

GREEN GEN TOWY TEIFI

A stronger, more resilient electricity network for Wales.

Consultation 5 March-16 April 2025

Frequently Asked Questions

About Green GEN Cymru

Q Who is Green Gen Cymru?

A Green Generation Energy Networks Cymru (Green GEN Cymru) is developing green energy networks to meet the future needs of the country's people, communities and businesses.

In 2024 we were granted an Independent Distribution Network Operator (IDNO) licence by Ofgem. As an IDNO, we'll design, construct and maintain a new 132 kV (132,000 volt) electricity distribution network to connect new renewable energy projects to the electricity transmission network, helping to get green energy to homes and businesses.

Adding much needed grid capacity and enabling new renewable energy sources will have positive impacts on local communities right across the country. Connecting local generation to the National Grid is crucial for improving our energy independence and resilience, reducing our vulnerability to UK energy supply disruptions. Our new network will create jobs and stimulate economic growth, reduce pollution, and improve public health.

We will work closely with communities and stakeholders as we develop our plans, to maximise the benefits and minimise the impacts for local people. You can find out more at the Green GEN Cymru website www.greengencymru.com

Q What is your relationship with Bute Energy?

A Windward Energy Group consists of Green GEN Cymru, Bute Energy and Haldane Energy. As a regulated business, Green GEN Cymru is legally separate and is managed and operated independently.

In July 2024, Green GEN Cymru became an independent business regulated by Ofgem and is now operating under an Independent Distribution Network Operator (IDNO) licence. Under this licence Green GEN Cymru must treat all customers (be they new energy users or generators) equally. Bute Energy is a customer of Green GEN Cymru and has connection agreements in place.



About the proposals

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

A The proposed draft route alignment for the connection is approximately 52km long. The current draft route alignment would require around four pylons per kilometre. These will have an average height of 29.5 meters.

These are the smallest pylons available to us to carry the amount of power generated. The design of the connection is still open to change based on feedback and our own assessments.

Q Why are you choosing to use pylons for the project?

A As an Independent Distribution Network Operator (IDNO) we have a duty under the Electricity Act to be economic and efficient as the cost of all connections is passed down to electricity consumers.

Since our first consultation, we have reassessed undergrounding, including open trench cabling and cable ploughing. Both are more expensive than developing overhead lines on pylons. This is due to the cost of the cables and the construction requirements.

We are committed to keeping impacts on local communities and the environment as low as possible. As a result of public feedback and further environmental and technical assessments, we are proposing two separate sections of undergrounding near Merlin's Hill and the new Llandyfaelog substation. Measuring approximately 5km in total, undergrounding in these locations is proposed in order to protect the cultural heritage of Merlin's Hill and to reduce the accumulative impact of electricity infrastructure in Llandyfaelog.

Underground cables typically require more land and create more ground disturbance during construction, which has the potential to produce more significant ecological and archaeological impacts, which we must also consider.

Overhead lines can also be developed more quickly. This is key if we're to bring low carbon energy to homes and businesses as soon as possible.

While the cost of one new connection might not appear to add much to electricity bills, when the maintenance and construction of all connections across Wales is considered, the costs to consumers would be significant if connections were put underground.

Q Could you use wood poles for the connection instead?

A To provide sufficient capacity for all of the low carbon energy proposed we need two 132 kV circuits. Wood poles can only carry a single circuit so using wood poles would require multiple connections to carry the same amount of electricity.

Q What is the status of the windfarms you are proposing to connect?

A We have connection agreements with the Lan Fawr energy development and others. There are more details about these in our updated Phase 1 Grid Connection Strategy, which is available on our website.

The energy developments will all go through their own stages of consultation in line with the planning process and all will need to seek the necessary permissions to be built. The developers of the energy parks are responsible for progressing their plans including any requirements for consultation and assessment.

Q Why are you developing the connection before the windfarms have planning permission?

A The energy developments and new connections can both take several years to plan, consent, and construct so it is normal practice for energy generation and new connections to be developed in parallel.

Q What is the status of the National Grid substation that would be required near to Llandyfaelog?

A National Grid has identified an area within which it anticipates developing the substation that would receive our connection. We have considered this area when designing the draft route alignment and in the preliminary environmental assessment.

National Grid will be developing its plans for the substation, including any requirements for consultation and assessment separately from Green GEN Cymru. For more information visit the National Grid website

www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/llandyfaelog-substation

About the proposals

Q Who would benefit from the energy that is generated?

A The Towy Teifi connection will contribute to a more resilient electricity network, ease pressure on the existing local grid, support businesses, and could help enable the roll out of green heating and electric vehicles in rural communities. It will take power from where it is generated to the national transmission network in Carmarthenshire, where it can then be distributed via the grid. This means that energy created by wind farms using the Towy Teifi connection will supply energy to homes and businesses across the country.

Green GEN Cymru holds an Independent Distribution Network Operator (IDNO) licence. The IDNO license enables us to operate electricity distribution networks, supporting the growing demand for renewable energy infrastructure in Wales. This means we can respond to customer connection requests for both energy consumption and generation.

In this way, the new connection could also become part of a more resilient network for the region – creating capacity to support local investment and providing for a future in which we all use more electricity.

Q How will the project benefit the local economy?

A Along with connecting renewable energy quickly and efficiently to the grid, our project will also contribute to a more resilient and reliable network for the region. By adding additional electrical capacity, the Towy Teifi project could open up the potential for business investment in the area, supporting the creation of jobs and skills.

We are committed to investing in Wales and supporting the local economy in the area of our projects. We are still at an early stage of project development, but we will be providing opportunities to the local supply chain wherever possible.

Q Does Green GEN Cymru have a community benefit fund?

A We do not, but by connecting wind farm projects from Bute Energy, the communities closest to our grid lines are also eligible to apply to Bute Energy's unique Community Benefit Fund.

Worth millions of pounds per year, this money will be available to provide financial support for initiatives that improve the quality of life for community members, help secure clean energy independence, foster engagement, and address social and economic concerns – a unique approach in Britain. Administered by Bute Energy, please visit their dedicated webpage for more information <https://bute.energy/community-investment/>

Q How will the project impact the environment and biodiversity?

A Climate change 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 have effects on the environment, but it can also be an opportunity to invest in and enhance biodiversity. We will seek to keep any effects on biodiversity as low as we can in the decisions we make.

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

A We are committed to minimising the environmental impact of our proposals. The project's environmental impact will be assessed through an Environmental Impact Assessment (EIA) on our final design for the overhead line and substation. This assessment will investigate the potential environmental impacts of our proposals and outline how we plan to mitigate these impacts. The findings will be reported in the Environmental Statement, which will be submitted as part of our planning permission application.

We will collaborate closely with specialist bodies, local environment groups, landowners, and local communities to discuss our findings and consult on our recommendations for managing any potential impacts.

In compliance with current guidelines in Wales, we aim to achieve a net benefit for biodiversity in the area. By working closely with relevant stakeholders, we are striving to deliver at least a 10% net gain in biodiversity value relative to the pre-development biodiversity value of the onsite habitat.

About the proposals

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 we can to those living and working in the areas around our proposals. We will take advice from technical stakeholders and consider 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, including 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 considered as part of the Environmental Impact Assessment (EIA). We will always ensure that the design of the overhead line carefully considers any impacts on the local community.

About the proposals

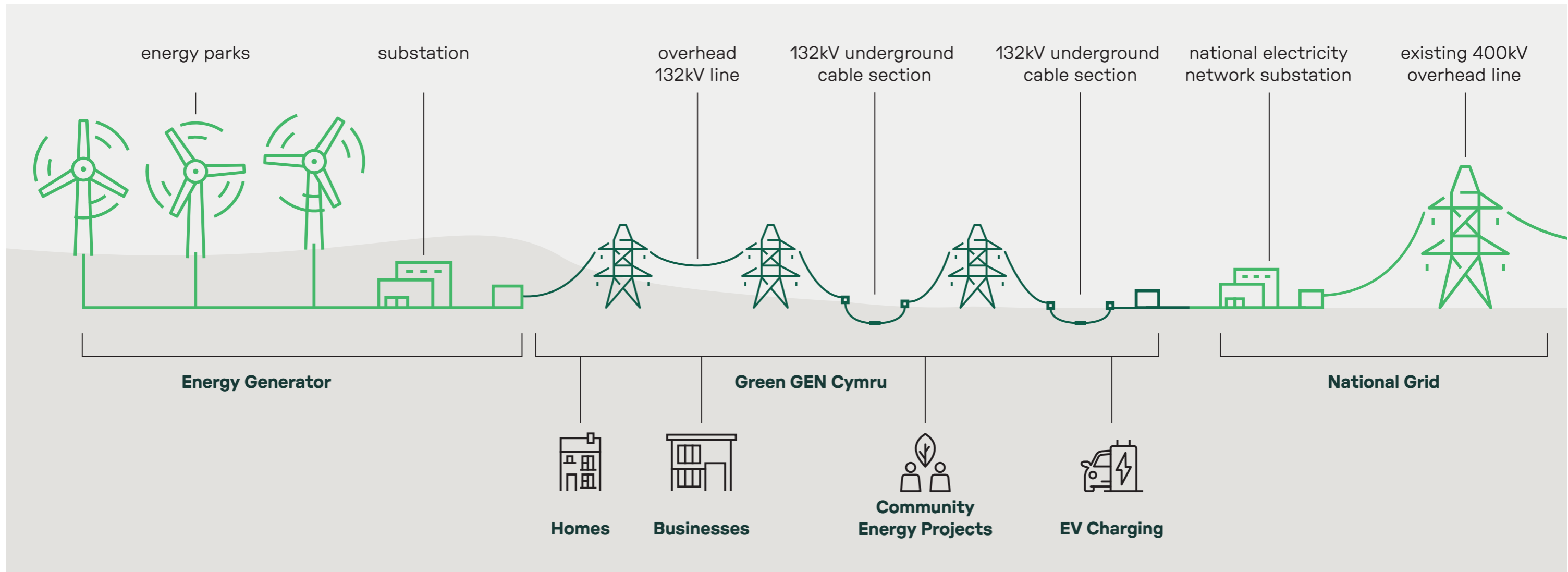
Q What are electric and magnetic fields (EMFs) and are they safe?

A Electric Magnetic Fields (EMFs) are produced whenever electricity is used or transmitted. 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. More information is available at www.emfs.info

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

A The draft route alignment does cross through areas of agricultural land and there are individual properties nearby. We understand that those affected by our current proposals including homeowners and landowners could have concerns. We're committed to ensuring that any impacts are mitigated as much as possible and are keen for those most affected to give us their feedback. Our lands team are available to meet with homeowners and landowners. If you have an interest in land affected by our proposals and have not yet been contacted by our land team, please get in touch.



About the proposals**Q How will you compensate landowners that have equipment on their land?**

A We recognise that landowners may have concerns about our proposals and we are committed to working with them to ensure they understand our proposals and to reduce the effects. We will provide easement payments to affected landowners, details of this can be found on our website, [greengentowyteifi.com/en/the-project/landowners/](https://www.greengentowyteifi.com/en/the-project/landowners/)

Q Would the project affect property values?

A We have considered the location of communities and individual properties in developing the draft route alignment seeking to avoid particular areas or reduce impacts, where we can. You can read more about the alignment in our consultation brochure which is available on our website. The draft route alignment is still open to change through feedback and ongoing assessment so it's too early to know exactly how individual properties will be affected.

A study published in September 2024 for Scottish Renewables by BiGGAR Economics assessed the potential effects of power lines on house price trends, looking at the Beaully Denny line – a high voltage line through areas of rural Scotland, completed in 2015. BiGGAR Economics surveyed estate agents from areas surrounding the Beaully Denny line. The study found that the uncertain period during the planning process did have some effect on the housing market, but that when the line was built housing market trends along the power line have mirrored those of the wider local authorities. Macroeconomic factors have been the principal drivers of house price growth and the power line has had no noticeable impact on house prices. The Beaully Denny power line stretches from Beaully, north of Inverness to Denny near Falkirk. This project is 137 miles long and has pylons almost double the height of the pylons proposed for Towy Teifi. The report is available here:

[www.scottishrenewables.com/publications/1714-house-prices-impact-of\[1\]beaully-denny-grid-infrastructure](https://www.scottishrenewables.com/publications/1714-house-prices-impact-of[1]beaully-denny-grid-infrastructure)

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 2029.

Q What is Green GEN Cymru's plan at the National Grid substation?

A Green GEN Cymru is proposing to connect to a new National Grid 400kV substation at Llandyfaelog in Carmarthenshire. We are planning to underground 2km of the route into the substation to limit any cumulative effects of this and other connections in the area.

Q What surveys will you carry out and when will they take place?

A We will undertake various surveys throughout the year including geology, ecology, and land use. Most will be non-intrusive (walk over), but for some intrusive surveys we may need to drill boreholes or dig trial pits. Some ecological surveys can only be carried out at a particular time of the year, or at night, when certain species (such as bats and newts) are more active. We work closely with landowners and occupiers to ensure that surveys are carried out, wherever possible, at appropriate times and with as little inconvenience as possible. We work hard to secure a voluntary access agreement with the owner/occupier wherever we can, and we normally issue a Land Interest Questionnaire (LIQ) at the same time to help us identify all parties with a legal interest in the land.

Q Do you have permission to carry out surveys?

A Our overwhelming preference is to agree access for surveys on a voluntary basis by way of survey licence. In the event access for surveys can not be agreed voluntarily, Green GEN Cymru may rely on the rights afforded to us under the Housing and Planning Act 2016, which authorises us as an acquiring authority.

Q By allowing survey access to my land will I be accepting that the project is going ahead?

A Allowing Green GEN Cymru access to land for engineering, ecological and environmental surveys does not prevent the landowner making representations about the Project or remove the right to comment in any form.

About the proposals**Q What is a Development of National Significance (DNS) application?**

A A Development of National Significance (DNS) is a type of large infrastructure project. Because the Towy Teifi project is an overhead electric line of 132kV which is associated with a devolved generation station, it is being promoted as a DNS. As a DNS, the project is subject to many requirements including a thorough environmental assessment and public consultation with community and stakeholders.

As developers, we will submit our application to Planning and Environment Decisions Wales (PEDW) for review, before a final decision is made by the Welsh Ministers.

Feedback from the public, local authorities, community councils and national organisations will help us develop a final design for the project. We will also carry out further technical assessments and surveys to inform our Environmental Impact Assessment (EIA). The EIA will then be reported in an Environmental Statement, which sets out the potential impacts of the project and any proposed mitigations.

Before we submit an application to PEDW, there will be a statutory Pre-Application Consultation period, where people will be able to review and comment on the detailed designs and the draft Environmental Statement.

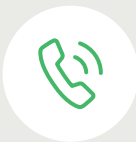
Q How will my feedback be considered and why is it important?

A Your feedback is key in influencing our proposals. Your local knowledge can help us understand any potential effects and benefits that we may not have considered in our work to date, and to inform our work going forward. We listened to what you said at our first consultation and the connection has been influenced by feedback from local communities and stakeholders. The design of the connection is still open to influence, your feedback will help us in continuing to keep effects as low as we can.

Q How can I leave feedback on the proposals?

A Submit your feedback by completing an online feedback form on our website www.greengentowyteifi.com, sending an email to info@greengentowyteifi.com or sending written feedback to FREEPOST Green GEN Cymru TT.





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