Scottish & Southern Electricity Networks

TRANSMISSION

Shetland HVDC Link 2 Strathbogie Hub

Public Information Session

May 2026

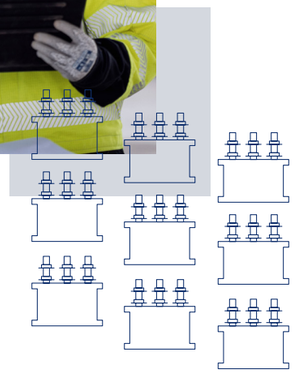
ssen-transmission.co.uk/shetland2

Contents

The information sessions will be taking place on:

Wednesday 27 May 2026, 3–7pm
Linden Centre, Castle Street, Huntly, AB54 4SE

Thursday 28 May 2026, 3–7pm
Scott Hall, Forgue, AB54 6DQ



Shetland HVDC Link 2 Strathbogie Hub

Powering change together

If we want to deliver on clean power and energy security targets and provide power for future generations, upgrades to Scotland's electricity transmission infrastructure are needed.

The shift to a cleaner, more sustainable future is about more than tackling the impact of climate change, it's about ensuring that future generations can thrive.

Countries around the world are investing in their energy infrastructure to support increasing electricity demands and to deliver on clean power targets and the UK is leading the way in building a modern, sustainable energy system for the future.

We all have a part to play

The UK and Scottish governments have set ambitious energy security and clean power targets, and we all have a part to play in delivering them.

At SSEN Transmission, we work closely with the National Energy System Operator (NESO) to connect vast renewable energy resources - like solar, wind, hydro and marine generation - to areas of demand across the country. Scotland will play a particularly big role in meeting increasing electricity demand.

But there is more to be done. By 2050, the north of Scotland is expected to contribute more than 50GW of low carbon power to the GB energy system. Today, the region has around 11GW of renewable generation connected to the network.

At SSEN Transmission, it is our role to build the energy system of the future. To do that, we are planning to invest around **£29 billion** in the coming years to upgrade the electricity transmission network in the north of Scotland. It's an investment that will unlock cleaner, more secure energy for homes and businesses now, and for generations to come. **By 2050, annual electricity demand is expected to at least double** - our investment will support the connection of more clean power to meet that demand to the GB electricity network, supporting up to **17,500 jobs in Scotland,** with more than **8,000** of those in the north of Scotland, along the way.

Who we are

We are responsible for maintaining and investing in the electricity transmission network in the north of Scotland. We are 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 communities and we are committed to minimising our impacts and maximising all the benefits that our developments can bring to your area. To do that 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 and we want to hear people's views, concerns, or ideas – and harness local knowledge – so that our work benefits communities today and long into the future. You can share your views with us at: **ssen-transmission.co.uk/talk-to-us/contact-us/**

Help shape our plans

At SSEN Transmission, we are committed to delivering a robust and transparent consultation process underpinned by inclusion and accessibility. As a stakeholder led business, we understand the importance of involving communities and key stakeholders throughout each stage of our development process.

This period of engagement in the development phase of the project is vital in shaping our proposals. To do this effectively, we need to capture feedback from stakeholders and harness local knowledge to identify key risks. Today we are presenting our approach to developing this project, including the site selection process, and options for locating the Strathbogie Hub.

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.

We want you to share your thoughts and opinions on our plans, including where you think improvements can be made and any concerns about the potential impacts of our work.

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 our communities. Ultimately, we want to work with you to ensure that the energy infrastructure we build will be the best it can possibly be.

If you require additional support to submit your views, please contact our Community Liaison Team **(shetlandengagement@sse.com)** who will happily assist you.

What to expect from this event

The aim of today's event is to:

- Provide information about the wider project and the Strathbogie Hub
- Share progress made on the project with the local community and other key stakeholders
- Explain our approach to developing the project, including the site selection process and options for locating the Strathbogie Hub
- Gather your feedback on the proposed substation site options to help inform the detailed assessment process
- Give you the opportunity to ask questions and share local knowledge, concerns and ideas to help shape our proposals

We will have experts on hand to answer any questions you may have.

Your feedback today has the power to influence outcomes. Across our wider portfolio, local insight has already led to changes in routeing and design. By sharing your views, you're helping us to understand what matters most to the people who live and work here.

Whether you have detailed feedback or just a first impression, we would really value your input.

Shetland HVDC Link 2 Strathbogie Hub

The story so far

The Strathbogie Hub in Aberdeenshire is an integral part of the Shetland HVDC Link 2 project. The Shetland Islands have a vital role to play in the UK's clean energy future. This has been formally recognised through independent national planning. In March 2024, the National Energy System Operator (NESO) Beyond 2030 report confirmed that additional transmission infrastructure is needed, both on Shetland and to the Scottish mainland to connect future renewable generation and to support security of electricity supply across Great Britain.

This assessment forms the basis of the Shetland Strategy - NESO and Ofgem have tasked us with providing a coordinated response to a confirmed need.

From National Plan to Local Action

NESO's findings were based on a comprehensive assessment of how the electricity network must evolve to:

- Meet net zero targets
- Manage increasing demand
- Support economic growth and
- Maintain resilience

Shetland was identified as a strategically important location, not because of any one single project, but due to its long-term potential and critical role in the future energy network.

In December 2024, Ofgem, the GB energy regulator, endorsed this position by approving funding for early-stage development works in Shetland. This sits alongside Ofgem's assessment of NESO's broader Clean Power 2030 recommendations, with further decisions expected in 2026.

Why this matters

The Shetland Strategy proposes a technologically robust solution, that is coordinated across the region and is shaped by local engagement and insight. The strategy serves Shetland's known energy needs as well as provision of headroom for future growth. We have looked to minimise the amount of infrastructure to reduce the impact on communities and the environment.

March 2024

NESO publishes transitional Centralised Strategic Network Plan (tCSNP2) (Beyond 2030) confirming Shetland requirements

December 2024

Ofgem approves early stage development funding

July 2025

Ofgem publishes Clean Power 2030 minded to position.

2026

Further Ofgem decisions expected to support Clean Power 2030

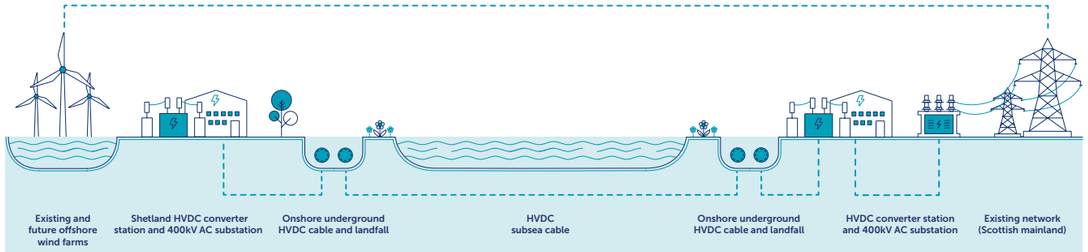
You can read the NESO Beyond 2030 report here

Shetland HVDC Link 2 project need and overview

Why is the project required?

The Shetland HVDC Link 2 is needed to provide a secure, long-term connection between Shetland and the GB (Great Britain) electricity network. It will enable new renewable generation, such as onshore and offshore wind farms, to connect to the grid, and support demand projects such as green hydrogen production. By reinforcing the existing Shetland HVDC Link 1, it also provides resilience for the islands' electricity supply.

The project will include the construction of HVDC converter stations and AC substations in northern Shetland and in Aberdeenshire. The converter stations are connected via a land and subsea HVDC cable system, carrying clean, renewable electricity over these long distances efficiently and reliably.



In addition to the HVDC subsea cable, key elements of the project include:

Northern Shetland:
- HVDC converter station
- 220kV AC substation
- 400kV AC substation
- Underground cable and landfall

Scottish mainland:
- HVDC converter station
- 400kV AC substation
- Underground cable and landfall

What is a Substation?

Substations play an essential role in managing electricity flow around the country and improving the reliability of the supply. They achieve this by connecting and disconnecting circuits and converting electricity into different voltages using large equipment called super grid transformers.

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.

Why HVDC?

High Voltage Direct Current (HVDC) technology offers the most efficient means of transmitting large amounts of power over long distances.

It helps minimise energy losses, reduce environmental footprint, and improve the stability of the wider electricity network. Using HVDC also ensures the new Shetland HVDC Link 2 is compatible with the first Shetland HVDC link and any other future subsea connections, providing a coordinated and future-proof solution.

Shetland HVDC Link 2 Strathbogie Hub

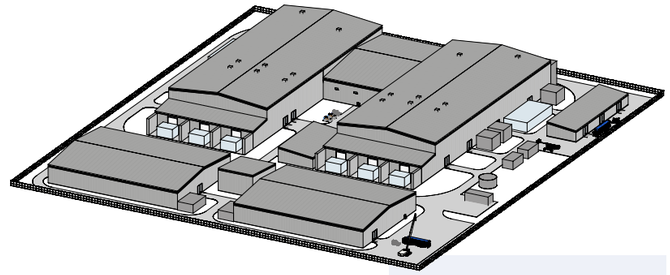
Project overview

We are proposing a new converter station and substation hub to the north-east of Huntly to facilitate the connection of the Shetland HVDC Link 2 project to the transmission network.

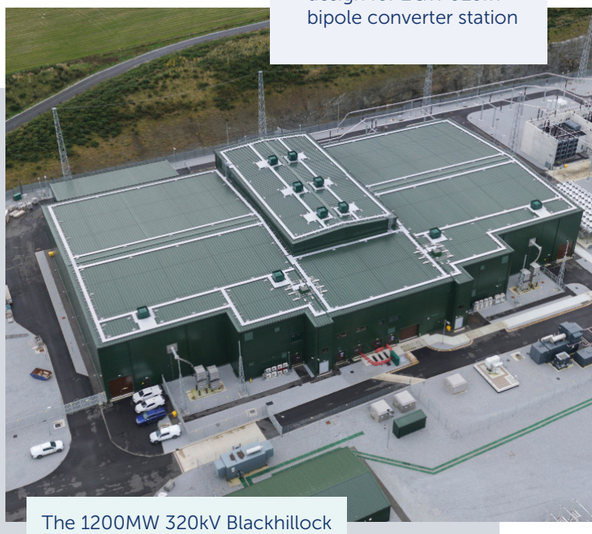
The hub brings together key elements of infrastructure for this project on a single site, including an HVDC converter station, AC substation, substation buildings, terminal tower platforms, lighting, access roads, landscaping and screening, and temporary construction facilities.

Overview

- **400kV Substation** - is required in the area to facilitate offshore and onshore electricity generation connections in addition to the connection for the Shetland HVDC Link 2 project. The substation will connect into the 400kV transmission network.
- **HVDC Converter Station** - A 2GW bi-pole, 525kV HVDC link is proposed between Aberdeenshire and northern Shetland, enabling the efficient, high-volume transmission of renewable electricity from Shetland and the far north of Scotland directly into the wider UK transmission network. This project element consists of two HVDC converter stations, one at each end of the link, connected via a subsea and underground HVDC cable circuit.



Indicative conceptual design for 2GW 525kV bipole converter station



The 1200MW 320kV Blackhillock HVDC converter station

The Kergord HVDC converter station and AC switching station

Onshore Cable

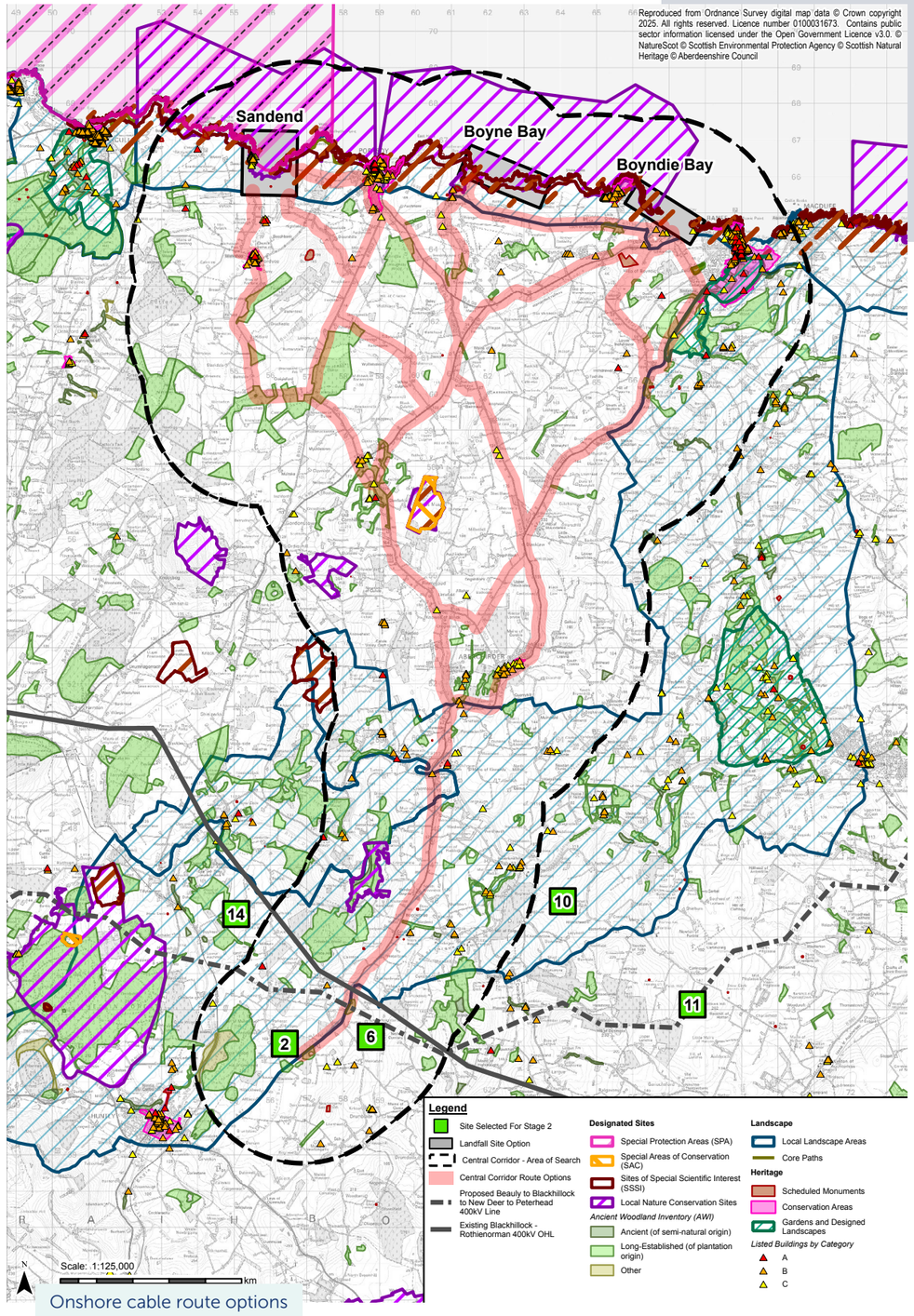
The onshore cable will run for approximately 30km from the landfall to the substation site. The cable will be entirely underground, meaning it will not be visible once installation is complete.

As the route is developed, we will work to avoid or minimise impacts to environmental constraints, such as the River Deveron, areas of ecological importance, farmland and existing infrastructure. Where required, specialist construction techniques such as trenchless crossings will be used to minimise disturbance.

Ongoing environmental surveys and engagement with landowners and statutory bodies will ensure the route is delivered responsibly with minimal long-term impact.

An example of a 400kV Gas Insulated Switchgear substation

Shetland HVDC Link 2 Strathbogie Hub



Onshore cable route options

Project timeline

We are currently in the site selection stage, which includes environmental assessments, technical studies, and early engagement with stakeholders and communities. While timelines may shift as the projects progress, our commitment to a collaborative approach will remain constant throughout every stage.

Strathbogie Hub will require an application for planning permission to be submitted to the relevant Local Planning Authority (Aberdeenshire Council) under the Town and Country Planning (Scotland) Act 1997.

This large scale project may be subject to Environmental Impact Assessment (EIA). This requires an application to be supported by a formal EIA Report together with robust consultation and mitigation proposals.

Should the proposed development be deemed non-EIA (due to its scale or potential environmental impacts), a voluntary Environmental Appraisal will be produced by SSEN Transmission to support the application.

2025
- Project need and scope confirmed
- Initial project development activities commenced

2026
- Site selection option refinement
- Environmental Impact Assessment (EIA)
- Land negotiations
- Public information sessions

2027
- Finalisation of proposed site design
- Public consultation events
- Planning application submission

2028–2029
- Receive consent determination
- Commence construction

2032
- 400kV substation construction complete
- 400kV substation commissioning

2034
- HVDC converter station construction complete
- HVDC converter station commissioning

2035
- Full system commissioning complete
- Full system energisation and integration into transmission network

Shetland HVDC Link 2 Strathbogie Hub

Site selection process

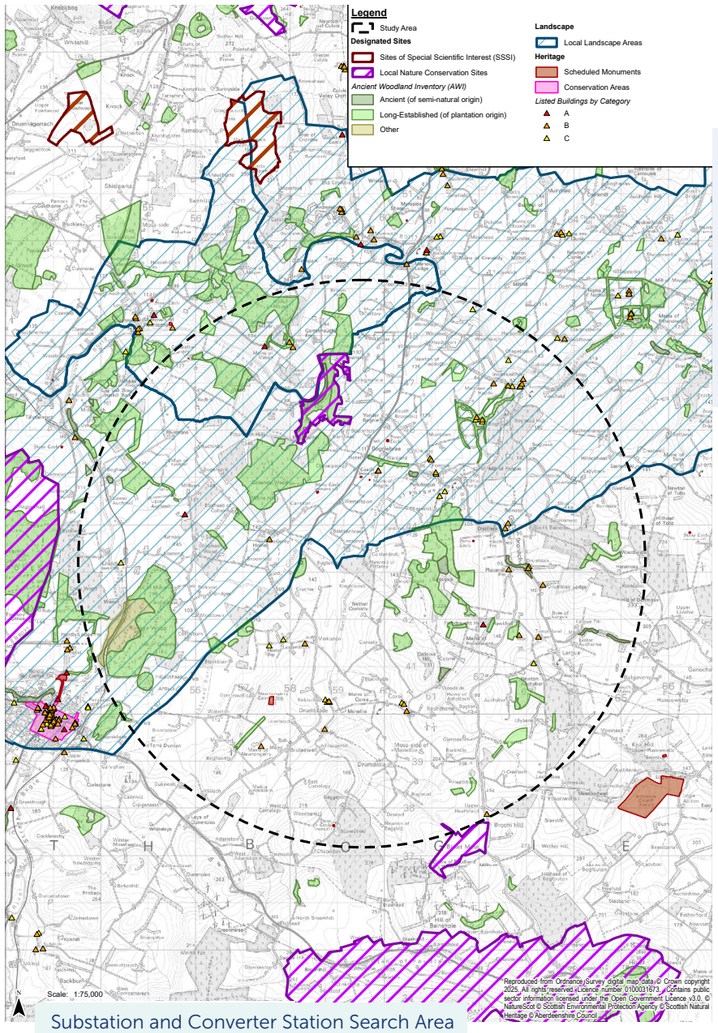
Our site selection process ensures that the design, consenting, construction and operation of our projects are undertaken in a manner, which on balance, causes the least disturbance to the local community and environment, while ensuring the solution taken forward is economically and technically practical.

Stage 0: Strategic options appraisal

Our site selection process provides a consistent and transparent approach to selecting new substation sites, in line with our statutory licence obligations. Our methodology ensures that the design, consenting, construction, and operation of each substation is technically feasible and financially viable, while aiming to minimise environmental impact and disruption to local communities and recreational areas.

To identify potential site locations for the new 400kV substation and HVDC converter station, we applied a 6km search radius around the area where the transmission network features a proposed 400kV circuit in close proximity to an existing 400kV circuit.

Drawing on expert judgement, local knowledge, and technical requirements, a range of engineering and environmental criteria formed the basis for a Multi-Criteria Analysis (MCA), ensuring a consistent and transparent comparison of potential sites. Using the MCA framework, high-level constraints mapping and desk-based review identified land parcels capable of supporting the development. This exercise produced an initial long-list of 14 sites, each meeting the core siting criteria and therefore progressing to the next stage.



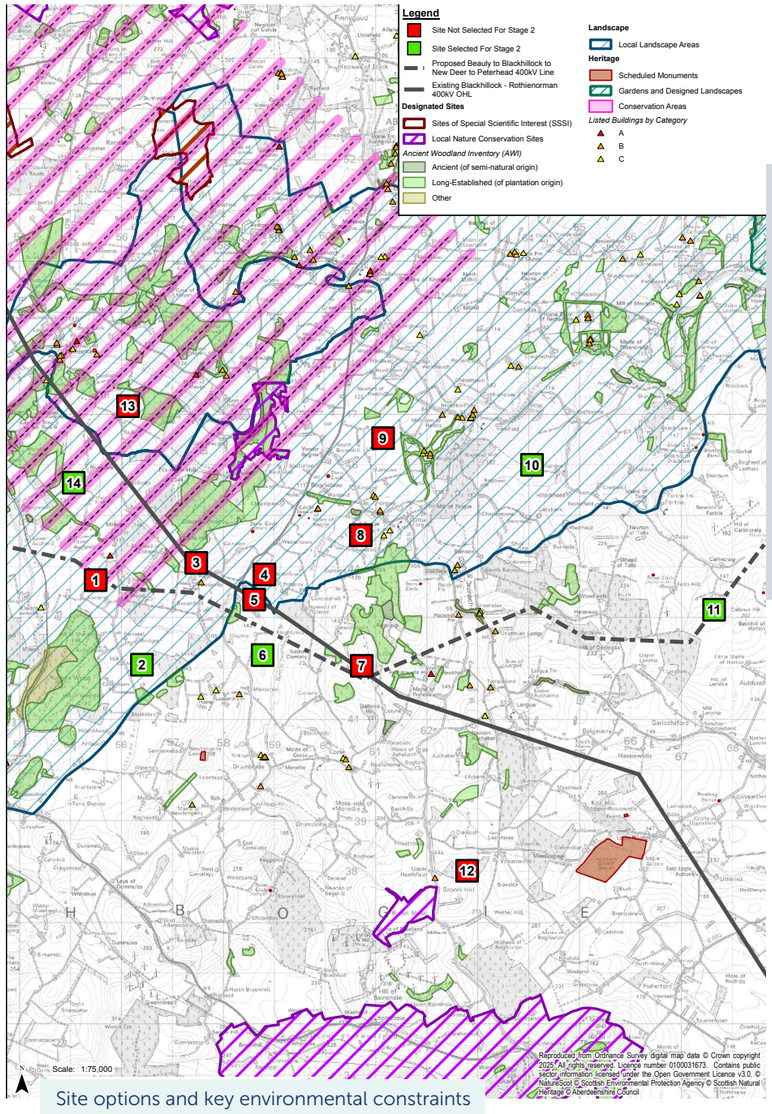
Substation and Converter Station Search Area

Stage 1: Initial site screening

A comparative assessment of 14 site options was carried out using refined selection criteria, supported by a multidisciplinary site visit in August 2025.

Nine sites were deemed unsuitable for progression to Stage 2 due to significant constraints. Site 1 is heavily constrained by existing infrastructure. Sites 3, 4, 5, and 13 lack sufficient land to co-locate both the converter station and substation. Site 7 would require complex connection arrangements, while Sites 8 and 9 are too close to Forgue. Site 12 presents challenging topography and an elevated position.

Sites 2, 6, 10, 11, and 14 were identified as less constrained and more aligned with operational and strategic requirements. These five sites advanced to Stage 2 for further detailed assessment.



Site options and key environmental constraints

Site	Proceed to Stage 2
1	No
2	Yes
3	No
4	No
5	No
6	Yes
7	No
8	No
9	No
10	Yes
11	Yes
12	No
13	No
14	Yes

Shetland HVDC Link 2 Strathbogie Hub

Stage 2: Detailed site selection

The five remaining site options were taken forward for more detailed assessment, supported by engineering and environmental surveys, as well as engagement with landowners. The table below provides a summary of the key environmental and engineering aspects of each site.

Site	Environmental summary	Engineering summary
2	Watercourse within the site, areas of ancient woodland nearby and some landscape sensitivity, with no designated sites identified within the site.	Predominantly flat land, close to existing overhead lines and the strategic road network, with some nearby residential properties.
6	Several watercourses, nearby heritage features and use of prime agricultural land, with no designated sites or woodland within the site boundary.	A large site containing existing overhead lines, undulating landform and some disused buildings, accessed from local roads.
10	Agricultural land in active use and proximity to residential properties, with no designated sites, heritage assets or priority habitats identified.	Gently sloping land located further from existing overhead lines, with watercourses along site boundaries and longer access routes.
11	A watercourse, nearby scheduled monuments and areas of woodland and wet ground, with no landscape designations identified.	Slightly sloping agricultural land with overhead lines crossing the site and access provided by local roads.
14	Proximity to a Site of Special Scientific Interest (SSSI), adjacent areas of ancient woodland, landscape sensitivity and nearby heritage assets.	Flat land located between existing and proposed overhead lines with an existing access track through the site.

Based on the detailed assessment to date, sites 6 and 14 are being taken forward for further assessment:

Site 6 (Cruchie)

- Good proximity to overhead line infrastructure, supporting efficient network connections.
- A large site area providing flexibility for layout and construction activities.
- No designated environmental sites within the site boundary.
- Access available via local roads, with scope to support construction and operation.

Site 14 (Rivestone)

- Strong strategic location between existing and proposed overhead lines.
- Generally flat landform, well suited to a large hub layout.
- No designated environmental sites located within the site boundary itself.
- Fewer nearby residential properties compared with other options.

Based on the detailed assessment, sites 2, 10 and 11 have been discounted at this stage:

Site 2 - this site is highly constrained by the public road network and a watercourse, limiting development potential.

Site 10 - this site is a significant distance from the connecting overhead line infrastructure, making integration less efficient.

Site 11 - this surrounding topography of this site presents significant constraints, resulting in complex overhead line routeing challenges.

Ground investigation will proceed over the summer months at the two shortlisted sites to support the assessment of ground risk and the selection of the proposed site. Design development is also progressing, and we remain committed to working closely with stakeholders and the local community, incorporating feedback wherever possible. Pre-application consultation events will be held to share insights from this public information session along with additional design detail, ahead of submitting a planning application to Aberdeenshire Council.

The Kergord HVDC converter station and AC switching station

Shetland HVDC Link 2 Strathbogie Hub

Environmental and social considerations

Environmental assessments and site surveys will be undertaken as we move through the stages of site selection to preferred site and consenting. This includes assessing landscape, visual and recreational amenity; ecology, habitats and ornithology; geology, hydrogeology and hydrology and cultural heritage of the potential options and then preferred sites. An assessment of environmental impact will be required as part of the Town and Country Planning consent application which will be subject to further rounds of consultation events.

Ecology, habitats and ornithology

Protected species and sensitive habitats could be present within the project area. However the short list of potential site options have been selected to avoid environmental designations and known sensitive habitats. The project will assess the risk to species and habitats as it moves through the stages of site selection, aiming to select a site with the least risk to the environment overall. Achieving a Biodiversity Net Gain for the site will be an overall objective of the preferred sites.

Landscape and visual amenity

The project site selection process aims to position sites in locations that minimises the effect on landscapes and visual amenity. The process being followed for the Strathbogie Hub will look at the visual impact of all the potential site options and will consider landscape designations, landscape character and residential proximity to the site locations.

Cultural heritage

Scheduled, non-scheduled cultural heritage, archaeological features will be mapped and risk assessed through the stages of site selection. The project works will be designed and constructed to ensure these features are avoided, where possible.

Where this is not possible, further site assessments will be conducted in consultation with the planning authority.

Geology, hydrology and hydrogeology

The geological and hydrological sensitivities of a site will be risk assessed throughout the stages of site selection and further refined once a preferred site is selected. The site and access points will be selected to minimise effects as far as possible.

Lasting legacy

SSEN Transmission is committed to leaving a lasting, positive legacy for the Aberdeenshire communities where we operate. Alongside delivering new infrastructure, we invest in local priorities through community benefit funding, volunteering and outreach, and ongoing engagement with community groups across the region. Recent examples include volunteering with Aberdeenshire North Food Bank and supporting improvements at New Deer Public Hall.

Housing

Through our housing legacy initiative, we are helping to increase local housing supply while accommodating the workforce delivering major grid upgrades. In Aberdeenshire, our agreement with The Springfield Group supports 293 homes overall, including 69 at a new development in Turriff, alongside our wider commitment to deliver over 300 legacy homes across five sites. Homes will initially support the construction workforce before being released for local use, with a mix of affordable, social and private housing for sale and rent.

Economy

Our Pathway to 2030 investment programme is expected to deliver significant benefits for Aberdeenshire, including up to £1bn of local spend and up to £820m in total Gross Added Value (GVA). The programme is also forecast to support around 1,140 jobs and could boost the local construction sector by up to 20% annually. We recruited almost 200 staff locally in the last year (including 38 'earn as you learn' roles) and expect a further 150 new staff in the area over the next five years.

Skills

We are working with our contractors and supply chain to grow regional skills through training, apprenticeships, graduate routes and 'earn as you learn' roles. In Aberdeenshire, this includes our learning partnership with Peterhead Academy (launched in 2025), linking pupils to industry experience connected to Eastern Green Link 2 (EGL2), and Pittodrie Pathways at Fraserburgh Academy with Aberdeen Football Club Community Trust. Across our business, we welcomed our largest-ever intake of 59 graduates, and have committed to creating 600 'earn as you learn' roles by 2030.

Our supply chain

We run competitive tenders to appoint contractors who share our commitment to delivering positive local outcomes. In Aberdeenshire, we encourage the use of local suppliers and services so project benefits are retained in the north east economy. Recent examples include Entier providing catering at our EGL2 site in Peterhead; David Smith Contractors Ltd (Fraserburgh) securing a major civil engineering contract creating nine new roles; and Nicol of Skene (Westhill) delivering onshore cabling works for the Spittal to Peterhead subsea project.

Shetland HVDC Link 2 Strathbogie Hub

Next steps

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

The feedback period

Following our events, a feedback period will open until **Friday 26 June 2026.**

How to provide feedback

You can complete our feedback form online, using the feedback form at the back of this booklet or submit feedback in writing or email. The feedback will be analysed by the project team and a report on consultation produced and published on our website detailing our response to your feedback.

Further engagement in 2026, will detail how the feedback has been taken on board as we continue to progress through the site selection process.

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.

What we're seeking views on

We want to know your thoughts on the sites under consideration. We'll be actively looking to mitigate the impacts of the project 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.

Recite me

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.

How to get in touch

SSEN Transmission, 10 Henderson Road, Inverness, IV1 1SN

shetlandengagement@sse.com

You can also follow us on social media:

@ssentransmission

SSENTransmission

SSEN Transmission

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/shetland2

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. **Do you feel sufficient information has been provided to enable you to understand what is being proposed and why?**

☐ Yes ☐ No ☐ Unsure

Comments:

Q2. **Have we adequately explained the need for the Strathbogie Hub?**

☐ Yes ☐ No ☐ Unsure

Comments:

Q3. **Are you satisfied that our approach taken to selecting our site options has been adequately explained, and do you agree with it?**

☐ Yes ☐ No ☐ Unsure

Comments:

Q4. **Are there any factors, or environmental features that you consider may have been overlooked by the project team?**

☐ Yes ☐ No ☐ Unsure

Comments:

Q5. **Do you have any other comments or concerns in relation to the project?**

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.

☐ **If you would like to be kept informed of progress on the project, 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: SSEN Transmission, 10 Henderson Road, Inverness, IV1 1SN

Email: shetlandengagement@sse.com

Online: ssen-transmission.co.uk/shetland2

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**

Feedback 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

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.