GREEN GEN CYMRU VYRNWY FRANKTON CONNECTION

Frequently Asked Questions

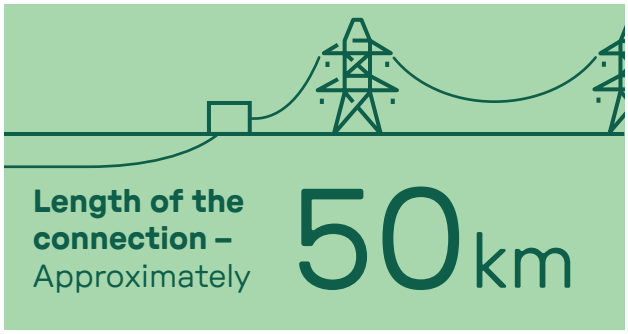
Green GEN Cymru is proposing a new substation site and overhead line through the Vyrnwy Valley to connect clean, green energy to the existing electricity network near Lower Frankton.

In order to address the climate emergency, we need new grid infrastructure that is able to connect renewable energy projects to homes and businesses across Wales and England. This is needed urgently to reduce the use of fossil fuels.

We are committed to minimising any potential impacts on the local community and surrounding area. Below you can find some frequently asked questions and answers on the project to provide further information on our proposals.

Q **How long will the overhead line be and how many pylons will you use?**

A We expect the total length of the overhead line to be approximately 50 kilometres, which is roughly 31 miles. Of this, we expect there to be a 45 kilometre overhead line, and a 5 kilometre underground cable from the collector substation to the Cable Sealing End Compound. We anticipate that we'll need to use around 4 pylons per kilometre. We are of course at an early stage of project development and any detail we have is indicative and subject to change. We expect to have more information, including details of where pylons would be located, at our second consultation in 2024.



Q **Why are you choosing to use pylons and an overhead line and not underground cables?**

A Pylons feature in many areas in England and Wales where landscape, agriculture and tourism are thriving parts of the local economy – electrical infrastructure and these activities co-exist in lots of places.

Underground cables are typically between 6 and 10 times more expensive than overhead lines. Underground cables require more land and create more ground disturbance during construction, which has the potential to produce more significant ecological and archaeological impacts. Overhead lines can also be developed more quickly – and providing the new connection quickly is key if we're to bring low carbon energy to homes and businesses as soon as possible.

We know that people have differing views on new infrastructure, and we recognise people have concerns about pylons featuring in the landscape. Delivering the infrastructure we need to address climate change requires a careful balance.

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Q Are you considering alternative routes?

A We believe that the preferred route we have identified is the best option based on the information we have available. We looked at three route options when identifying our preferred route, based on locations where the renewable energy generated by new energy parks could be connected to the electricity network. The route we have identified performed best against a range of factors. We will continue to review our preferences as we move forward and will develop a connection design, including where pylons and other equipment will sit in the local landscape. This will include further surveys and consultation with landowners, communities and specialist bodies.

Q How will the project be funded?

A The Vyrnwy Frankton connection will be 100% funded by the Bute Energy Group. There will be no public funds used.

Q How does this project relate to the Llyn Lort Energy Park?

A Llyn Lort Energy Park near Cefn Coch is one of the energy parks that plans to utilise Green GEN Cymru's Vyrnwy Frankton connection.

With a total of 25 wind turbines, Llyn Lort will generate 165MW of electricity, enough to power 144,000 homes per year. This amount of green energy has the potential to displace 10.1 million tonnes of CO_2 over the course of its lifetime. Llyn Lort's location has been strategically selected to reduce effects on local communities while in a location with excellent wind resources, harnessing this power to supply homes and business with the energy they need for a low carbon future.

Q Who will benefit from the energy that is provided?

A The Vyrnwy Frankton connection will take power from where it is generated, to the transmission network in Shropshire where it can then be distributed via the grid. Once the high-voltage electricity enters the grid at a transmission network connection point, it is then distributed via the local distribution network operator (DNO). For our area, the DNO is Scottish Power Energy Networks and they supply electricity to Mid and North Wales and parts of England.

This means that energy created by Llyn Lort and other wind farms using the Vyrnwy Frankton connection will supply energy to homes and businesses across Wales and England.

Q How will the project benefit and impact the local economy?

A We are committed to investing in the communities that surround our projects. We are still at an early stage of project development, but we will be providing opportunities to Welsh and English supply chains wherever possible.

As part of our planning application, we will also assess the project's impact on business and employment. This will include a socio-economic and community report, which will consider how the project could affect these areas and whether any mitigation is required and how this will be delivered.

Q How will the project impact the environment and biodiversity?

A A changing climate is having a dramatic effect on plants and animals – protecting biodiversity is one of the key drivers for moving away from fossil fuels. Meeting the needs of the natural world with the infrastructure we need to address climate change requires careful balance. Developing large infrastructure will always bring effects on the environment, but it can also be an opportunity to invest in and enhance biodiversity.

We will always seek to keep any effects on biodiversity as low as we can in the decisions we make. We will comply with current guidelines in Wales and England on achieving a net benefit for biodiversity within the area. By working closely with the relevant stakeholders, we will work to deliver an environmental benefit that goes above and beyond these requirements.

Q How will you manage the environmental impact of the project?

A We are committed to keeping the environmental impact of our proposals as low as possible. The project's environmental impact will be assessed as part of an Environmental Impact Assessment (EIA) on our final design for the overhead line and substation. This will investigate the potential environmental impacts of our proposals, together with how we plan to reduce or limit these impacts. This will be reported in the Environmental Statement that is submitted as part of our application for planning permission.

We will also work closely with specialist bodies, local environment groups, landowners and local communities to discuss our findings and consult on our recommendations for how best to manage any potential impacts.

Q How do you plan to manage construction traffic on local roads and what transport routes do you intend to use?

A We are committed to causing the least disturbance to those living and working in the areas affected by our proposals. We will take advice from technical stakeholders and thoroughly assess the project's impact on local roads as part of a traffic and transport assessment, which is a requirement of the process we will follow to submit a planning application. This will include how we plan to manage construction traffic, and minimise any potential impacts. We recognise the importance of maintaining connectivity between nearby towns and villages and we will ensure that our work does not make it difficult for those living and working in the area.

Q Will the overhead line emit any noise?

A High-voltage overhead lines can sometimes generate noise, under certain conditions. This often sounds like either a crackle or humming sound and occurs mainly during wet weather. Noise may also arise as a result of wind blowing past the line or pylons. Any potential noise impacts will be assessed as part of the Environmental Impact Assessment (EIA) and this will include plans for mitigation. We will always ensure that the design of the overhead line and substation carefully considers any impacts on the local community.

Q What are electric and magnetic fields (EMFs) and are they safe?

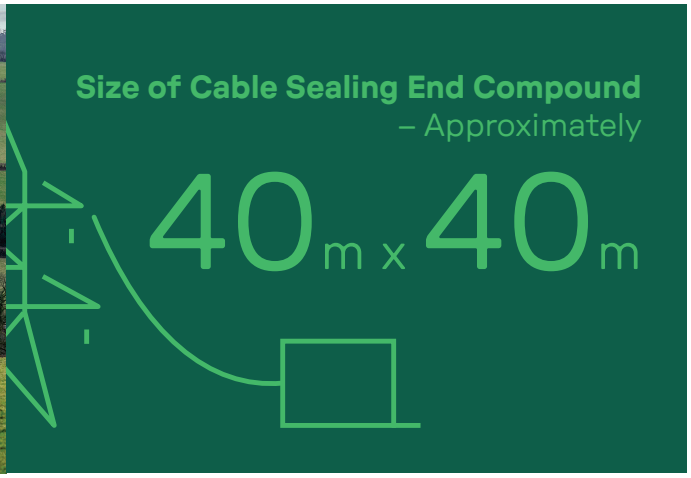
A Electric Magnetic Fields (EMFs) are produced whenever electricity is used or transmitted. Our household wiring, appliances and electricity supply are all sources. So, they are around us all the time in modern life. Overhead lines are a source, but just one of many. The maximum possible exposure under the overhead line is 38.9 microtesla, which is similar to what you would expect from using a hairdryer or walking close to a microwave when it's cooking.

There are limits in place to protect us all against EMF exposure. These limits have been based on careful reviews of the science by independent experts, who recommend safe levels of exposure for the public. The exposure limit for members of the public is 360 microtesla, so even if you are standing directly underneath the overhead line, the levels are just a small fraction of the limit. After many decades of research and hundreds of millions of pounds spent investigating the issue, there are no established health effects below the exposure limits.

Q How will you support those that are likely to be directly impacted by the project?

A We understand the effect on those impacted by our proposals including homeowners, landowners and the local community, and we are committed to ensuring that any impacts are mitigated as much as possible.

While we're making every attempt to keep impacts on communities low, the route does cross through areas of agricultural land. Our dedicated lands team are talking to landowners and working closely with those who are most affected by our proposals. If you have an interest in land affected by our proposals and have not been contacted by our lands team, please get in touch.



Q How will you compensate landowners that have equipment on their land?

A We are at an early stage of development on this project and no final decisions have been made on where the overhead line or pylons will go within the preferred route.

This is our first round of consultation, and we are asking for feedback on the work we have done to date and how we should further develop our proposals. It is very important to us that people respond to this consultation and tell us their concerns so we can work to reduce the effects on communities and individual properties.

Once we have refined our proposals, we will work with landowners affected to discuss how we can support them. We will work hard to reduce impacts on individual properties but if the final design does impact your property, we will discuss what compensation is available to you in line with current legislation.

Q Will you be undertaking surveys and which ones are needed?

A To further develop our proposals, we will need to undertake a range of surveys over a wide area to help determine any factors that need to be taken into consideration during the development of the project. These will typically involve a small number of people entering certain areas of land to undertake a range of archaeological, environmental and engineering surveys.

A request to undertake surveys on any piece of land does not mean that it will necessarily form part of the route or have infrastructure placed on it. Before we do any surveys, we will always agree the scope of works and timing with land owners.

Q When will the project be completed?

A We are at a very early stage of the project, but if we are granted planning permission we anticipate that the line will be operational by 2028.

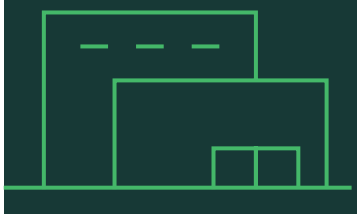
Height of the pylons

27m

Width of preferred route

200m

Collector substation footprint – Approximately



200m x 200m

Length of construction period – Approximately

2 years

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