

Introducing Scotland to England Green Link – SEGL2

From Peterhead to Drax



Meeting the UK's green energy ambitions



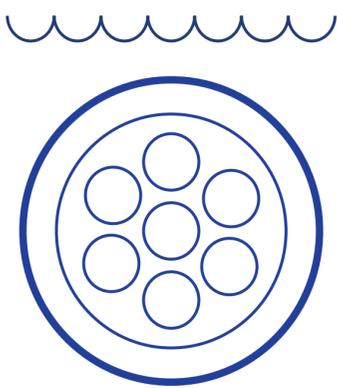
Net zero target in all greenhouse gases -
2045 in Scotland and 2050 in England & Wales.

40^{GW}
by
2030

By 2030, the Government's target is for
40GW of offshore wind to be delivered -
enough to power every home in the UK.



To help deliver this greener energy to homes
and businesses across the UK, we need to
increase the capability of our network between
Scotland, with its renewable energy reserves,
and England.



To do this, we are proposing the construction of two new
High Voltage Direct Current (HVDC) links which will operate
as electricity superhighways from Scotland to England.

Our Scotland to England Green Link 2, or SEGL2 for short,
is one of these projects and, if approved, will run from
Peterhead in Aberdeenshire, Scotland to Drax in North
Yorkshire, via the North Sea. Its sister project, SEGL1,
will run from the Torness area in East Lothian to
Hawthorn Pit in County Durham, also via the North Sea.

**Making the transition to net zero by 2050 is expected
to generate 400,000 jobs across the energy sector.**

About National Grid and our SEGL2 project partners

National Grid sits at the heart of Britain's
energy system, connecting millions of
people and businesses to the energy
they use every day. We're at the forefront
of decarbonising the UK with ambitious
projects like SEGL2.

We're working in partnership with Scottish
and Southern Electricity Networks (SEN) to
develop SEGL2. SEN are the Transmission
Owner for Northern Scotland and responsible
for the onshore and offshore aspects of this
project in Scotland.

**For more information on National Grid please visit our website:
nationalgrid.com/segl2**

Our proposed SEGL2 project

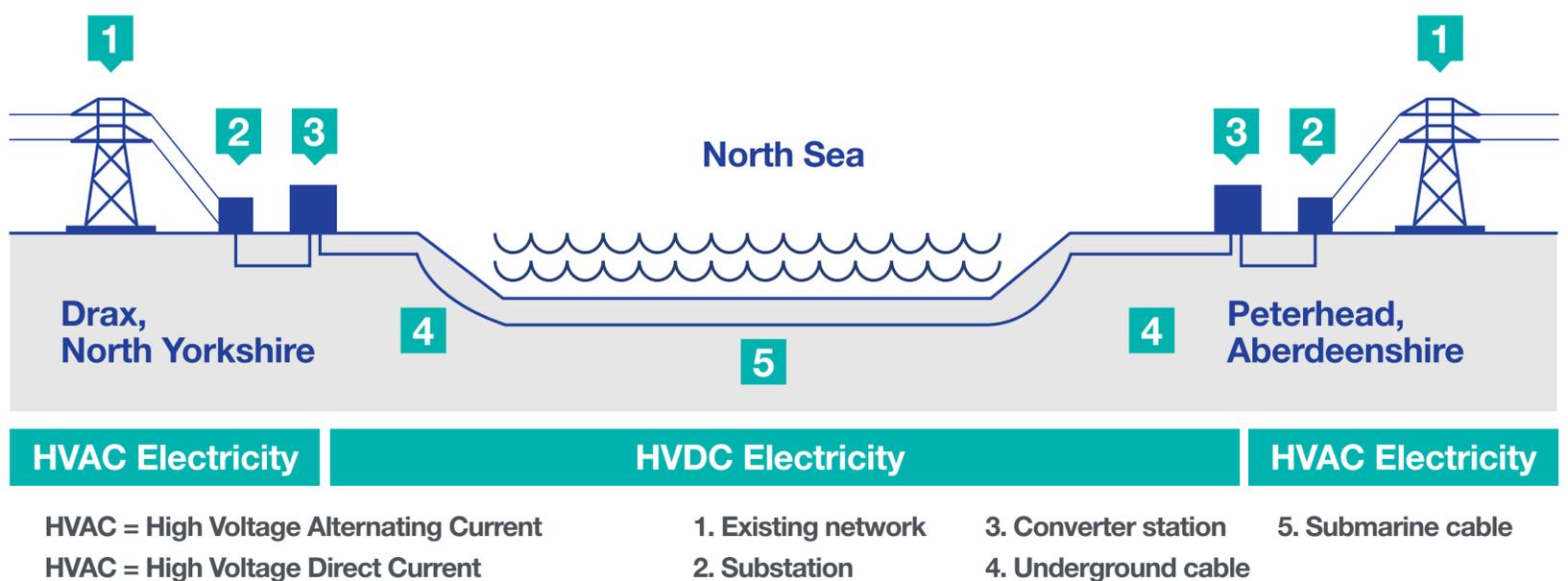
For SEGL2, we are proposing the construction of a 2GW High Voltage Direct Current (HVDC) link – an electricity superhighway between Scotland and England.

The purpose of our SEGL2 project is to scale up the capability of our network to deliver greener electricity generated in Scotland to the rest of the UK. If approved and completed, it will be able to carry enough green electricity to power up to **2 million homes** across the UK.

What we are consulting on

We are consulting with you on proposals to build a new **converter station** and install **underground cables** from the landfall point at Wilsthorpe, to Drax, North Yorkshire. Together, these elements are the fundamental components of SEGL2.

How SEGL2 will work



SEGL2 Project map



Why Drax?

The proposed locations for SEGL2's new converter station and cable route have been selected after extensive research and planning.

Drax already has a National Grid substation, which is an access point to the UK electrical grid. Connecting SEGL2 to this existing network provides the network capability needed to deliver cleaner greener energy on to the rest of the country in the most optimum way. Many factors were very carefully considered including, balancing cost, benefit to the network and minimising infrastructure and impacts on people, places and the environment.

Take a look at the next two boards for a more detailed view of the cable route and converter stations.

Consent for our project and the planning process

We are holding this consultation to seek your views on our early proposals for SEGL2. We have set out the vision behind our proposals, the key elements of the project and how you can share your feedback.

Your views at this early stage are important to us. We will also be holding online events throughout the consultation period, where you can speak to the team about our proposals (see the 'Providing feedback' board for details).

For SEGL2, we will be applying for planning permission from both Selby District Council and East Riding of Yorkshire Council under the Town and Country Planning Act for the onshore elements. We will also be applying for a Marine Licence from the Marine Management Organisation under the Marine and Coastal Access Act for the offshore elements.

We intend to submit our consents applications in early 2022 and before we do, you will get another chance to hear about our plans when we hold a public information event in early 2022.

Your feedback is important to us and we will use it to shape our proposals.

Once our planning application is submitted to East Riding of Yorkshire Council and Selby District Council, then there will be a period of consultation by the councils before they then decide to approved our proposed project.



2 million homes

SEGL2 will help provide the additional network capacity needed to transport renewable energy to homes and businesses throughout the UK.



Our project in detail: proposed cable route

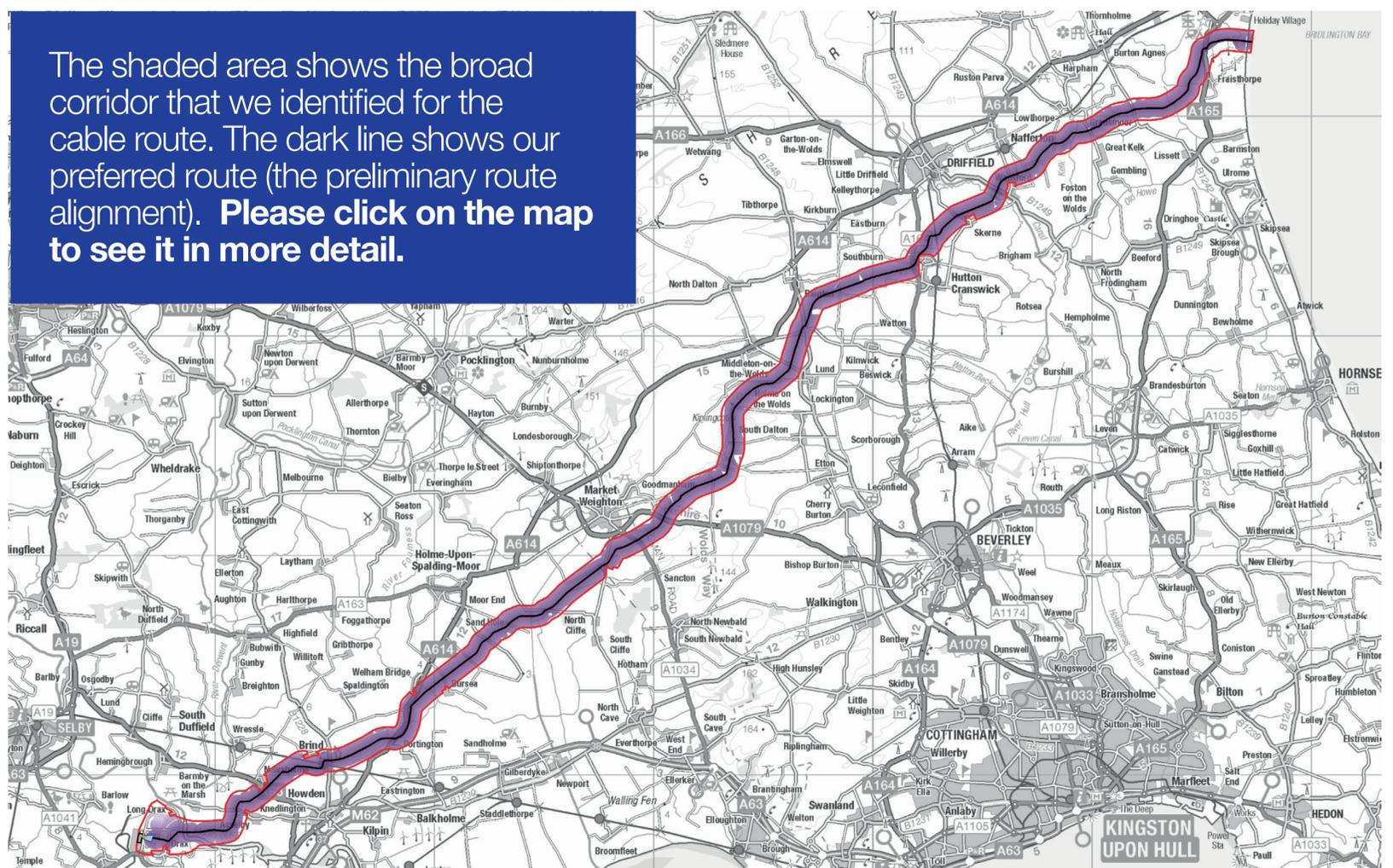
The proposed cable route for SEGL2 runs under the North Sea for most of its 505km length.

After travelling 440km under the sea from Peterhead, it will come ashore at Wilsthorpe, just south of Bridlington. The cable will then run underground onshore for around 65km, to new the converter station and existing substation at Drax, North Yorkshire.

If approved, the works to install the cable will be laid in sections and is expected to take up to five years. Once the cable is buried, then the land above it will be returned as it was before.

Our preferred onshore cable route in Yorkshire

The shaded area shows the broad corridor that we identified for the cable route. The dark line shows our preferred route (the preliminary route alignment). **Please click on the map to see it in more detail.**



Why this route?

We considered several potential cable routes between Drax power station and the East Yorkshire coastline, and we identified that this route is the least disruptive to local communities and the environment, as well as providing a relatively direct route to our proposed converter station.



What the cable looks like.



Cables will be installed 1.5 metres underground, as seen in the above image.



Marine cables will need to be installed in addition to underground cables.

Our project in detail: converter station and existing substation

The new converter station and existing substation are critical components of our project.

Our converter station will house the technology to enable the clean electricity to be transmitted through the 505km cable. A converter station converts electricity between Alternating Current (AC) and Direct Current (DC). AC is used in each country's transmission system, while DC is used for sending electricity long distances along the subsea cables. A similar converter station will be constructed at the other end of the cable in Peterhead.

We're currently finalising the design of our converter station, but we expect it to have a footprint of approx. 170 x 220 metres.

The buildings will have different heights, but we anticipate a maximum of 30 metres.

Substations are crucial for controlling the voltage of electricity between the country-wide network and people's homes and businesses. They 'step down' the high voltage electricity running up and down the country to lower voltage electricity suitable for everyday use.

We will connect the new converter station to the existing substation by constructing underground cables.

What our converter station could look like



This image is indicative.



This image is indicative.



This image is indicative.



The blue line illustrates our preferred location for the converter station. Please click the map to enlarge it.

Why here?

We have selected this site because:

- It is next to an existing National Grid substation, providing access to the UK's electricity transmission network
- It is immediately adjacent to Drax power station, helping us to better integrate it into its surroundings

Environmental impacts

Helping society decarbonise is the biggest contribution we can make to the environment and this ambition is the very foundation of the SEGL2 project.

However, we must also consider our direct impact and are working to ensure that our project meets and exceeds environmental standards to protect local wildlife and local ecology.

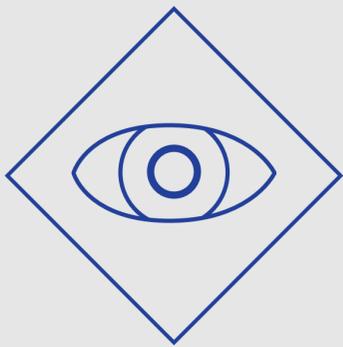
When working in an area, National Grid seeks to leave the area in a better biodiversity position than it was before. We will look at opportunities to enhance and extend a variety of habitats and wildlife corridors along the route and around the converter station site.

Reducing environmental impact

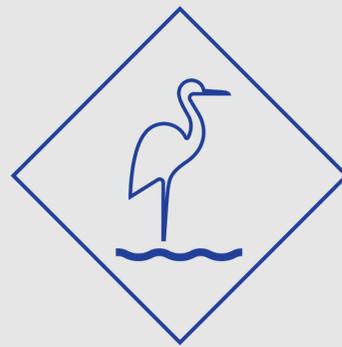
To minimise the impact of our work we will be undertaking an environmental assessment, both onshore and offshore, which considers the potential impacts of SEGL2 and how we could reduce or mitigate any significant impact.

As we continue to develop our plans for SEGL2 we will provide more detail on our environmental assessments as well as information about how we can minimise or mitigate any adverse environmental effects.

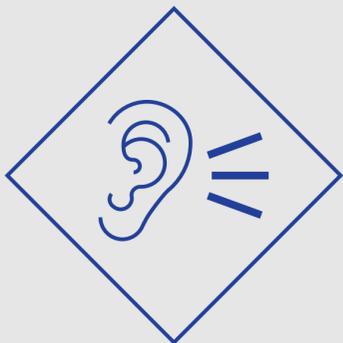
Here are some of the topics we'll be looking into:



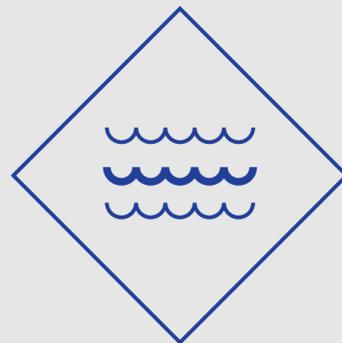
Visual impacts



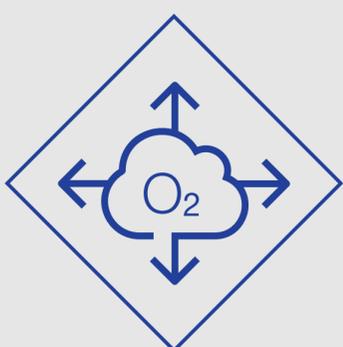
Ecology



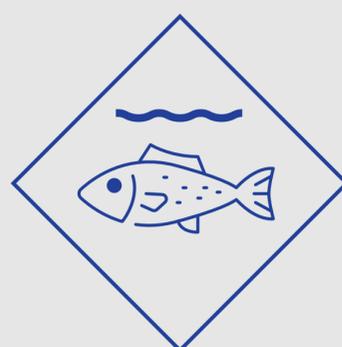
Noise impacts



Water impacts



Air quality



Marine wildlife



Being a good neighbour

Due to the very nature of what we do – connecting people to the energy we all use – National Grid is at the heart of communities.

We want to make a positive impact in the communities we serve and each year we make significant charitable investments around the UK. When our operations impact local people, we try to give back. Here are some of the ways we do that:

- **Our community grant programme.** We fund projects run by charities and community groups that meet local community needs by providing a range of social, economic and environmental benefits. If your project meets our criteria you can apply for a grant.

Since the programme began in December 2015, we have awarded **over £2million** in grants.

- **We're considerate constructors.** As members of the Considerate Constructors Scheme, we abide by a Code of Considerate Practice, which encourages best-practice approaches and policies above and beyond statutory requirements.

- **We're committed to keeping disruption to a minimum.** We will proactively share information with affected communities through our SEGL2 project website. You can learn more about the commitments we make when undertaking work in the UK in our stakeholder, community and amenity policy.



We have partnered with five charities to donate 1,000 laptops to help young people keep up with their studies during lockdown.

With schools closed during lockdown, technology to learn from home is vital and children without access to a computer are missing out.



Community Grant awards for National Grid's River Humber Gas Pipeline Replacement project.

The 1st Goxhill and Barrow Scouts received £1,000 from our Community Grant Programme for new camping equipment.

The Community Recreation Team in Paull, East Yorkshire, received £20,000 from our Community Grant Programme which was used to create an outdoor gym and seating area for local residents to enjoy together.

Next steps

We would like to hear your feedback on our early proposals, including any queries or concerns you may have.

Your views are important to us and will help inform our plans as we continue to develop the proposed scheme.

Please take time to look around the rest of our website, where you'll find Q&As, videos and infographics about our project.

Our public consultation

This consultation will run between Monday 29 March 2021 to Friday 23 April 2021. Please provide your comments by 23:59 on Friday 23 April. You can do this by completing our online survey which you can find on this [website](#).

We hold three live Q&A events as part of this consultation. This will give you the opportunity to hear more about the proposals and discuss your views directly with members of the project team via our online one-to-one chat function.

You don't need to book ahead, simply visit this website during the event times and register. You will then be able to use the live chat function.

The **live Q&A events** will be held on:

- **Tuesday 30 March 4pm – 8pm**
- **Wednesday 31 March 8am – 12pm**
- **Thursday 1 April 1pm – 4pm**

We will also hold video drop-in sessions when you can join a member of the project team on a call and have your questions answered. These will be held on:

- **Tuesday 13 April 8am - 9:30am**
- **Thursday 15 April 3pm – 4:30pm**
- **Tuesday 20 April 6pm – 7:30pm**
- **Friday 23 April 10am – 11:30am**

You can find details on how to book a session on this website or by contacting us by email or phone using the details below.

Project timeline



If you would like a hard copy version of these boards or a leaflet, you can contact us using the details below. This information can also be made available in large print format, braille or other languages.

You can also contact us at **0808 1968 407** or info@segl2.nationalgrid.com

Please note that any data collected through your consultation feedback will only be used to help understand views regarding SEGL2. The data will not be used for any other purposes. For more information see our privacy policy.