

Welcome to our second round of public exhibitions on the Xlinks' Renewable Energy Development in Devon.

- > A vital part of the plan to deliver reliable and low-cost renewable power from Morocco to the GB electricity grid.
- Free from the environmental and weather constraints holding back UK-based generation.

The planning application will seek to gain permission for:

- Approximately 14km of underground High Voltage Direct Current (HVDC) cabling, from landfall at Cornborough Range.
- Construction of a HVDC to HVAC Converter Station site in close proximity (to the west) of the existing National Grid substation located between Gammaton and Alverdiscott.

THE XLINKS MOROCCO-UK POWER PROJECT

Capturing and connecting the power of nature

A new clean energy source dedicated to the UK
Proven technology, that will lower consumer prices
Reliable, firm and flexible energy – operational from the end of the decade
Capable of meeting 8% of GB's annual electricity demand

CONNECTING

SMAL

 Proven HVDC interconnector technology on a 3,800km route under the seabed
 A dedicated source of renewable energy, exclusively to power the UK
 Securing Britain's energy supply by diversifying from EU interconnectors and LNG dependence, and biomass from North America
 3.800km

cable route

 GENERATING
 10.5GW clean power from large scale solar and wind facilities in Morocco
 High wind and solar intensity providing ultra-low cost zero-carbon electricity
 Coupled with 20GWh/5GW battery storage

mmm

MOROCCO -

TRANSMITTING

 Agreement secured with National Grid for two 1.8GW connections in Devon
 Powering 7 million homes before the end of the decade

• Delivering 3.6GW for an average of 20+ hours a day providing firm and flexible energy





CREATING

SILLI

Nationally significant action in line with the principles of the Devon Climate Declaration
A UK manufacturing, export-led, industry that meets rapidly growing global demand for HVDC cable for a net zero world
1,350 new permanent green jobs in the UK by 2024 and thousands more jobs in the supply chain
Over 10,000 jobs in Morocco and contributing to their renewables industrial ambition



WHY CONNECT TO THE GB ELECTRICITY GRID

WHO IS XLINKS?

IN DEVON?

- The project needs to connect at the optimal location in terms of transmission capacity and efficiency.
- This means it can deliver more renewable energy at a lower cost to Britain's households.
- Working with National Grid, the optimal connection site has been identified as the substation located between Gammaton and Alverdiscott.
- Agreement has been reached with National Grid for two 1.8GW connections at this site.

- A private business, headquartered in the UK.
- A team combining FTSE100 and power industry leadership with British entrepreneurship.
- > Driven by an ambition to change the way we think about the low carbon energy transition.
- Our team includes technical and project leads that delivered the North Sea Link, which became operational in Oct 2021 and is currently the world's longest subsea interconnector.



What's changed?

Following feedback from the local community at our first public consultation, we extended our project timeline and worked to enhance our proposals.

THREE KEY ENHANCEMENTS TO OUR PROPOSALS

You said

- 1
- There is a better, less disruptive and visually intrusive, location for the converter station site.
- The underground cable runs too close to homes and schools in Abbotsham.
- We need more detail on the construction plans and are particularly concerned about potential road closures and the volume of traffic on local roads.

Proposed enhancement

- Converter station site relocated to the old Webbery Showground, closer to the National Grid substation and substantially screened.
- Alternative underground cable route avoids Abbotsham village.
- Further detail available on construction methods. Updated transport routes employ temporary haul roads and marine delivery to minimise disruption on local roads.

You can read more about these proposed enhancements at today's public exhibition. Our team would be delighted to discuss these plans with you.





OUR PROPOSALS

PROJECT BOUNDARY



Four HVDC cables will be installed underground for approximately 14km along a single corridor between the proposed landfall and converter station site.

Once the installation of the underground HVDC cables is complete, the land will be reinstated to its previous use and condition. There will be no permanent infrastructure above ground along the Xlinks HVDC cable route.

Selection of the HVDC cable route

We have sought to select an underground cable route that causes minimum disruption to local communities, ecology and the environment. In selecting our preferred route corridor,

we have taken into account:

- **Early feedback from local stakeholders.**
- Community feedback from our first round of consultation.
- > Environmental effects.
- Project engineering requirements.
- **Construction requirements.**
- Land ownership and land use.





OUR PROPOSALS

ALTERNATIVE UNDERGROUND CABLE ROUTE AT ABBOTSHAM



- The alternative underground cable route passes to the west of Abbotsham and continues on the western side of the road which runs north of Abbotsham Cross roundabout, before turning to cross underneath the A39.
- Route does not run close to homes or schools and is outside the area designated for future development in the Local Plan.
- Route further reduces the use of public highways by construction traffic and reduces the environmental impact from hedge crossings.



OUR PROPOSALS

CONSTRUCTION METHODS ALONG THE UNDERGROUND CABLE ROUTE



Construction sequence

- Fence off the 65m cable route construction corridor in sections.
- Carefully strip back top soil and store it on one side of the construction corridor.
- **Construct the haul road.**
- Dig the cable trenches and joint bays storing excavated material, separately from the topsoil, on the opposite side of the construction corridor.
- Place ducts into the trenches, surrounding them with thermally efficient sand based material, and backfill the trenches with the original subsoil.

- **Cable drums delivered to site.**
- Pull the cable through the ducts (each approx.
 1km long) and connect at the joint bays.
- Fill and cover the joint bays in the same way as the cable trenches.
- Carefully replace the topsoil over the whole construction corridor once the cable has been tested.
- Reinstate drainage and haul road and return the land to its previous use.



- **DC cable route expected to be constructed over a period of 2 years.**
- **Construction activity is transitory in most places.**
- > Permanent easement reduces to 32m.





OUR PROPOSALS

NEW CONVERTER STATION SITE

Two converter stations convert electricity from direct current (efficient over long distances) to alternating current (used in homes and businesses).



Harmonic filter AC Yard Spare transformer Transformers Valve and reactor building DC Yard

Aerial view

- The proposed converter station site at the old Webbery Showground is immediately west of National Grid's existing Alverdiscott substation.
- The site will include two converter stations, one to serve each of the two 1.8GW connections to the GB electricity grid.
- The total area of development is approximately 27.6 hectares of which 6.9 hectares accounts for the footprint of the converter station and other buildings.
- > The site slopes gently downwards towards the east and south east.
- Our proposed construction methodology nestles the buildings into this topography, with additional banking to screen the site from views from the north and the AONB to the west.
- The landscaping scheme will also offer opportunities for biodiversity enhancement on the site.
- The converter station site will be connected to National Grid substation via 12 HVAC underground cables.





OUR PROPOSALS

NEW CONVERTER STATION SITE



The converter stations are still in the design process which will seek to minimise their impact on the landscape. We would welcome your feedback on these plans.

Selection of the converter station site location

Following community feedback and further engineering evaluation, Xlinks has decided to relocate its proposed converter stations closer to the existing National Grid substation. Factors affecting site selection include:

- Reducing the number of properties impacted by construction and associated traffic.
- Reducing the number of properties affected by visual impact.
- Concentrating grid and energy infrastructure in one place.





OUR PROPOSALS

LANDSCAPE AND VISUAL IMPACT

A Landscape and Visual Impact Assessment (LVIA) is being conducted to assess the effects of our proposals on both landscape character and views from publicly accessible locations. This includes a computer-generated Zone of Theoretical Visibility (ZTV) around the converter station site to give an indication of how much of the converter station buildings could be seen and which landscape character areas might be affected.

Representative viewpoints were chosen at publicly accessible locations from a variety of distances and geographical locations, to determine the degree of visibility. These viewpoints are represented as photomontages at this exhibition.

Looking South

Existing view



Proposed illustrative view

This viewpoint is located along the Public Right of Way between Mutton Hall and Ashridge, approximately 550 metres south of Horwood. The viewpoint looks in a southerly direction towards the proposed converter site.





OUR PROPOSALS

Looking North East



Proposed illustrative view



This viewpoint is located north of Gammaton Moor. It is situated 120 metres north up the road from Moorland Cottage. The viewpoint looks in a north-easterly direction towards the proposed converter site.

Looking North

Existing view



Proposed illustrative view



This viewpoint is located along the footpath which is routed between Huntshaw and Sheddymoor Heights. It is situated approximately 240 metres east along the road from Huntshaw, left onto the public footpath, and 120 metres north east along the footpath towards Sheddymoor Heights. The viewpoint looks in a northerly direction towards the proposed converter site.



OUR PROPOSALS

Looking West







Proposed illustrative view

This viewpoint is located adjacent to Alverdiscott, approximately 50 metres south from the junction with the B3232 and towards Abbaton. The viewpoint looks in a westerly direction towards the proposed converter site.

Looking West



Proposed illustrative view



This viewpoint is located approximately 145 metres north east up the road from Abbaton, towards Alverdiscott. The viewpoint looks in a westerly direction towards the proposed converter site.



OUR PROPOSALS

PROTECTING THE ENVIRONMENT

The Environmental Impact Assessment process and how it will inform the development of the proposals.

For proposed projects such as this, we are required to undertake an Environmental Impact Assessment (EIA) and produce an Environmental Statement (ES), which will be submitted as part of the planning application.

A full range of environmental studies are being conducted to inform the preferred HVDC cable route, access for construction vehicles and the design of the converter station complex.

Our plans have been developed against a priority objective to deliver a net positive environmental impact for regional biodiversity.



ECOLOGY

Ensuring that our proposals do not have a detrimental impact to local wildlife and habitats is a key priority for the project. As such, we have been working hard to identify a number of measures to mitigate any issues and provide improvements wherever possible. These will be identified in detail in our Ecological Management Plan, which will be submitted as part of the planning application.

We are working to map and assess all habitats for ecological value and potential to support protected or otherwise important species.

Detailed surveys have been undertaken which have found the following general results so far:



- Dormice
- Bats
- **Otters**
- Water voles
- **Badgers**
- Amphibians
- > Breeding birds
- > Wintering and migratory birds
- Reptiles
- > Aquatic invertebrates



OUR PROPOSALS

PROTECTING THE ENVIRONMENT



TRANSPORT

We will seek to minimise disruption to local roads during construction by:

- Transporting large, infrequent, converter station components by water to Appledore shipyard.
- > Employing construction haul roads along the underground cable route to remove frequent vehicle movements from the public highway.
- Transporting materials to strategically located compounds adjacent to the A39, A386 and Gammaton Road.



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NOISE

- Noise during construction will be managed through the Construction Environment Management Plan (CEMP) which will be agreed with Torridge District Council. It will outline how the construction works will avoid, minimise or mitigate effects on the environment and surrounding area.
- Noise levels post construction will be minimal. There will be no permanent infrastructure above ground along the HVDC cable route. At the converter station site there will be very few moving parts and noise levels will be kept within the relevant statutory limits.



ONGOING OPERATIONS

- Once operational, there will be a small team based at the converter station site. Occasional inspections and maintenance would be conducted at the converter station site and along the HVDC cable route.
- Outdoor lighting at the converter station site will normally be restricted to motion-activated security lighting. Most outdoor night-time activity, such as occasional deliveries, can be conducted with torchlight. Only on rare occasions, such as maintenance outages in the winter months, will it be necessary to employ any further outdoor lighting.





OUR PROPOSALS



OUR COMMITMENT

We are committed to engaging fully and thoroughly with the Devon community.

- 1. Our priority is to be a good neighbour to Devon's communities and natural environment.
- 2. As a major piece of energy infrastructure, we recognise that the project's construction will give rise to a degree of disruption to local communities. We will engage with local stakeholders to ensure that we have the fullest understanding of how to minimise disruption during construction.
- 3. We will explore all opportunities to contribute to the social and economic development of the local community.

LISTENING TO YOU

Today, and through the course of this consultation, we're especially keen to hear your views including:

- 1. Comments, questions or concerns relating to our proposals.
- 2. Ways in which components, materials, work packages and services can be tendered and sourced locally.
- 3. Options we should consider to achieve a net positive impact on biodiversity.
- 4. Ways in which a community benefit fund might be structured, and examples of local projects that could take advantage of such a scheme.



GET IN TOUCH

Thank you for taking the time to visit us today. You can send us your thoughts via any of the channels listed below:

Feedback form – available today and online at <u>www.xlinks.co/devon</u>. We will also post hard copies upon request. **Post** – written feedback can also be posted to Xlinks Ltd, Kingfisher House, 1 Radford Way, Billericay, CM12 0EQ

Email – written feedback can be sent to <u>hello@xlinks.co</u>

Phone – register your views or request a call back from the team by calling 01271 268830

The deadline for response to this consultation is **Wednesday 31st May 2023**. All responses will be gratefully received and will be analysed as we refine our proposals ahead of submitting a planning application. A Statement of Community Involvement (SCI) will accompany the planning application, which will set out the methods used to consult, the views expressed and how these have been taken into account in relation to the project.





OUR PROPOSALS

INDICATIVE PROJECT TIMELINE

2021 – agreement with National Grid for connection to the GB electricity grid

November-December 2022 – first round of public consultation

January-March 2023 – re-design of converter station

April-May 2023 – second round of public consultation

Summer 2023 – submission of planning application to Torridge District Council

Winter 2023 – anticipated planning decision

2025 – anticipated start of construction

2030 – target for project completion

All project information can be viewed at www.xlinks.co/devon