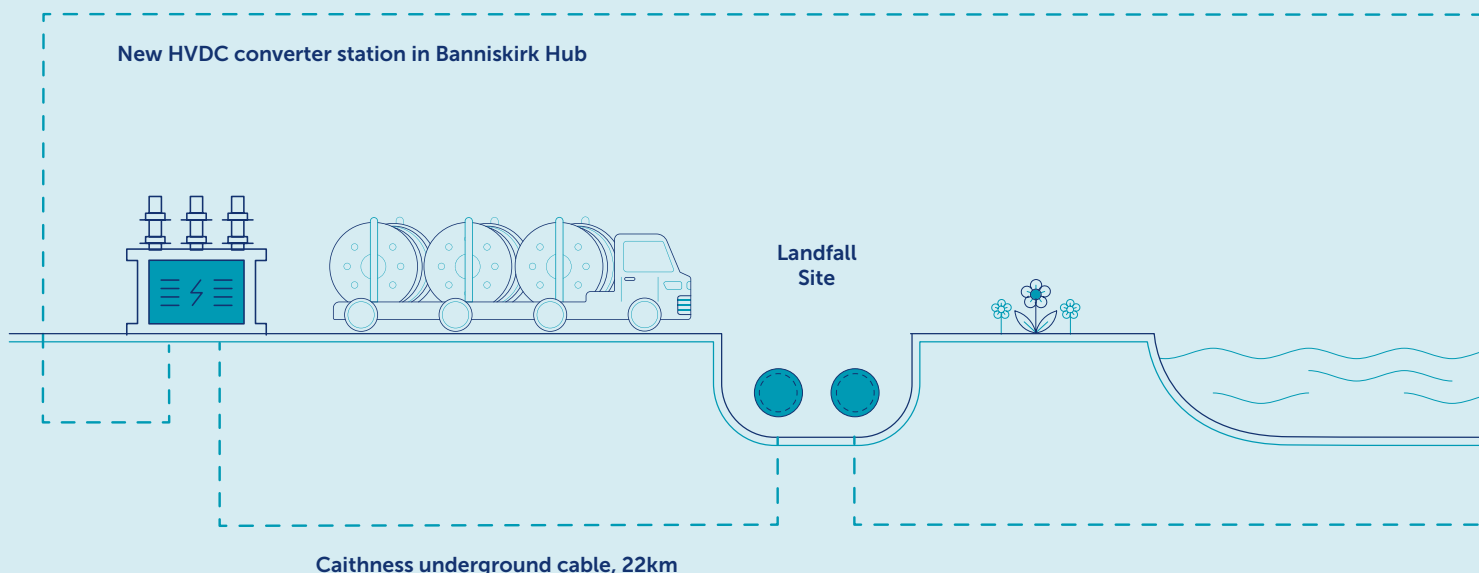
Cable Lay Vessel - NKT Eleonora



Cable Lay Vessel – NKT Victoria



Cross-section of a seabed trenching cable



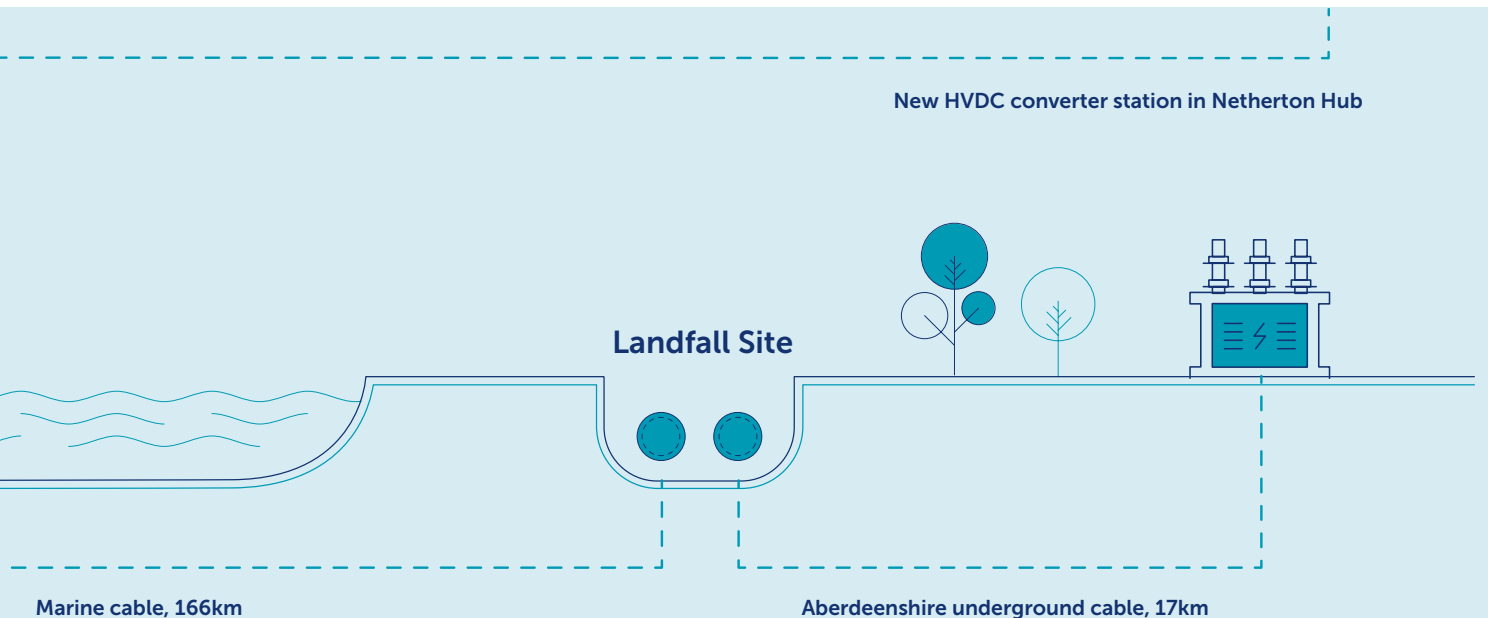
## Connecting our marine and underground cables

At the Sinclair's Bay and Rattray Head landfalls, the marine cable comes ashore using horizontal directional drilling (HDD), which is a method used to install cables without disturbing the surface. A bore hole is drilled underneath the beach from an onshore drilling platform sited behind the dunes. Ducts are installed in the boreholes which the marine cables are pulled through, protecting the cable – and the beach – from damage.

Once the marine cable is pulled through the ducts from vessel to shore, it can be connected to the onshore cable in a transition joint bay. This is a large open trench with a concrete foundation. This will be backfilled and reinstated once the cables have been jointed and the system has been tested.



Example of transition joint bay



## How we lay our onshore cable

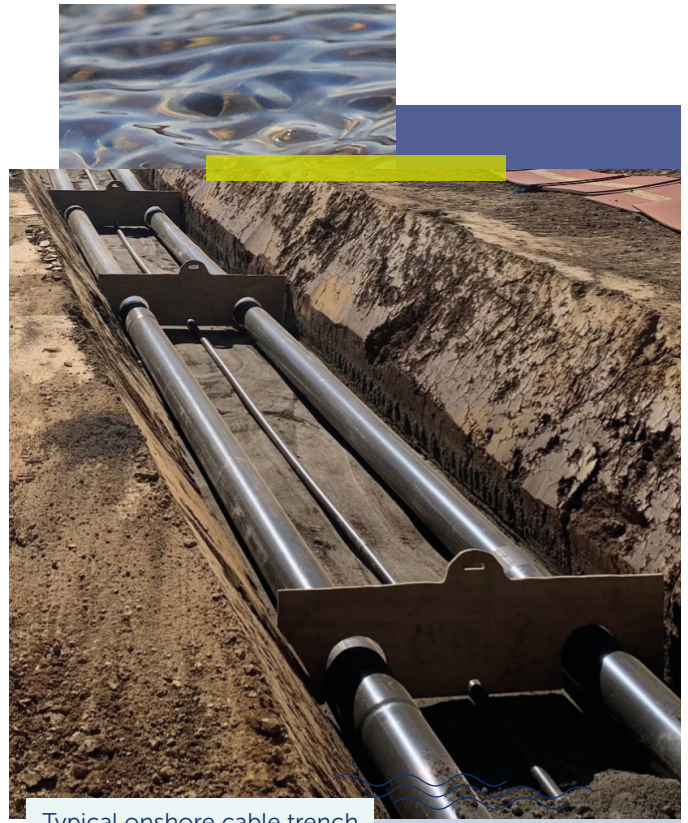
Construction of the underground land cable is done using two cable-laying methods:

### Cable trenching

Working in sections, a construction corridor of approx. 40m in width is fenced off, and an approx. 2m-wide by 1.5m-deep trench is excavated by removing and storing the topsoil and subsoil. Ducts are installed in the trench and the cables are pulled through in sections. The trench is then backfilled with either the subsoil or cement bound sand, and the area reinstated.

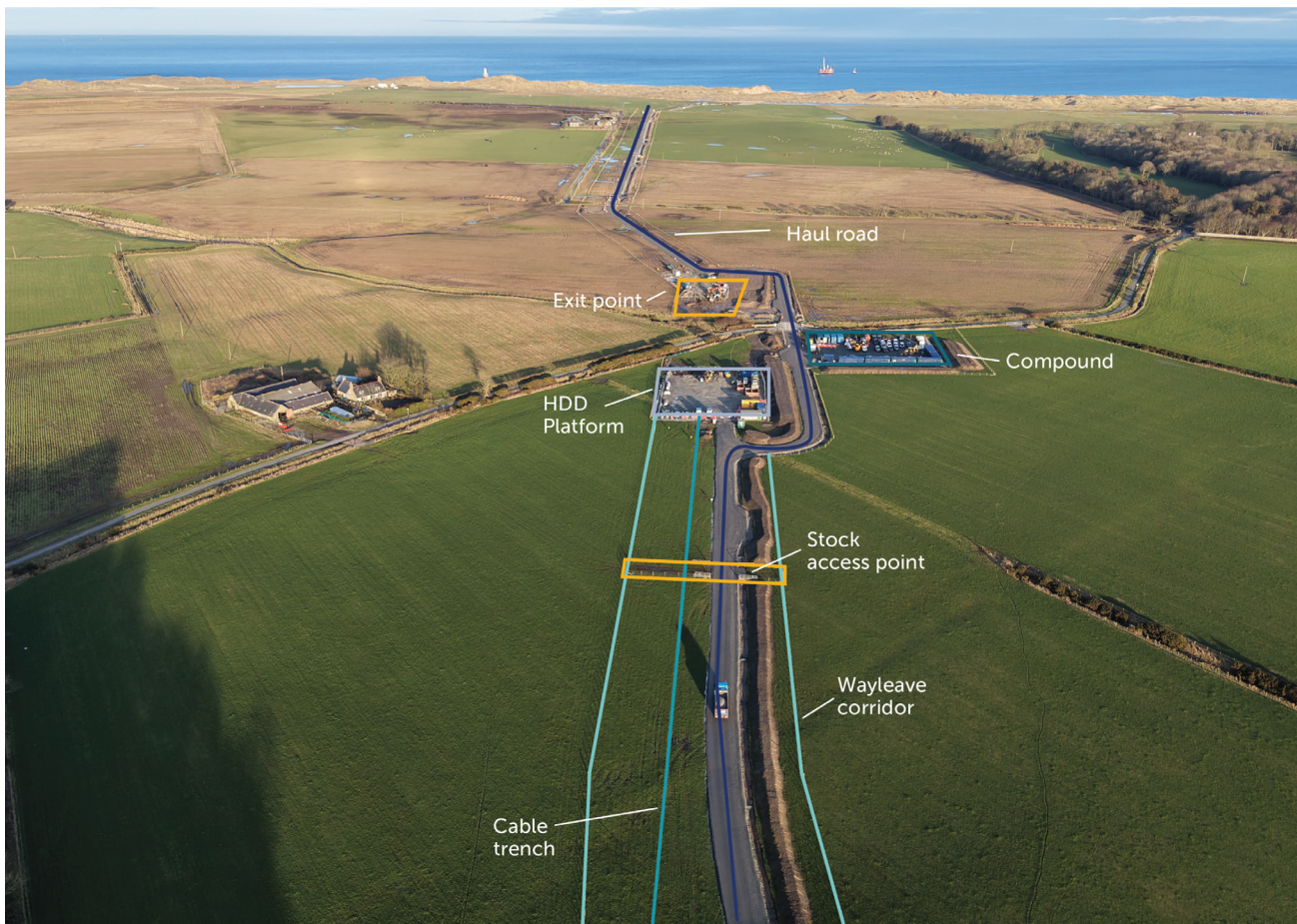
### Trenchless method

Horizontal directional drilling (HDD) is a method used to install cables without digging a trench or disturbing the surface. This can be used where we need to cross underneath existing features such as gas pipelines, trunk roads and railways, or in environmentally sensitive habitats such as rivers or peatland.



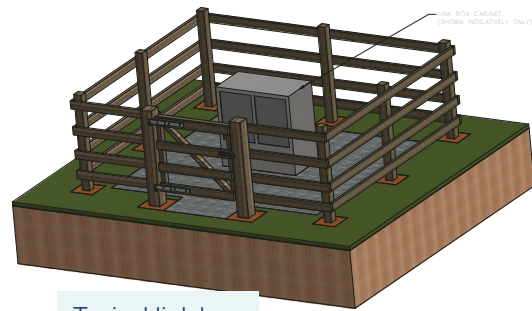
Typical onshore cable trench

## Key features of the onshore construction process



## Transition joint bays

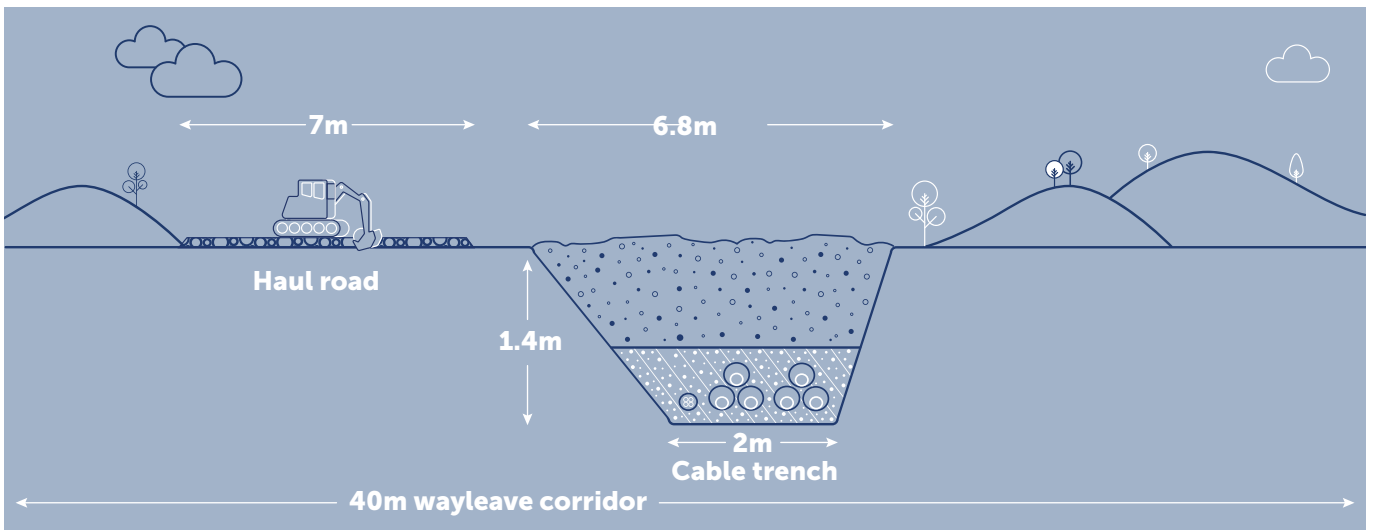
In addition to those at the landfalls, there are joint bays along the onshore cable route at each point where sections of cables connect. In some places, there will be a permanent link box, which is an above-ground monitoring unit. These will be in an area that is mutually suitable for us and the landowner and will be fenced off with stock proof fencing.



Typical link box

## Haul roads, bellmouths and access tracks

Our construction corridors need to be wide enough so that our contractors can install a temporary haul road alongside the cable trench to access the work area and transport equipment and cable reels along the alignment. We also need to construct temporary access tracks and bellmouth junctions so that our construction vehicles can reach the haul road from the public road network.



Typical construction corridor, showing haul road, trench and topsoil storage



## HDD platforms

The horizontal directional drilling (HDD) rigs are placed on stone hard standings. These areas will be fully reinstated once the HDD works are complete. In addition to the two HDD platforms located at each landfall site, we will require several smaller HDD pads across the route wherever drilling is required.

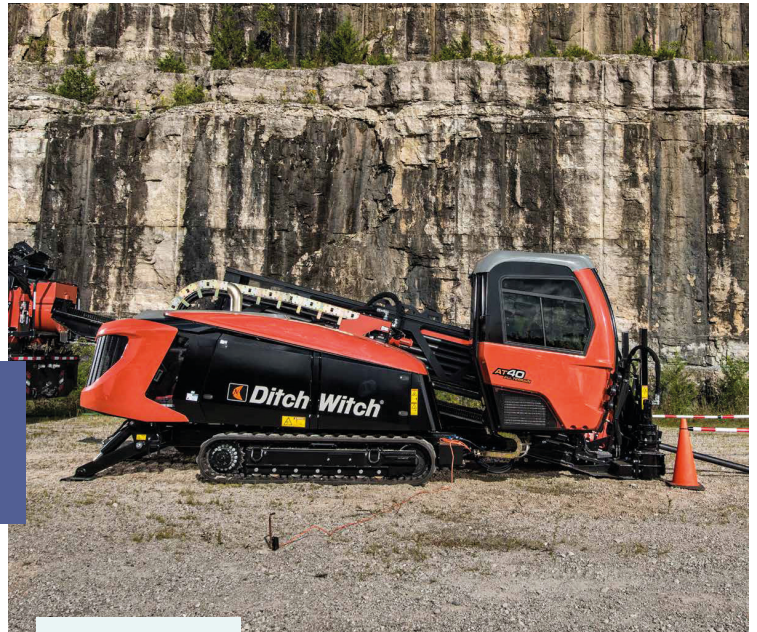


Typical HDD Compound

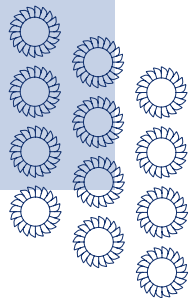
Using horizontal directional drilling, we will safely navigate underneath several roads, rivers, streams and gas pipelines.

## Construction compounds

Temporary compounds will be established in two locations in Caithness and two in Aberdeenshire. These provide welfare, storage, office space and parking for our workers.



HDD drilling rig



### Achieving Biodiversity Net Gain

Find more about our commitment to achieve a 10% biodiversity net gain target on all our projects.

[ssen-transmission.co.uk/bng](https://ssen-transmission.co.uk/bng)

# Managing potential impacts on local communities and the environment

## Traffic management

It may be necessary on occasions to put in place temporary traffic management such as stop-go signage, road or lane closures. We will ensure that any diversions are appropriately signposted and complete our works as quickly as possible to reduce impacts on the local area.

## Reinstatement

The condition of the local roads will be monitored for deterioration, and a road sweeper or wheel wash deployed if necessary. Land disturbed during construction will be carefully reinstated, including topsoil replacement and reseeded. Bellmouths and access roads may remain in place, but haul roads will be removed.

## Working hours

Construction working hours are 7am-7pm Monday to Friday, Saturdays 8am-5pm, with some Sunday working by request. Some periods of 24 hour working will be required during cable jointing works, and when conducting HDD drilling at the landfalls.

## Impacts from construction of access tracks and haul roads

Constructing the access tracks and haul roads are likely to be the most noticeable activity due to the level of truck movements and activity from heavy machinery. We will do what we can to reduce impacts where possible. Most disruption will be localised and temporary in nature, as the work front progresses along the alignment.

## Coordination and communication

We will work closely with the Netherton and Banniskirk Hub teams to coordinate our construction activities and minimise impacts where possible. We will issue regular construction updates, and therefore we encourage local residents and other interested parties to register for project updates via our webpage.

## Reducing impacts on marine environment and sea users

We will take every step to minimise impacts to the marine environment and other sea users. The documents on our webpage contain more information about environmental considerations and how we assessed potential impacts to commercial fisheries and other sea users.

## Minimising environmental impacts during construction

Ahead of the construction phase, a range of environmental surveys were carried out to assess the presence and absence of protected species and habitats - including otters, water vole, badger, birds and peatland. These key environmental sensitivities will continue to be monitored throughout the construction phase.

Construction Environmental Management Plans (CEMP) have been developed specifically for the project and have robust systems in place for identifying, avoiding and mitigating potential negative impacts during construction.

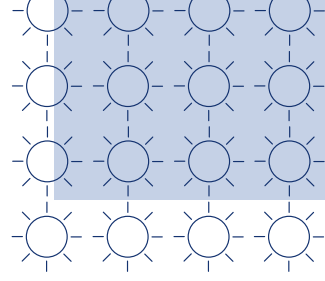
Rigorous monitoring is a central part of our approach to ensure compliance with environmental legislation, best practice measures, and the implementation of effective mitigation strategies.

We have also obtained several species licences and registrations/permits under the Environmental Authorisations (Scotland) Regulations 2018 (EASR) to facilitate the construction process. The project team maintains ongoing dialogue with key environmental stakeholders and statutory bodies, including NatureScot and SEPA, throughout the construction phase to ensure transparency and continued compliance.

Additionally, soil stripping and excavations will be undertaken with an archaeological watching brief, approved by Highland and Aberdeenshire Council Planning Archaeologists.

To minimise environmental impacts during construction, several measures are being implemented, including (but not limited to):

- Conducting thorough environmental surveys prior to the start of work, accompanied by ongoing monitoring throughout the project;
- Water quality will be closely tracked to ensure compliance with environmental standards;
- Timing certain construction activities with care - such as scheduling around bird breeding seasons or fish spawning periods;
- Selection of construction methods e.g. use of Horizontal Directional Drilling (HDD) to reduce disturbance in sensitive habitats and peatland areas; and
- Establishment and careful management of exclusion zones undisturbed during construction.

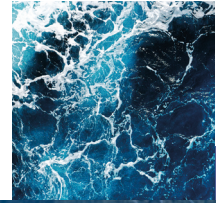


# Delivering benefits locally

As well as helping to deliver a secure, green energy future for Scotland and the UK, the project will create tangible social and economic benefits in the local area – from employment opportunities to environmental projects and enhanced community relationships.

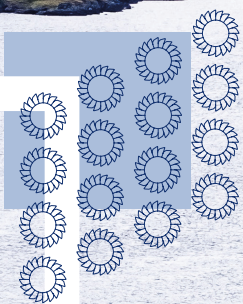
Our contractors are required to deliver against a suite of these 'social value' metrics. Examples of initiatives include supporting the local supply chain and providing local jobs, work placements and training, to volunteering and in-kind contributions for community projects.

Get in touch if you have suggestions for local initiatives that we could support.

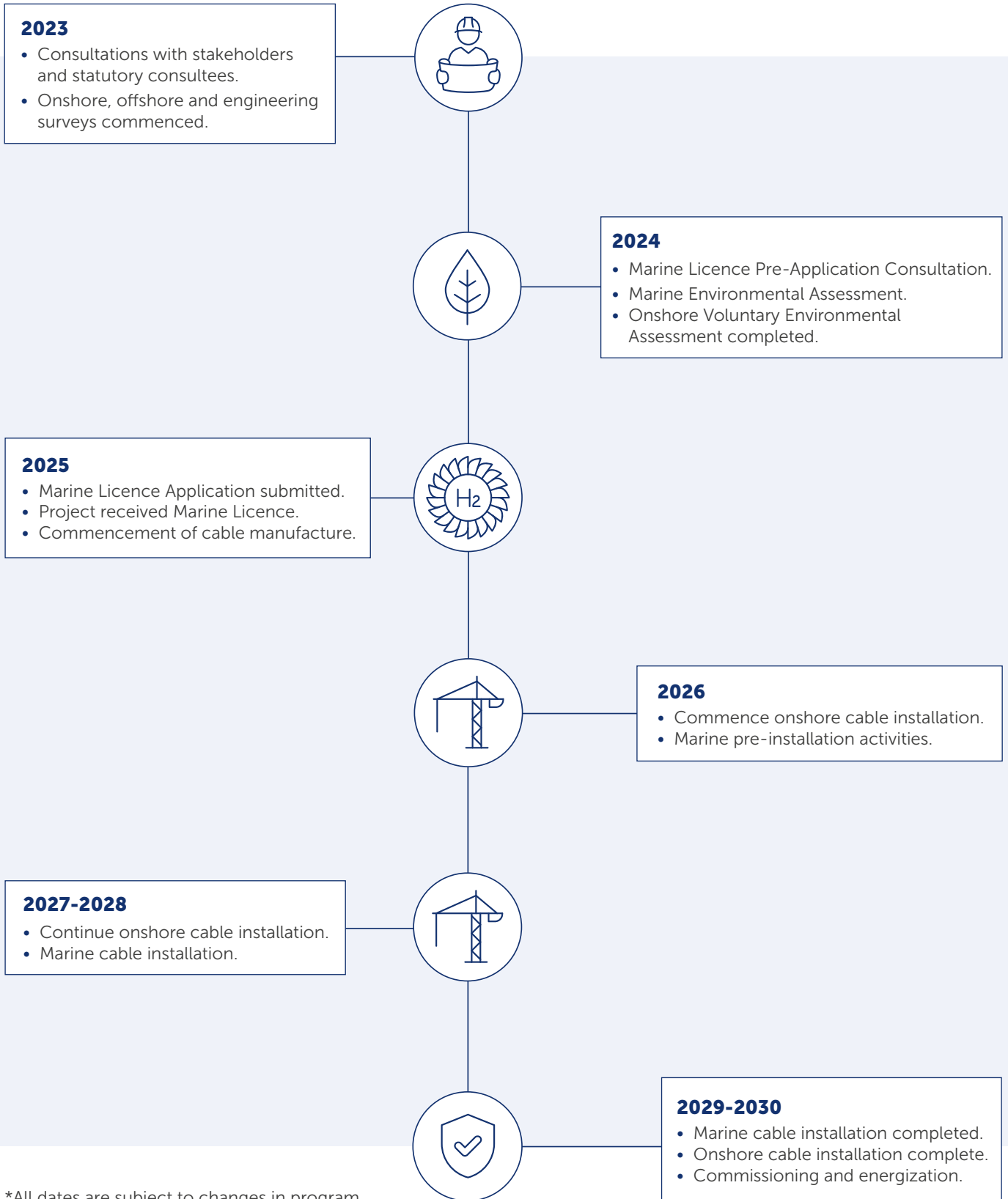


## Managing impacts on marine environment and sea users

We will take every step to minimise impacts to the marine environment and other sea users. The documents on our webpage contain more information about environmental considerations and how we assessed potential impacts to commercial fisheries and other sea users.



# Project timeline



\*All dates are subject to changes in program

# How to get in touch

We will carry out all works with least disruption possible, and we thank you for your patience as we deliver this critical national infrastructure project. If you have any questions, concerns or would like more information, please contact our Community Liaison team and register for project updates via our webpage:

## Community Liaison Team



spittaltopeterhead@sse.com



07879 288 666



### Project webpage:

Stay up to date and sign up for project updates via the project webpage:

[ssen-transmission.co.uk/spittal-peterhead](https://ssen-transmission.co.uk/spittal-peterhead)



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