

# Bryn Cadwgan Energy Park



## Welcome

to Galileo's community consultation on the proposed Bryn Cadwgan Energy Park. Thank you for taking the time to visit today's event.

Please take as much time as you need to review the information presented. Members of the project team are on hand to provide you with answers to any questions or to discuss any comments on the project.

This is our first round of consultation events and gives you the chance to view our current plans for the site, meet the project team, and provide feedback.

## Leave your feedback

We would very much value your feedback as we seek to review and refine our plans.

Please take a few minutes to share your views and any comments on our proposal by complete for feedback form:



on the website  
**bryncadwganenergypark.co.uk**



hard copies are available at the event today. Please return to the return box at the event or to **Freepost GRASSHOPPER CONSULT** (no stamp or further address required)

## Keeping in touch

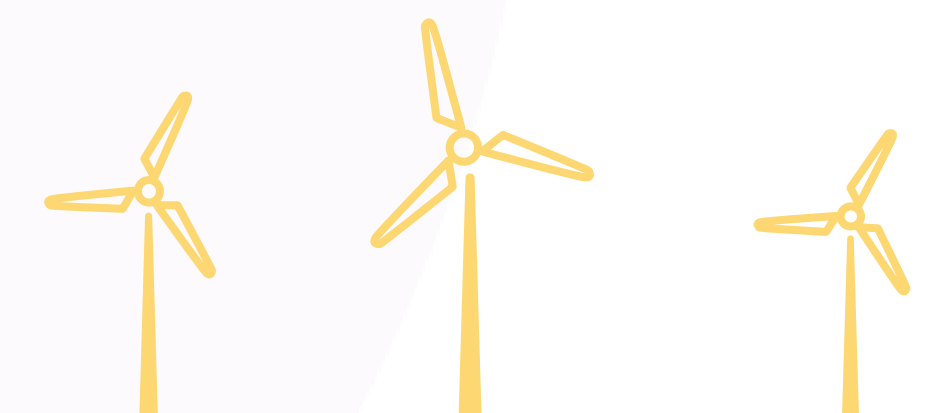
If you have any questions, want more information on our plans or would like to meet with us to discuss the project in more detail, please get in touch at any time by:



emailing  
**BrynCadwgan@galileoenergy.uk**



calling  
**01550 910 285**



**The deadline for feedback is:**  
Thursday 30 November 2023





# How is Galileo tackling the climate emergency?

**We work together with our partners to bring forward high-quality renewable energy projects at pace.**

The proposal for Bryn Cadwgan Energy Park is set against the backdrop of the climate emergency, and the need to transition to renewable energy sources and reducing greenhouse gas emissions globally from polluting fossil fuels.

Recent events have focused people's minds on the risks of overreliance on imported fossil fuels, with the rising cost of gas driving the huge increase in energy bills.

Wind is a key part of the renewable energy mix to generate clean, homegrown energy that will help tackle energy prices and heighten energy security.

The growth of secure, home-grown renewable energy can help to insulate Wales and the UK from future price shocks and play a key role in decarbonising heat, power and transport.

Onshore wind is one of the cheapest sources of new-build electricity generation in the UK, and already makes an important contribution to the renewables mix.

Bryn Cadwgan Energy Park will assist in achieving the Welsh Government target of 100% of electricity needs from renewable sources by 2035.

## About us

Established in 2020, Galileo is a fast-growing European, multi-technology, renewable energy developer, owner and operator.

Our mission is to **significantly contribute to achieving global emission reduction targets**. We aim to do this by developing enough smart, efficient, high-quality and integrated green energy projects to make renewable energy the primary source of electricity for all energy consumers in Europe.

Galileo currently has a project development portfolio of over 7 Gigawatts (GW) across multiple European countries including the UK, Sweden, Spain, Italy, Germany, France and Poland. With an office in Cardiff, Bryn Cadwgan is one of a pipeline of our renewable energy projects in development across Wales.

More information about Galileo is available at: **[galileoenergy.uk](https://galileoenergy.uk)**

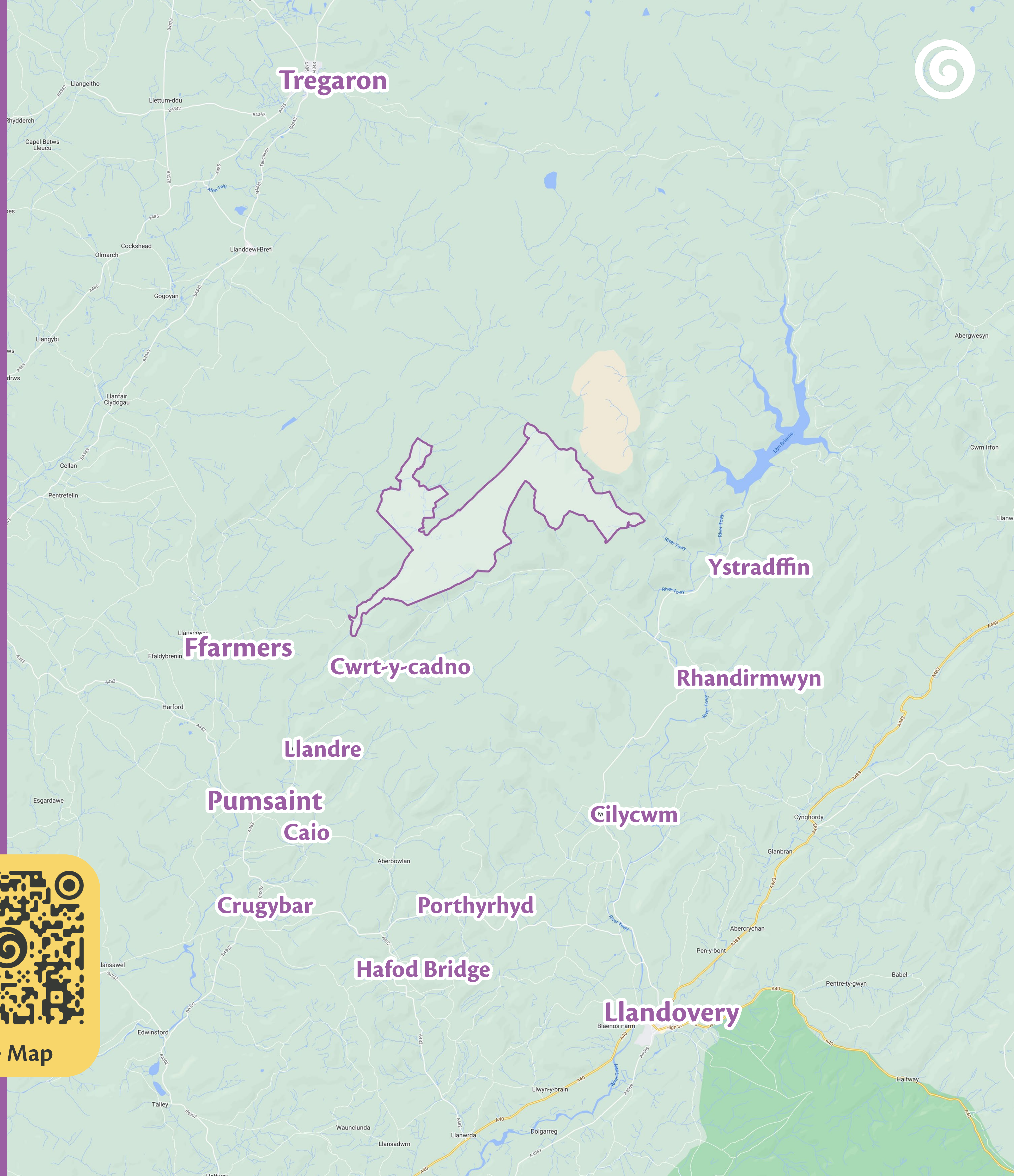


# Site location

Bryn Cadwgan Energy Park is over 1,000 hectares and situated in a rural sparsely populated area on the border with Carmarthen and Ceredigion within the Cambrian Mountain Range.

The site benefits from excellent wind resource and is an ideal location for a new renewable energy park to provide clean, carbon-free electricity.

The land is currently used for grazing farmland and forestry.





# The proposals



## Wind



**Up to 25 turbines**



**230m to blade tip**



**Total installed capacity of up to 175 megawatts (MW)**



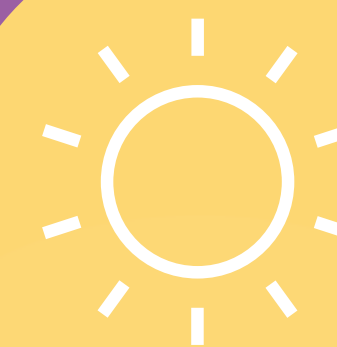
**Annual output of approximately 403,000 MWh**



**115,000 homes equivalent powered from wind alone**



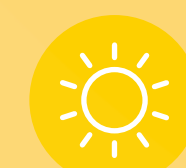
**Approximately 171,000 tonnes of carbon dioxide emissions saved per annum**



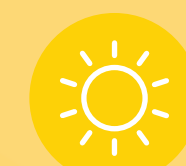
## Solar



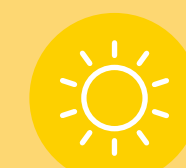
**Ground mounted solar photovoltaic (PV) modules fixed to mounting structures known as 'strings'**



**Each panel typically 2m long and 1m wide**



**Maximum height of the modules approximately 4m**



**Panels angled towards the sun**



## Battery Energy Storage System (BESS)



**BESS is designed to provide peak generation and grid balancing services to the electricity grid**



**As a secondary function, it may also import surplus energy from the electricity grid when energy available to the grid exceeds demands**



**The BESS typically comprises a number of shipping container units**





# Environmental considerations

We've got a team of expert environmental and technical consultants helping us develop our proposals.

We're undertaking in-depth studies to enable us to assess any environmental impacts. The findings will help us refine our proposals to remove, reduce and mitigate any potential impacts.

As part of the application, we are required to undertake an Environmental Impact Assessment (EIA).



## Wildlife

We are currently conducting a range of surveys to determine the project's potential impact on local wildlife and habitats, including birds and bats. Impacts on wildlife will be minimised where possible and opportunities will be explored for biodiversity enhancement.



## Landscape and Visual

A detailed landscape and visual impact assessment will also be undertaken, which will allow us to determine the design and location of the wind turbines, solar panels, and battery storage. The effect of the project on landscape and the views of local residents are important considerations in this assessment.



## Historic Environment

We will investigate the potential effects of the project on the historic environment which will include cultural heritage and archaeology.



## Noise

There are strict standards controlling acceptable noise levels. We will carry out noise assessments and make predictions on likely noise levels.



## Access and Transportation

Key considerations include how the site will be accessed by vehicles during the construction period. We have been assessing potential routes for component delivery to the site. The current assessment involves the components being transported via the M4 from Swansea to Carmarthen (M4 and A48) and on to Llandeilo (A40). From Llandeilo, access routes are currently being assessed:

**Option 1 – A40 (to Llanwrda), A482 to Pumsaint**

**Option 2 – B4302 to Pumsaint via Maerdy and Talley**

The planning application will consider the impact of construction traffic on the surrounding road network and will identify any mitigation required. A traffic management plan will set out measures to secure the safety of other road users and to reduce the impact of construction traffic.



## Grid

The project has secured a grid connection agreement to allow us to export electricity to the National Grid. A specific route of the grid connection is still to be decided, and so will be subject to a separate consent application.







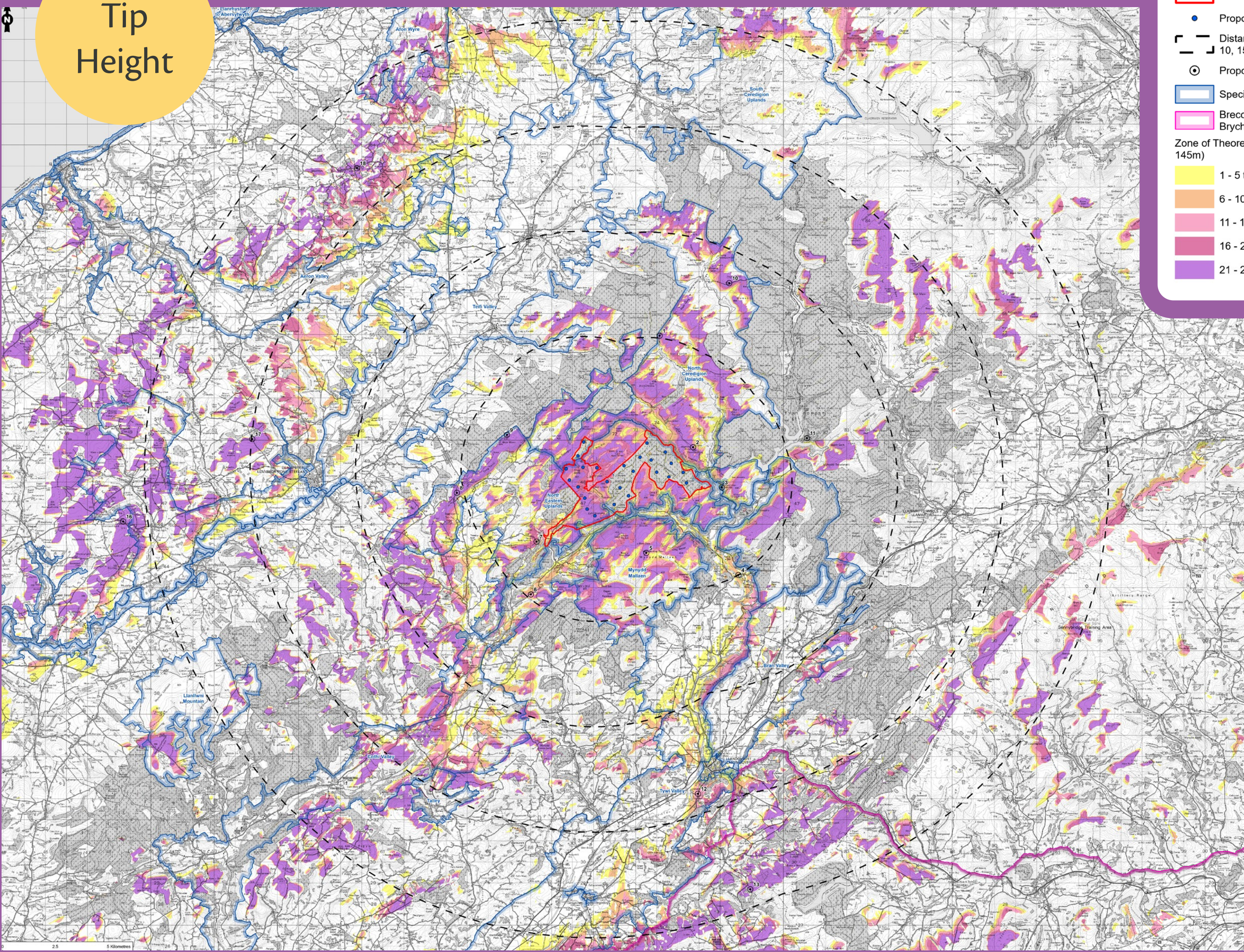
# Zone of Theoretical Visibility

The Landscape and Visual Impact Assessment will assess and illustrate how Bryn Cadwgan Energy Park will look and fit into the surrounding landscape.

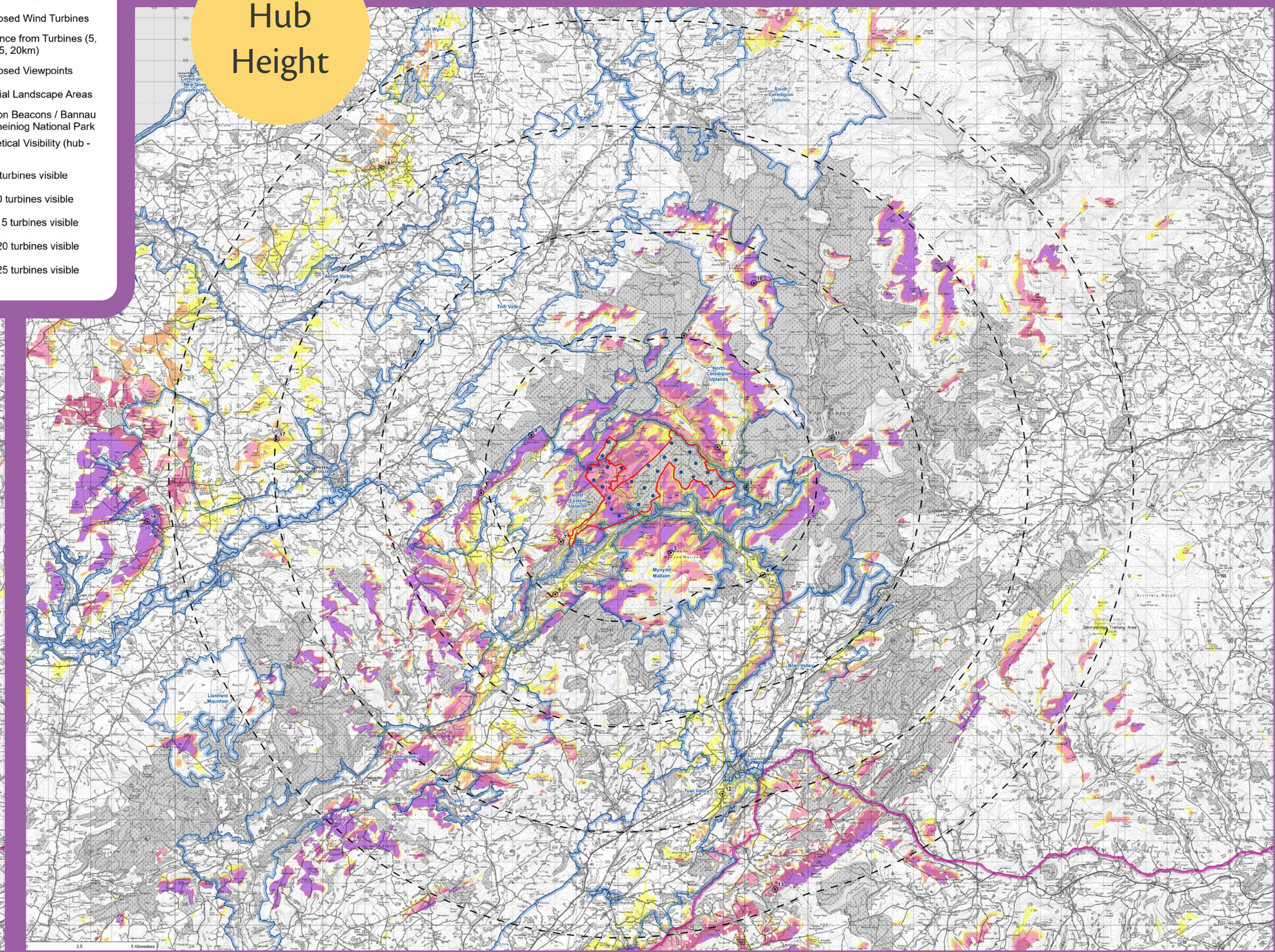
The Zone of Theoretical Visibility (ZTV) is a tool used to indicate the theoretical number of turbines that could be visible from a specified location, given the topography of the area. This does not take into consideration any screening from trees or buildings which often leads to fewer or no turbines being visible. Further visual analysis will be carried out for selected viewpoints by producing wirelines and photomontages that will show what the project will look like in the surrounding landscape.

We have selected the viewpoints shown on the next board to illustrate how the Bryn Cadwgan Energy Park, in its current layout, may appear in the surrounding area.

Tip  
Height



Hub  
Height

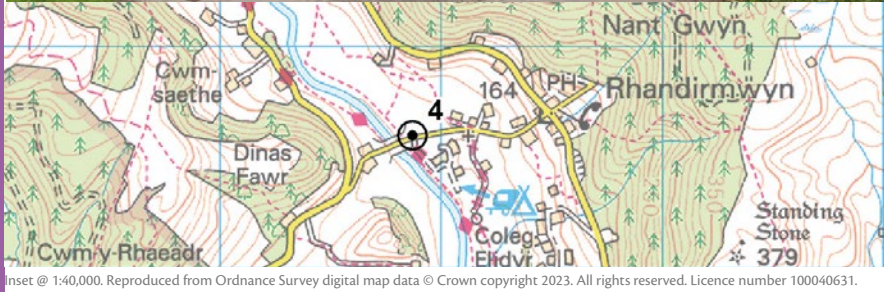


- Legend**
- Site Boundary
  - Proposed Wind Turbines
  - Distance from Turbines (5, 10, 15, 20km)
  - Proposed Viewpoints
  - Special Landscape Areas
  - Brecon Beacons / Bannau Brycheiniog National Park
  - Zone of Theoretical Visibility (hub - 145m)
  - 1 - 5 turbines visible
  - 6 - 10 turbines visible
  - 11 - 15 turbines visible
  - 16 - 20 turbines visible
  - 21 - 25 turbines visible

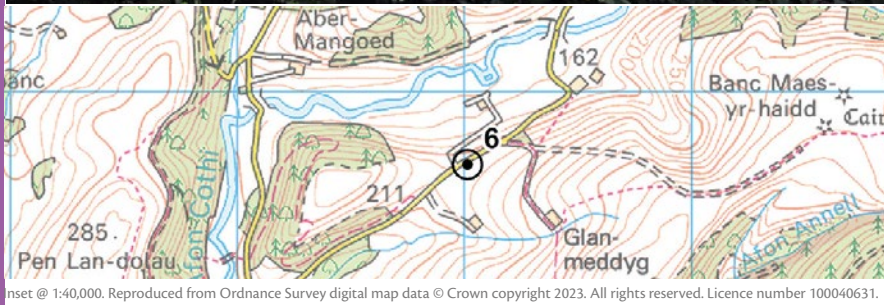
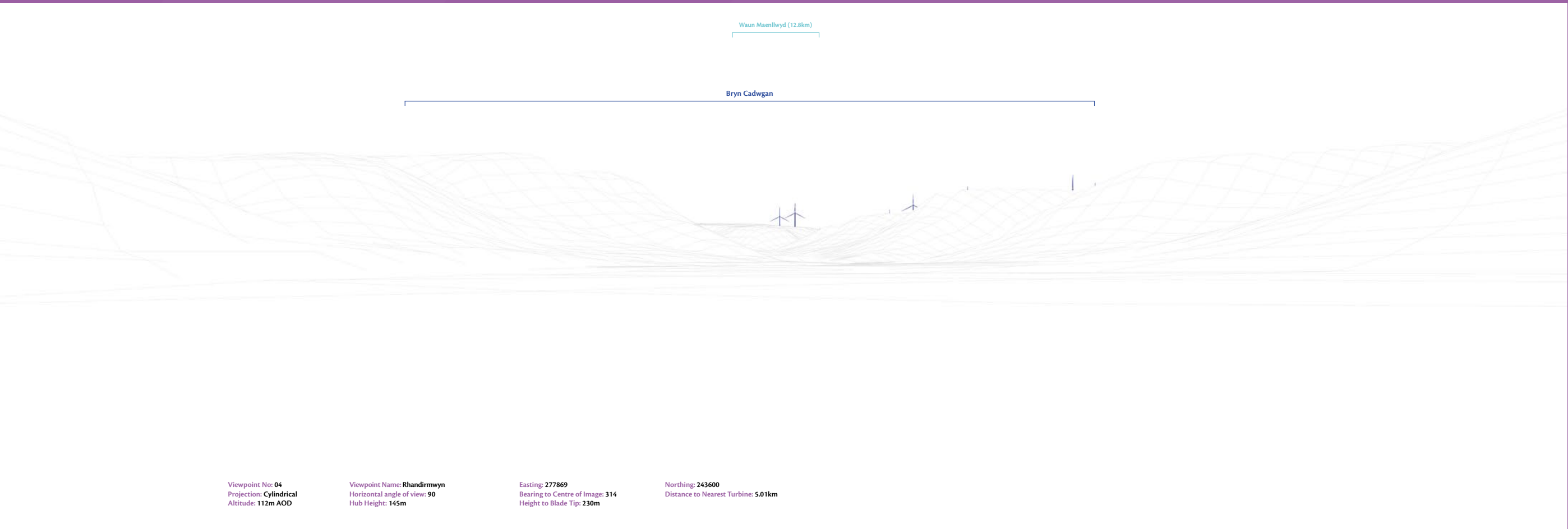




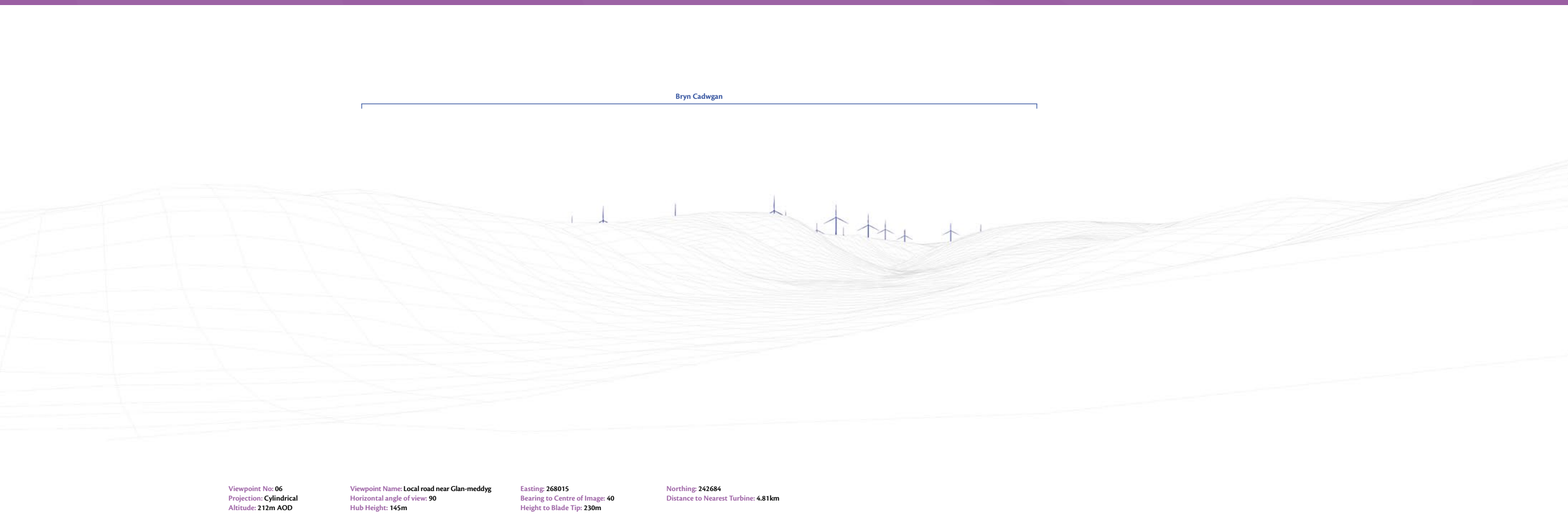
# Viewpoints



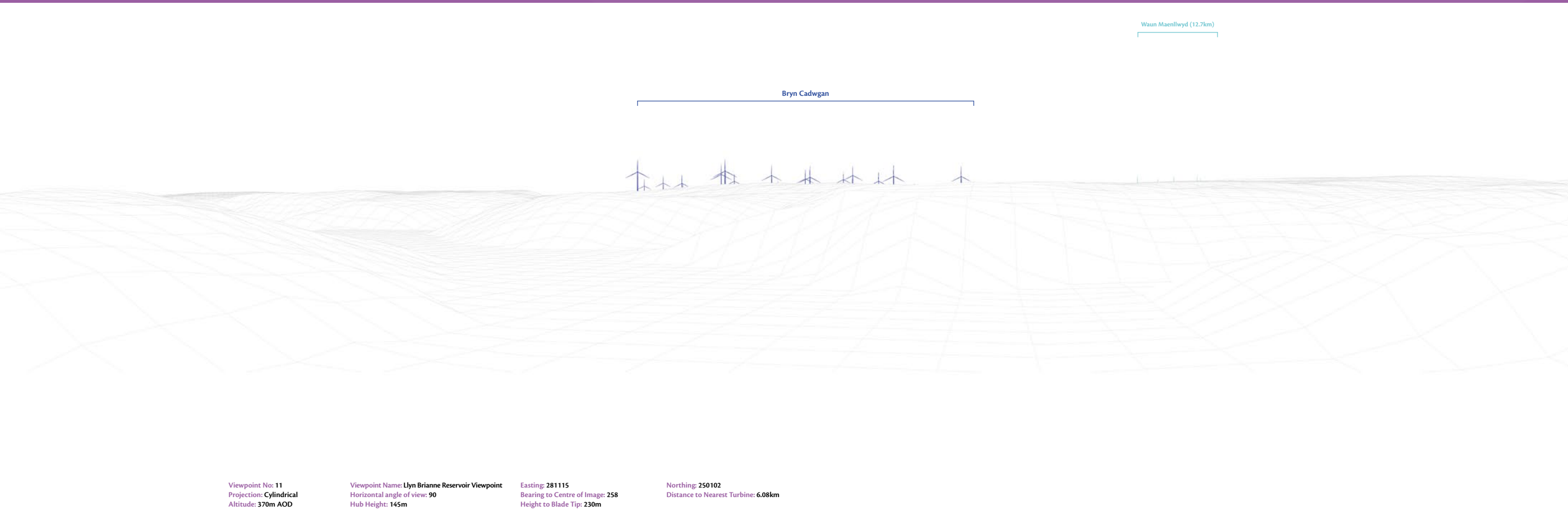
VP4 Rhandirmwyn



VP6 Local road near Glan-meddyg



VP11 Llyn Brianne Reservoir Viewpoint





# Galileo's community offering

Galileo's developments provide the opportunity to deliver considerable benefits to the local community for the lifetime of the energy park, and beyond.

We are committed to delivering a sustainable Community Wealth Fund of £5,000 per MW installed annually (index linked) over the energy park's lifetime to the local community.

We actively encourage input from members of the local community concerning the types of local projects they would like to see benefit from the wealth fund, which could include local energy discounts or an education and training fund.



## Community shared ownership

Up to 10% ownership in the project will be offered to the community surrounding the development to invest in.



## Renewable Energy Discount Scheme

We are keen to explore the potential for discounting energy bills for those properties in communities closest to the energy park. This would be a direct and tangible benefit to people living and working closest to Bryn Cadwgan Energy Park, and would be open to all residential, business and community buildings.



## Construction community fund

Available to local groups and organisations to help offset any inconvenience caused during the construction period.

**We welcome your thoughts on how the investment package could be structured, what type of projects could be considered and any other ideas about how the project can deliver benefits to the community. Wherever possible, we will also use local suppliers and contractors during construction and operation and hire workers from the local population.**



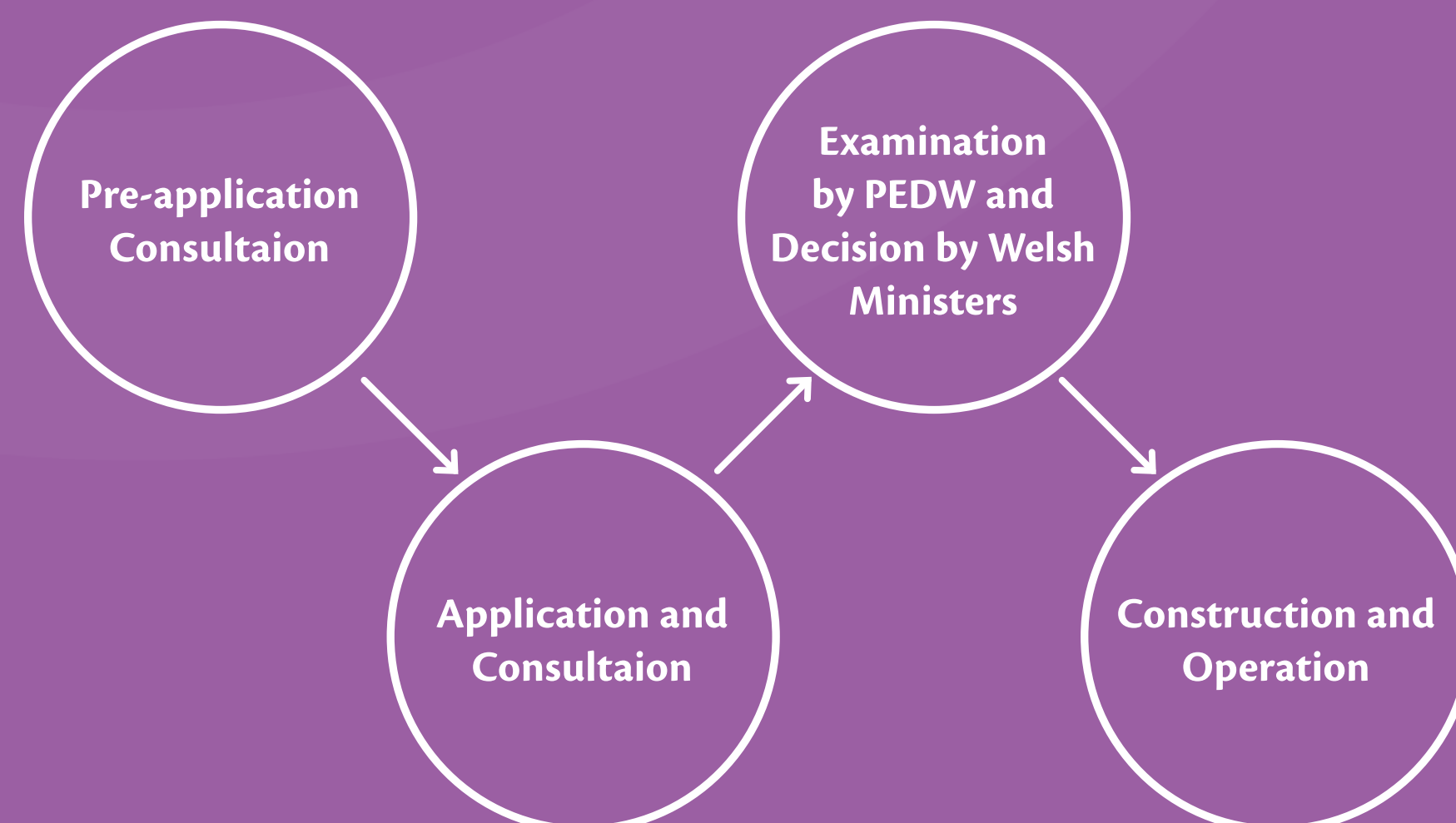


# Timeline

Due to the scale of the proposed Bryn Cadwgan Energy Park, it is classed as a Development of National Significance (DNS) and a planning application will be submitted to the Planning and Environment Decisions Wales (PEDW) for determination by Welsh Ministers.

This applies to all energy generation projects between 10MW and 350MW. Under this planning regime, Carmarthenshire County Council and Ceredigion County Borough Council are Statutory Consultees and are not the final decision makers.

The diagram below sets out the planning process:



\*Based on Developments of National Significance: An Accessible Guide to Engaging with the Process, The Planning Inspectorate

**A Scoping Request will be submitted to PEDW in Autumn 2023 to seek feedback on the proposals. Their response together with the feedback will inform how the proposals evolve.**

We will collect feedback following this consultation and carry out further assessments and surveys. You can submit your feedback on the project either by filling in a feedback form here or on the project website. There will be a second consultation event in 2024 to update you on the project before we submit a planning application.

The Draft Environmental Statement will be presented at the next consultation in 2024. This will contain the results of all the surveys and studies carried out as part of the Environmental Impact Assessment and will outline our plans to mitigate potential impacts. There will be an opportunity for the public to submit comments to Welsh Ministers once the application has been submitted.

