Eastern Green Link 4

Proposed New High Voltage Direct Current (HVDC) electrical link connecting Fife, Scotland with Norfolk, England

Summary of feedback from second round of Pre-Application Consultation (PAC) – May 2025

Contents

Executive Summary

This report summarises the second round of pre-application consultation events carried out by SP Energy Networks for a proposed new High Voltage Direct Current (HVDC) electrical link connecting Fife in Scotland with Norfolk in England.

SP Energy Networks carried out its first round of pre-application public consultation with local residents and stakeholders from Monday 8 April to Friday 10 May 2024, which included three drop-in public exhibitions on Tuesday 23, Wednesday 24 and Thursday 25 April 2024 to consult on initial proposals.

Since then, we have continued talking to stakeholders and conducting technical and environmental studies. A second round of pre-application public consultation took place from Monday 12 May to Friday 6 June for local people to give their views on the updated proposals. As before, three drop-in public exhibitions were held on Tuesday 13, Wednesday 14 and Thursday 15 May 2025 in Auchtertool, Ballingry and Kinghorn, respectively.

1 Introduction

Need for the Project

The UK and Scottish Governments are committed to increasing the use of renewable energy and have targets to achieve net-zero greenhouse gas emissions by 2045 in Scotland and 2050 in the UK. As the country shifts away from traditional forms of fuel to heat homes, charge vehicles and power businesses, there is greater need for clean electricity.

The UK Government is also aiming for every home in the country to be powered by offshore wind and has set a 50GW offshore wind connections target by the early 2030s. Much of the new onshore and offshore wind generation is in or around Scotland, and the existing electricity network does not have enough capacity to transmit all the additional clean, green energy from where it's produced to where it's needed.

EGL4 is one of many new transmission upgrades that are planned in the UK to help reach these targets. The need for these projects has been identified through the Network Options Assessment (NOA), which is carried out every year by National Electricity Systems Operator (NESO) to determine what, if any, additional capacity will be required and economically justified to ensure current and future energy generation can flow from where it is produced to where it is needed.

The Role of SP Energy Networks

SP Energy Networks is part of the Scottish Power Group. It is responsible for the transmission and distribution of electricity in central and southern Scotland, and, through SP Manweb and Electricity North West, the distribution networks in North Wales and North West England. SP Energy Networks' role is to maintain, operate and invest in our network to secure a safe, reliable, and economic service for current and future consumers, including homes, schools and businesses in our local communities.

Its transmission networks are the backbone of the electricity system in its area, carrying large amounts of electricity at high voltages across long distances. The distribution networks are local networks, which take electricity from the transmission grid and bring it into the heart of communities. SP Energy Networks' transmission network in Scotland consists of over 150 substations, more than 4,500km of overhead lines and more than 600km of underground cables.

The Proposals

Last year, we consulted local people about our preferred converter station site at Westfield, near Ballingry, our preferred landfall site near Kinghorn (where the subsea cables would come ashore), and our preferred onshore underground cable route between them. Second time round, we consulted on our detailed plans for the converter station site, underground cable route, marine cable route and landfall site.

In summary, EGL4 is a major investment developed in partnership between SP Energy Networks and National Grid Electricity Transmission, and is made up of three parts:

- A 530km offshore High Voltage Direct Current (HVDC) cable between Kinghorn, Fife, and Anderby Creek, Lincolnshire
- A 16.4km underground cable from Kinghorn to a new converter station at Westfield, near Ballingry, Fife
- A 100km underground cable from Anderby Creek to a new converter station near Walpole, Norfolk

HVDC is the most efficient way to transmit large amounts of electricity over long distances. Converter stations are needed at each end to change the direct current (DC) electricity to and from alternating current (AC) electricity, so it's safe to use in our homes and businesses.

2. Approach to Pre-Application Consultation

Legislation and guidance

SP Energy Networks will be applying to Fife Council for planning permission in principle (PiP) under the Town and Country Planning (Scotland) Act 1997 for the proposed converter station, and full planning permission for the DC underground cable from the Mean Low Water Springs (MLWS) at the landfall site to the converter station and for the AC underground cable from the converter station to Westfield Substation.

SP Energy Networks is carrying out an Environmental Impact Assessment, which will accompany the planning applications.

The marine cable within Scottish territorial waters will be subject to a separate marine licence application to the Scottish Government's Marine Directorate – Licensing Operations Team (MD-LOT) and will be supported by a marine environmental appraisal.

Statutory and licence responsibilities

As a transmission licence holder for central and southern Scotland, SP Energy Networks is required under Section 9(2) of the Electricity Act 1989 to develop and maintain an efficient, co-ordinated and economical transmission system.

SP Energy Networks also has a duty under Section 38 of Schedule 9 of the Electricity Act 1989, to have regard to the desirability of the preservation of amenity, the natural environment, cultural heritage, landscape and visual quality. SP Energy Networks considers the effect of work on communities when putting forward proposals for new transmission development.

As a result of the above, SP Energy Networks is required to identify electrical connections that meet the technical requirements of the electricity system, which are economically viable, and cause, on balance, the least disturbance to the environment and the people who live, work and enjoy recreation within it.

Commitment to engagement

Stakeholder engagement, including public involvement, is an important component of the Scottish planning and consenting system. Legislation and government guidance aim to ensure that the public, local communities, statutory and other consultees and interested parties have an opportunity to have their views considered throughout the planning process.

Striking the right balance can be challenging, and in seeking to achieve this, SP Energy Networks recognises the importance of consulting effectively on proposals and being transparent about the decisions reached. SP Energy Networks is keen to engage with key stakeholders including local communities and others who may have an interest in the project. This engagement process begins at the early stages of development of a project and continues into construction once consent has been granted.

Approach to consultation

The strategy for consultation on EGL4 was designed to ensure that stakeholders:

- Were made aware of the proposals in a timely manner
- Had access to project information and understood its development
- Had access to the project team to ask questions directly on the project; and

- Could put forward their own views and be confident that issues raised would be considered.

3. Pre-Application Consultation

Consultation Strategy

SP Energy Networks attaches great significance to the effects its works may have on the environment and local communities and is always keen to hear the views of local people to help it develop the project in the most appropriate way.

The overall objective of the consultation process is to ensure that all parties with an interest in the EGL4 project have access to up-to-date information and are provided with clear and easy ways in which to shape and inform SP Energy Networks' proposals at the pre-application stage. Key issues identified through this process are being recorded and presented to decision makers to assist the consents process.

As part of the consultation strategy, SP Energy Networks held two rounds of consultation events for the public, stakeholders and consultees to view the proposals and provide feedback. The first round took place in April 2024 and the second round in May 2025.

SP Energy Networks used a range of communication channels to publicise and promote the consultation events, which are detailed in the following sections of this document. Respondents were also able to give feedback in different formats, depending on their own preference:

- Email: egl4@communityrelations.co.uk
- Freepost: FREEPOST SPEN EGL4
- Freephone: 0800 021 7890
- Online via the dedicated project website: egl4@communityrelations.co.uk
- Face-to-face or in writing at public consultation exhibitions

How we consulted

SP Energy Networks wished to consult with relevant stakeholders during both rounds of consultation and gain their views on the proposals. These stakeholder groups included:

- Elected members of Fife Council, Members of Parliament (MP) and Members of the Scottish Parliament (MSPs) whose constituencies are within the Fife Council area
- Community councils in the project area
- National statutory consultees such as NatureScot and SEPA
- Known local interest and community groups operating in the project area
- Fisheries; and
- Local residents, businesses and the general public.

The first consultation period ran from Monday 8 April until Friday 10 May 2024. SP Energy Networks held three public drop-in exhibitions (details of which were included in all issued project communications):

- Tuesday 23 April, 2-7pm: Benarty Centre, Flockhouse Avenue, Ballingry, KY5 8JH

- Wednesday 24 April, 9am-12:30pm: Auchtertool Village Hall, Main Street, Auchtertool, KY2 5XW
- Thursday 25 April, 3:30-7:30pm: Kinghorn Community Centre, Rossland Place, Kinghorn, KY3 9SS

Further details of the first round of consultation are included in the SPEN_EGL4_Round_One_Feedback_Report on the SP Energy Networks website.

The second consultation period ran from Monday 12 May until Friday 6 June 2025. SP Energy Networks held three public drop-in exhibitions (details of which were included in all issued project communications):

- Tuesday 13 May, 2-7pm: Auchtertool Village Hall, Main Street, Auchtertool, KY2 5XW
- Wednesday 14 May, 2-7pm: Benarty Centre, Flockhouse Avenue, Ballingry, KY5 8JH
- Thursday 15 May, 2-7pm: Kinghorn Community Centre, Rossland Place, Kinghorn, KY3 9SS

A total of 74 people visited the three events (19 at Auchtertool, 7 at Ballingry and 48 at Kinghorn). This included representatives from Fife Council, Auchtertool Community Trust and The Ecology Centre.

The events provided stakeholders with the opportunity to learn more about the project, discuss the proposals with the project team, and provide feedback to SP Energy Networks on the updated project design. Project team members were available at the events to discuss the proposals and answer any questions.

Prior to the start of the consultation, a notification was sent via email or letter to the stakeholders listed above advising them of the consultation, inviting them to the events and seeking their views on the proposals. The project team also contacted directly affected landowners individually.

A project leaflet explaining the proposals, the purpose of the consultation and the process for submitting feedback was produced and distributed to approximately 4,100 properties (residential and business) within a defined radius of the project site, including the communities of Ballingry, Kinghorn and Auchtertool. This was the principal form of direct communication with the local community. A copy of the leaflet can be found in Appendix A.

To promote the consultation, SP Energy Networks placed formal newspaper advertisements in the *Fife Free Press*, *Glenrothes Gazette,* and *The Courier* newspapers for two consecutive weeks (w/c 21 May 2025 and w/c 28 May 2025). The advert described the project proposals, details of the drop-in events, the ways in which feedback could be submitted, a statement that comments made at this stage were not representations to the consenting authorities, and details on how to find further information, including a QR code linking to the project website. A copy of the advert can be found in Appendix B.

A feedback form was made available in hard copy and online. It included seven questions in relation to the project proposals and an additional section that asked demographic data including title, name, address, telephone number, email address, if the respondent is responding on behalf of an organisation and if they attended any of the public exhibitions.
The seven project related questions were:

1) Do you have any comments on our preferred site for the converter station?
2) Do you have any comments on our proposed underground cable route?
3) Please let us have any comments you may have about our preferred landfall site.
4) We are consulting with marine users, including fisheries and shipping organisations, about our preferred subsea cable route, but please let us know if you have any comments you would like us to take into account

5) How did you find out about the project and the consultation? *Multiple choice options provided were: advert, leaflet, website, media coverage, social media, word of mouth, other.*

6) Do you have any comments about our public consultation?

7) Are there any other comments you would like to make; for example, your priorities for community benefit projects?

The closing date for submitting responses to SP Energy Networks was midnight on Friday 6 June 2025. Following this date, the consultation information remained accessible on the project website and available to download.

At the public events, a range of information was made available including printed maps to give a visual interpretation of what the site could look like, which were displayed on tables at the venues. There were also 10 exhibition boards displayed across the room which provided detail on each aspect of the proposals. A copy of the boards can be found in Appendix C.

A 3D model of the landfall, cable corridor and converter station site was also available. Visitors were able to interact with the model and zoom in to different locations to view the project from different angles. Animation of the landfall HDD and cable installation were also available to watch.

The project leaflet, newspaper notice, project plans, FAQs, general information about the project and the consultation, the exhibition boards, and the feedback form were made available on a dedicated project website:

https://www.spenergynetworks.co.uk/pages/eastern_green_link_4.aspx.

To make the website as accessible as possible, the communications created for the consultation included a QR code that linked through to the home page. The website remained live following the consultation to ensure stakeholders can find out more and stay up to date on project developments.

Summary of feedback

Stakeholders could submit feedback in various methods as outlined previously. All feedback received as part of the consultation was analysed by members of the project team.

Respondents were made aware via a data protection statement that any comments they provide could be made available to certain bodies for the purposes of the consultation and for creating reports. This included the Scottish Government and relevant planning authorities. SP Energy Networks will continue to review comments in the context of the development of the project at each stage.

A total of 13 feedback forms were submitted during the consultation period via hard copy forms sent to the FREEPOST address, online via the feedback form, and email to the project inbox, providing comments on a variety of topics, including impact on wildlife, the cable route and benefits for the local community.

Feedback was also received from statutory stakeholders and local interest groups, whom the project team engaged with directly.

The hardcopy documents received through the FREEPOST address were collected, scanned and securely saved on the project's SharePoint. The full responses were then manually transcribed into the analysis database and checked for accuracy.

Emails received in the project mailbox which were categorised as consultation feedback were separated from the general correspondence. Email feedback was securely saved on the project's SharePoint, manually transcribed into the analysis database and checked for accuracy. The sender of each email was sent a standard acknowledgement in the form of an automated response.

Once all responses were included in the analysis database, they were given a unique

identification number.

Where provided by the respondent, contact details were recorded and added to the communication database so respondents could receive project updates.

Topics raised during the consultation

The consultation feedback submitted to SP Energy Networks has been considered by the project team as part of the design development, in addition to feedback from key statutory and non-statutory consultees and the findings from the detailed technical and environmental studies that have been undertaken.

SP Energy Networks received consultation responses from the following statutory consultees:

- Joint Nature Conservation Committee (JNCC) – agrees with the approach of avoiding environmentally sensitive areas where possible and we are glad to see that mitigation hierarchy has been applied as the Scottish Offshore Approach avoids the Firth of Forth Banks Complex Nature Conservation Marine Protected Area (NCMPA). The consultee indicated that they are seeking further information on the project and its cable crossings plans. In addition to that, the consultee has also sought clarity on presence and avoidance of Annex I habitat and if other routes were considered for this portion of the cable and confirmation of the methodology for the route proposal. They added that if cable crossings are located within areas of Annex I habitat, they would ask if it is possible to change the location of these crossings to stop the unavoidable need for cable protection and permanent alteration of these habitats.

- The Coal Authority – requests that consideration be given posed by past coal mining activity to the project works proposed and a Coal Mining Risk Assessment prepared for those parts of the project in the defined Development High Risk Area where groundworks are required for underground cabling and structures.

- RYA Scotland – had no further comments and are happy with the proposals.

- NATS Safeguarding – stated that the proposed development has been examined from a technical safeguarding aspect and does not conflict with our safeguarding criteria.

- Network Rail – requests that any works under the railway to be subject to further discussion and agreement with Network Rail. Stated that as the proposed cables run under the railway owned by Network Rail installation, operations, maintenance and renewals will be subject to legal agreement. Construction works will need to be undertaken in a safe manner and that details of all changes in ground levels, laying of foundations and operation of mechanical plant in proximity to the railway must be submitted to Network Rail for approval prior to work commencing on site.

- ScotWays – identified that the onshore works interact with a number of recorded rights of way and other routes used for recreation and/or active travel. Suggests that public rights of way should be added to the list of environmental constraints and considerations as although rights of way can and do coincide with designated core paths, this is not necessarily always the case. Recommend contacting Fife Council's access team regarding managing public access during works. Look forward to commenting on the Access Management Plan that may be developed as part of the planning application process.

- Scottish Forestry – notes and welcomes the intention to avoid woodland either by installing cables alongside or under forested areas where possible. States that Scottish Government policy is opposed to the permanent removal of woodland. Sets out requirements for infrastructure felling, restocking requirements, enforcement and compensatory planting.

- BT – have looked at the proposals with respect to Electromagnetic Compatibility (EMC) and related problems to BT point-to-point microwave radio links. Concludes that the project should not cause interference to BT's current and presently planned radio network.

Table 1 summarises the key themes that arose during the second round of pre-application consultation as well as SP Energy Networks' response to these themes.

SP Energy Networks' response to the feedback

The key themes that arose in the comments have been summarised below with a response from SP Energy Networks.

Table 1 Summary of the key feedback themes received during the consultation and responses from SP Energy Networks

Key theme	Example comments	SP Energy Networks' response
Preferred cable routes	"I have looked at the proposed route and would like to ensure that it will not affect Minto woodland. This area is currently having £100,000 spent on it to upgrade grass paths to semibond surface. This should be complete by June 14 2025. This allows more usage access especially disabled access. Can you assure us these routes will remain intact?"	The Minto Woodland will not be impacted by the cable route. SP Energy Networks will use a horizontal directional drill (HDD) underneath the woodland and so there will be no impact on the newly created woodland or footpaths.
Converter station	"I think this is a good location for the converter station and encourage the landscaping and tree planting" "Our concerns include the impact on our new business which is opening soon at our property which is in close proximity to the proposed entrance to the Converter Station, the view we will now have from our house window with a building up to 28.5m high"	As part of the Environmental Impact Assessment (EIA) an assessment of potential landscape and visual impacts will be undertaken in accordance with Guidelines for Landscape and Visual Impact Assessment (3rd edition) (GLVIA3). This will identify potential impacts and relevant mitigation measures including the development of a landscape plan. It is acknowledged that the buildings proposed are large in scale and it will not be possible to fully screen from every location around the site. The visual assessment undertaken as part of the EIA includes representative viewpoints and will determine the degree of anticipated change to visual amenity experienced. Visualisations will be produced for the converter station at the viewpoint locations to provide an understanding of the potential visual effects.
Ecology and biodiversity	"I am concerned about the impact of the landfall construction on wildlife in the area" "I have looked at the proposed route and would like to ensure that it will not affect an area called into woodland" "The wildlife in the local areas will obviously be disrupted."	With regard to the impact on wildlife and ecology, the proposal will be supported by an EIA which will fully consider impacts on ecology and the proposal will accord with the National Planning Policy 4 requirements to enhance biodiversity. SP Energy Networks will comply with Schedule 9 responsibilities as set out in the Electricity Act 1989 when balancing the development requirements against impacts on fauna.

Key theme	Example comments	SP Energy Networks' response
	"I am concerned about the marine environment. The seals, dolphins and porpoises could be vulnerable as could the ecosystems under water which ensure our coast is rich in life and diversity." "I hope there will be minimum disruption to the coastal path at the landfall site. Engaging with Fife Coast & Countryside Trust is paramount"	The EIA will include details of Biodiversity Net Gain proposals such as landscaping around the converter station, restoration of hedgerows along the cable route and potential areas for additional woodland planting in the vicinity of the converter station site. In addition to the onshore Environmental Impact Assessment a detailed marine environmental appraisal is also underway and will support the Marine Licence application. The marine environmental appraisal includes details of the marine survey which has been undertaken along the full length of the marine cable. The survey includes benthic sampling, videos along the cable route and geophysical and geotechnical surveys. The proposed landfall location is situated in fields to the east of Kinghorn. The landfall will allow the marine cables to come onshore and run up to Westfield. There is no requirement for any permanent structures above ground at the landfall site and the cables will go out to sea via an HDD under the cliffs. A temporary construction compound will be required during this work following which the land will be reinstated. There will be no interaction between the HDD and the coastal path and this will remain open and unaffected throughout the works.
Impact due to construction	"Concerned about the upheaval at the time of construction with traffic and machinery"	The EIA process considers and proposes mitigation not only to the permanent impact of a development but also the temporary impact any development may have during construction. This includes a full assessment of noise and vibration and the impact of the scheme on communities and on the local and private road network. Noise and vibration: Baseline noise monitoring is being undertaken, and noise modelling is proposed to formally establish the operational noise characteristics of the proposed converter station and underground cable works. These details will form part of the supporting information for the planning application to Fife Council. At the

Key theme	Example comments	SP Energy Networks' response
		Kinghorn landfall site there will be a need for 24/7 working for a short period during HDD operations, which will create some noise and vibration. Where noise mitigation is required to address noise levels in excess of adopted standards, this will be implemented prior to commissioning of the development. Traffic and Transport impacts will also be considered in the EIA including a traffic management plan.
Impact on local community	"We have concerns with the value of our property decreasing and the difficulty of selling it once the Converter Station is in place" "It is to be hoped that there will be no disruption to the working farms in this area." "Could you provide information on the overall estimated costs of EGL4 and when the construction might begin? Also the number of jobs created" "Can you please confirm […] improvements will be made to the boundary with residential properties which has been sadly neglected over many years by the farmer"	It should be noted that there is currently no compensation for the potential impact of the connection on views from individual properties. However, we recognise that the visual impact of transmission infrastructure may be an issue for many local communities and individuals and our approach is to maximise the distance of the final project from properties, wherever possible. Individual properties have been mapped out and considered as part of the detailed routeing and siting. For a project of this size there will always be some temporary disruption during construction. We will work closely with the affected landowners and local communities to ensure clear communication of the timing of proposed work. The overall costs associated with the project will be known once key contractors are appointed. Our sister project EGL1 is valued at £2.5bn.
Visual impact	"I am pleased this is an underground cable"	Noted.
Safety	"I would be concerned at fire risk at the converter station"	SP Energy Networks works to very strict health and safety requirements when designing our transmission equipment (including The Building (Scotland) Regulations 2004 issued by Scottish Ministers). All converter stations are operated in line with rigorous UK and international fire safety standards (such as BS 9999, Code of Practice for fire safety in the design, management and use of buildings). The buildings are constructed primarily of non-combustible materials to reduce the potential for build-up and spread of fire. The converter station is subdivided into fire compartments and are separated from each other either by distance or by fire walls.

Key theme	Example comments	SP Energy Networks' response
		An area wide fire alarm and detection system is provided for all buildings of the converter station. This includes advanced fire detection and suppression systems, as well as strict operational protocols to minimise the risk and ensure the safety of the public, our staff and contractors, and our infrastructure.
Community benefits	"The Fife Coastal Path would benefit from upgrades at a number of locations in the Kirkcaldy / Kinghorn area. One would be an upgrade to the Pettycur Bay Beach Ramp between Kinghorn and Burntisland beaches" "We would like to certainly work with SP Energy Networks on community projects. We have a community engagement day with SP Energy which was excellent" "It is to be hoped that a substantial donation will be made from SPEN to Benarty Primary School St Kenneth's Primary School along the lines of donations we received from the Windfarm at Kinglassie + Exxon Mobil at/near Auchtertool. These are deprived communities and need investment and jobs. Hopefully locals will gain something through employment. Reportedly 4-5000 jobs were created during the construction of the Blyth converter station" "Perhaps SPEN could donate to the local museum and provide wildlife cameras for children to spot badgers, deer and the otters and bats?" "An investment by SPEN would give back to the community and ensure the disruption to the wildlife habitats is recoverable. Around £200,000 to the Ecology Centre would help with their work and education programme." "Liaise with Fife Coast & Countryside Trust regarding upgrades to the Fife Coastal Path between Kinghorn and Kirkcaldy." "Kinghorn Community Centre needs an energy efficiency upgrade"	Noted, thank you for the suggestion. SP Energy Networks will discuss this with the Fife Coast and Countryside Trust. SP Energy Networks has a dedicated community benefits team that will work in parallel with the project to develop community benefit plans. All suggestions for community benefits submitted during all rounds of consultation will be passed to that team.

Key theme	Example comments	SP Energy Networks' response
	"SPEN should give something back to the community by enhancing the coastal path so that cycles, pushchairs and wheelchairs can access it more easily." "Could you provide more detail on when funding for Community Groups will be available next year?" "My priorities for benefit projects would be for pedestrian path upgrades."	
Quality of consultation	"I think the public consultation has been wholly inadequate. 3 separate drop-in sessions in May 2025 and in 2024 are not adequate for a project of this scale and the impact on the local communities and the wildlife habitat in the surrounding areas, both farmland/woodland and coastal/undersea." "There was a lot of information which was clear. There didn't seem to be any thoughts around pending community benefits with the electricity pumped south"	In addition to the two rounds of Pre-Application Consultation, SP Energy Networks has continued to engage with stakeholders and landowners throughout the project development process. The Eastern Green Link 4 contact centre (Freephone, email and Freepost address) has also remained available throughout, and we have continued to respond to enquiries and comments from local communities and stakeholders. All project information has also been available on the project website throughout.

4. Appendices

Appendix A: Project Leaflet

Scotland is producing more clean, green energy than ever before, and we need to strengthen the transmission network so we can get it to the homes, schools and businesses that need it. One of the ways we increase capacity is by building new infrastructure to transmit more electricity securely and reliably.

Eastern Green Link 4 (EGL4) is a new High Voltage Direct Current (HVDC) electrical link that will connect Fife in Scotland with Norfolk in England. It will play a key role in the fight against climate change, and the UK's transition to Net Zero.

Last year we consulted local people about our preferred converter station site at Westfield, near Ballingry, our preferred landfall site near Kinghorn (where the subsea cables would come ashore), and our preferred onshore underground cable route between them.

We are now consulting on our detailed plans for the converter station site, underground cable route and landfall site.

We want to hear your views!

Our public consultation runs until Friday 06 June 2025.

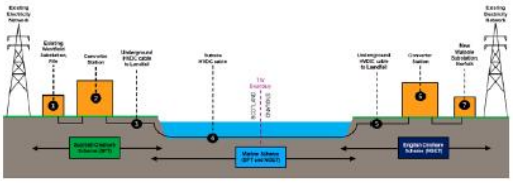
This leaflet tells you about our plans, where to find more information, and how you can give us your views.

What is EGL4?

EGL4 is a major investment developed in partnership between SP Energy Networks and National Grid Electricity Transmission, and is made up of three parts:

- A 530km offshore High Voltage Direct Current (HVDC) cable between Kinghorn, Fife, and South Humber, Lincolnshire
- A 16.4km underground cable from Kinghorn to a new converter station at Westfield, near Ballingry, Fife
- A 100km underground cable from South Humber to a new converter station near Walpole, Norfolk

HVDC is the most efficient way to transmit large amounts of electricity over long distances. Converter stations are needed at each end to change the direct current (DC) electricity to and from alternating current (AC) electricity, so it's safe to use in our homes and businesses.



Why is EGL4 needed?

The UK and Scottish Governments are committed to increasing the use of renewable energy and have targets to achieve net-zero greenhouse gas emissions by 2045 in Scotland and 2050 in the UK.

As the country shifts away from traditional forms of fuel to heat homes, charge vehicles and power businesses, there is greater need for clean electricity. By the end of this decade, the UK Government also aims for every home in the country to be powered by offshore wind and has set a 50GW offshore wind connections target by the early 2030s.

Much of the new offshore and onshore wind is in or around Scotland, and the existing electricity network does not have enough capacity to transmit all the additional clean, green energy from where it's produced, to where it's needed.

EGL4 will be able to transmit up to 2GW of clean, green renewable energy – enough to power around 1.5 million homes. It is one of four Eastern Green Link HVDC projects that will significantly increase the capacity of the electricity network between Scotland and England.

Western Link, a similar HVDC project linking Hunterston on the west coast of Scotland with Connahs Quay in North Wales, is already in operation. EGL1 and EGL2 have already been consented and are moving towards construction, and EGL3 and EGL4 (this project) are in the development and assessment stage.

Converter station

We need to build a new converter station close to the existing substation at Westfield, so that AC electricity from the transmission network can be converted to HVDC for safe onward transmission via the underground and subsea cables.

The converter station will be made up of large warehouse-type buildings and outside electrical equipment. The total converter station footprint will be approximately 250m x 350m in size with buildings up to 28.5m in height, to accommodate the equipment needed. We will also need temporary construction and parking areas, and underground cables to connect the converter station to the existing substation. Our plans will include landscaping and tree-planting to help screen the site, reduce its visual effects and increase biodiversity.

Following the first round of public consultation in May 2024, our design team has been carrying out detailed site investigations (boreholes and other intrusive surveys) to determine the best location within our preferred site for the converter station, construction compound and earthworks.

These have helped to identify the proposed platform area for buildings and equipment, requirements for the levelling of the site and the best location for the temporary construction compound.

Permanent and temporary site accesses from the B9097 have been designed and bunding locations also identified.

Excavated material removed during levelling works will be reused on site where possible, reducing the number of construction vehicle movements. Existing woodland will be retained and additional planting will help to screen the site. We will also create new wetland habitat through drainage works, and look at opportunities for further Biodiversity Net Gain (BNG) on surrounding land.

Existing converter station at Blyth, Northumberland

Proposed new converter station

Public consultation

Our public consultation runs until Friday 06 June 2025

Project documents are available on our website, where you can also fill in an online feedback form. Alternatively, we can also send you a paper feedback form and a Freepost envelope so you can complete it and return it to us free of charge.

SP Energy Networks attaches great importance to the effect our work may have on the environment and local communities. We want to hear what local people think about our proposed landfall and converter station site, and onshore and offshore cable routes, to help us develop the project in the best way. Please come along to one of our public exhibitions, where you can see our plans in more detail and ask questions of the project team.

Date	Venue
Tuesday 13 May 2pm – 7pm	Auchtertool Village Hall, Main Street, Auchtertool KY2 5XW
Wednesday 14 May 2pm – 7pm	Benarty Centre, Flockhouse Avenue, Ballingry KY5 8JH
Thursday 15 May 2pm – 7pm	Kinghorn Community Centre, Rossland Place, Kinghorn KY3 9SS

How to contact us

Website: **https://www.spenergynetworks.co.uk/pages/eastern_green_link_4.aspx**
Email: **egl4@communityrelations.co.uk**
Freephone: **0800 021 7890**
Freepost: **FREEPOST SPEN EGL4**

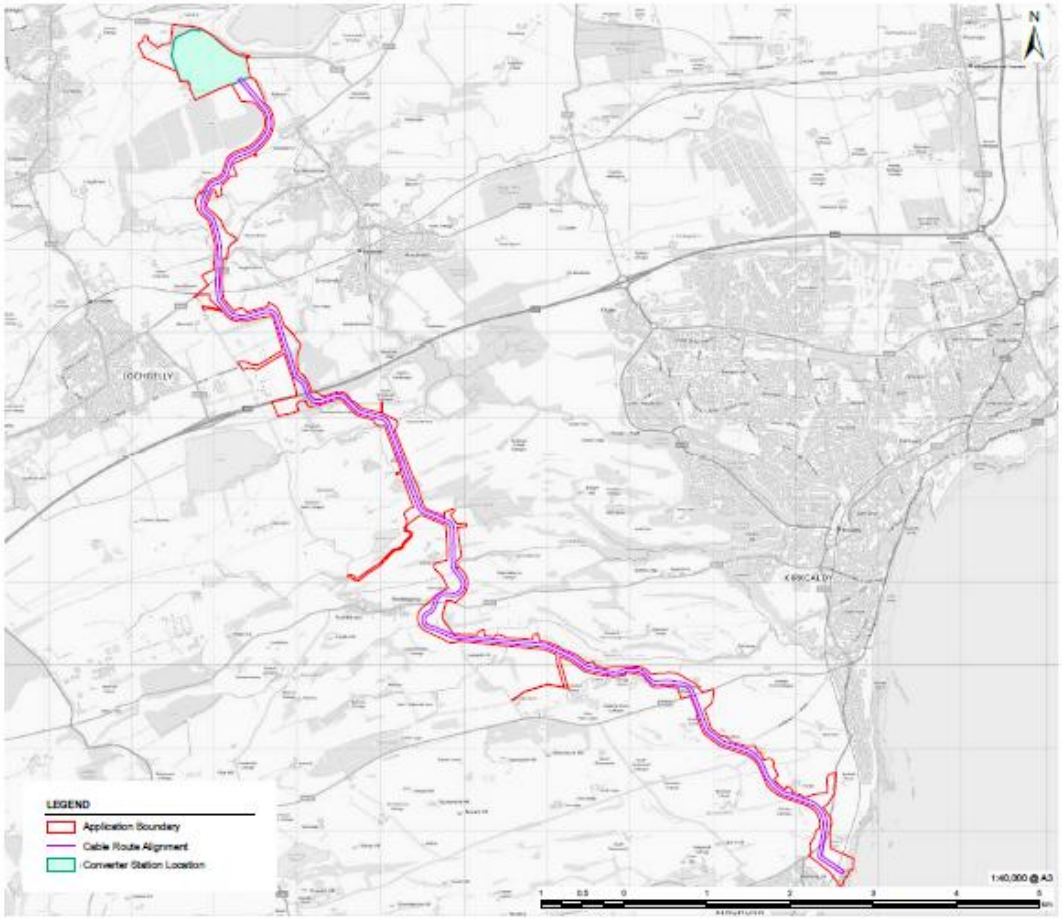
What happens next?

Once pre-application consultation is complete and feedback received on the converter station, landfall and the cable corridor, a detailed EIA will be completed. The scope of the EIA has been agreed with Fife Council and will assess the potential impact of the project on the landscape, ecology, water and flooding, cultural heritage, traffic and transport, noise, geology and tourism. The EIA will be completed and submitted as part of the planning application in autumn 2025.

SP Energy Networks will be applying to Fife Council for planning permission in principle (PiP) under the Town and Country Planning (Scotland) Act 1997 for the proposed converter station, and full planning permission for the DC underground cable from Mean Low Water Springs (MLWS) at the landfall site to the converter station and for the AC underground cable from the converter station to Westfield Substation. The EIA Report will accompany the application to Fife Council.

For the marine cables, our marine environmental consultants conduct a seperate environmental appraisal which assesses the potential impact of the project on the marine environment, shipping and navigation, commercial fisheries and other marine users. The appraisal will accompany an application to the Scottish Government Marine Directorate Licensing Operations Team (MD-LOT) for a licence to install the marine cables.

At this stage, your comments are not representations to the planning authority or MD-LOT. When we make an application for development consent in future, you will be able to make formal representations at that stage.



Landfall

We are proposing to bring the subsea cables ashore at Kinghorn, south of Kirkcaldy, where they will be joined to underground cables in a buried pit. Once installation is complete, the ground will be reinstated and no permanent above-ground infrastructure will be visible.

We selected Kinghorn as the landfall site after careful appraisal of a number of potential options along the Fife coast, including at Largo Bay and Buckhaven. Bringing the cables ashore at Kinghorn allows a shorter onshore cable route to Westfield (around 16.4km from Kinghorn compared to around 29km from Largo Bay) and avoids centres of population, thereby minimising disturbance to local communities.

The subsea cables will be installed at the landfall site below ground using Horizontal Directional Drilling (HDD) to minimise any impact on the sensitive coastal environment and protected sites, and avoiding disturbance to the seal haul-out area to the north. No works on the beach or cliffs will be required.

Following the first round of consultation in 2024, our detailed design work has enabled us to move the proposed HDD compound to the north-east of the preferred site, further away from homes to the south at Kinghorn.

Further work will focus on the design of the HDD compound site to ensure the drill works are carried out as sensitively as possible both for the residents and for the environment and wildlife (including seals and overwintering birds). This will be driven by the Environmental Impact Assessment (EIA) which will be undertaken following the completion of the consultation and before the submission of the planning application.

Marine cable route

Our preferred route for the subsea cables has been developed through careful environmental and technical assessment of potential route options, in consultation with Scottish shipping and fisheries organisations and environmental bodies. It takes into account protected and designated areas and infrastructure such as pipelines, cables, wrecks and military considerations. You can find detailed information and maps on our website and at our consultation events.

SP Energy Networks have carried out benthic and geotechnical marine surveys to look at the route through which the marine cable will run. The surveys gather data on the geology and ecology in the marine environment. Following completion of the surveys, marine technical consultants developed a route for the marine cables which tried to avoid difficult ground conditions such as outcropping rock and areas of high shipping, fishing and environmental sensitivity.

Onshore cable route

Our preferred route for the underground cables between the converter station at Westfield and the landfall point at Kinghorn is approximately 16.4km in length, running mainly through rural areas to the south of the A92, and on the margins of scattered settlements to the north of the A92.

The preferred route avoids designated areas including Camilla Loch SSSI, Raith Park and Beveridge Park Garden. It will cross under the A92, the Fife Circle Railway Line and watercourses using trenchless technology (such as HDD). This trenchless technology will also be used to pass safely under other features such as large areas of woodland where we cannot route around them.

Following last year's public consultation, our design team made up of engineering and environmental specialists has developed a detailed route alignment for the underground cables within the preferred route corridor, including locations for construction compounds and access routes for construction vehicles. The route includes the cable trench, topsoil storage bunds, haul road and drainage.

The design work included boreholes and other intrusive surveys to assess the suitability of the land along the route, and technical assessments of how and where to cross beneath roads, railway lines, watercourses and woodlands. Ecologists have also walked the route to identify potential habitats for protected species including badgers, otters and bats.

The 'red line boundary' (shown on the map) allows for a small amount of deviation in the route, so we can make adjustments to allow for any environmental sensitivities that may be discovered at the time of project construction.

We will use HDD technology to drill beneath Minto Woodlands to ensure no impact on the recently-planted woodland and new footpaths. The HDD will drill the cable ducts from a compound on one side of the woodland, emerging in a second, smaller compound on the other side of the woodland. No access is envisaged to the woodland or footpath areas for these works.

We recognise that construction work can cause temporary inconvenience and disturbance, but we believe our preferred route will keep this to a minimum. Once the cables are installed the land will be reinstated and there will be no visible above-ground infrastructure.

Underground cable installation during construction

Appendix B: Newspaper Advert

Eastern Green Link 4 Project

SP Energy Networks

We'd like your views!

Scotland is producing more clean, green energy than ever before, and we need to strengthen the transmission network so we can get it to the homes, schools and businesses that need it. One of the ways we increase capacity is by building new infrastructure to transmit more electricity securely and reliably.

Eastern Green Link 4 (EGL4) is a new High Voltage Direct Current (HVDC) subsea electrical link that will connect Fife in Scotland with Norfolk in England. The EGL4 project will play a key role in the fight against climate change, and the UK's transition to Net Zero.

Last year we consulted local people about our preferred converter station site at Westfield, near Ballingry, our preferred landfall site near Kinghorn (where the subsea cables would come ashore), and our preferred onshore underground cable route between them. We are now consulting on our detailed plans.

Our public consultation runs until Friday 06 June 2025.

We are holding three public exhibitions where you can view our plans and talk to the project team. You can also find more information on our website https://www.spenergynetworks.co.uk/pages/eastern_green_link_4.aspx

You can leave comments on the website, and you can also contact us in the following ways:

Phone: 0800 021 7890
Email: egl4@communityrelations.co.uk
Post: FREEPOST SPEN EGL4

At this stage, your comments are not representations to the planning authorities. When we make applications for development consent in the future, you will be able to make formal representations at that stage.

Public exhibitions

Date	Location
Tuesday 13 May 2.00pm – 7.00pm	Auchtertool Village Hall, Main Street, **Auchtertool** KY2 5XW
Wednesday 14 May 2.00pm – 7.00pm	Benarty Centre, Flockhouse Avenue, **Ballingry** KY5 8JH
Thursday 15 May 2.00pm – 7.00pm	Kinghorn Community Centre, Rossland Place, **Kinghorn** KY3 9SS

Appendix C: Exhibition Panels

About
SP Energy Networks

SP Energy Networks

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SP Energy Networks operates, maintains and develops the network of cables, overhead lines and substations which transport electricity to homes, schools and businesses in our local communities, and onwards to where it's needed further afield.

Our high-voltage transmission network takes electricity generated from wind farms, power stations and imports, and transports it through over 3700 km of overhead lines, over 600 km of underground cables and more than 150 substations, to our local distribution networks, where the voltage is reduced for use in homes and businesses.

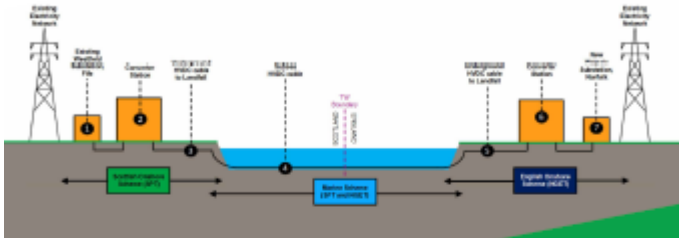
The UK and Scottish Governments are committed to increasing the use of renewable energy and have targets to achieve net-zero greenhouse gas emission by 2045 in Scotland and 2050 in the UK.

By the end of this decade, the UK Government also aims for every home in the country to be powered by offshore wind and has set a 50GW offshore wind connections target by the early 2030s.

Much of the new offshore wind energy is in or around Scotland, but the existing electricity network does not have enough capacity to transmit all the additional clean, green energy from where it's produced to where it's needed.

Eastern Green Link 4 (EGL4) is being developed in partnership between SP Energy Networks and National Grid Electricity Transmission and is one of four similar projects that will significantly increase the capacity of the electricity network between Scotland and England.

Eastern Green Link 4 (EGL4): what's involved



SP Energy Networks

EGL4 is a new High Voltage Direct Current (HVDC) electrical link that will connect Fife in Scotland with Norfolk in England. It will be able to transmit up to 2GW of clean, green renewable energy – enough to power around 1.5 million homes.

EGL4 is made up of three parts:

- A 530km subsea HVDC cable between Kinghorn, Fife, and Anderby Creek, Lincolnshire
- A 16.4km underground HVDC cable from Kinghorn to a new converter station at Westfield, near Ballingry, Fife
- A 100km underground HVDC cable from Anderby Creek to a new converter station near Walpole, Norfolk

In everyday life we use Alternating Current (AC) electricity, which can have its voltage increased or decreased using transformers, making it safe to use in our homes, schools, businesses, and hospitals.

But to transmit large volumes of electricity over long distances it is more efficient to use HVDC, which operates at a fixed voltage, requires fewer conductors (cables or wires) and incurs less power loss than AC networks.

AC electricity is converted into HVDC electricity using specialised equipment at a converter station. The HVDC electricity can then be transmitted over long distances via underground and subsea cables to a second converter station, where it is converted back to AC to flow into the local electricity network.

By doing this, projects like EGL4 can remove 'bottlenecks' on the existing transmission network while reducing the need for more onshore overhead or underground power lines and associated infrastructure.

Westfield converter station

Proposed new converter station

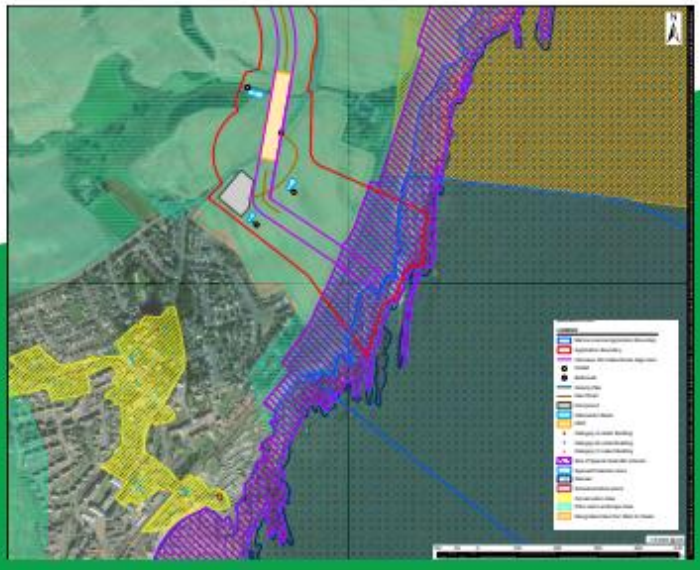
Existing converter station at Blyth, Northumberland

Converter stations are needed at each end of an HVDC link to change the DC electricity to and from AC electricity, so it's safe to use in our homes and businesses.

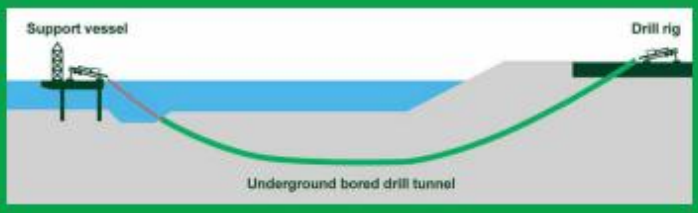
The converter station will be made up of large warehouse-type buildings and outside electrical equipment. The total converter station footprint will be approximately 250m x 350m in size with buildings up to 28.5m in height, to accommodate the equipment needed. We will also need temporary construction and parking areas, and underground cables to connect the converter station to the existing substation. Our plans will include landscaping and tree-planting to help screen the site, reduce its visual effects and increase biodiversity.

Westfield is the starting point for EGL4 because it is a strong point on our existing transmission network which is closest to the Fife coast. The Westfield substation is currently a 275kV substation but will be rebuilt in the future as a 400kV substation. We need to have suitable network connectivity at the substation to provide the strongest support for the HVDC link. Westfield substation is the only substation in this area that provides this level of network connectivity and security, with four circuit infeeds to provide the resilience needed to keep the electricity moving.

Kinghorn landfall point



We propose to bring the subsea cables ashore below ground at Kinghorn, south of Kirkcaldy, using Horizontal Directional Drilling (HDD) to minimise any impact on the sensitive coastal environment and protected sites, and avoiding disturbance to the seal haul-out area to the north. No works on the beach or cliffs will be required.

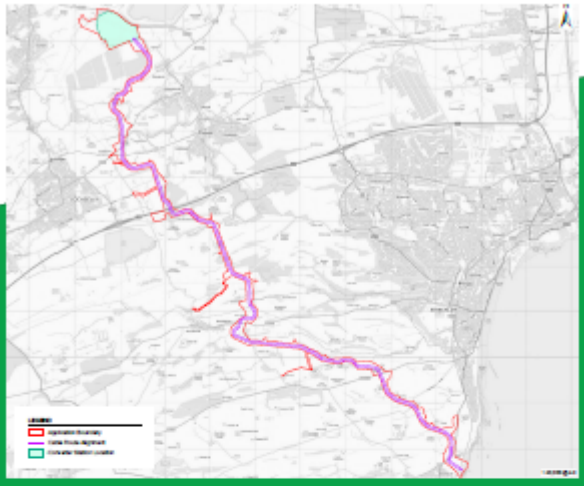


Following the first round of consultation in 2024, further design work has enabled us to move the proposed HDD compound to the north-east of the proposed site near Kinghorn, further away from homes to the south.

Further work will focus on the design of the HDD compound site to ensure the drill works are carried out as sensitively as possible both for the residents and for the environment and wildlife (including seals and overwintering birds). This will be driven by the Environmental Impact Assessment (EIA) which will be completed following the consultation and before the submission of the planning application.

The subsea cables will be joined to underground cables in a buried pit. Once installation is complete, the ground will be reinstated and no permanent above-ground infrastructure will be visible.

Underground cable route



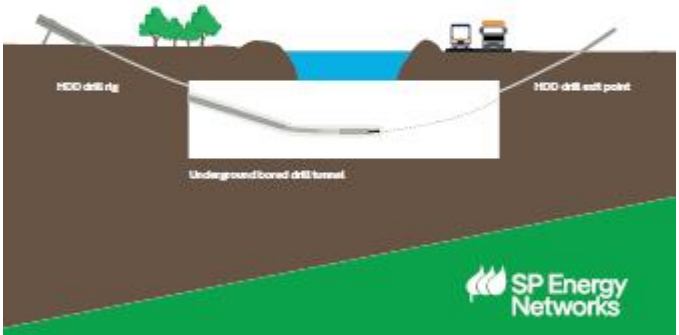
Our proposed route for the underground cables between the converter station at Westfield and the landfall point at Kinghorn is approximately 16.4km in length, running mainly through rural areas to the south of the A92, and on the margins of scattered settlements to the north of the A92.

The proposed route avoids designated areas including Camilla Loch SSSI, Raith Park and Beveridge Park Garden. It will cross under the A92, the Fife Circle Railway Line, Minto Woodlands and watercourses using trenchless technology (such as HDD) to avoid or minimise disturbance.

Following last year's public consultation, our design team has developed a detailed route alignment for the underground cables within the preferred route corridor, including locations for construction compounds and access routes for construction vehicles. The route includes the cable trench, topsoil storage bunds, haul road and drainage. The design work included boreholes and other intrusive surveys to assess the suitability of the land along the route, and technical assessments of how and where to cross beneath roads, railway lines, watercourses and woodlands. Ecologists have also walked the route to identify potential habitats for protected species including badgers, otters and bats.

The 'red line boundary' (shown on the map) allows for a small amount of deviation in the route, so we can make adjustments to allow for any environmental sensitivities that may be discovered at the time of project construction.

Underground cable installation



SP Energy Networks

We will need a 'working width' of approximately 40 metres along the cable route, so we have enough space to excavate a trench for the cables and store topsoil and subsoil alongside it, and allow vehicles to pass up and down.

Once the trench has been excavated we will install protective ducts within it, through which the cables will be pulled.


Cross-section of typical working width for HVDC cable installation


HVDC cable installation

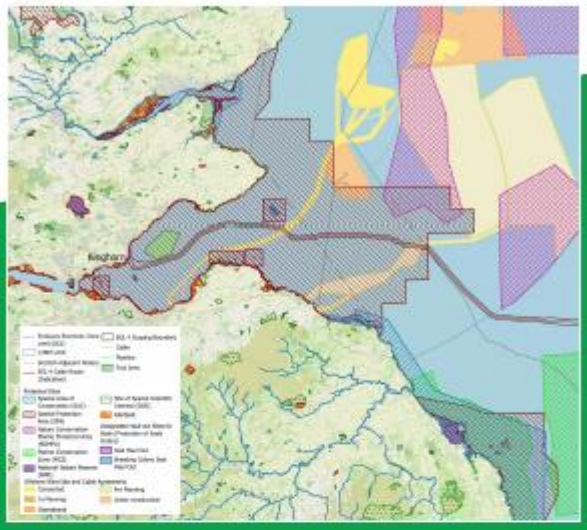
Where the cable route crosses roads, railway lines, watercourses and sensitive areas (such as Minto Woodlands), we will use HDD to pass safely underneath without disturbing the surface environment. This involves establishing a compound for the HDD rig, from which it will drill beneath the area before emerging at another smaller compound on the other side.

We recognise that construction work can cause temporary inconvenience and disturbance, but we believe our proposed route will keep this to a minimum. Once the cables are installed the land will be reinstated and there will be no visible above-ground infrastructure.


Horizontal Directional Drill (HDD) rig


Example of HDD road crossing

Marine
cable route



Our proposed route for the subsea cables has been developed through careful environmental and technical assessment of potential route options, in consultation with Scottish shipping and fisheries organisations and environmental bodies.

Following benthic and geotechnical marine surveys, which gathered data on the geology and ecology in the marine environment, marine technical consultants developed a route for the cables which takes into account protected and designated areas and infrastructure such as pipelines, cables, wrecks and military considerations. Wherever possible the route seeks to avoid difficult ground conditions, such as outcropping rock, and areas of high shipping, fishing and environmental sensitivity.

The marine cables will be installed by special cable-laying vessels (pictured below). The cables will be buried in the sea bed or covered by rock armour throughout their length to protect them from accidental damage.

Supporting the communities we serve

SP Energy Networks

We are on a mission to develop a safe, secure and resilient network that's ready for Net Zero, to tackle climate change and build a cleaner future for the communities we serve.

In March 2025, the UK government published guidance on community benefit funds for transmission infrastructure. The guidance sets out the recommended level of funding for eligible onshore electricity transmission infrastructure projects, including £530,000 for a new converter station or substation.

Applications for project planning and feasibility support will open in 2026, but discussions can start now!

We want to hear your views!

SP Energy Networks

Our public consultation runs until Friday 06 June 2025.

SP Energy Networks attaches great importance to the effect our work may have on the environment and local communities. We want to hear what local people think about our plans, to help us develop the EGL4 project in the best way.

Please give us your views on our proposed converter station site, underground cable route, landfall point and marine cable route, and anything you would like us to take into account – such as site access – to help us develop our plans.

You can find more information, project documents and an online feedback form at our project website: www.spenergynetworks.co.uk/pages/eastern_green_link_4.aspx

You can also contact us to ask any questions or give us your comments:

Email: egl4@communityrelations.co.uk

Freephone: 0800 0217890

Freepost: FREEPOST SPEN EGL4

What happens next?

Following pre-application consultation we will complete a detailed Environmental Impact Assessment (EIA), which will assess the potential impact of the project on landscape, ecology, water and flooding, cultural heritage, traffic and transport, noise, geology and tourism. The EIA will be completed and submitted as part of the planning application in autumn 2025.

SP Energy Networks will be applying to Fife Council for planning permission in principle (PiP) under the Town and Country Planning (Scotland) Act 1997 for the proposed converter station, and full planning permission for the DC underground cable from Mean Low Water Springs (MLWS) at the landfall site to the converter station and for the AC underground cable from the converter station to Westfield Substation.

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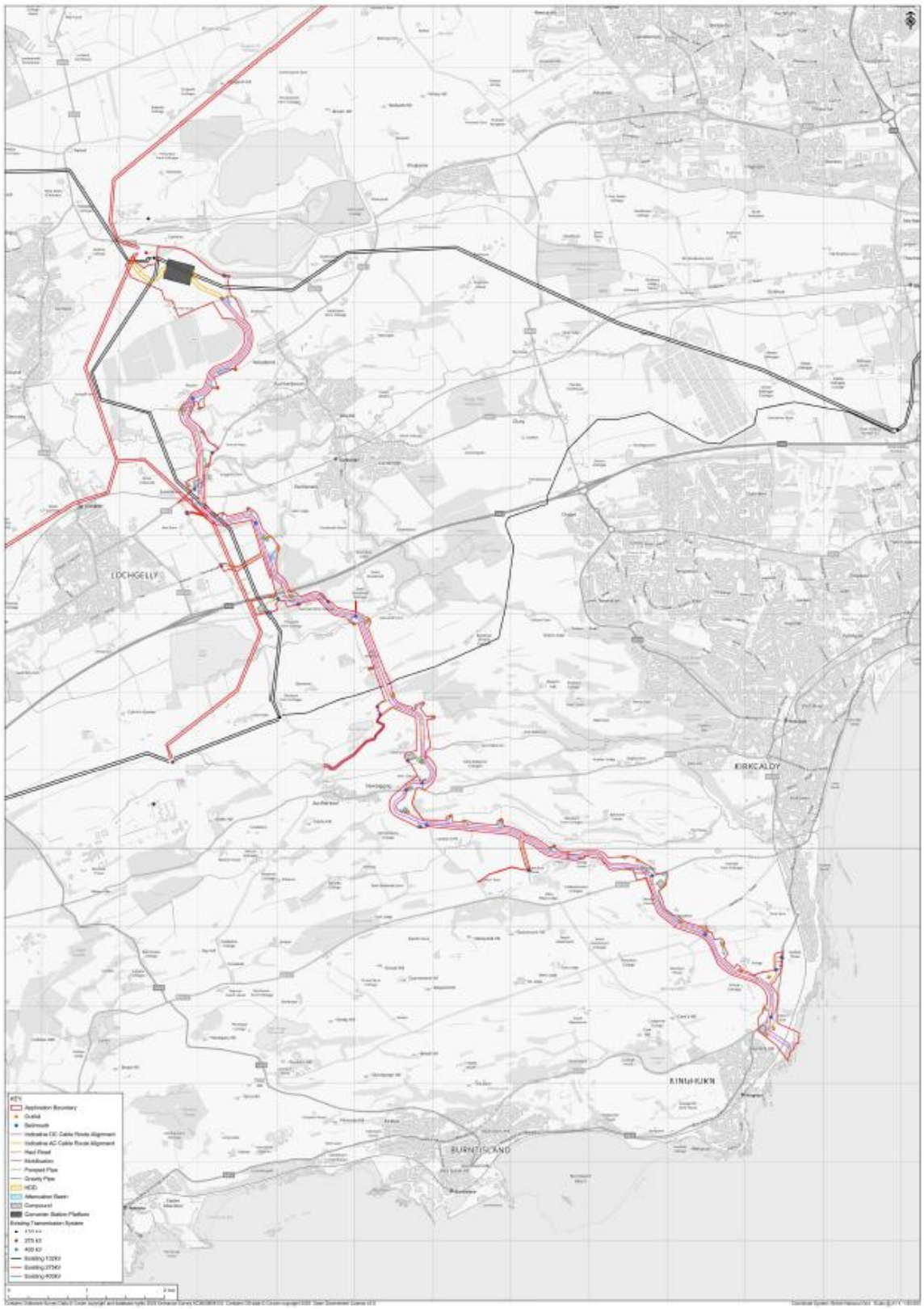
At this stage, your comments are not representations to the planning authority or MD-LOT. When we make an application for development consent in future, you will be able to make formal representations at that stage.

Appendix D: Red Line Boundary and Proposed Route

1.1.1 Onshore Scheme



1.1.2 Marine Cable Route