

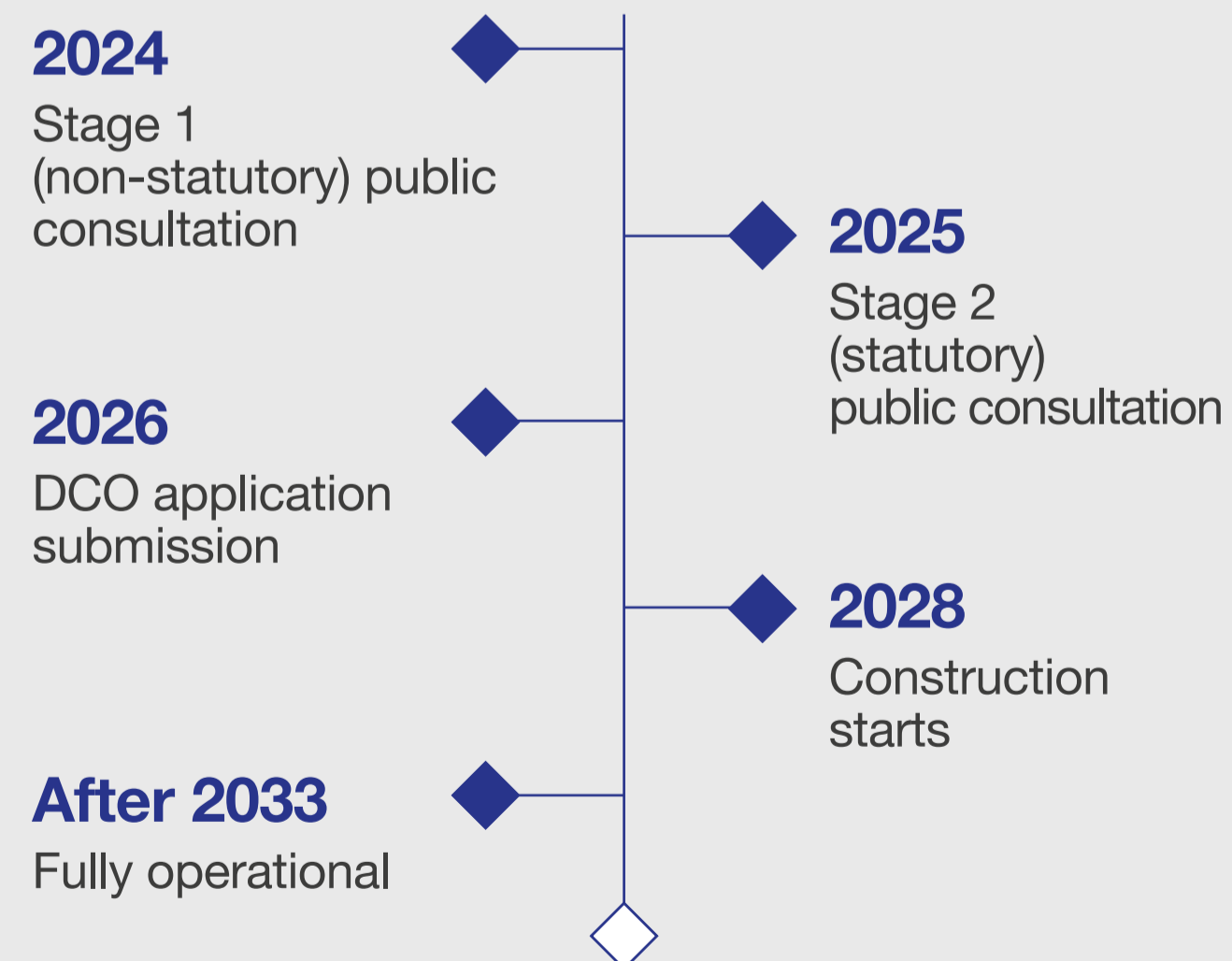
The Great Grid Upgrade

Eastern Green Link 3 (EGL 3) and Eastern Green Link 4 (EGL 4)

EGL 3 and EGL 4 are National Grid Electricity Transmission's proposals to install two new primarily offshore high voltage electricity links and associated onshore infrastructure between Scotland and England.

EGL 3 and EGL 4, part of The Great Grid Upgrade, are needed as the existing transmission network does not have enough capacity to securely and reliably transport the increasing amount of energy generated in Scotland and Scottish waters to population centres in the Midlands and the South of England.

Project timeline



In the community

In 2023, Government sought views about potential community benefits for those hosting new electricity transmission infrastructure. We welcome Government's intention to publish guidance outlining principles for how communities should benefit from the development of onshore transmission infrastructure.

This will help set a framework for us, in consultation with local communities and stakeholders, to deliver community benefits that work for them. This could include, for example, supporting local community projects as well as delivering broader socio-economic and environmental enhancements.

[Learn more about our Community Grant Programme:](#)



Opportunities for young people

To help achieve net zero by 2050, we estimate our industry needs to recruit 400,000 jobs between now and 2050.

Grid for Good

Grid for Good is our flagship programme that helps increase access to training and employment opportunities for young people. We support students with career coaching and masterclasses.

Community Grant Programme

When we are nearer to construction, our community grant programme will be open for applications from local charities and not-for-profit organisations to support local community initiatives.

Contact us:

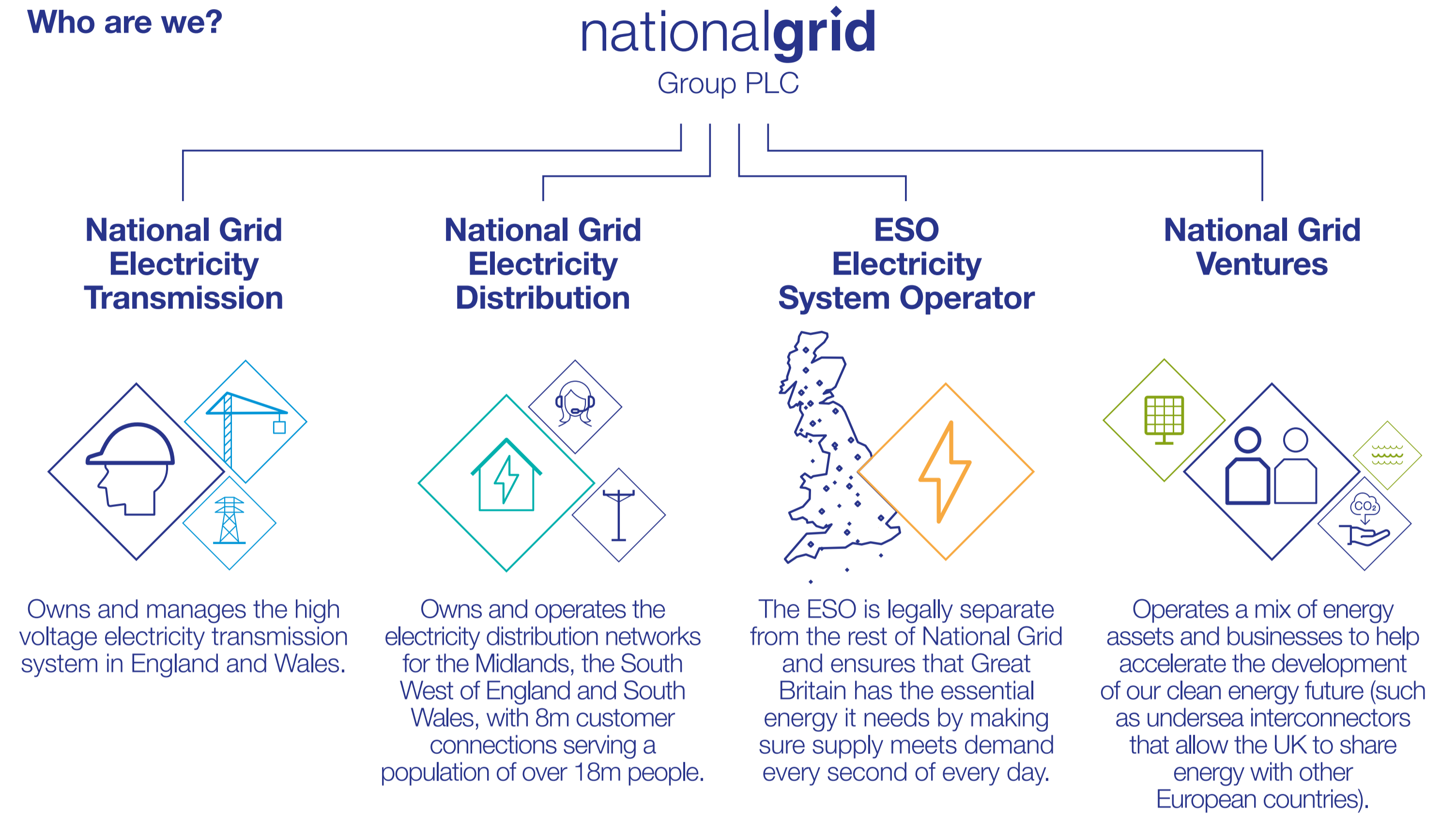
nationalgrid.com/egl3andegl4
contactegl3and4@nationalgrid.com
 0800 298 0405

Call us to request paper copies of the materials or materials in a different format.

Scan the QR code here to view our consultation documents on our website, see our webinar schedule, or book a 1:1 'ask the expert' session.

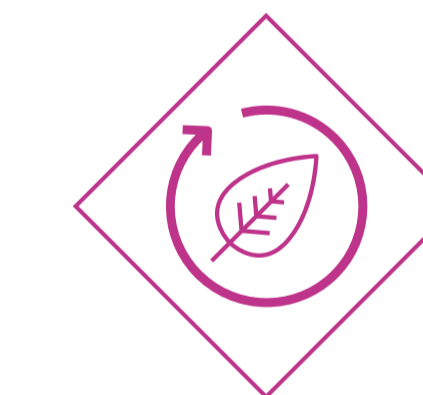


Who are we?

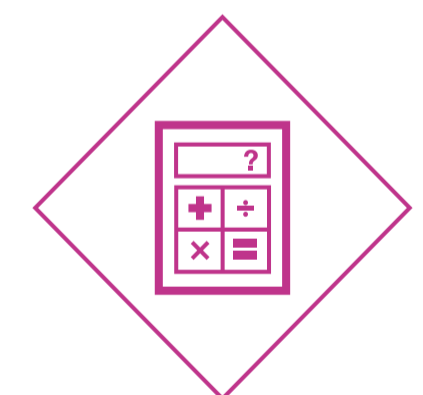


What is The Great Grid Upgrade?

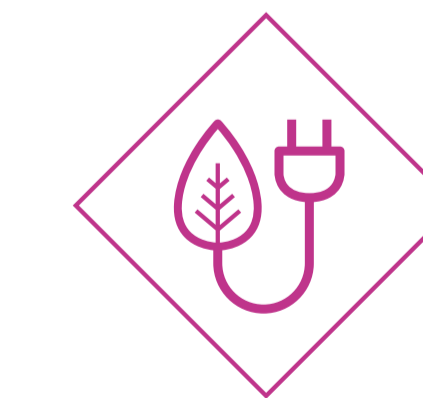
The Great Grid Upgrade is the largest overhaul of the electricity grid in generations. Our infrastructure projects across England and Wales are helping to connect more renewable energy to your homes and businesses.



A grid that's fit for the future



Investment close to home



More clean energy for all



Energy security

Why we need to build EGL 3 and EGL 4

EGL 3 and EGL 4 are needed to transport secure, cheaper and cleaner energy from where it is generated to where it is needed.

Contact us:

nationalgrid.com/egl3andegl4
contactegl3and4@nationalgrid.com
0800 298 0405

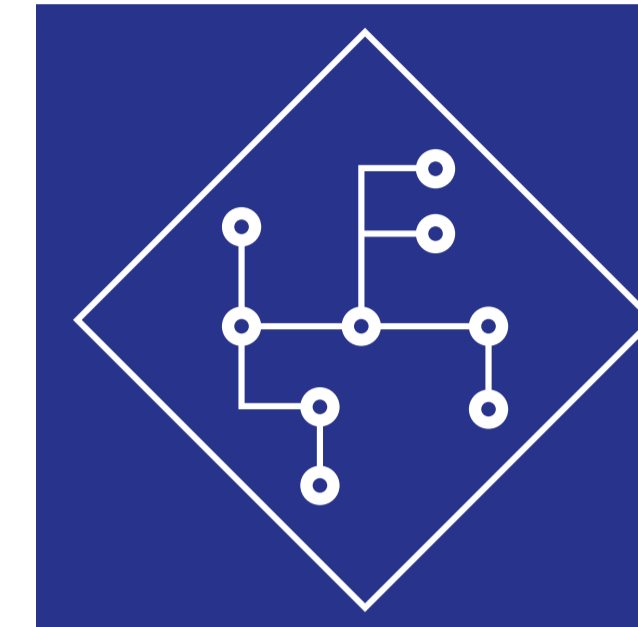
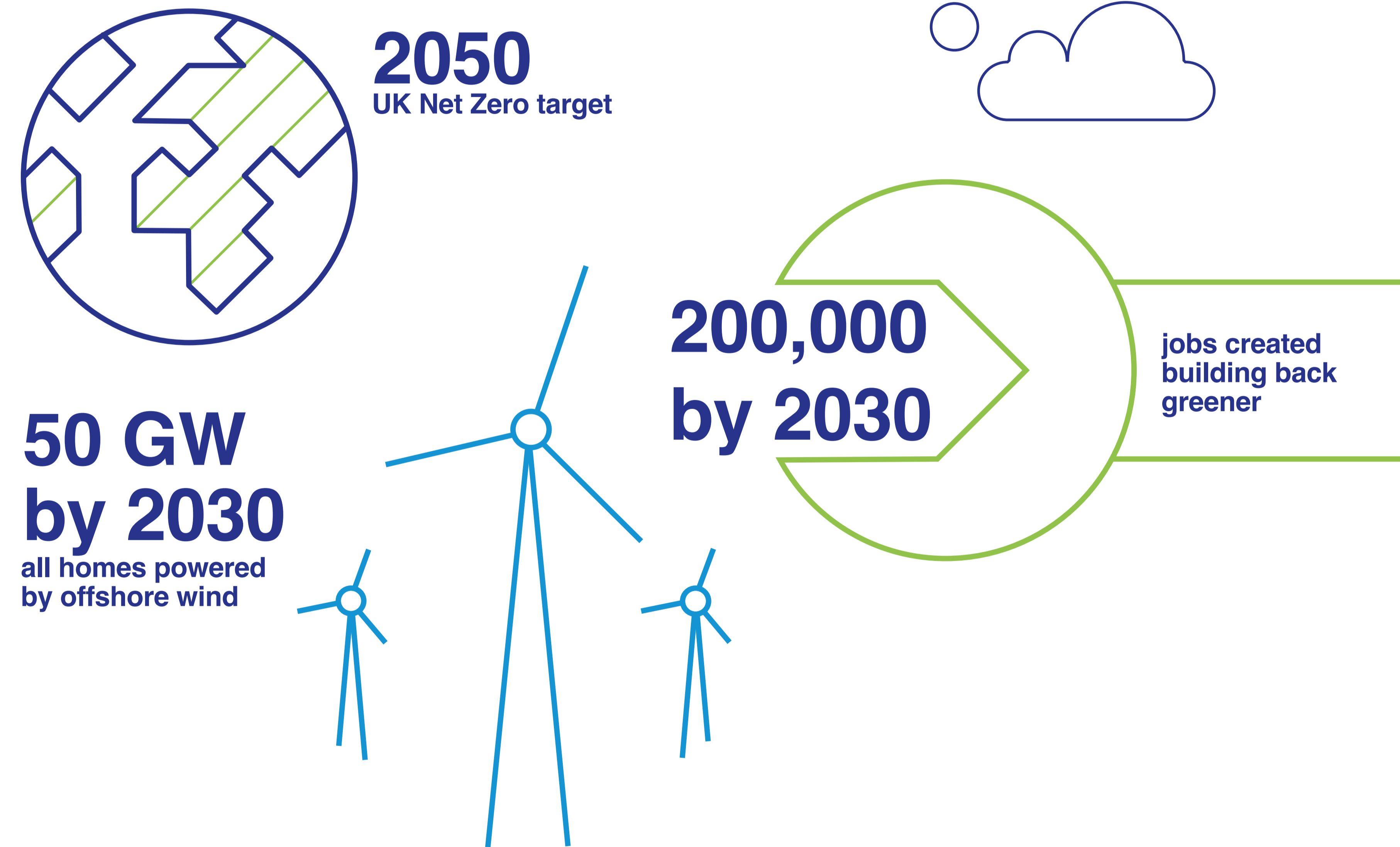
Call us to request paper copies of the materials or materials in a different format.

Scan the QR code here to view our consultation documents on our website, see our webinar schedule, or book a 1:1 'ask the expert' session.



Moving towards net zero

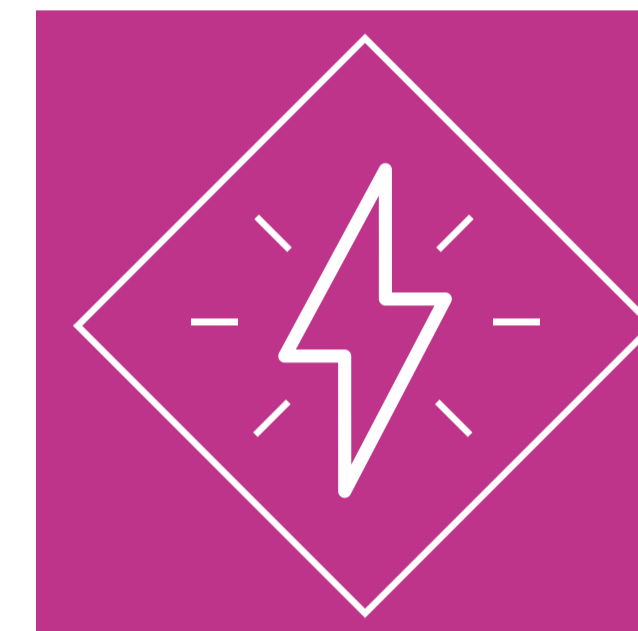
The way we generate electricity in the UK is changing rapidly. We are transitioning to cleaner technologies such as new offshore windfarms. This means we need to make upgrades to the grid so the whole country has access to the clean electricity generated from these new renewable sources.



The network today

By 2033, we expect that the network between Scotland and the Midlands will need to be able to transfer around 25.9 GW of electricity, compared to today's 11.6 GW due to the amount of power set to be predominantly generated by offshore wind in Scottish waters.

A shortage in transmission capability between Scotland and the Midlands will create a bottleneck in the network, restricting our ability to move power to where it is needed.



How EGL 3 and EGL 4 would help reinforce the network

By reinforcing the transmission system from Scotland down to the Southern East Midlands region with EGL 3 and EGL 4, we would avoid creating a bottleneck and enable the transfer of enough energy to power up to four million homes in the Midlands and South of England.



Why here?

We appraised several potential locations for EGL 3 and EGL 4 and concluded that connecting to a new Walpole substation via the Lincolnshire coastline would be the best option economically, environmentally and technically.

This location also allows for flexibility and resilience in the system by allowing a potential connection to the transmission network near Bilsby, East Lindsey, should it be required.

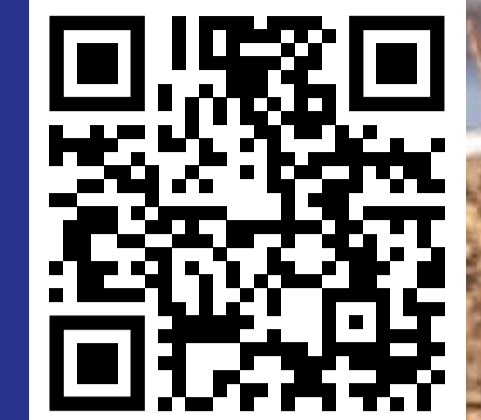


For more detail on the needs case for EGL 3 and EGL 4, please see our Project Background Document and Strategic Options Report available at this event or on our project website.

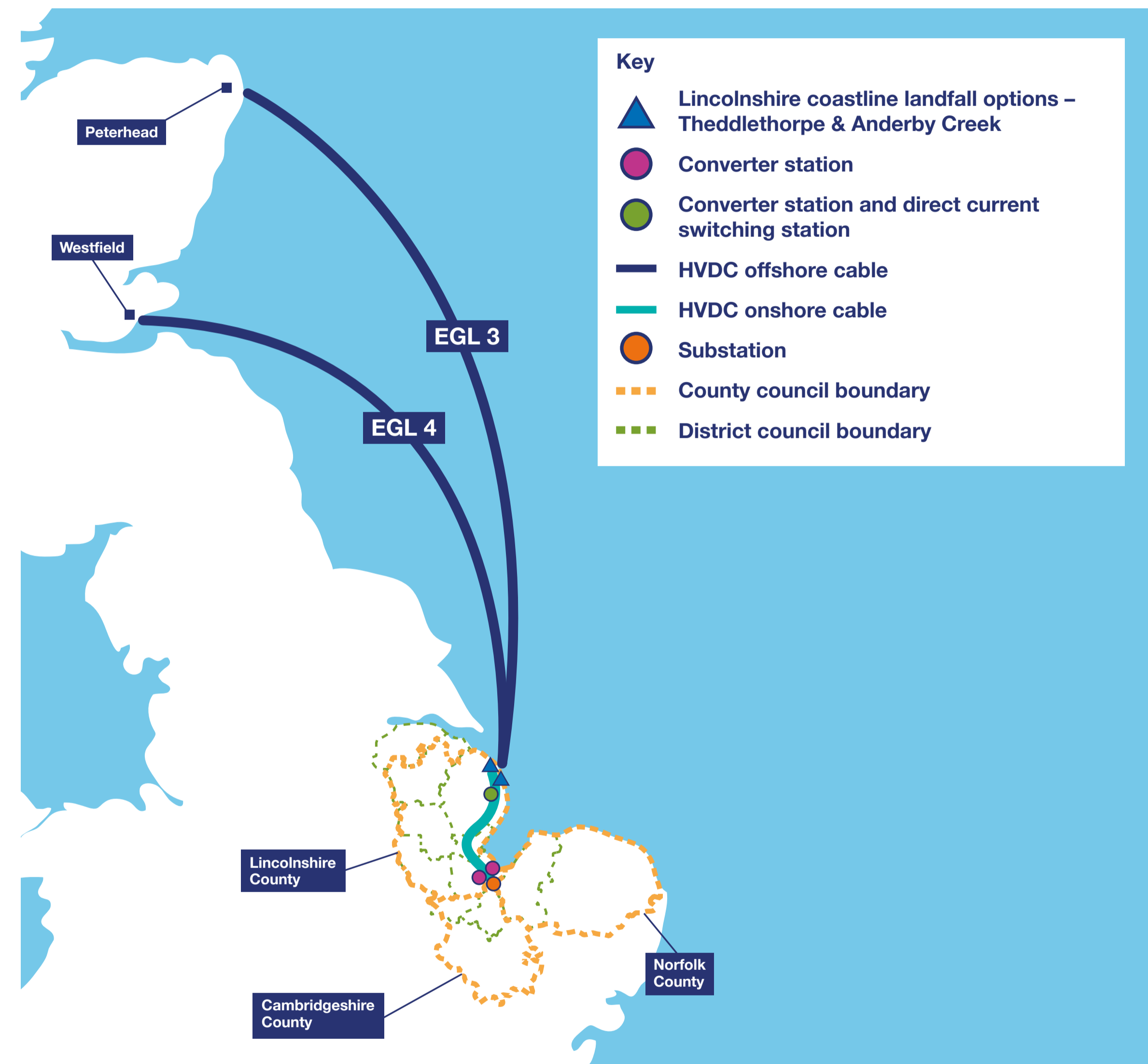
An overview of our proposal

Contact us:
nationalgrid.com/egl3andegl4
contactegl3and4@nationalgrid.com
 0800 298 0405
 Call us to request paper copies of the materials or materials in a different format.

Scan the QR code here to view our consultation documents on our website, see our webinar schedule, or book a 1:1 'ask the expert' session.



Overview of EGL 3 and EGL 4



For detailed maps of our proposals, please see the interactive map or section maps available at this consultation event and on our project website.

What we propose developing

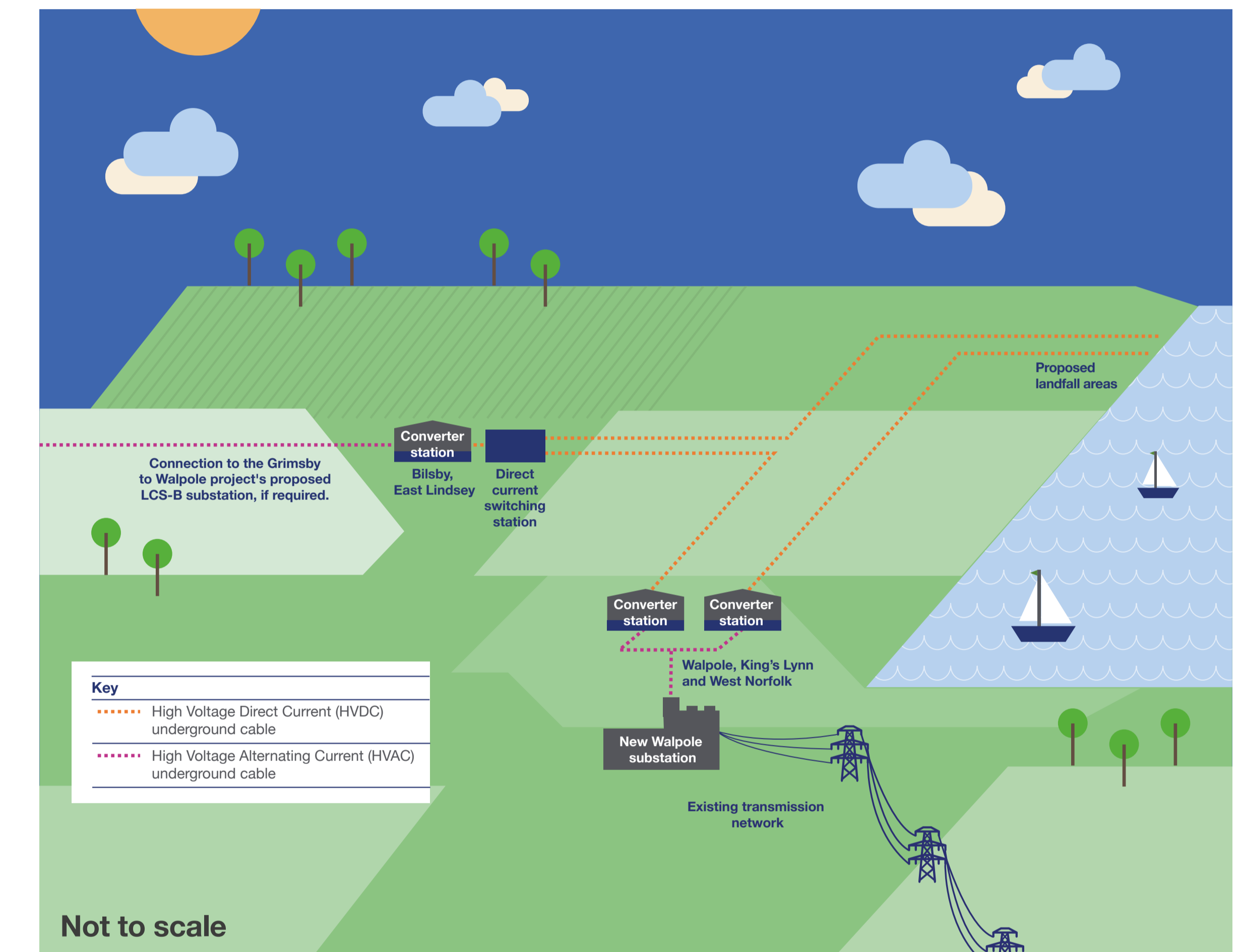
EGL 3 and EGL 4's proposed main onshore elements in the districts of East Lindsey, Boston, South Holland, and King's Lynn and West Norfolk are:

- **Underground HVDC cables** - from proposed landfall to converter stations, approx. 100km long
- **Three converter stations**
 - One proposed converter station located near Bilsby, which could connect one of the projects to National Grid Electricity Transmission's Grimsby to Walpole project's proposed Lincolnshire Connection Substation B (LCS-B), if required
 - Two proposed converter stations in the Walpole area for EGL 3 and EGL 4
- **One direct current switching station** – used by one of the projects to direct power through its cables into either its converter station near Bilsby or in the Walpole area
- **One substation in the Walpole area** – both EGL 3 and EGL 4's Walpole converter stations would connect to this
- **Underground HVAC cables** – connecting the converter stations to their associated substations

As the project proposals progress further, it could be necessary to install a short length of new overhead line, or underground cable, to connect the proposed new substation in the Walpole area to the existing electricity network.



EGL 3 and EGL 4 onshore in England



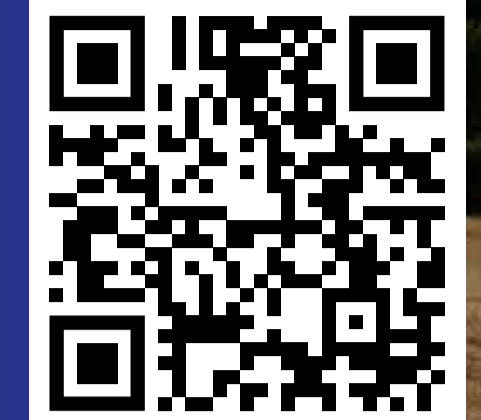
The Scottish ends of the projects

We're jointly developing EGL 3 with Scottish and Southern Electricity Networks Transmission (SSEN Transmission) and EGL 4 with Scottish Power Energy Networks (SPEN). SSEN Transmission and SPEN are responsible for obtaining the relevant consents in Scotland and in Scottish waters.

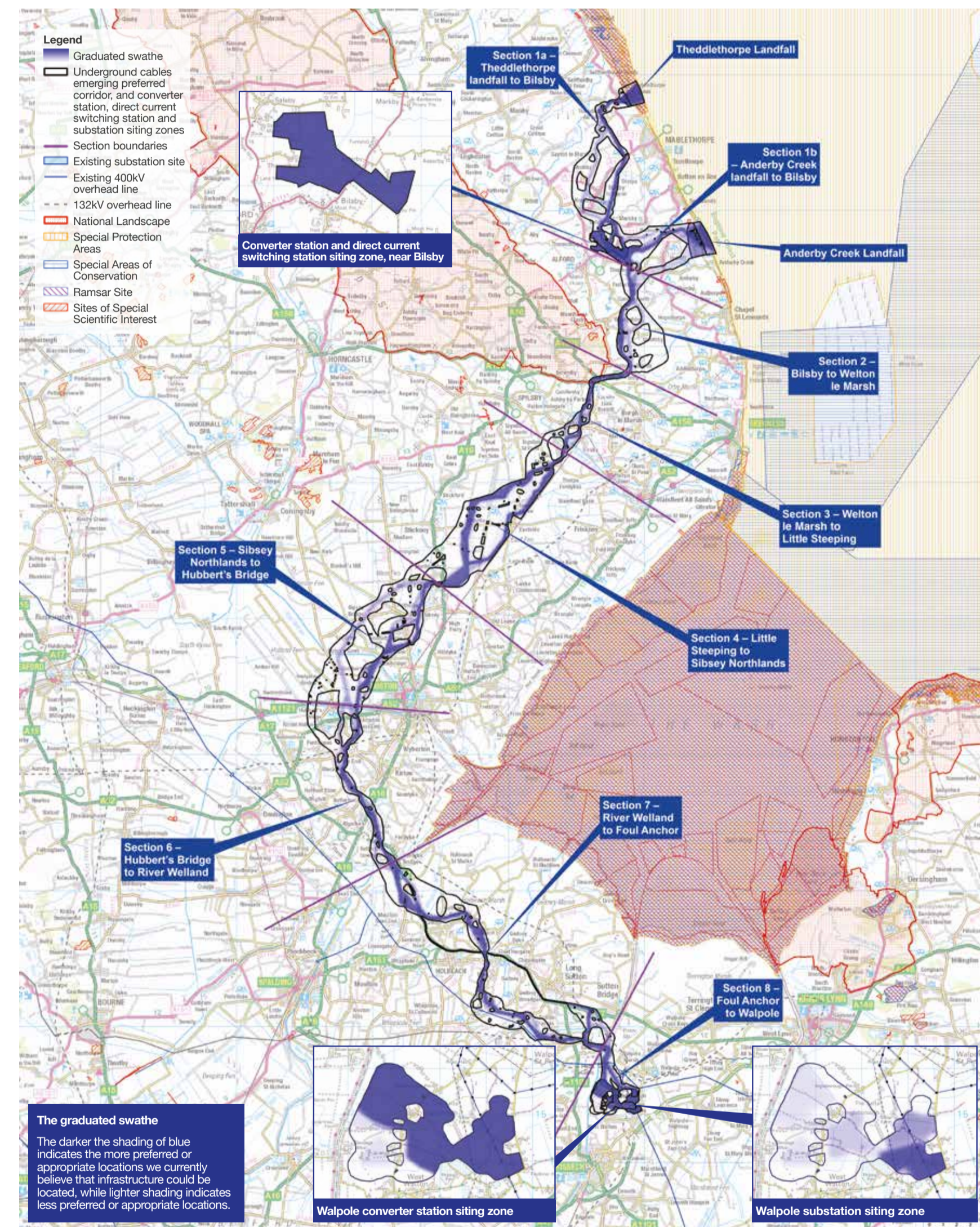
Our proposed onshore infrastructure

Contact us:
nationalgrid.com/egl3andegl4
contactegl3and4@nationalgrid.com
 0800 298 0405
 Call us to request paper copies of the materials or materials in a different format.

Scan the QR code here to view our consultation documents on our website, see our webinar schedule, or book a 1:1 'ask the expert' session.



Overview of our emerging preferred corridor, siting zones and graduated swathe



The graduated swathe
 The darker the shading of blue indicates the more preferred or appropriate locations we currently believe that infrastructure could be located, while lighter shading indicates less preferred or appropriate locations.

Converter stations

Converter stations contain specialist electrical equipment that enable electricity to be converted from alternating current to direct current or vice versa depending on the direction of operation. We expect each converter station to have a footprint of approximately 100,000 sq. m and a maximum height of up to 30m.

Our proposals include two converter stations in the Walpole area and one near Bilsby.

Substation

The main role of substations is to convert electricity into different voltages. This is needed so the electricity can be transmitted throughout the country and then distributed throughout local networks and into our homes and businesses. We expect our substation would have an approximate footprint of 160,000 sq. m and height of up to 12m.

As part of EGL 3 and EGL 4's planning application, we are proposing to develop one new substation in the Walpole area.

Direct current switching station

A direct current switching station is equipment used to tie together two or more electric circuits through switches, allowing us to send the flow of electricity to two or more locations.

For one of the projects, we could use a direct current switching station located near Bilsby to direct the flow of electricity to either our converter station located in the Walpole area or the one near Bilsby. We expect it would have a footprint of approximately 20,000 sq. m and a maximum height of up to 30m, and that it would be located adjacent to the converter station near Bilsby.



A cross-section of a cable

Underground cables

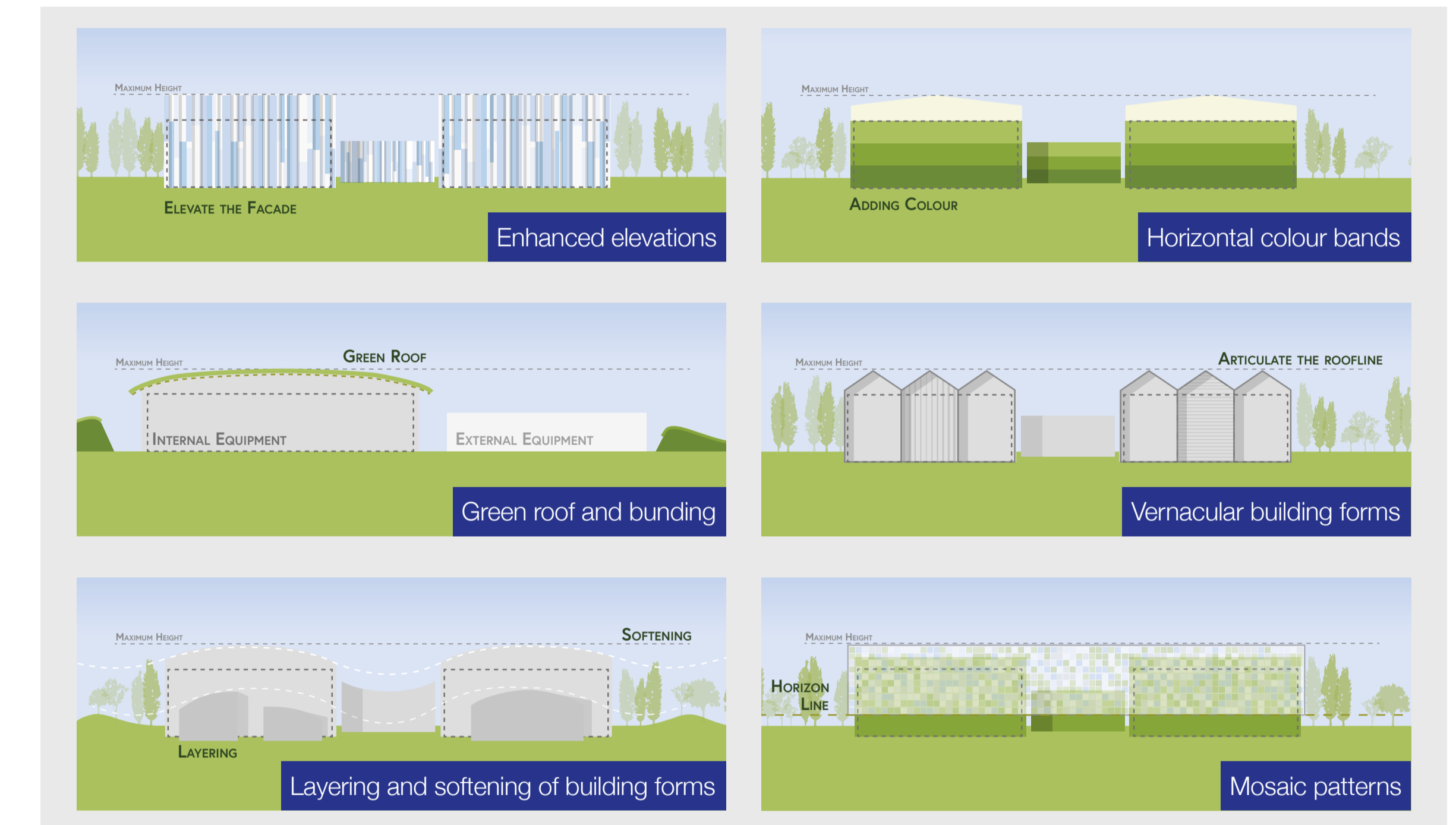
A variety of methods can be used to lay underground cables, including ducted and trenchless methods.

To install our cables a construction area is required. This is called a swathe and includes a cable trench/ducting, soil storage and a temporary haul road. We expect that the swathe for EGL 3 and EGL 4 to be approximately 80m wide, dependent on location.

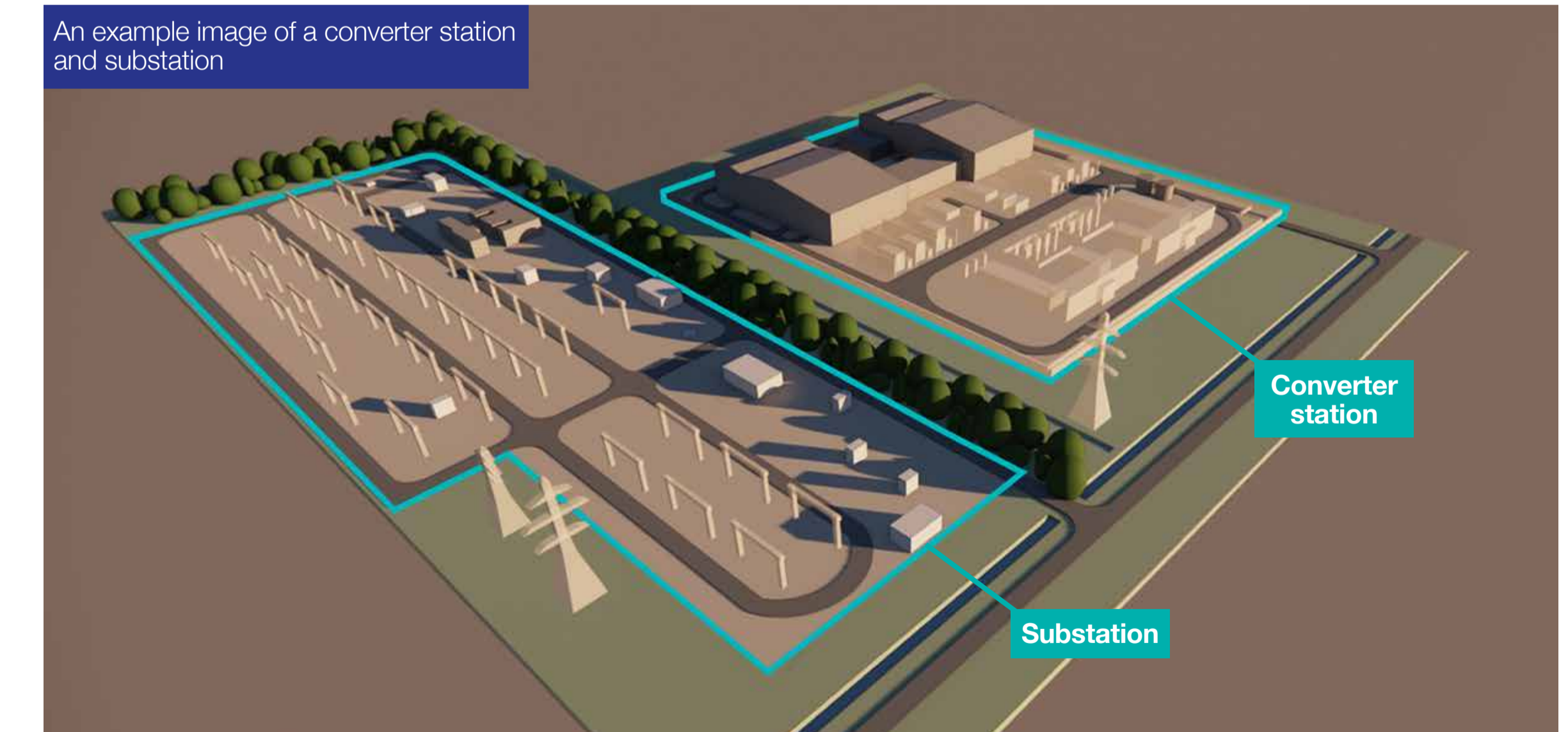
Once the cables have been installed, the swathe is reinstated, with the land returned to its former use.

See our Project Background Document for more information on cable installation.

Potential design approaches to proposed converter stations



An example image of a converter station and substation



If you would like to see a section of this map up close, view our section maps and interactive map available at this consultation or on our project website.