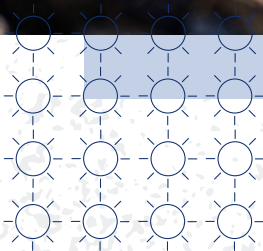
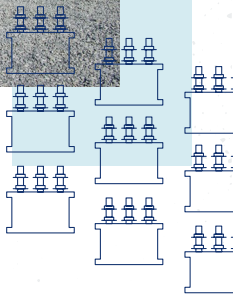




# Netherton Hub

## Pre-application consultation

28 February 2024



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## The consultation event will be taking place on:

28 February (2–7pm)  
Longside Parish Church Hall, Inn Brae, Longside AB42 4XN



# Powering change together



## The time has come to further enhance Scotland's energy infrastructure, providing power for future generations as we move towards net zero.

The shift to a cleaner, more sustainable future is about more than climate change. It's about ensuring future generations have the same opportunities to thrive as we have all had.

Countries around the world are investing in their energy infrastructure to support the demands of modern economies and meet net zero targets. The UK is leading the way in building a modern, sustainable energy system for the future.

## We all have a part to play

When it comes to net zero, we have to be in it together. The UK and Scottish governments have ambitious net zero targets, and we're playing our part in meeting them.

We work closely with the National Grid Electricity System Operator to connect vast renewable energy resources—harnessed by solar, wind, hydro and marine generation—to areas of demand across the country. Scotland is playing a big role in meeting this demand, exporting two thirds of power generated in our network.

**But there's more to be done. By 2050, the north of Scotland is predicted to contribute over 50GW of low carbon energy to help deliver net zero. Today, our region has around 9GW of renewable generation connected to the network.**

At SSEN Transmission, it is our role to build the energy system of the future.

**We're investing £20 billion into our region's energy infrastructure this decade, powering more than ten million UK homes and 20,000 jobs, 9,000 of which will be here in Scotland.**

## Who we are

We're responsible for maintaining and investing in the electricity transmission network in the north of Scotland. We're part of SSE plc, one of the world's leading energy companies with a rich heritage in Scotland that dates back more than 80 years. We are also closely regulated by the GB energy regulator Ofgem, who determines how much revenue we are allowed to earn for constructing, maintaining and renovating our transmission network.

## What we do

We manage the electricity network across our region which covers a quarter of the UK's land mass, crossing some of the country's most challenging terrain. We connect renewable energy sources to our network in the north of Scotland and then transport it to where it needs to be. From underground subsea cables and overhead lines to electricity substations, our network keeps your lights on all year round.

## Working with you

We understand that the work we do can have an impact on our host communities. So we're committed to minimising our impacts and maximising all the benefits that our developments can bring to your area. We're regularly assessed by global sustainability consultancy AccountAbility for how we engage with communities. That means we provide all the information you need to know about our plans and how they will impact communities like yours. The way we consult is also a two-way street. We want to hear people's views, concerns, or ideas and harness local knowledge so that our work benefits their communities: today and long into the future. You can share your views with us at: [ssen-transmission.co.uk/talk-to-us/contact-us/](https://ssen-transmission.co.uk/talk-to-us/contact-us/)



Scan the QR code with your smartphone to find out more about how these policies have been assessed and determined.

# The Pathway to 2030

Building the energy system of the future will require a significant acceleration of work over the next few years. In partnership with the UK and Scottish governments, we're committed to meeting our obligation of connecting new, renewable energy to where it's needed by 2030.

## Achieving Net Zero

By 2030, both the UK and Scottish governments are targeting a big expansion in offshore wind generation of 50GW and 11GW respectively. The Scottish Government has also set ambitious targets for an additional 12GW of onshore wind by 2030.

Across Great Britain, including the north of Scotland, there needs to be a significant increase in the capacity of the onshore electricity transmission infrastructure to deliver these 2030 targets and a pathway to net zero.

## Securing our energy future

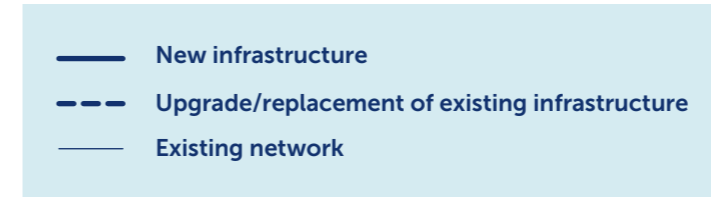
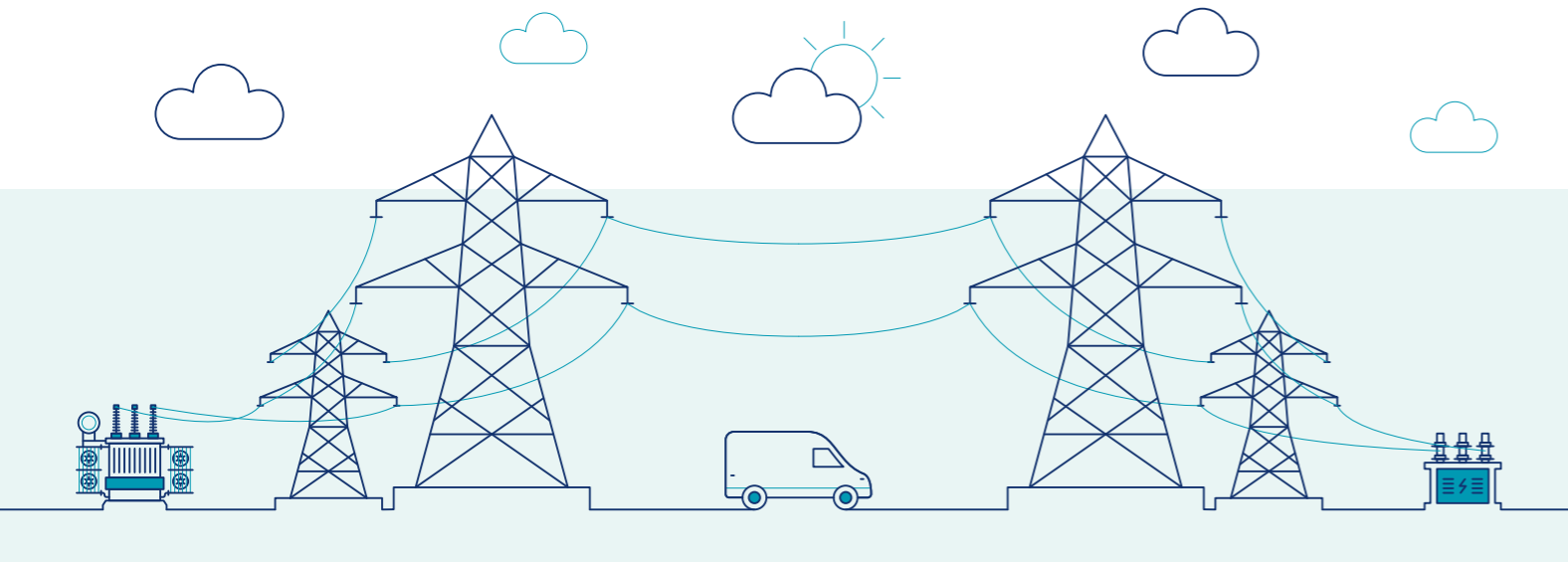
And it's not just about net zero. It's also about building a homegrown energy system, so that geopolitical turmoil around the world doesn't severely impact the UK and push up energy prices.

The UK Government's British Energy Security Strategy further underlines the need for this infrastructure, setting out plans to accelerate homegrown power

for greater energy independence. The strategy aims to reduce the UK's dependence on and price exposure to global gas wholesale markets through the deployment of homegrown low carbon electricity generation supported by robust electricity network infrastructure.

## Meeting our 2030 targets

In July 2022, National Grid, the Electricity System Operator (ESO), published the Pathway to 2030 Holistic Network Design (HND). This set out the blueprint for the onshore and offshore transmission infrastructure that's required to support the forecasted growth in the UK's renewable electricity. It's an ambitious plan that will help the UK achieve net zero.



# The Pathway to 2030

## What does this mean for you?

The north and the north-east of Scotland will play a key role in meeting these goals. The extensive studies that informed the ESO's Pathway to 2030 Holistic Network Design confirmed the requirement to reinforce the onshore corridors between Beaully and Peterhead, Beaully and Spittal in Caithness, and an offshore subsea cable between Spittal and Peterhead.

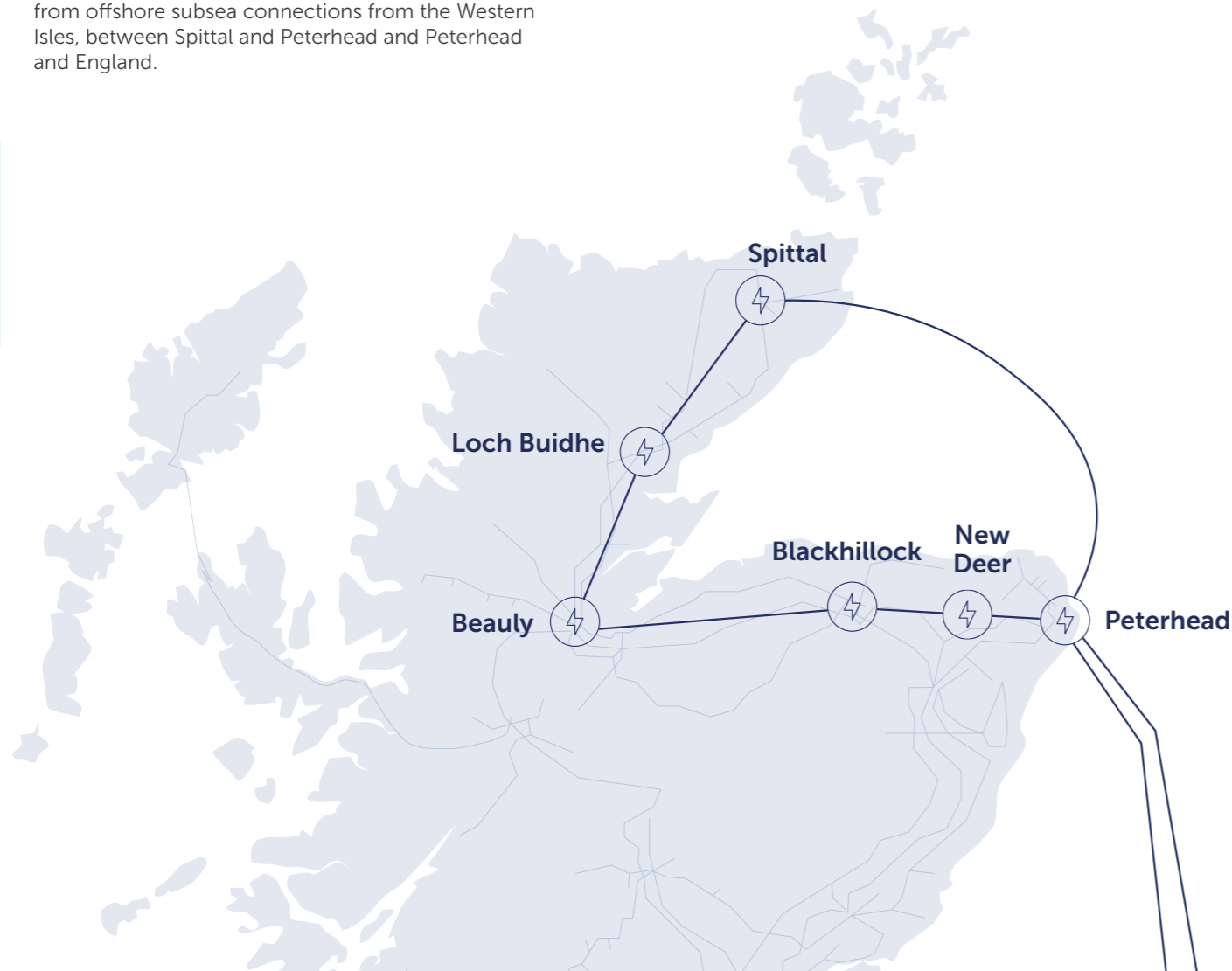
Providing a 400kV overhead line and high voltage subsea cable (HVDC) connection between these sites provides the significant capacity required to take power from large-scale onshore and offshore renewable generation (mainly wind farms) to the north-east mainland of Scotland.

From there, it will be transported to demand centres in England via an HVDC subsea cable. To enable these new connections, new 400kV substations are also required at key locations. At Spittal, Beaully and Netherton near Peterhead, high voltage converter stations are also required to convert DC electricity to AC (and vice versa), from offshore subsea connections from the Western Isles, between Spittal and Peterhead and Peterhead and England.

## Future network investment requirements

Our 2030 targets are the first step on the transition to net zero. The UK Government has a target to decarbonise our electricity system by 2035 and fully decarbonise our economy by becoming net zero by 2050, with the Scottish Government committing to net zero five years earlier, by 2045.

To achieve these targets, further investment in new low carbon electricity generation and the enabling electricity transmission network infrastructure will be required. The next stage of strategic network planning across Great Britain is underway and we expect the independent Electricity System Operator, National Grid ESO, to publish details of this in March this year. It is expected this will include a combination of new onshore and offshore network requirements.



# Project overview

We're leading some exciting projects to power change in the UK and Scotland. To support the delivery of 2030 offshore wind targets set by the UK and Scottish Governments, and to power local communities, we need to upgrade our existing network. In some key areas, we need to develop entirely new infrastructure, and quickly.

The Netherton Hub is a strategic development proposed for a site located to the west of Peterhead, near Flushing and Longside. Several components will be co-located at this site and are outlined below. The project has been renamed from Peterhead Net Zero 2030 Developments to 'Netherton Hub' to reflect the area's farming history following discussions with local stakeholder groups.

## Key components of the Netherton Hub



### 400kV substation

A 400kV substation is proposed to support offshore and onshore electricity generation. The substation will be based on an enclosed Gas Insulated Switchgear (GIS) design.



### Eastern Green Link 3 HVDC converter station

This second converter station and associated HVDC underground and subsea cable will transport renewable energy from generators in the northeast of Scotland to Norfolk and beyond.



### 132kV substation

A 132kV substation is proposed to support further future generation and storage connections from third party developers. The substation will also be based on an enclosed Gas Insulated Switchgear (GIS) design.



### HVDC switching station

A switching is required to facilitate coordinated DC connections on the network and from generation sources. This will reduce the required footprint for future HVDC connections and help to ensure a more resilient transmission network.



### Spittal to Peterhead HVDC converter station

This converter station and associated high voltage direct current (HVDC) underground and subsea cable will transport renewable energy from generators in the north of Scotland via Spittal in Caithness to the Netherton Hub and on to demand centres throughout the UK.



### Spares warehouse and operations base

A spares warehouse and operations base will also be sited within the Netherton Hub.

# Project overview



3D aerial view of the Netherton Hub

## Substations - 400kV and 132kV

Two substations are proposed—a 400kV and a 132kV substation—and both will be based on enclosed Gas Insulated Switchgear (GIS) design. The substations are required to support offshore and onshore electricity generation and transmission, and future generation from third-party developers. A new 400kV overhead line between Beauly, Blackhillock, New Deer and Peterhead is proposed to connect to the 400kV substation. The existing 400kV overhead line between New Deer and Peterhead will also connect to the 400kV substation. Consultation on these proposed overhead line connections will be carried out separately.

**Overall, the 400kV substation is approximately 187 meters in length, 142 meters wide and 16 meters in height. The super grid transformer building is approximately 85 meters in length, 50 meters wide and 21 meters in height. The 132kV substation is approximately 73 meters in length, 32 meters wide and 16 meters in height.**

### What is a substation?

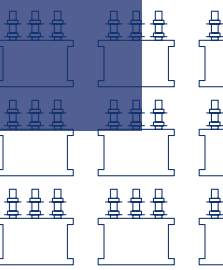
Substations play an essential role managing electricity flow around the country and improving the reliability of supply. They achieve this by connecting and disconnecting circuits and converting electricity into different voltages using large equipment called super grid transformers. Substations with Gas Insulated Switchgear, like the two we're proposing here, are smaller in size compared to Air Insulated Switchgear design.



Super grid transformer



An example of a 400kV Gas Insulated Switchgear substation



# Project overview

## Converter stations: Eastern Green Link 3 HVDC and Spittal to Peterhead HVDC

Two high voltage direct current (HVDC) converter stations are proposed for the Netherton Hub.

### Eastern Green Link 3 HVDC converter station

Eastern Green Link 3 HVDC converter station and HVDC underground and subsea cable will transport renewable electricity from the north of Scotland to centres of demand in the wider GB network. The project is being jointly developed by SSEN Transmission and National Grid Electricity Transmission and will include a converter station at Netherton Hub, a converter station in Norfolk and over 600km of HVDC cable connecting the two. You can find more information on this major subsea project here:

[ssen-transmission.co.uk/projects/project-map/eastern-green-link-3](https://ssen-transmission.co.uk/projects/project-map/eastern-green-link-3)

Dimensions of a standard converter station design are 359m by 288m by 29m. The final dimensions will depend on the final design and technology choice.

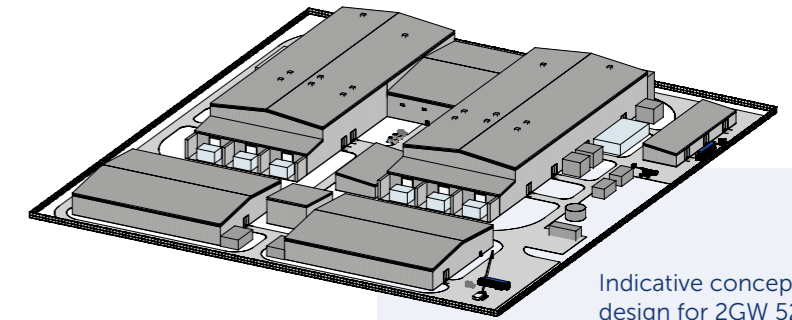
### Spittal to Peterhead HVDC converter station

Spittal to Peterhead HVDC converter station and over 200km of HVDC underground and subsea cable will transport renewable energy from generators in the far north of Scotland via Spittal in Caithness to the Netherton Hub near Peterhead for onward transmission to demand centres throughout the UK. You can find more information on this major subsea project here:

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

## What is a converter station?

Converter stations change electricity from alternating current (AC) to direct current (DC), or vice versa. Alternating current is used in households, whereas direct current is used to efficiently transport electricity over long distances, such as via subsea cables, with fewer electrical losses.

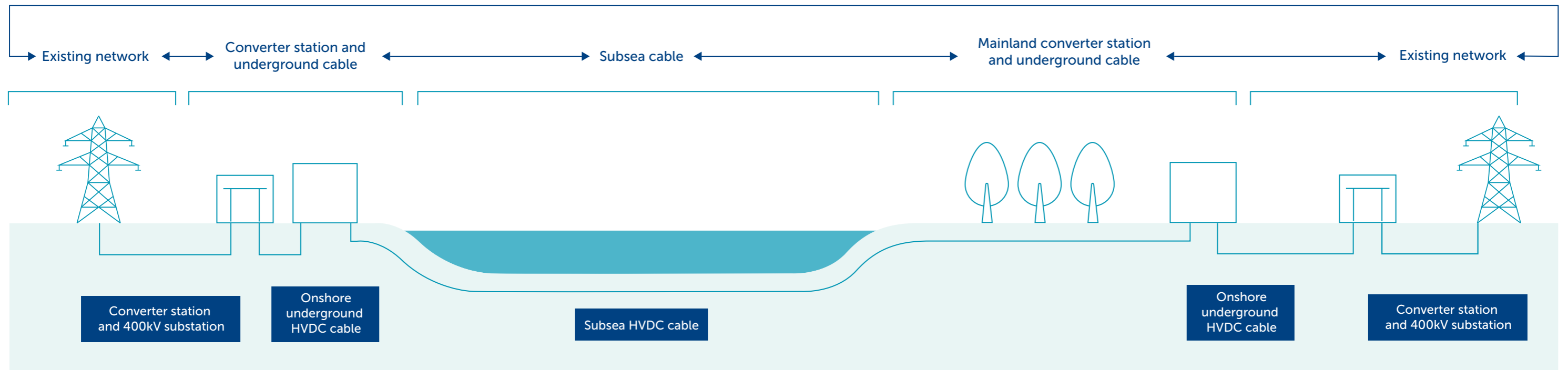


Indicative conceptual design for 2GW 525kV Bipole converter station



The 320kV DC 1200MW Blackhillock HVDC converter station

## Diagram illustrating HVDC converter station and subsea cable projects



# Project overview

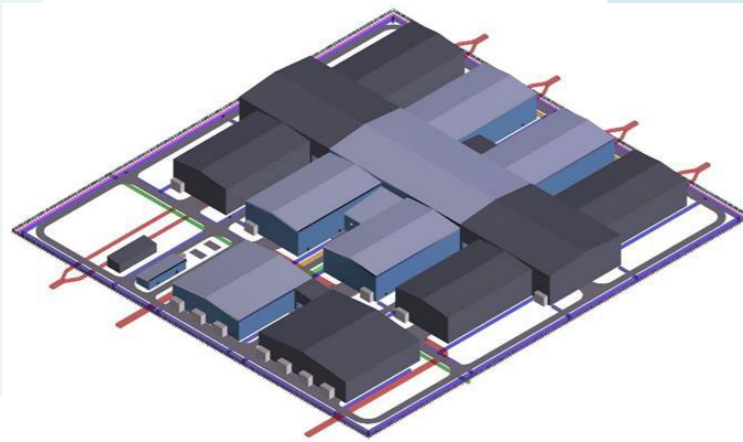
## HVDC switching station

A switching station is required to facilitate co-ordinated DC connections on the network and from generation sources. This will reduce the required footprint for future HVDC connections and help to ensure a more resilient transmission network.

Dimensions: Switching station approx. 30m at highest point, a width of 245m and length of 355m.

### What is a switching station?

Unlike substations and converter stations, switching stations don't change voltages or currents. Instead, they enable us to connect and disconnect electrical circuits to assist with managing faults and maintenance, reducing customer impact and sending power where it is needed. They do this through a series of switches providing resilience in the network.



The shape of the HVDC switching station may vary from this image due to optimising design and space.

### A spares warehouse and operations base will also be housed on site.

Dimensions: spares warehouse approx. 220m by 125m by 24m; operations base approx. 90m by 100m by 20m.



# Help shape our plans

The work we have planned is significant and has the potential to deliver massive benefits in your community, Scotland, and beyond. Yet we know that achieving our goals will require a lot of work that will impact your lives. That's why we want to work with you every step of the way throughout the planning and delivery stages of these essential and ambitious works.

We're committed to delivering a meaningful consultation process that actively seeks the views of everyone affected by our plans. That means making our plans clear and easily accessible, so that you can give us input throughout each stage of the development process.

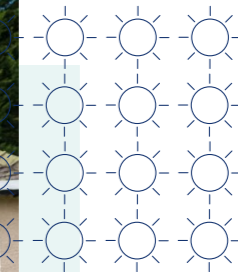
Throughout the consultation, we'll present our approach to developing the project, including changes made since we last consulted with you. We will also provide some visualisations and maps to show you where everything will be located.

We want you to share your thoughts and opinions on our plans, where you think we can make improvements, concerns about the impact of our work and what you think of any changes and refinements we've made. By telling us what you think, you will help shape our proposals. We want to harness your local knowledge so that we spot any unforeseen challenges early and maximise the potential benefits and opportunities for your communities.

Because, ultimately, we want you to work with us to ensure that the energy infrastructure we build will be the best it can possibly be.

## Who we're consulting with

As well as communities, we are keen to hear feedback from a broad range of other stakeholders including but not limited to landowners, businesses, non-statutory consultees and statutory consultees such as local authorities, NatureScot, Scottish Environment Protection Agency (SEPA), Historic Environment Scotland (HES).



# How we've selected the Netherton Hub site

Our site selection process makes sure the design, consenting, construction and operation of our projects are undertaken in a manner, which on balance, causes the least disturbance to the environment and the local community, while ensuring the solution taken forward is economically and technically practical.

To do this we follow an internal process supported by third party environmental and technical experts. This has many key stages, each increasing in detail and definition and bringing technical, environmental, people, and cost considerations together to find a balanced outcome.

## Our proposed site: Netherton Hub

Following our consultations in January and April 2023, where we asked for community views on our shortlisted and preferred sites, we published a Report on Consultation in December 2023 confirming our intention to progress with the Netherton Hub location. This document can be found on our project document page of our website at: [ssen-transmission.co.uk/netherton-hub](https://ssen-transmission.co.uk/netherton-hub)

### Why this site?

- Fewer environmental constraints
- Large enough to house the proposed components and to support landscaping and biodiversity net gain improvements.
- Locality in relation to main access routes for transport.
- Connectivity for existing and proposed overhead line infrastructure and local services.
- Supports the construction requirements (including laydown and compound) without the need to extend beyond the boundary.

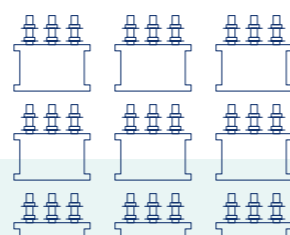
### What has changed since we last consulted?

Following the initial consultation events, we have sought to ensure that comments and concerns raised have informed our designs as far as possible. We are pleased to be able to present our updated site layout design and our plans for landscape screening and site drainage.

We also changed the name of the project from Peterhead Net Zero 2030 Developments to Netherton Hub.

### What's next?

We are now at the 'pre-application' stage of our site selection process and following this consultation, we will engage again in May, to share feedback from this consultation and any subsequent changes to design prior to submitting a planning application to the Local Authority.



# The Town and Country Planning Process

## The legislation that enables the planning of projects like Netherton Hub is the Town and Country Planning (Scotland) Act 1997.

### Engaging the right people

Local Planning Authorities determine the outcome of any applications made under the Town and Country Planning Act. The application will be accompanied by an Environmental Impact Assessment (EIA) Report. The scope of potential impacts to be considered within the EIA Report has been established through formal scoping with Aberdeenshire Council. The assessments will be made publicly available once submitted.

The Netherton Hub project is classed as "National Development" under the Town and County Planning process; therefore, pre-application consultation is required with the public and interested parties.

### The pre-application process

A Proposal of Application Notice (PAN) was submitted to Aberdeenshire Council on 23 January 2024. This is the first stage in the planning application process, and the beginning of a consultation period that must allow for at least 12 weeks between the start of the pre-application consultation and feedback, and submission of a planning application.

The plans we are consulting on at this event might change between now and the submission of a planning application. The red line boundary that has been submitted with the PAN represents the maximum extent of the land potentially included in the application site, but this area may be reduced or rationalised as the development proposal becomes finalised. There is a requirement to hold at least two events to provide the opportunity for members of the public to comment on

An Environmental Impact Assessment (EIA) Report will accompany our planning application to Aberdeenshire Council and will be available for members of the public to comment on.

the proposals. This public event is the first event. A second event will be held in May 2024 at which feedback will be given on the views obtained at the first event. There will also be a short opportunity for comment after this second event and comments will be included in a Pre-application Consultation Report.

### Submitting a planning application

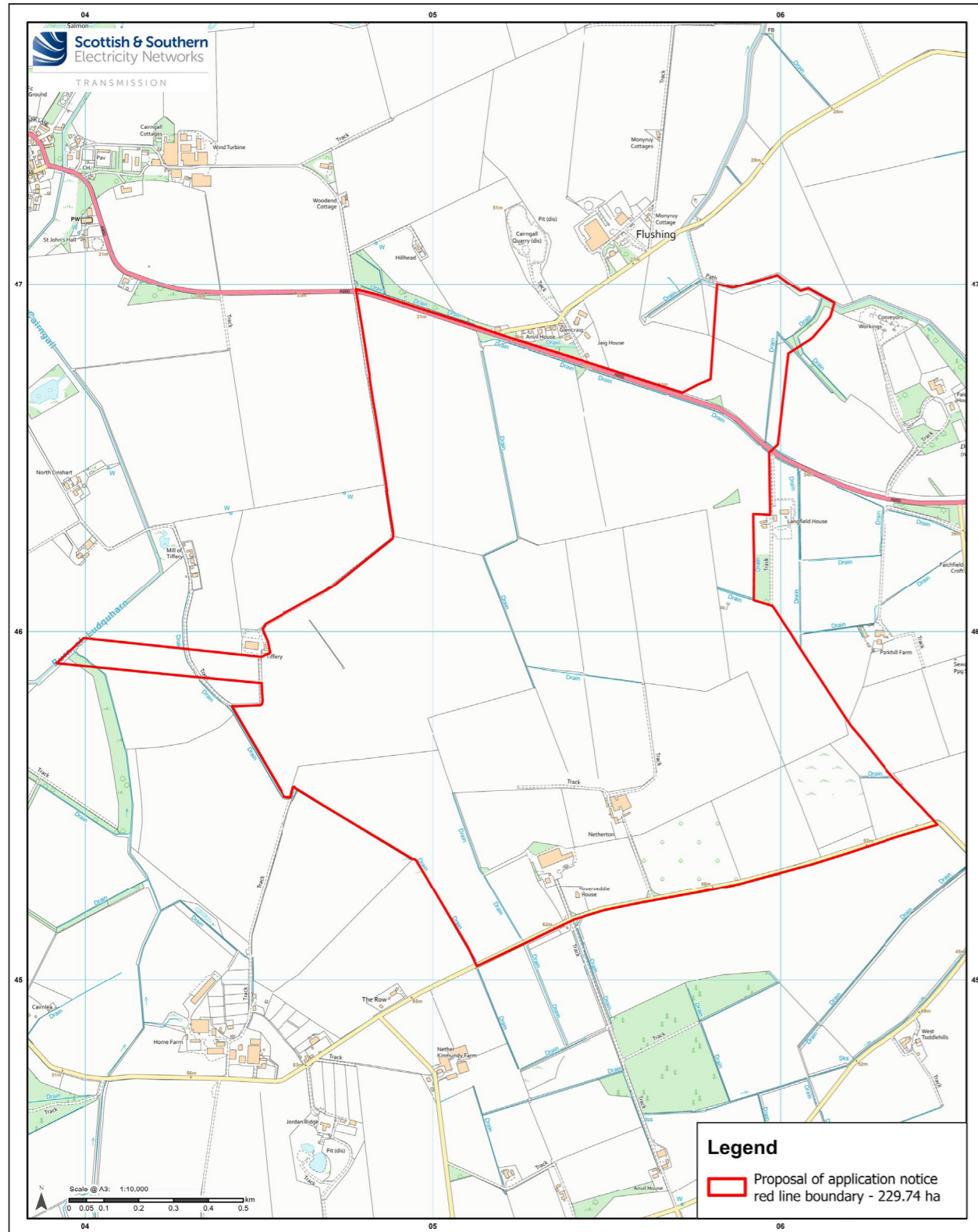
The planning application is due to be submitted to Aberdeenshire Council in Autumn 2024. A Pre-application Consultation Report will accompany the planning application providing details of the consultation undertaken and communicating how the consultation process has influenced the proposed development. Where comments are received that cannot be addressed in the final proposal, an explanation will also be given why this is the case.

Comments made through the pre-application consultation process are not formal representations to Aberdeenshire Council. When the planning application is submitted there will be an opportunity to make formal representations to Aberdeenshire Council.





# Red line boundary map

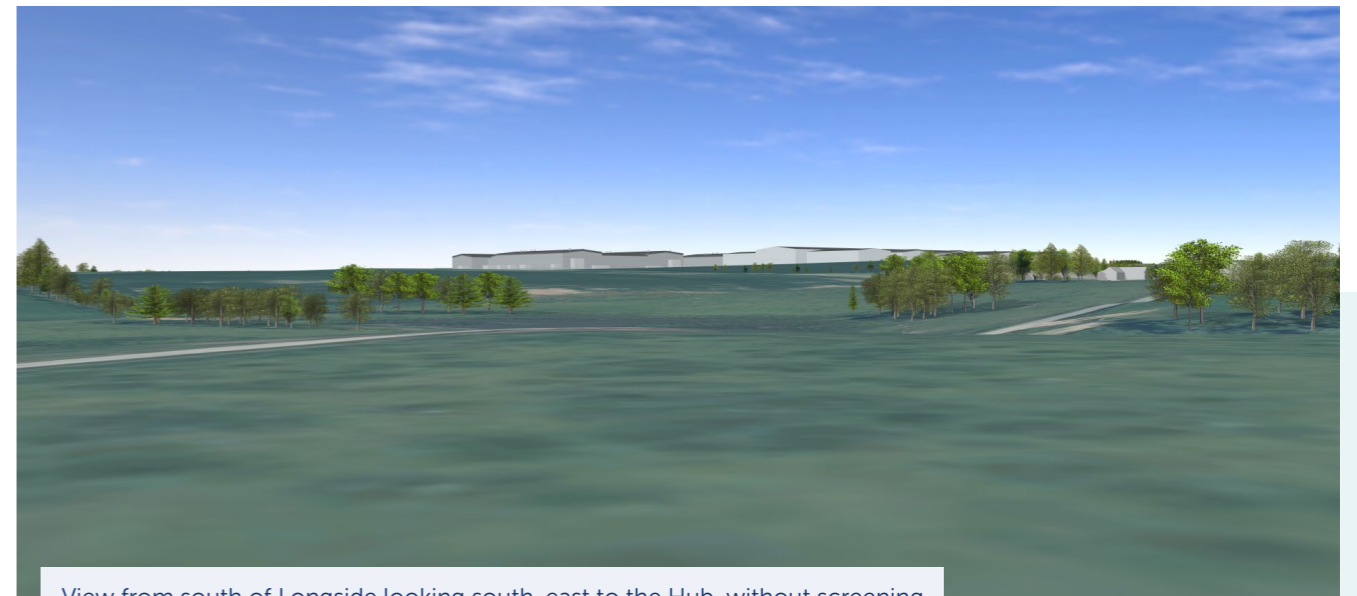


# 3D modelling

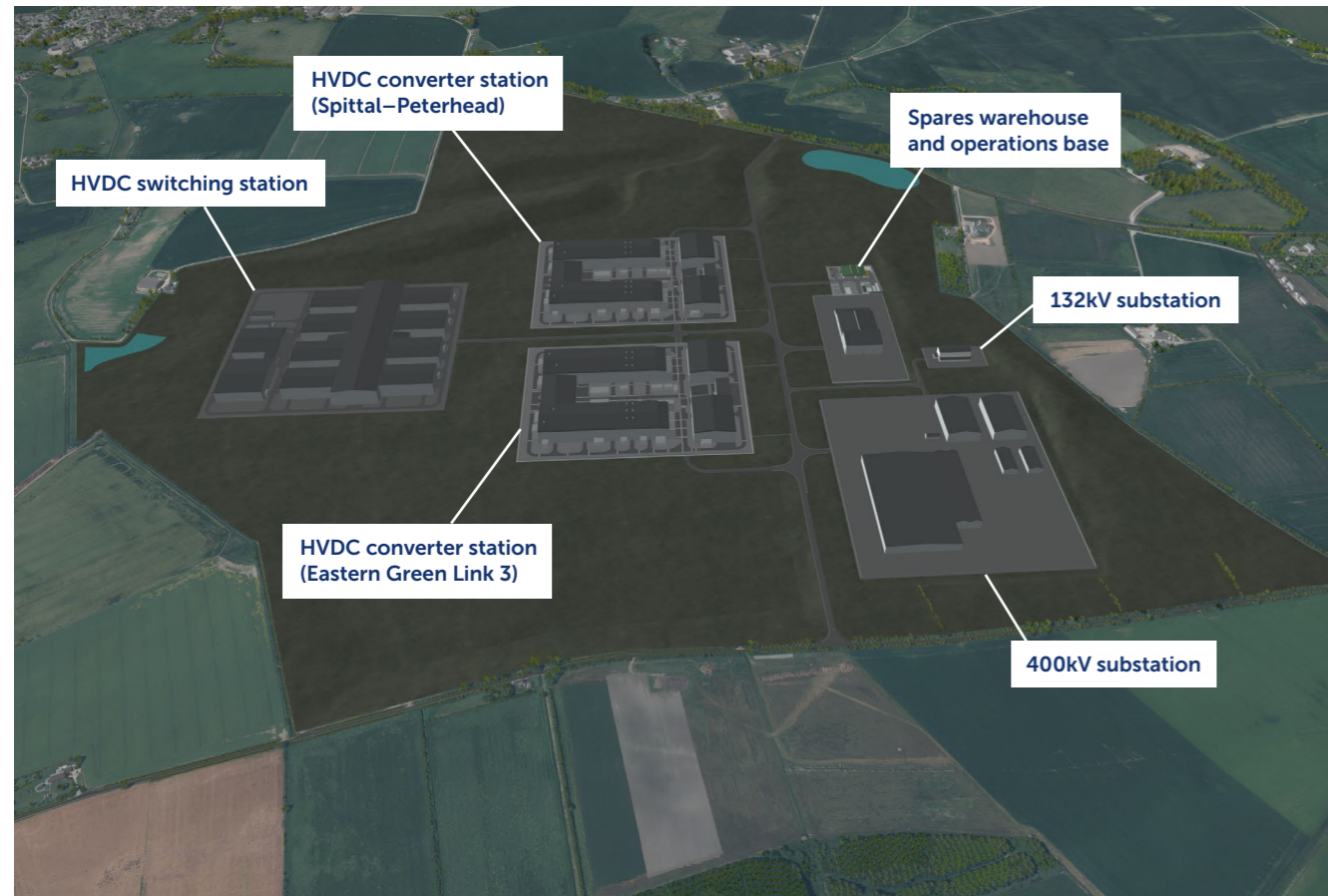
We have commissioned 3D visualisations to help show the appearance of the development within the landscape. A flythrough video is available to view from the project webpage or via the QR code. The two images shown below demonstrate the impact of the landscape mitigation we are developing.



Scan the QR code to find the 3D flythrough video.

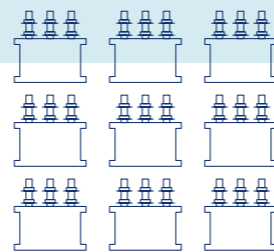


The layout and colour of our proposals may change based on feedback and further refinement of the design. If that happens, we will update our model and video and share this on our webpage and with you at the next pre-application event.



### Photomontages

Photomontage visualisations will also be produced as part of the Environmental Impact Assessment (EIA). Once the EIA is completed, we'll ensure these photomontages are available to view.



# Development considerations

During our last consultation, we outlined many of the engineering, environmental and social considerations that we take account of when establishing a practical site for the Hub. Now that we have identified a proposed site, we are able to share further details regarding many of our development considerations.

### Size

Our proposed site layout map shows the space needed to house the structures and ensure adequate room for access, landscaping, and drainage features. The proposed site measures around 230 hectares, with a considerable area of the site consisting of landscape mitigation for the development as well as enabling us to meet our Biodiversity Net Gain (BNG) commitments.

### Traffic

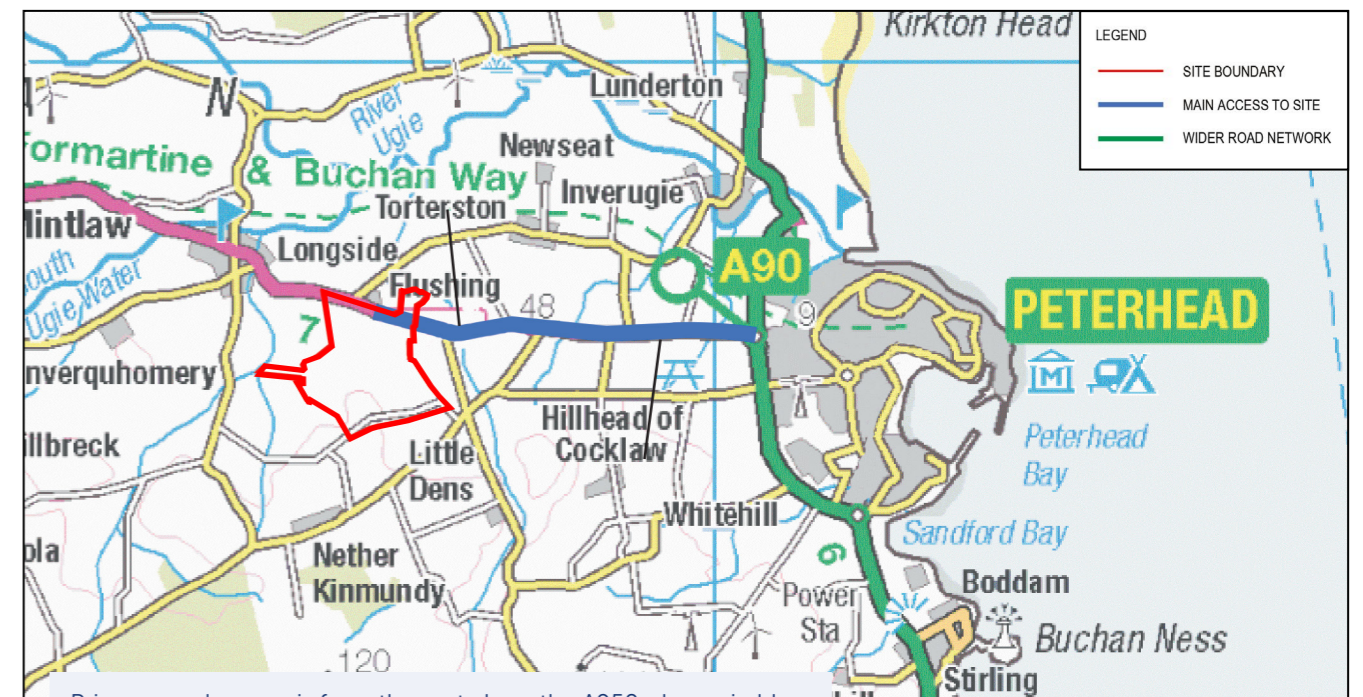
Primary access to the site is expected to be from A950 which forms the northern site boundary. This is shown in blue on the map below. The A950 links with the A90 which is located approximately 5km to the east and forms part of the strategic road network.

Potential impacts from construction traffic will be fully assessed as part of the EIA Report and a construction traffic management plan prior to commencement of works on site.

### Connectivity

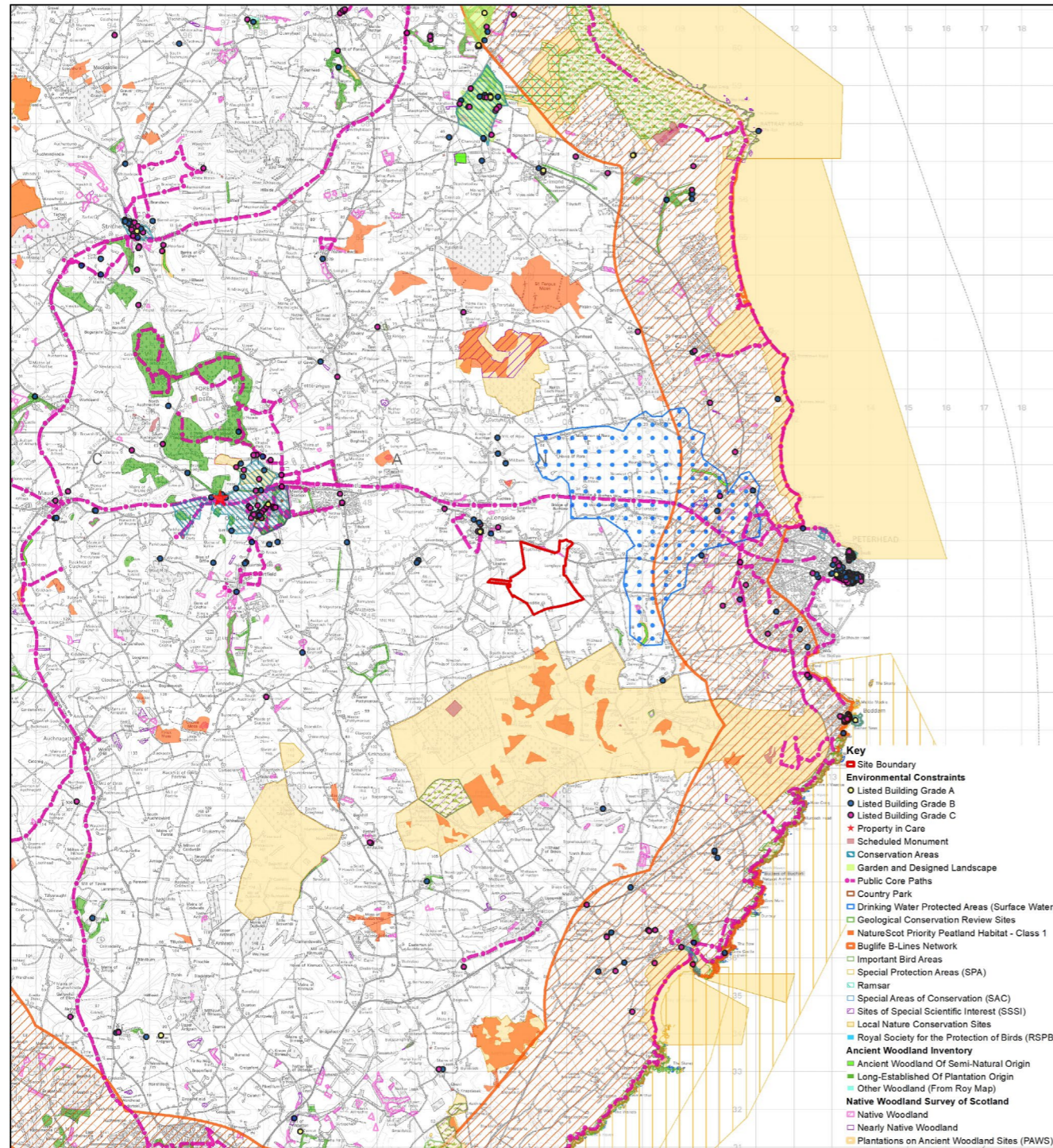
There are a number of connections to be considered. They include:

- Spittal to Peterhead HVDC underground cable connection
- Eastern Green Link 3 HVDC underground cable connection
- Beauly-Blackhillock-New Deer-Peterhead 400kV overhead line
- New Deer-Peterhead 400kV existing overhead line tie-in
- Third-party renewable energy developer connections



Primary road access is from the east along the A950, shown in blue.

An overview of the environmental features and designations in the wider area is provided in the below map.



## Landscape and visual impact

A landscape and visual assessment will determine how the proposed development will be viewed within the surrounding area and its impact on the landscape character and value of the area. The assessment will be used to inform proposals to mitigate any significant effects.

We aim to reduce visual impact in a number of ways. Siting the buildings relatively low in the landscape and creating a naturalistic rolling landform will help to partially screen views. Extensive native woodland and hedgerows are planned to provide further screening, as well as habitat that will contribute to biodiversity improvement. The choice of cladding colour has a large impact on how the buildings blend into the landscape. Experienced landscape architects advise us on the most appropriate colour, and we submit that recommendation to the Local Authority as part of our planning application.

There are no landscape designations covering the area of the Proposed Development.



## Ecology, nature conservation and ornithology

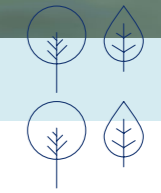
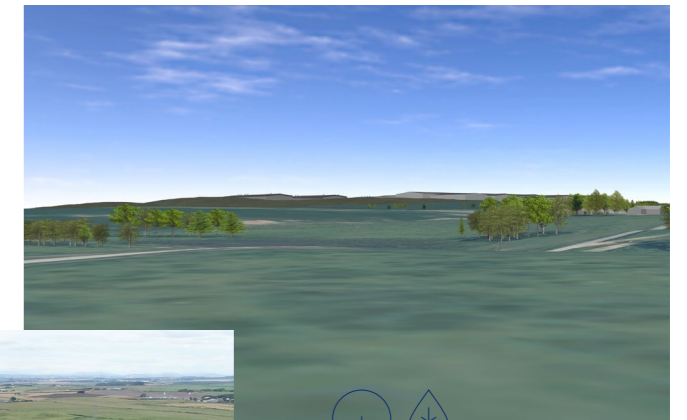
A suite of ecological surveys have been undertaken. Based on the information available to date, sensitive receptors are likely to include bats and badgers. The EIA Report will fully assess the significance of any impacts to species and their habitats and identify mitigation measures where necessary.

We will seek to enhance biodiversity with a minimum biodiversity net gain target of 10%.

There are four designated sites of European or International importance within 20km of the site. There are no statutory designated sites at National or Local level within 2km, and no non-statutory designations or nature conservation sites within the site.

## Noise

Independent consultants have undertaken background noise surveys that will inform an environmental noise impact assessment. Any potential impacts likely to have a significant effect on our close neighbours will be evaluated within the EIA Report. Noise limits will be agreed with Aberdeenshire Council and appropriate mitigation measures will be implemented to ensure these limits will be met.



## Cultural heritage

The potential effects of the Proposed Development will be assessed through examination of desk-based sources and detailed field surveys. Where appropriate, mitigation measures will be proposed to prevent, reduce, or offset any direct physical impacts and/or any effects arising from changes within the setting of heritage assets.

To better assess the archaeological potential of the site, we are planning to undertake archaeological trial trenching in Spring/Summer 2024.

There are no designated heritage assets within the Proposed Development boundary.

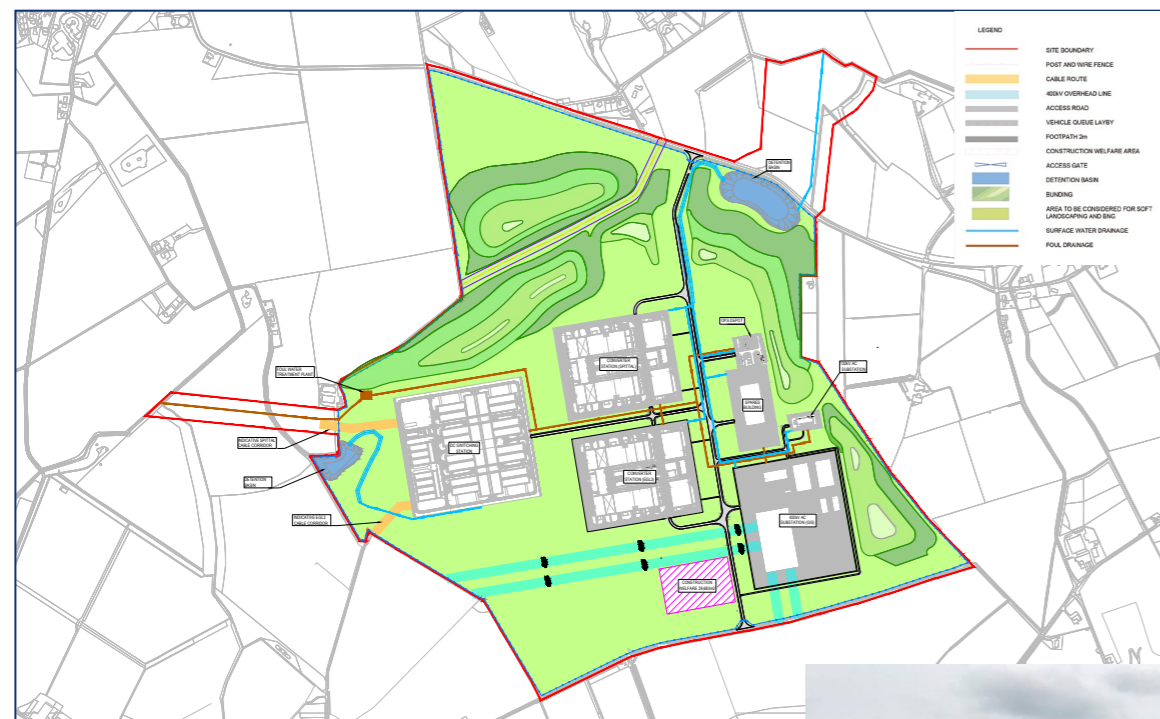
## Water and drainage

During previous consultations, a number of stakeholders identified an existing surface water flooding issue within the north of the site, adjacent to the A950 at Flushing.

A detailed drainage strategy for the permanent site arrangement is currently in development and will establish the existing site wide drainage scheme and the necessary infrastructure that will be installed to ensure the proposed site effectively contributes to the overall drainage network. Currently, there is an existing watercourse on site that has been straightened and is causing excessive uncontrolled flows to the culvert crossing the A950 at Flushing village. As part of the project, we will carry out detailed assessments in consultation with SEPA and the local authority to re-naturalise this watercourse and control the flows in order to reduce the overburden on the flushing drain during high rainfall events.

Furthermore, two new detention basins will be installed to the north-east and west of the site. These basins will be sized to accommodate all surface water run-off from the overall site area and will provide suitable storage of surface water during significant rainfall events. This will introduce an element of control over the rate of run off from the site into receiving watercourses.

There are also a large number of private water supplies that have been identified within 1km of the site, including three within the site boundary. We are currently mapping all owners of these private water supplies and will consult with each owner personally to ensure suitable solutions or mitigations are in place to avoid any issues during or after construction of the site.



## Land use and agriculture

The site is characterised by open, agricultural landscape, with interspersed farmsteads and residential properties. Some areas of the site are classed as prime agricultural land.

There are no settlements within the proposed site, however there are dispersed buildings used as farmhouses and private residence. There is also an existing high-pressure gas main pipe that crosses the site. Any potential impacts likely to have a significant effect on the sensitive receptors, such as loss of agricultural land, farm holding viability and impacts to private properties, will be evaluated within the EIA Report.



An example detention pond (small scale)

# Delivering a positive environmental legacy

**On every project we deliver, we always need to consider how we impact the environment in that area. As we enhance the transmission network in the East of Scotland, we have a responsibility to design and build our projects to protect and enhance the environment. We will always look to minimise the potential impacts from our activities and achieve Biodiversity Net Gain (BNG).**

As the first developer to consult upon and implement an award-winning approach to deliver Biodiversity Net Gain (BNG) on all new sites, we're committed to delivering a "greener grid", focusing on habitat restoration and creating biodiversity growth as we invest in our network. We are committed to delivering 10% Biodiversity Net Gain on all sites gaining consent going forward. This ensures that we don't just restore our natural habitats but actively improve them for the benefit of local communities, wildlife, flora and fauna.

During the development, construction and operation of our projects, we will leave the environment in a measurably better state than before development started, ensuring a positive environmental legacy at all our sites.

As this project progresses through the development process, we will actively seek ways to avoid and minimise impacts on biodiversity, through careful routing and site design to avoid impacting areas of highest biodiversity value.

Where avoidance is not possible, we will offset this by introducing new habitats along with restoration efforts. These can be achieved within the boundary of the development site, or by providing support to local groups involved with habitat restoration or creation projects, within the locale of the development site.

**If there are biodiversity improvement projects in your local area that we could get involved with, please get in touch. Contact details for the Community Liaison Manager can be found on page 30.**

## Example projects

### Argyll Coast and Countryside Trust (ACT)

Argyll's rainforest is a unique and rare habitat of ancient and native woodland. This collaboration with ACT will help deliver our compensatory tree planting and BNG commitments in Argyll. It also aligns with ACT's woodland planting ambitions, supporting its charitable objectives including biodiversity gain, health and wellbeing, improvement for local people, outdoor learning opportunities and climate change workshops.

### Thurso South substation and The Bumblebee Conservation Trust

We created approximately 10 hectares of bee-friendly habitat to support the pollination of the rare endemic great yellow bumblebee. This contributed to wider conservation efforts for this bee species. A collaboration with The Bumblebee Conservation Trust facilitated research on food availability for bumblebees, identifying the need for a diverse seed mix containing key flowering species to enhance early, main and late food supply to support the full lifecycle of bumblebees.



# Connections into Netherton Hub

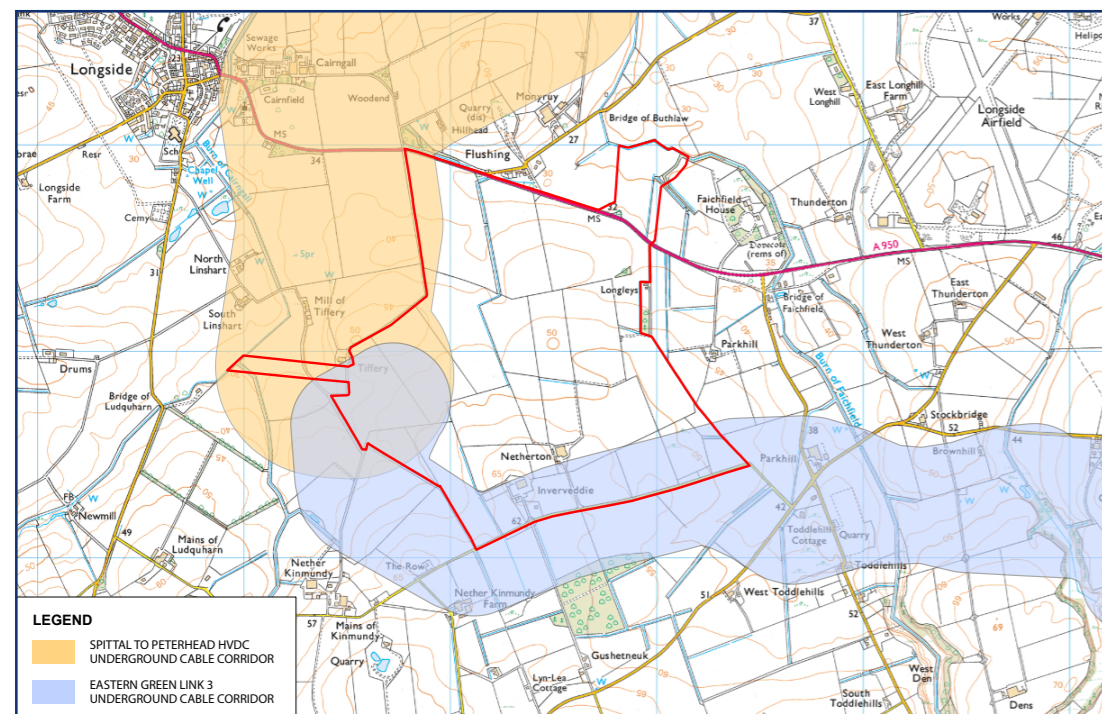
Connections into Netherton Hub are in various stages of development and are not part of this consultation process. We are presenting information below to provide an overall picture.

## Spittal to Peterhead HVDC underground cable route

The marine cable landfall for Spittal to Peterhead HVDC project has been identified north of St Fergus Gas Terminal in the vicinity of Rattray Head.

The preferred underground cable corridor from Rattray Head to Netherton Hub has also been identified however the cable route refinement within that corridor is still in progress, with ground investigation works currently underway.

The underground cable works are classed as 'Permitted Development' and therefore do not require a planning application to the Local Authority. The route corridor is shown here for information in orange, and discussions with landowners and other stakeholders will continue while we further refine the alignment. We will update the project's webpage with the latest developments as well as informing statutory stakeholders of any significant developments.



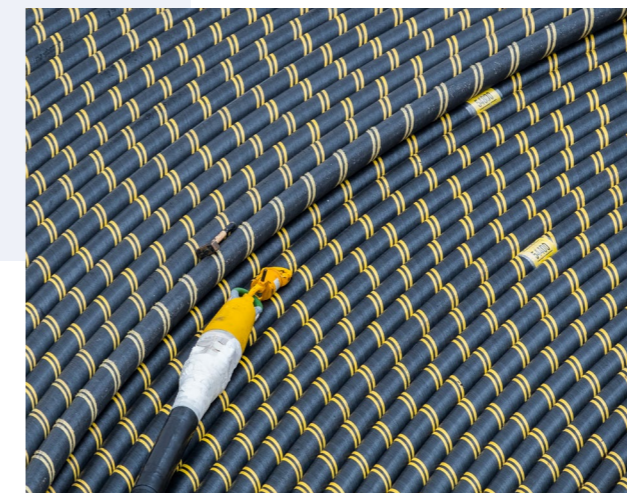
Approximate underground cable route corridors for Spittal–Peterhead HVDC Link and Eastern Green Link 3

## Spittal to Peterhead HVDC marine cable

Similar to the underground cables, a marine cable corridor has been selected and surveys of this corridor are underway. The information obtained from these surveys will allow us to determine our preferred route within this corridor.

Marine survey consultations are planned for 2024 following conclusion of the marine surveys and assessment of the data acquired. We will update the project's webpage with the latest developments as well as informing statutory stakeholders of any significant developments.

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



## Beauly–Blackhillock –New Deer–Peterhead 400kV overhead line

This project has been identified as key to connecting the growth in onshore and offshore renewables across the north of Scotland. A 400kV overhead line connection together with new substations are needed to connect new renewable power sources and transport it from source to areas of demand across the country, enabling power sharing between east and western parts of our network.

**Future consultation:** Please refer to the separate consultation information pack for further information.

[ssen-transmission.co.uk/projects/project-map/beauly-blackhillock-new-deer-peterhead-400kV](https://ssen-transmission.co.uk/projects/project-map/beauly-blackhillock-new-deer-peterhead-400kV)

## Eastern Green Link 3 HVDC underground cable route

The marine cable landfall for this project has been identified at Sandford Bay to the south of Peterhead. The preferred underground cable route to Netherton Hub has also been selected and ground investigation works will be undertaken from February 2024 with discussions with potentially impacted landowners underway.

The underground cable works are classed as 'Permitted Development' and therefore do not require a planning application to the Local Authority. The route is shown overleaf in blue for information, and discussions with landowners and other stakeholders will continue while we further refine the alignment. We will update the project's webpage with the latest developments as well as informing statutory stakeholders of any significant developments.

[ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/](https://ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/)

## Eastern Green Link 3 HVDC marine cable

The EGL3 HVDC marine cable preferred corridor has been selected following consultation. Surveys of the corridor are currently being completed. Information acquired from the survey will be used to inform final route alignment. Further information on the final marine cable route will be shared in Autumn 2024.

[ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/](https://ssen-transmission.co.uk/projects/project-map/eastern-green-link-3/)

## New Deer–Netherton –Peterhead overhead line works

In order to connect the proposed 400kV substation at Netherton Hub to other parts of our transmission network, the overhead line connection between the existing 400kV substation at New Deer and existing 400kV substation at Boddam, Peterhead, will be diverted into Netherton Hub. This will involve removing and replacing some overhead line towers to enable diversion into the proposed 400kV substation, and creating a New Deer–Netherton –Peterhead transmission link.

Further information on this project will be shared later in 2024.

# Other projects in the local area

**As the transmission operator in the north of Scotland, we need to maintain and invest in the high voltage electricity transmission network in our area to provide a safe and reliable electricity supply to our communities.**

We also need to offer terms for connections to the transmission network for new generation such as wind farms and pumped storage schemes and for new sources of electricity demand.

Therefore, as well as Netherton Hub, we have a number of other projects within the local area we are currently progressing, described below. Our relevant Pathway to 2030 projects are also detailed on Page 5.

## Eastern Green Link 2

Eastern Green Link 2 is a joint venture between SSEN Transmission and National Grid Electricity Transmission that will see around 440km of subsea high voltage direct current cable connecting new converter stations planned for Boddam near Peterhead and Yorkshire. The project will contribute towards the Scottish and UK

governments achieving their ambitious net zero climate targets and will help transport Scotland's vast reserves of renewable energy to where it is needed. Plans for the Peterhead converter station were consented in May 2022 by Aberdeenshire Council and construction is due to begin in late 2024 and be complete in 2029.

## Peterhead 275kV substation upgrade

Following consultation in October 2021, we have submitted a planning application to Aberdeenshire Council regarding our proposal to replace two ageing super grid transformers at the Peterhead 275kV substation. These new transformers will be housed in two new buildings located to the immediate south-west of the substation.

## Peterhead 400kV substation

We have recently completed the construction of a new substation in Boddam, Peterhead, adjacent to the existing 275kV substation. The project required the construction of four enclosed super grid transformers, a 400kV gas-insulated busbar, substation control building and associated infrastructure.

## Local renewable developments

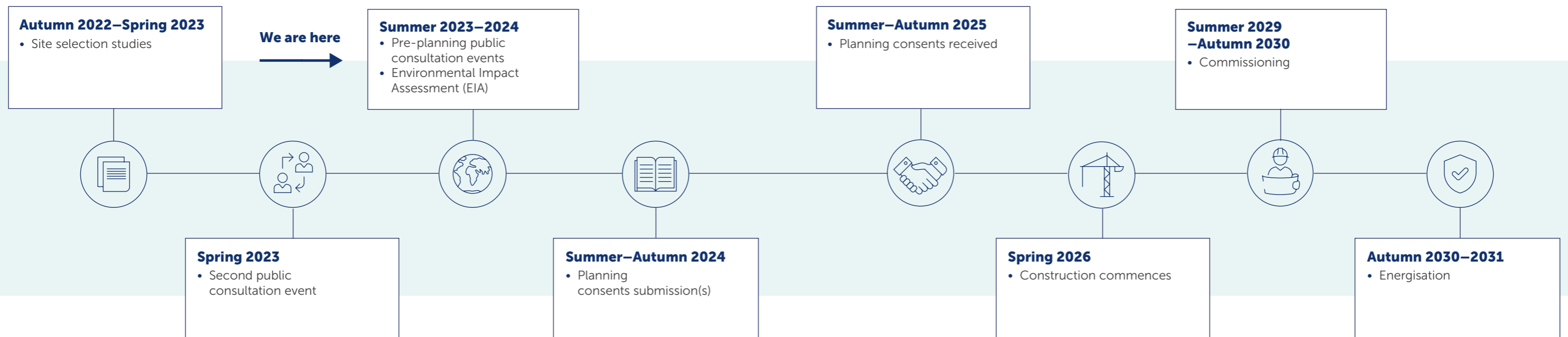
We know that local stakeholders are keen to understand the full extent of renewable developments being proposed in their local area.

Applications to connect to the transmission network in our licence area are made to National Grid ESO and undergo a lengthy process of assessment before we begin to develop a network connection for those developments. We aim to be transparent about the renewable

developments looking to connect to our network but are not permitted to disclose any details of these developments until they are in the public domain.

A list of projects that hold contracts for Transmission Entry Capacity (TEC) with National Grid, the Electricity System Owner is available from their website: [nationalgrideso.com](https://www.nationalgrideso.com)

## Project timeline



# Finding common ground with landowners

**We recognise that landowners and occupiers are key stakeholders in the development of our projects. At all levels, we will be transparent about our proposals and keep the conversation open and constructive when it comes to those affected and reaching effective compromise.**

From the outset of the project, our land team have been identifying and contacting landowners and occupiers who may be affected by our proposals. If you are a landowner who is affected by the proposals and have not yet had contact from us, please get in touch via the contact details for the dedicated project land managers found on the relevant webpages:

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

We work with landowners and occupiers to mitigate the effects of our infrastructure on their properties and our team of Land Managers will be on hand to answer queries and address concerns throughout this process.

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As part of this, we need to carry out various engineering and environmental surveys to inform what we design and how we build it. We will always seek consent from affected landowners and occupiers in advance for these surveys.

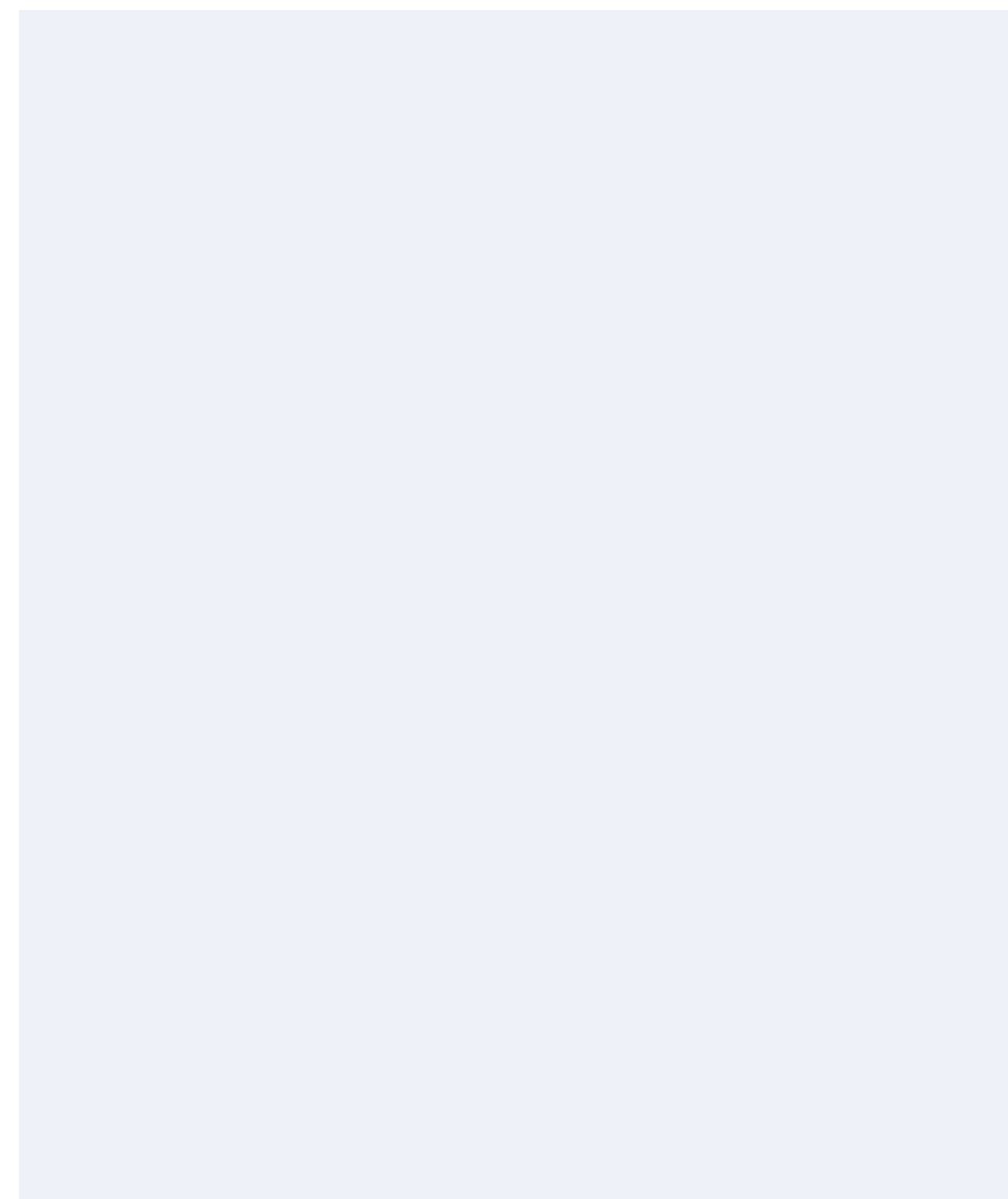
Once we have finalised the design, we will be required to secure the appropriate land rights from landowners and occupiers in order to secure planning consent. Our land managers will endeavour to reach a voluntary agreement with landowners and occupiers, however, as a statutory undertaker, we might need to underpin voluntary discussions with an application to Scottish Ministers for a Necessary Wayleave or Compulsory Purchase Order.

Ultimately this is to ensure nationally significant infrastructure projects are delivered on time and in line with our licence obligations. We also have a duty to protect the interests of the UK bill payer. Statutory powers are not used lightly as we aim to work with landowners and occupiers to secure the necessary land rights voluntarily.

All potentially affected landowners and occupiers have the opportunity to provide feedback at our in-person consultation events and by submitting a feedback form. We would encourage all those with an interest to submit their views through this consultation.



# Notes



# Have your say

**We value community and stakeholder feedback. Without this, we would be unable to progress projects and reach a balanced proposal.**

## The feedback period

We will accept feedback from now until **9 April 2024**.

## How to provide feedback

Submit your feedback online by scanning the QR code on this page or via the form on our project webpage at: [ssen-transmission.co.uk/projects/project-map/netherton-hub](https://ssen-transmission.co.uk/projects/project-map/netherton-hub)

Email the feedback form to the Community Liaison Manager, or write to us enclosing the feedback form at the back of this booklet.

## Our Community Liaison team

Each project has a dedicated Community Liaison Manager who works closely with community members to make sure they are well informed of our proposals and that their views, concerns, questions or suggestions are put to our project teams.

Throughout the life of our projects, you will hear from us regularly. We aim to establish strong working relationships by being accessible to key local stakeholders such as community councils, residents' associations, and development trusts, and regularly engage with interested individuals.



To support everyone online, we provide accessibility and language options on our website through 'Recite Me'. The accessibility and language support options provided by 'Recite Me' include text-to-speech functionality, fully customisable styling features, reading aids, and a translation tool with over 100 languages, including 35 text-to-speech.

Please select "Accessibility" on our website to try out our inclusive toolbar."

## What we're seeking views on

During our last public consultation event in April 2023, we wanted to know your thoughts on the site we had identified as most suitable. We'll be actively looking to mitigate the impacts of the site as much as possible over the coming months, but it would be helpful to understand what you believe we should be doing to help minimise these impacts and if there are any opportunities to deliver a local community benefit you would like us to consider.

We encourage all interested community members to fill in a feedback form when submitting feedback, however if you prefer, you can email us to provide your feedback or ask any questions.


## Community Liaison Manager

The best way to contact us regarding this project is through our Community Liaison Team.

### Gillian Doig

 SSEN Transmission  
200 Dunkeld Road, Perth, PH1 3GH

 [nethertonengagement@sse.com](mailto:nethertonengagement@sse.com)

 +44 7879 288 666

## Additional information:



The best way to keep up to date is to sign up to project updates via the project webpage: [ssen-transmission.co.uk/netherton-hub](https://ssen-transmission.co.uk/netherton-hub)

You can also follow us on social media:



# Your feedback

**Thank you for taking the time to read this consultation booklet. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.**

Please complete in BLOCK CAPITALS. (Please tick one box per question only)

**Q1. Now that we have shared updated design plans for this site, is there anything you'd like to bring to our attention that you believe we may not have already considered during project development?**

Comments:

**Q2. Are there any environmental features, that you consider important and should be brought to the attention of the project team?**

Comments:

**Q3. What suggestions for social or environmental community benefit opportunities do you have that you would like us to consider, or are there any local initiatives you would like us to support?**

Comments:



**Q4. Following review of the provided information, how would you describe your understanding of the project and are there any aspects that you feel you require more information on?**

Comments:

**Full name:** ..... **Email:** .....

**Telephone:** ..... **Address:** .....

We would like to send you relevant communications via email such as invitations to stakeholder events, surveys, updates on projects, services and future developments from the Scottish and Southern Electricity Networks group listed below. If you are happy to receive email updates please opt in by ticking the box below. You can unsubscribe at any time by contacting us at stakeholder.admin@sse.com or by clicking on the unsubscribe link that will be at the end of each of our emails.

For information on how we collect and process your data please see our privacy notice available at today's event. This can also be obtained online at <https://www.ssen-transmission.co.uk/privacy>

**If you would like your comments to remain anonymous please tick this box.**

**Thank you for taking the time to complete this feedback form. Please submit your completed form by one of the methods below:**

**Post:** Scottish Hydro Electric Transmission, 200 Dunkeld Road, Perth, PH1 3GH

**Email:** nethertonengagement@sse.com

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

**Download:** For information on how we collect and process your data please see our privacy notice available at today's event. This can also be obtained online at: [ssen-transmission.co.uk/privacy](https://www.ssen-transmission.co.uk/privacy)

Comments forms and all the information from today's event will also be available to download from the project website.

We intend to use Artificial Intelligence (AI) to assist our experienced teams in the analysis of your feedback, so we can categorise key points raised more quickly. You can learn more about how we're utilising AI at: [ssen-transmission.co.uk/AIFAQ](https://www.ssen-transmission.co.uk/AIFAQ)

Any information given on the feedback form can be used and published anonymously as part of Scottish and Southern Electricity Networks consultation report. By completing this feedback form you consent to Scottish and Southern Electricity Networks using feedback for this purpose.

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