Introduction to LionLink

National Grid Ventures (NGV) is developing plans to build LionLink, a new subsea electricity cable (known as an interconnector) between the UK and the Netherlands.

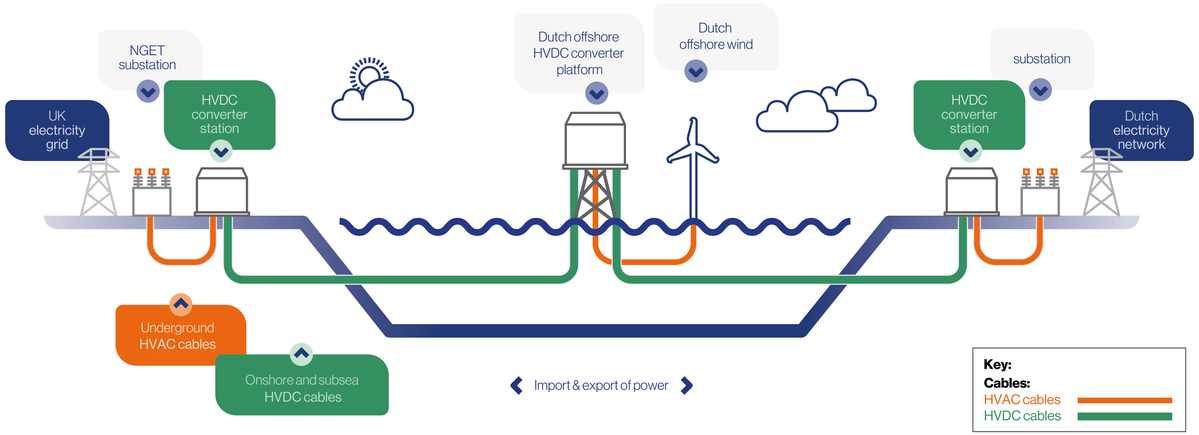
LionLink will have the capacity to deliver up to 2 gigawatts (GW) of electricity, which will be vital in supporting greater energy security and delivering more affordable energy for consumers. LionLink will bring offshore wind energy to the UK by connecting to a Dutch offshore wind farm, enabling the flow of energy between the UK and Dutch electricity systems.

It is expected to deliver a range of benefits, including:

Strengthening the UK's national energy security

Lowering energy bills

Providing clean, green, renewable energy



Helping to achieve net zero

The UK Government has committed to achieving net zero carbon emissions by 2050. To reach this target, the UK is transitioning from fossil fuels to low-carbon energy sources like offshore wind and nuclear power. As electricity demand is expected to double by 2050 due to the electrification of transport, heating, and industry, the UK is investing in strategic infrastructure to maintain a stable energy supply.

LionLink will play an important role in reducing the UK's reliance on fossil fuels and supporting the UK Government's objectives to create a secure, reliable, and affordable energy supply for UK households.

What is an interconnector?

Interconnectors are subsea electricity cables that enable the sharing of energy between countries, improving system resilience during periods of high demand.

Interconnectors help strengthen the security and reliability of different energy systems, and lower consumer bills.

NGV already has six interconnectors across the UK with a combined capacity of 7.8 GW, comprising BritNed, IFA 1, IFA 2, Viking Link, North Sea Link and Nemo Link.

LionLink is an Offshore Hybrid Asset (OHA). OHAs are seen as the next generation of interconnector, that will connect offshore wind farms to multiple countries.

In addition to facilitating the sharing of energy between countries, OHAs will also help to speed up the connection of offshore wind and maximise the use of wind generation.

About NGV

National Grid Ventures (NGV) is part of the National Grid Group but operates independently, focusing on investments in energy projects, technologies, and strategic partnerships. While it functions autonomously, NGV is regulated alongside the wider National Grid Group to ensure its activities contribute to keeping the lights on, decarbonising the economy, and building a more secure, resilient, and affordable energy system for Britain.

nationalgrid Group PLC

National Grid Electricity Transmission

Owns and manages the high voltage electricity transmission system in England and Wales.

National Grid Strategic Infrastructure

Delivers major strategic United Kingdom electricity transmission projects, focussed on connecting more clean, low-carbon power to England and Wales.

National Grid Electricity Distribution

Owns and operates the electricity distribution networks for the Midlands, the South West of England and South Wales, with 8 m customer connections serving a population of over 18 m people.

National Grid Ventures

Operates a mix of energy assets and businesses to help accelerate the development of our clean energy future (such as undersea interconnectors that allow the United Kingdom to share energy with other European countries).

LIONLINK

Evolution of proposals

As part of developing our plans we have undertaken extensive technical work alongside engagement with the relevant local authorities, stakeholders and local residents. The plans presented today are the result of this work and feedback.

How we develop LionLink:

1 Strategic proposal

Developed options following the identification of the need for an interconnector between the UK and Netherlands, and receiving a connection point from National Energy System Operator (NESO).

2 Options identification and selection

Identified and appraised project options, engaged stakeholders and sought consultees' feedback through two non-statutory consultations in 2022 and 2023 to shape the development of the project.

3 Defined proposal and statutory consultation

2026
Current stage

Develop project design in response to feedback, identify and share preliminary environmental information and undertake statutory consultation on the proposals.

4 Assessment and land rights

2026

Refine proposals in response to consultation feedback, assess the project impacts and seek agreements with landowners where applicable.

5 Application, examination and decision

2026 – 2028

We will submit the application for development consent to PINS. Following an examination period, the Secretary of State for Energy Security and Net Zero will make a decision on our application.

6 Construction

2028 – 2032

Subject to approval, project infrastructure built and ground restoration completed.

Our engagement so far

We held our first non-statutory consultation in 2022, where we outlined our initial siting and routeing options, including landfall sites at Walberswick, Southwold, Aldeburgh, and Dunwich. We identified alternative options based on the feedback, including:

- An alternative landfall site at Walberswick, which has the potential to reduce access constraints and traffic impacts.
- An alternative underground high voltage direct current (HVDC) cable corridor to the north of Southwold, which has the potential to reduce impacts on designated sites of ecological importance.

We held a second non-statutory consultation in 2023 to gather feedback on these alternative options, as well as our original siting and options, such as converter stations and a substation.

Scan to view our consultation reports in our online library.

What has changed since 2023?

We refined the options for the project based on the feedback received during both non-statutory consultations before submitting an Environmental Impact Assessment Scoping Report to PINS in March 2024.

We have updated the anticipated boundary within which LionLink could be constructed, which would accommodate temporary and permanent infrastructure, construction accesses, and works to existing infrastructure.

Preferred landfall site

- The alternative Walberswick landfall site was identified as the preferred landfall site over Southwold, with Walberswick having a lower overall environmental impact due in part to a c. 12 km shorter onshore cable route.
- The alternative site avoids the temporary loss of the beach car park and beach huts during construction, while reducing the impact of construction traffic on Walberswick village.

Converter station site

- We have outlined our preferred converter station location near Saxmundham. We discounted three converter station sites in Aldeburgh and Leiston following the results of landscape and visual surveys and assessments.
- These sites were discounted due to a combination of factors, including technical constraints, environmental, and visual impacts.

Cable route

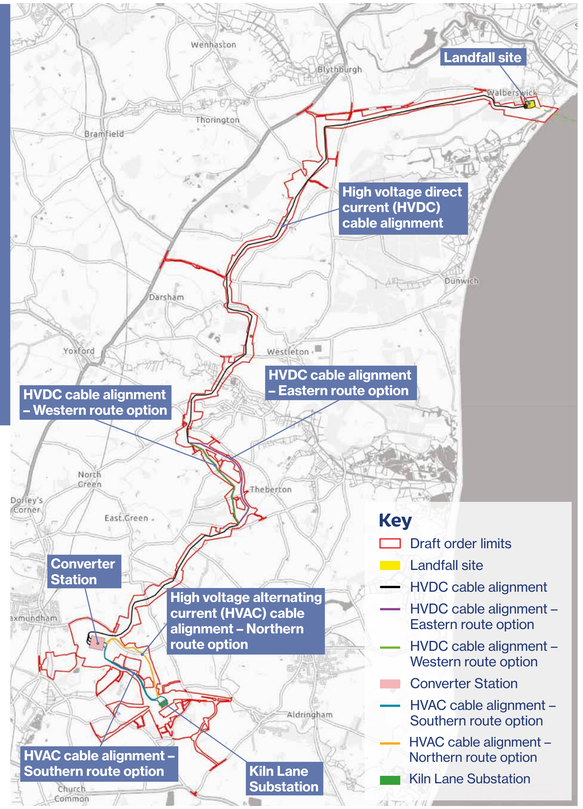
- We have published our preferred HVDC and high voltage alternating current (HVAC) cable corridors. The HVDC cable corridor would connect our onshore infrastructure to our landfall site in Walberswick.
- Information on how these decisions were made can be found in our project overview document available online and at our events.

Our onshore proposals

LionLink proposes a new interconnector between the United Kingdom and the Netherlands, including a connection into a wind farm located in Dutch waters, via an offshore converter station, being delivered by our partner TenneT.

Our proposals are:

- Kiln Lane Substation
- Underground high voltage alternating current (HVAC) cables between Kiln Lane Substation and the proposed converter station
- Converter station, east of Saxmundham
- Underground high voltage direct current (HVDC) cables between the proposed converter station and landfall
- Landfall site at Walberswick
- Offshore HVDC cables from the proposed landfall site at Walberswick at the UK coast, to the edge of the UK's Exclusive Economic Zone (EEZ)



Landfall site

The proposed landfall site is where the proposed offshore HVDC cables connect to the proposed underground HVDC cables. We would use Horizontal Directional Drilling (HDD), a trenchless crossing technique, to bring cables onshore and avoid disruption to Walberswick Beach.

Underground HVDC cables

The proposed underground HVDC cables would run approximately 20 km from the proposed landfall site at Walberswick to the proposed converter station, east of Saxmundham.

As part of this consultation, we are seeking feedback on our plans across the route. This includes instances where we are presenting options.

Along the HVDC route, from Saxmundham Road (B1119) to Middleton Moor, the following options are presented:

- **Western route:** LionLink cabling would be installed within its own route corridor.
- **Eastern route:** Would enable co-location within the Sizewell Link Road.

Converter station

The proposed converter station would change electricity from the direct current (DC) used to transmit across long distances to alternating current (AC), to enable electricity to be supplied to homes and businesses.

The proposed converter station site is located east of Saxmundham and south of the B1119 Saxmundham Road, adjacent to Sea Link's proposed converter station. Given the proposed co-location of our infrastructure with Sea Link, we are continuing to explore further coordination opportunities for our on-site activities.

The proposed converter station would house several buildings up to 26 metres high and would have a footprint of up to 8.1 hectares.

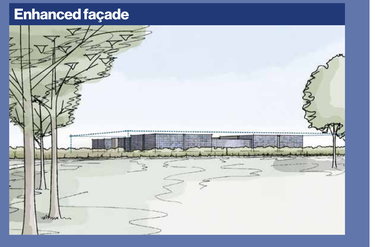
Underground HVAC cables

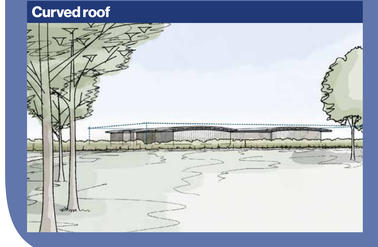
From the proposed converter station, two route options for the underground HVAC cables to connect to Kiln Lane Substation remain at this stage, subject to further studies and feedback:

- **Southern route option:** This option would allow for coordination or co-location of cabling with Sea Link.
- **Northern route option:** This option does not allow for coordination or co-location of cabling with Sea Link.

Converter station design

We would like to hear your views on the design approaches for the proposed converter station. The below illustrations set out some design principles that may work for the proposed converter station:





Kiln Lane Substation

Substations convert electricity to different voltages, ramping it up so that it can be transmitted safely and efficiently across our transmission network.

LionLink has an agreement with the National Energy System Operator to connect to Kiln Lane Substation, near Friston, which already has development consent as part of ScottishPower Renewables (SPR) East Anglia One North and East Anglia Two windfarms. Construction of the substation is expected to be completed by 2028.

We have considered two possible options for enabling LionLink's connection to Kiln Lane Substation:

- **Amendments to Kiln Lane Substation:** To facilitate our connection.
- **Delivering Kiln Lane Substation:** Our application will account for the unlikely scenario that LionLink comes before SPR's consented full build-out of Kiln Lane Substation.

Viking Link cable installed through hedge gap

Constructing LionLink

If our application is approved, we expect construction of LionLink to begin in 2028 and be complete in 2032.

How long will it take?

Construction of LionLink is anticipated to take place over five years.

This will not be continuous works at all locations as we will complete construction in phases to avoid prolonged impacts on residents. The below timings include set up and take down works.

- **Converter station** - Approximately five years
- **Landfall** - Approximately 20 months.
- **Cable corridor** - Approximately three years, delivered in sections across the route

We will look to employ local people where possible and are working with local enterprise groups to ensure that economic benefits are shared within the community as the project develops.

Some activities at the landfall site will require 24-hour working. These include drilling, reaming, duct pulling and cable pulling. The landfall site would require up to four HDDs and each is expected to take up to six weeks to complete, subject to site conditions.

In most cases, continuous 24-hour construction activities at the landfall site are expected to be limited to a maximum of ten consecutive days per HDD.

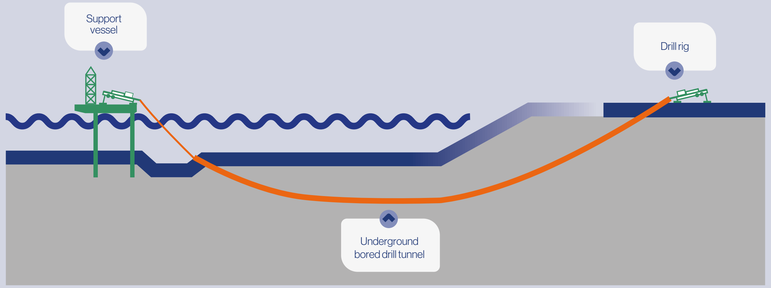


Diagram of HDD cable laying at landfall

How will we install cables?

Across the cable route and at landfall, we would use a mix of open-trench and trenchless construction methods, such as HDD, to reduce disruption and potential environmental impacts for sensitive areas such as the landfall site where the cables come ashore.

Consultation with key stakeholders is required to confirm whether this is possible, alongside ground investigation works, which remain ongoing.

What will this include?

- The HVDC cable corridor will require a temporary haul route, soil storage areas, and drainage measures to facilitate installation.
- Ahead of construction at the converter station site, the team will carry out preparatory works, including vegetation clearance and drainage activities.
- Temporary roads will be removed and land impacted by this, as well as the cable installation, will be reinstated to its original condition following construction.
- Once works are completed cabling will remain buried with only occasional link box pillars visible above ground at cable joint bay locations.

CGI photo of the after phase of our onshore cable laying and ground restoration for Viking Link.

A temporary construction compound will be established at the landfall site, along with the installation of welfare cabins to support the workforce. These include site offices, working areas for construction equipment and machinery, temporary accommodation for personnel, storage compounds, and construction access points.

Converter station locations

Coordination with Sea Link

Alongside NGV's proposals for LionLink, National Grid Electricity Transmission (NGET) is developing the Sea Link project in Suffolk.

Sea Link and LionLink are being developed as two separate projects due to distinct legal, regulatory, and operational structures of the entities involved. However, we are working with NGET to minimise environmental and community impacts through sharing resources, as well as aligning construction activities and mitigation measures where possible. NGV and NGET are also collaborating on co-locating infrastructure for LionLink and Sea Link, such as identifying a shared converter station site at Saxmundham. Cumulative impacts with other regional projects will be considered within our Environmental Statement.

Offshore proposals

Our proposals include approximately 182 km of offshore high voltage direct current (HVDC) cables extending from our proposed landfall site at Walberswick to the edge of the UK's Exclusive Economic Zone (EEZ).

Our offshore HVDC cable corridor has been developed through consultation with marine stakeholders and technical and ecological surveys. The exact alignment of the cables will be informed by further marine surveys and statutory consultation feedback.

How we lay new subsea cables out at sea

- **Pre-lay trenching:** A vessel would create a trench along the seabed, and the cables would be laid directly into it. It would generally be followed at a later date by a support vessel which would cover or bury the cables.
- **Simultaneous lay and burial:** A vessel would create a trench and lay the cable into it at the same time. The vessel may also tow the burial equipment or it could be deployed by another vessel following close behind.
- **Post-lay burial:** The vessel would lay the cables on the seabed and a vessel would follow later to bury the cables.

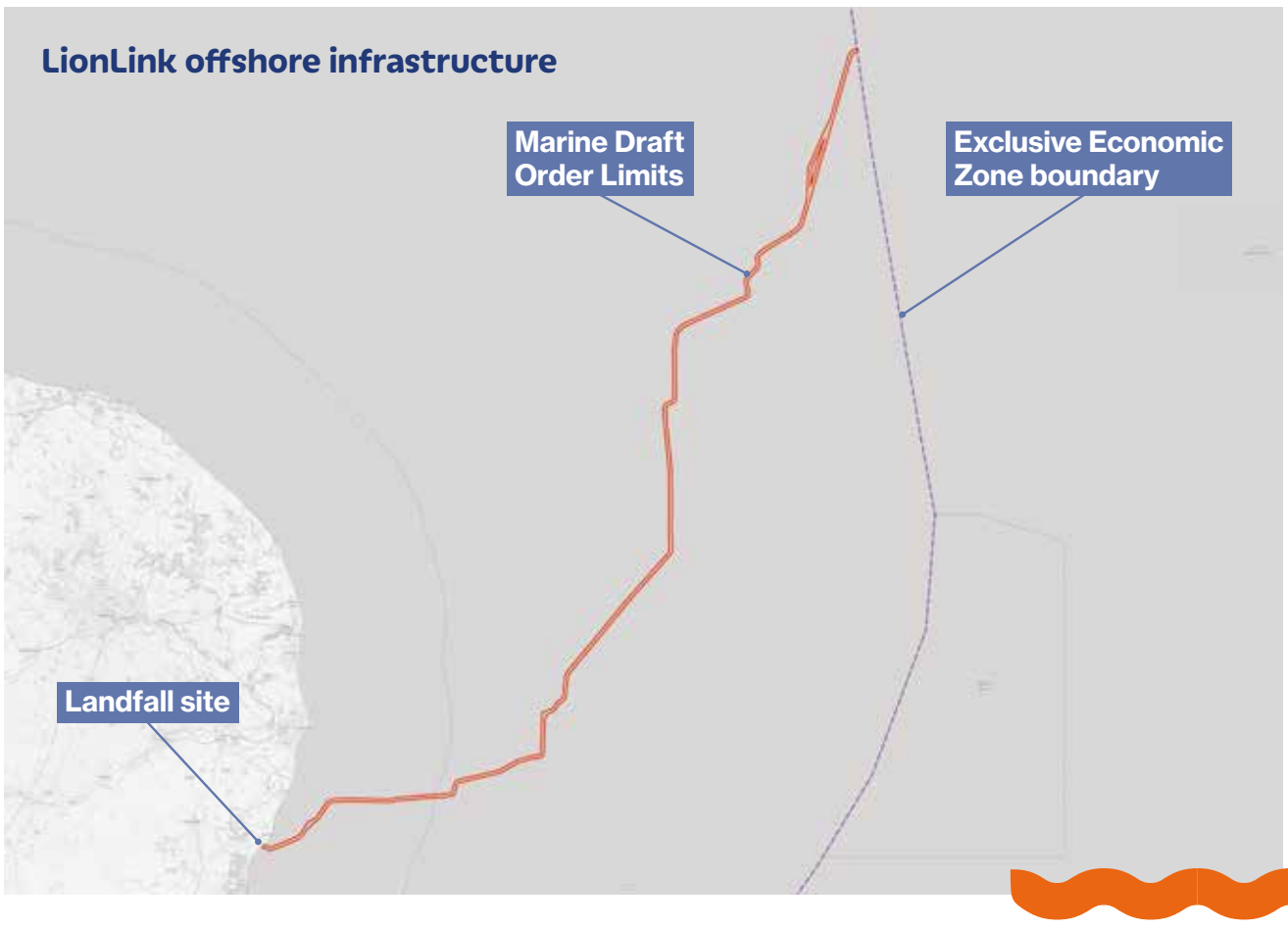
If our offshore cable crosses existing cables or pipelines, the design of the crossing will account for the specific cable protection requirements of the owner or operator.

TenneT

We have partnered with TenneT, the Dutch transmission system owner and operator, to deliver LionLink. TenneT would own the offshore converter station in the Dutch North Sea that would connect to the UK's electricity grid via subsea cables and are developing proposals for LionLink's connection to the Netherlands. LionLink marks our second collaboration with TenneT, following the successful delivery of BritNed, which we have been operating for 15 years as our first joint interconnector project.

TenneT

LionLink offshore infrastructure



Key

- Draft order limits
- HVDC cable alignment

Leaving a lasting positive legacy

NGV aims to work closely with local communities at the earliest opportunity and always act as a good neighbour. We have already worked with Suffolk based charities and organisations, and remain committed to positively contributing to local communities.

Community benefit

The UK Government has recently released a new Community Benefits Framework. This has recommended the level of developer contribution for projects which have a converter station to be £530,000, made available once construction begins. We're seeking local views on where this funding could be allocated.

You can share your feedback on our approach to community benefit funding in our feedback form, available in both printed and digital formats.

Biodiversity net gain

We are committed to leaving behind an enhanced local environment and will deliver a minimum of 10% improvement in onshore biodiversity. We would do this through:

- Habitat creation
- Enhancement to support site specific biodiversity improvements
- Contributing to wider environmental objectives.

At the converter station site, we would also look to reduce visual impacts through a series of mitigation measures. These would include landscape buffering to integrate infrastructure within the existing surroundings. This could involve:

- Native woodland planting
- Reinforcement of existing hedgerows
- Soft landscaping.

Our plans for biodiversity net gain will be set out in the Outline Landscape and Ecological Management Plan (OLEMP), which will be legally secured under a requirement of the Development Consent Order (DCO), if granted. The OLEMP will be available within our Environmental Statement, which will be submitted with our application for development consent.

Have your say

Our statutory consultation will run for a period of eight weeks between Tuesday 13 January and Tuesday 10 March 2026.

How to give feedback

Please submit your feedback by the close of our consultation period. All feedback we receive as part of this consultation will be carefully considered as we finalise our proposals and prepare our application for development consent.

All responses to the consultation must be received before 11:59pm on the closing date. Postal responses will be accepted until Monday 16 March 2026.

Online feedback form:
Complete an online feedback form by visiting **nationalgrid.com/lionlink**

Paper feedback form:
Send your completed feedback form to **Freepost NGV LIONLINK**.

Email us:
If you prefer to send us your comments via email, you can send them to us at **info@lionlink.nationalgrid.com**

If you would like to speak with a member of the team, please call **0800 083 1787**.

Project timeline

October – December 2022
Non statutory consultation

October – December 2023
Supplementary non statutory consultation

2024
EIA scoping report submission

2026
DCO application

Environmental Impact Assessment & Environmental Statement finalised

Statutory consultation
We are here

2027
Examination

2028
Decision

2028 – 2032
Construction

2032
Operation