

Prosiect Maen Hir

Project Information Booklet

OCTOBER 2024

This Project Information Booklet has been produced to inform you about the Project and to invite your feedback on our proposals. Our aim is to ensure that local communities are fully engaged in the development process and have the opportunity to provide their views and comments. The booklet outlines the key aspects of the Project, including its benefits and potential impacts, and provides details on how you can participate in the consultation.

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Prosiect Maen Hir

About the Prosiect

Lightsource bp is developing Prosiect Maen Hir, a solar and energy storage project with a generation capacity of 360 megawatts (MW) alternating current (AC). This means it could produce enough clean energy to power over 140,000 homes (equivalent) and avoid over 70,000 tonnes of CO² annually.

Subject to being consented, the Project would deliver economic, community, and environmental benefits, and in doing so, play a key part in the Isle of Anglesey County Council’s Energy Island Programme. This programme aims to position the Island at the forefront of low carbon energy research and development, production, and servicing.

The Project would also make a significant contribution to the Welsh Government’s targets to achieve Net Zero by 2050 and to generate approximate 70% of electricity from renewable sources.

The Solar PV site comprises approximately 1,284 hectares (ha) across three parcels:

- Gogledd Maen Hir (Maen Hir North) – comprises land near Rhosgoch and Bodewryd
- Canol Maen Hir (Maen Hir Central) – comprises land around the northern and eastern periphery of Llyn Alaw
- De Maen Hir ‘A’ a ‘B’ (Maen Hir South A and B) – comprises land to the north-east and south-east of Llannerchymedd

The land predominantly consists of agricultural fields used for grazing, with an area of brownfield land within Maen Hir North close to Rhosgoch, which was formerly an oil depot.

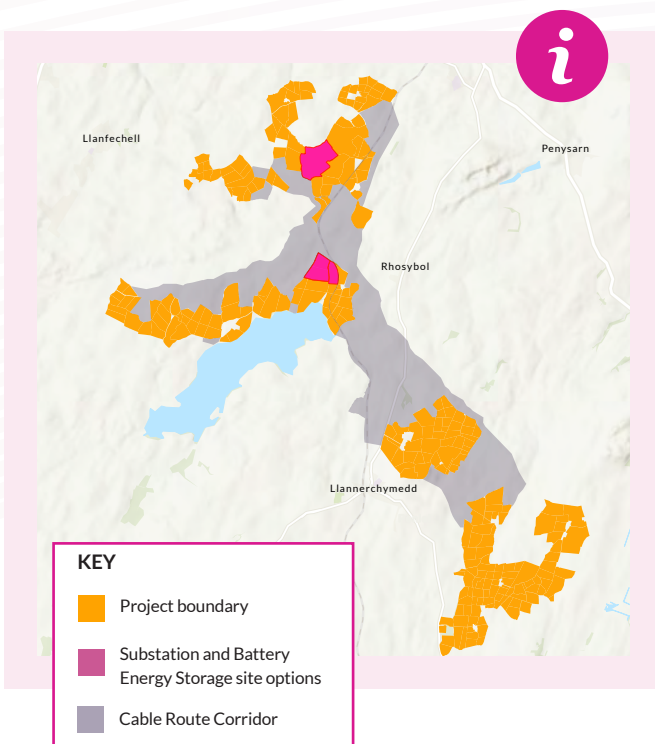
The Former Oil Depot is proposed as the primary construction compound for the Project. It is also the preferred location for the Community Solar Project and BESS. The Project may involve infrastructure improvements at the brownfield site that could help unlock its development potential and support future employment opportunities.

At this early stage, we have not yet finalised the design for the Project. We need to determine how much of the land would be developed for:

- Solar panel modules and associated equipment, including the Project Substation and Battery Energy Storage System (BESS)
- Accesses and temporary compounds for construction
- Creating new or enhancing existing habitats for biodiversity, and buffer zones to maintain distance between new equipment and homes, landscape features, and Public Rights of Way

The Project also includes a 5MWp* Community Solar Project. The income generated from this would be used to finance projects that directly benefit local communities and the environment, which may include supplementing existing infrastructure and creating new recreational spaces.

The project will have an operational life of up to 60 years. During the operational phase, the land under and around the solar panels will remain grassland and be managed by grazing or mowing to protect soil resources and agricultural land quality. At the end of the operational phase the project will be decommissioned and the land returned.



*MWp is the maximum capacity (peak) of installed MW DC solar capacity

Need for the Project

There is a growing body of UK energy and climate change international commitments, law, policy and guidance which highlights an urgent need for new energy generation infrastructure, particularly from renewable sources such as solar. Alongside this drive for new energy generation, the UK Government has committed to achieving net zero greenhouse gas emissions by 2050 and decarbonisation of the energy sector by 2035¹.

Decarbonisation is a UK legal requirement and is of global significance. In June 2019, the Government passed law to end the UK's contribution to global warming by 2050: Net Zero².

About Us

Lightsource bp; a global leader in development, financing, management and operation of utility-scale solar projects. For over a decade Lightsource bp has been harnessing sunlight to help power the world in a clean, sustainable and responsible way.

Lightsource was established in 2010 and has provided sustainable and affordable energy to businesses and communities throughout the UK. In 2017 Lightsource formed a joint venture with bp and subsequently became Lightsource bp. Most recently, bp has announced the intention to fully acquire Lightsource bp, which currently operates as a 50:50 joint venture with bp.

Importance of Community Feedback

We want to hear your views on the Project. Community feedback is crucial in helping us shape the Project and ensure it reflects local needs and priorities. We welcome your feedback on various elements of the Project, such as the site layout, environmental considerations, and community benefits. Your comments and suggestions will assist us in refining our Project, addressing any concerns, and maximising the benefits of the Project for the local area. We are committed to engaging with the community throughout the development process and value your input in creating a successful and sustainable Project.

More information on the importance of consultation and how you can provide your feedback can be found on **page 20** of this booklet.

Our expertise in renewable energy projects

Over the past decade, we have driven solar energy forward, from development through to managing and operating solar projects across our extensive portfolio. As we continue to grow, we have ambitious goals for the future. We recently announced our aspiration to deliver 25 gigawatts of solar by 2025, underscoring our commitment to helping the world's energy system decarbonise at the pace required. To date, Lightsource bp has developed 9.5GW of solar capacity globally.

At Lightsource bp, we consider community engagement and consultation as intrinsic to the development of our proposals. We respect that each community is unique and are committed to working with and listening to the views of those with interests in the Project. This approach allows us to develop the Project responsibly and in a manner that recognises and positively responds to the unique character and interests of local communities.

¹<https://www.gov.uk/government/news/plans-unveiled-to-decarbonise-uk-power-system-by-2035>

²<https://www.legislation.gov.uk/ukpga/2008/27/contents>

How Solar Farms Work

Solar farms capture sunlight to generate electricity, which is fed into the National Grid via a substation. Electricity generated can also be stored in batteries and fed into the grid during times of peak demand. The operational areas of the site are enclosed by security fencing to ensure safety for both the site and the local community. Security measures like CCTV will be in place, although the site will not be lit at night.

The solar panels are arranged in rows and connected by cables that transfer the electricity produced to inverters. Once installed, the panels can reach a height of up to 3.5 metres.

Inverters are essential to convert the direct current (DC) electricity produced by the solar panels into alternating current (AC), which is the type of electricity used in homes and businesses. The 33kV parcel substations collect the electricity generated, and the 132kV project substation increases its voltage before transmitting it to the National Grid substation. The project substation may reach a height of up to 15 metres.

Battery storage plays a key role in holding electricity during times of low demand and releasing it when it's needed most. The battery units will typically be no taller than 4 metres. The final locations for battery storage will be carefully chosen based on consultation feedback and the outcomes of our detailed environmental assessments.

Inverters may be positioned beneath the solar panels or in designated areas. These areas, up to 4 metres high, also house equipment like switchgear, which manages the electrical systems, and transformers, which increase the voltage to the required level for transmission to the substation

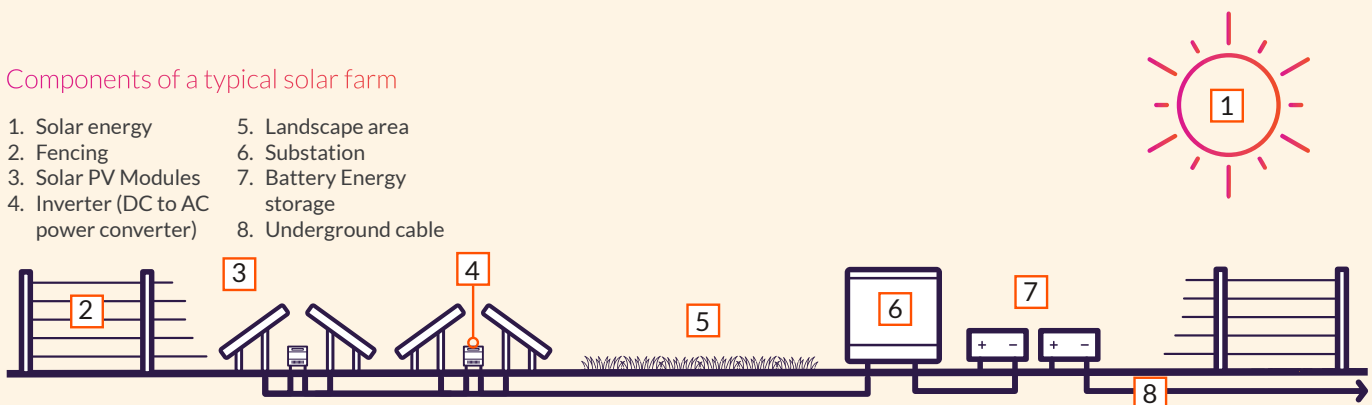
Throughout the lifetime of the solar farm, our proposals will include opportunities to enhance the site's landscape and biodiversity, creating new habitats that support local wildlife.

Underground cables are used to connect different parts of the solar farm and transport electricity to the National Grid substation.

The Indicative Masterplan on **page 8** shows our current proposals for the design and layout of the solar energy park.

Components of a typical solar farm

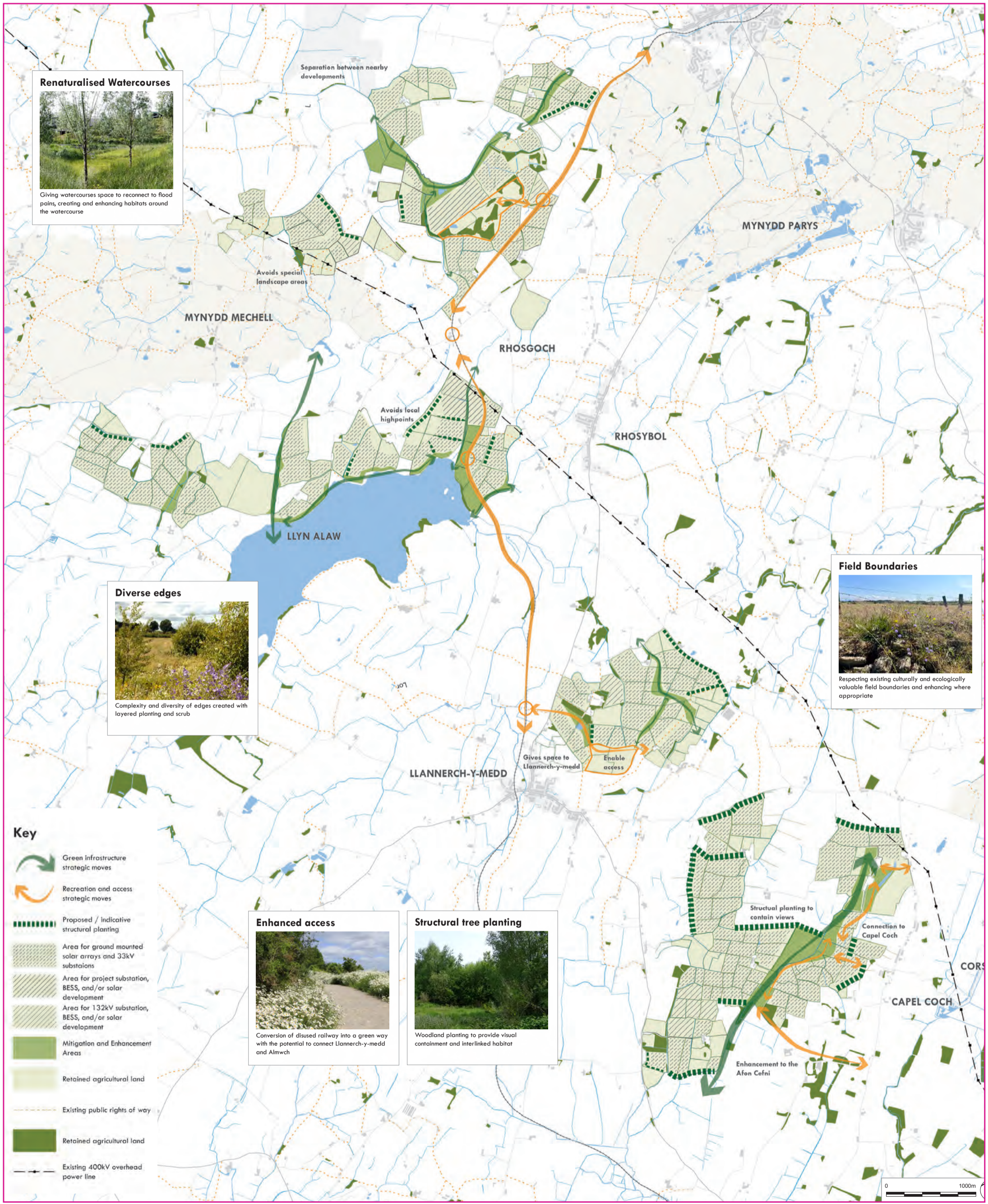
- 1. Solar energy
- 2. Fencing
- 3. Solar PV Modules
- 4. Inverter (DC to AC power converter)
- 5. Landscape area
- 6. Substation
- 7. Battery Energy storage
- 8. Underground cable



*Layout and scale of components will vary



Indicative Site Masterplan



Renaturalised Watercourses



Giving watercourses space to reconnect to flood plains, creating and enhancing habitats around the watercourse

Separation between nearby developments

Avoids special landscape areas

MYNYDD MECHELL

RHOSGOCH

MYNYDD PARYS

RHOSYBOL

LLYN ALAW

Avoids local highpoints

Diverse edges



Complexity and diversity of edges created with layered planting and scrub

Field Boundaries



Respecting existing culturally and ecologically valuable field boundaries and enhancing where appropriate

Gives space to Llanerch-y-medd

Enable access

LLANNERCH-Y-MEDD

Key

- Green infrastructure strategic moves
- Recreation and access strategic moves
- Proposed / indicative structural planting
- Area for ground mounted solar arrays and 33kV substations
- Area for project substation, BESS, and/or solar development
- Area for 132kV substation, BESS, and/or solar development
- Mitigation and Enhancement Areas
- Retained agricultural land
- Existing public rights of way
- Retained agricultural land
- Existing 400kV overhead power line

Enhanced access



Conversion of disused railway into a green way with the potential to connect Llanerch-y-medd and Almwh

Structural tree planting



Woodland planting to provide visual containment and interlinked habitat

Structural planting to contain views

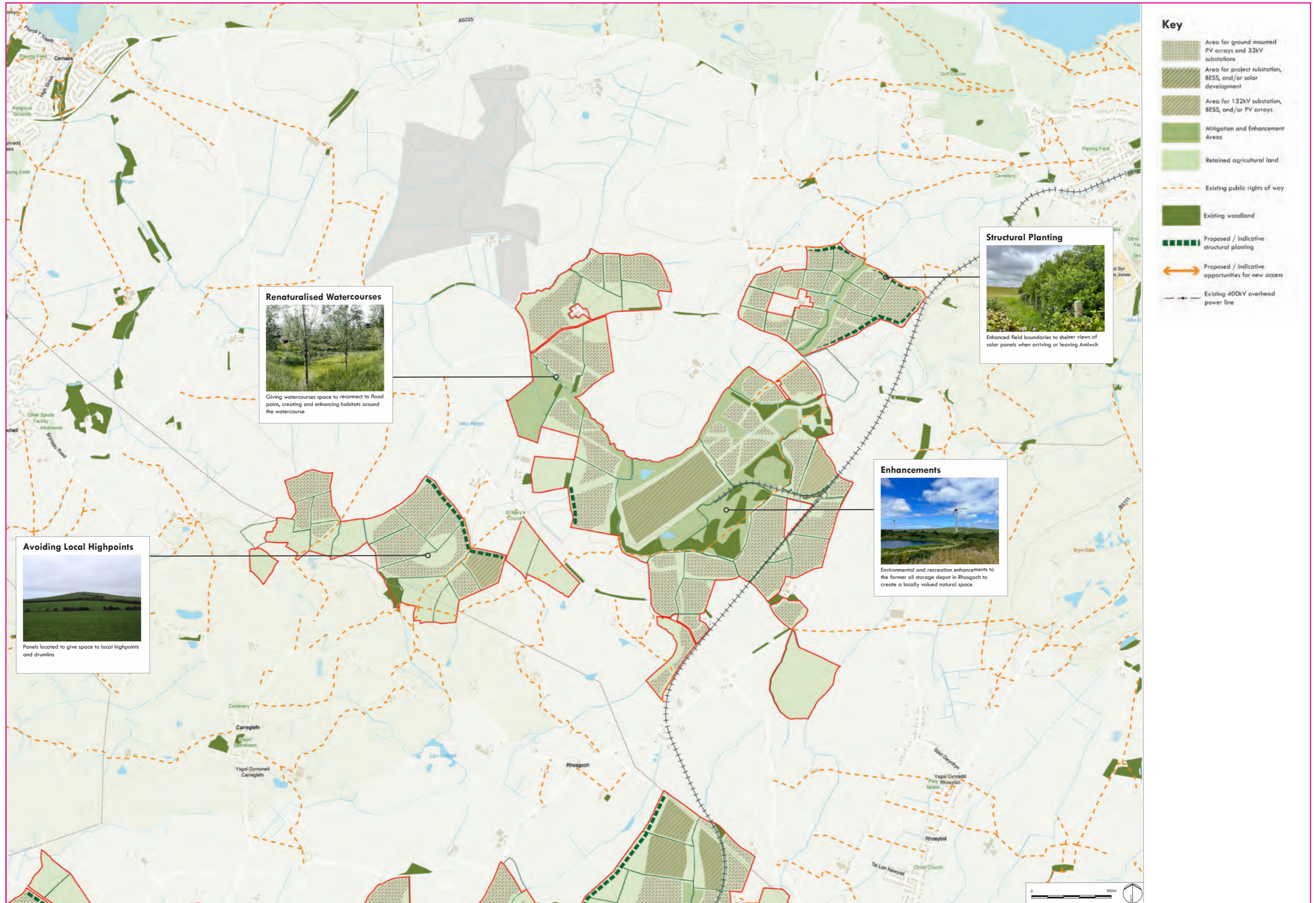
Connection to Capel Coch

CAPEL COCH

Enhancement to the Afon Cefni

0 1000m

Indicative Masterplan - North



Indicative Masterplan - Central



Key

- Area for ground mounted PV arrays and 33kV substations
- Area for project substation, BESS, and/or solar development
- Area for 132kV substation, BESS, and/or PV arrays
- Mitigation and Enhancement Areas
- Retained agricultural land
- Existing public rights of way
- Existing woodland
- Proposed / indicative structural planting
- Proposed / indicative opportunities for new access
- Existing 400kV overhead power line

Mynydd Mechell

Avoiding and protecting key views from locally designated special landscape area

Potential Substation (BESS)

Potential location of project substation, national grid substation, and potential BESS location

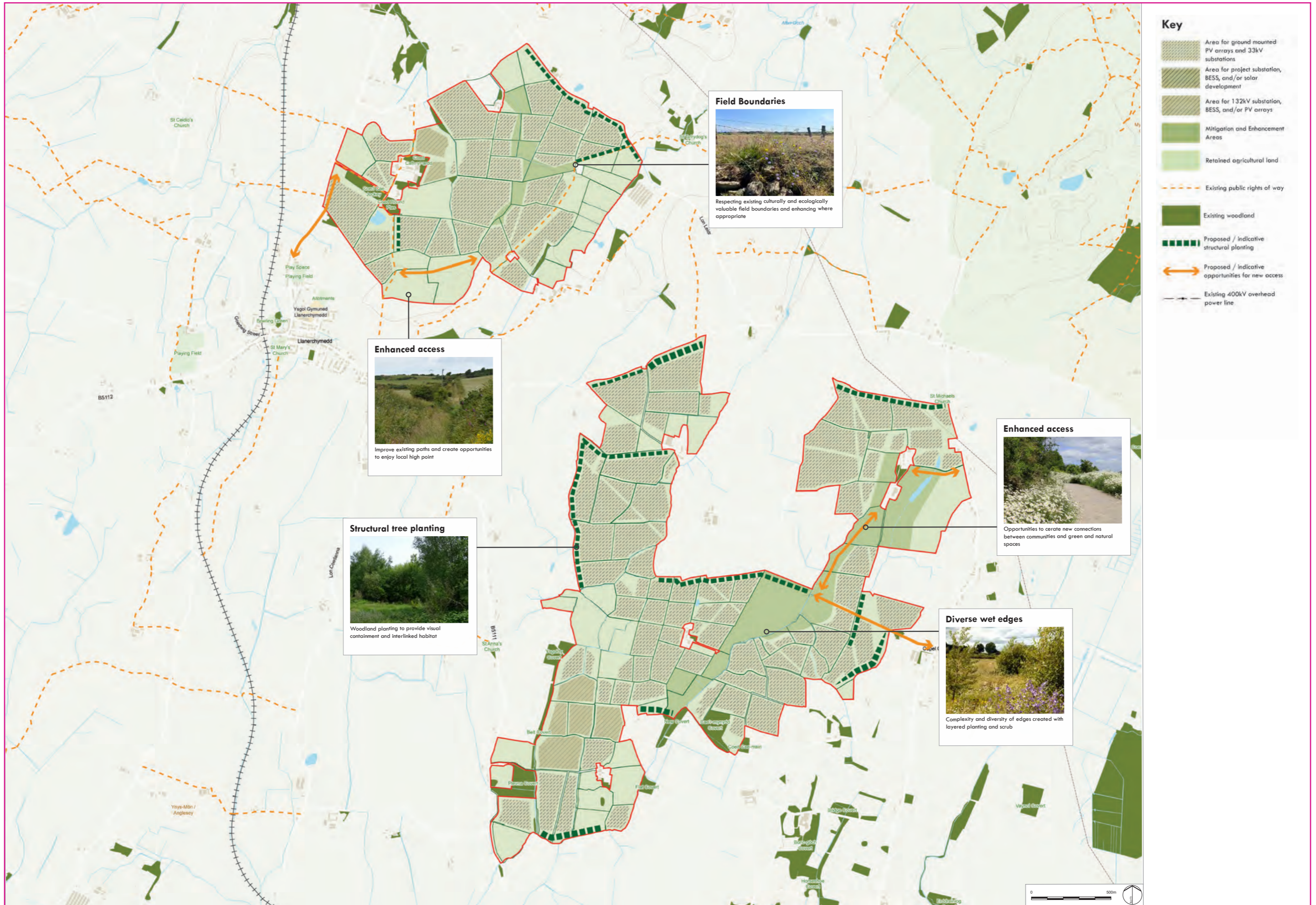
Reservoir Edge

Enhanced edges to Llyn Alaw to compliment existing habitats and improve biodiversity

Disused Railway

The project is exploring opportunities to support wider aspirations for the former Central Anglesey Railway line

Indicative Masterplan - South 'A' and 'B'



Environmental Impact and Mitigation

Summary of the Environmental Impact Assessment (EIA) Process

EIA is the process of compiling, evaluating and presenting the likely significant environmental effects of a project. The process involves several key stages to ensure that all likely significant environmental effects are identified, assessed, and mitigated where necessary.

Key steps involved are:

1. **Scoping:** Identify key environmental topics to be considered within the Preliminary Environmental Information Report (PEIR) and Environmental Statement (ES) and establishing the scope of the assessment with stakeholders.
2. **Baseline Studies:** Collect data on existing environmental conditions such as land use, habitats, water resources, air quality, and noise.
3. **Preliminary Environmental Information Report (PEIR):** A document prepared to set out the preliminary assessment of effects of the Project on the environment. This is the document that forms the basis of this Statutory Consultation, and which we are seeking your feedback on.
 - Socio-economics: Economic benefits and effects, including job creation
 - Health: Potential health effects on local communities
 - Other Matters: including Glint and Glare, Air Quality, Major Accidents and Disasters, and Waste
 - Cumulative Effects: assessment of other relevant projects and combined effects
4. **Environmental Impact Assessment and Mitigation and Enhancement:** Evaluates potential effects during construction, operation and maintenance, and decommissioning on various environmental aspects, and identifies mitigation measures to avoid or reduce likely significant effects. At this stage in the Project, this information and assessment is preliminary and will continue to evolve.
5. **Consultation:** Engage with stakeholders to refine Project design and enhancement measures.
6. **Environmental Statement (ES):** A full assessment of the effects of the Project, including results of consultation and design evolution, relevant mitigation and enhancement measures, and management plans.

A series of environmental topics have been addressed, including:

- Landscape and Visual: Effects on landscape character and visual amenity
- Ecology and Biodiversity: Effects on wildlife habitats and species
- Cultural Heritage: Effects on archaeological and historic sites
- Transport and Access: Effects on transport infrastructure and traffic movement
- Noise and Vibration: Noise and vibration levels and their effects on communities
- Ground Conditions: Type and structure of ground formation and effects arising
- Soils and Agriculture: Soil and quality and land use
- Water Resources: effects on surface and groundwater resources
- Climate Change: The Project's effects on, and contribution to resilience against climate change

Proposed Measures to Address Environmental Effects

Subject to ongoing detailed design and statutory consultation, key design measures that have been incorporated into the design of the Project may include:

- Avoidance of visually exposed summits of geomorphological features
- Utilising natural screening and topography in siting key components
- Provision of visual breaks and separation between solar arrays
- Offsets from the northern and eastern shores of Llyn Alaw
- Enhancements to the diversity, extent, condition and connectivity of landscape features (including hedgerows, woodlands and **cloddiau**)
- Improvements to access and the green and natural spaces; and containment of the solar arrays within undulating landform in the southern parcel

New landscape features will also be introduced as part of the Green Infrastructure Strategy, to replace any unavoidable losses and contribute to the visual screening of the Project. Key measures include:

- New areas of woodland, hedges, cloddiau, drystone walling, wildflower meadows and wetlands
- Existing hedges and cloddiau would be infilled and 'gapped-up' where appropriate
- Defunct or collapsed sections of drystone walling or cloddiau would be made good where appropriate
- Public Rights of Way within the PEIR Boundary and passing through the Project would be buffered within hedge-lined corridors

Key Findings From Our Environmental Studies

The Preliminary findings from the PEIR are set out within the non-technical summary (NTS), which forms part of our consultation documents: lightsourcebp.com/maenhir-english



**Cloddiau: Traditional Welsh earth banks, often topped with hedgerows, used as field boundaries*

Community and Economic Benefits

The Project offers a wide range of benefits to the local community and the regional economy, including employment opportunities, environmental improvements, and long-term social advantages.



Economic and Employment Benefits

The Project will create significant opportunities for local job creation and economic growth. During the construction phase, around 1,320 jobs are expected to be generated, with a peak workforce of 650. These roles will range from specialist and highly skilled positions to general labour, providing a broad spectrum of employment. Additionally, the local economy will benefit from approximately 1,110 indirect and induced jobs, supported through the supply chain and worker spending on accommodation, food, and other services.

During the operational phase, the Project will support 10 to 12 full-time jobs, including roles in electrical engineering, performance management, maintenance, and landscaping, with additional opportunities for repair and maintenance teams. By partnering with local educational institutions like Grŵp Llandrillo Menai and Bangor University, the Project will also contribute to skills development in the renewable energy sector, ensuring lasting benefits for the community. More details on these initiatives are included in our Preliminary Employment and Skills Strategy (PESS) within the consultation materials.



Environmental and Biodiversity Benefits

The Project aims to enrich the local environment by enhancing biodiversity, creating new wildlife habitats, and maintaining agricultural activities such as livestock grazing and wildflower planting. These efforts will promote the health of the local ecosystem and contribute to the wider goal of environmental sustainability.

The restoration of traditional landscape features, such as cloddiau (stone-faced earth banks), will help reinforce the character and culture of the region, while also supporting biodiversity. By integrating agriculture, wildlife habitat creation, and biodiversity enhancement, the Project will ensure that Anglesey's unique environment is preserved and improved for future generations.

Additionally, the Project supports the Isle of Anglesey County Council's Energy Island Programme and will contribute to regional and national net zero targets. This environmental contribution, combined with its energy outputs, will help secure a sustainable future for the region.



Community and Social Benefits

The Project provides a range of significant benefits for the local community, including the potential to deliver a 5MWp community solar project. The income generated from this project will be allocated to local initiatives and environmental projects, providing long-term support for community programs.

The Project also aims to improve recreational and amenity resources for the local community and visitors. This includes the potential creation of new permissive paths and cycle routes, which promote outdoor activities and encourage healthy lifestyles. The Project will explore opportunities to enhance existing public rights of way, making them more accessible and enjoyable for all users. These improvements could provide lasting benefits to the local community by promoting well-being and enhancing the quality of life. More details on these initiatives are included in our draft Collaborative Benefits Report within the consultation materials.



Energy Security and Infrastructure Improvements

By improving the reliability of the national power supply, Prosiect Maen Hir will contribute to regional energy independence and security. This will help safeguard the region's power needs while supporting the transition to renewable energy sources.

The Project will also have significant implications for local agricultural activities. It will provide an additional income stream to local farms, allowing them to continue vital farming activities such as sheep grazing. This additional revenue will help ensure the continuation of agricultural activities on Anglesey, benefiting the local farming community while maintaining the rural character of the area.

Statutory Consultation

DCO Application Process

Prosiect Maen Hir is classified as a Nationally Significant Infrastructure Project (NSIP) because it is proposed to have a generating capacity of more than 350 MW.

In Wales, if an onshore generating station (excluding wind) has a generating capacity of less than 10MW, the planning application is decided by the local planning authority. Between 10MW and 350MW, the application is decided by Welsh Ministers. If the project has a generating capacity of more than 350MW, as Prosiect Maen Hir does, the planning application is decided by the relevant Secretary of State for the United Kingdom.

This means that, to build Maen Hir, we will apply for a Development Consent Order (DCO), which is a planning permission for a NSIP. DCO applications are submitted to the Planning Inspectorate (PINS) and made to the Secretary of State for the Department for Energy Security and Net Zero (DESNZ). The DCO application will be subject to an examination by an examining authority, which is appointed by the Secretary of State, who make a recommendation to the Secretary of State as to whether development consent should be granted or not. The examining authority will consist of between one to five inspectors. PINS will administer the examination on behalf of the Secretary of State. The final decision on whether development consent should be granted or not rests with the Secretary of State.

Statutory Consultation

One of the key parts of the DCO pre-application process is providing local communities, community councils, landowners, occupiers, statutory consultees, and other interested parties with the opportunity to understand and influence the Project. This forms part of the statutory consultation, which will run for just over six weeks from **02 October to 15 November 2024**.

During the statutory consultation, we welcome and will consider feedback on all aspects of the Project. We invite comments on the following:

- The Preliminary Environmental Information Report (PEIR), which details the results of our preliminary environmental assessments and associated mitigation and enhancement measures.
- Proposed longer-term operational features, such as how the Project might look to, and be experienced by nearby neighbours.
- Proposed shorter-term temporary features, such as construction plans.
- Potential benefits associated with the Project, such as the opportunity for a 5MWp Community Solar Project.

The DCO application we submit will include a Consultation Report setting out our method for consulting, the feedback received in response to the consultation, and how this has influenced our proposals.



How to provide feedback

We welcome your feedback on our Project. You can submit your comments in the following ways:

- Submitting an online feedback form through the Project webpage
- Completing a paper copy feedback form, which can be submitted at an in-person information event or returned via the Project freepost address
- Sending an email to: maenhir@lightsourcebp.com
- Providing comments in writing and posting them free-of-charge, to **FREEPOST MAEN HIR PROJECT**

Your feedback is important to us and will be carefully considered as we develop the design of the Project. Thank you for taking the time to share your views.

Feedback to the consultation must be submitted in writing or online by **23.59 Friday 15 November 2024**. **Feedback received after this date may not be considered.**

As part of the statutory consultation, we are holding eight in-person information events and two online community webinars to give you the opportunity to speak directly with members of the Project team, in both Welsh and English, and ask any questions you may have.

Details of the information events and webinars can be found below:

Date	Opening Times	Location	Venue
Weds 09 October 2024	13.30-19.30	Llangefni	Llangefni Town Hall, Bulkeley Square, Llangefni, LL77 7LR
Fri 11 October 2024	13.30-19.30	Llanddyfnan	Talwrn Village Hall, Talwrn, LL77 7SU
Thurs 17 October 2024	13.30-19.30	Tref Alaw	Llanddeusant Village Hall, Llanddeusant, Holyhead, LL65 4AA
Fri 18 October 2024	13.30-19.30	Amlwch	Amlwch War Memorial Hall, 18 Market Street, Amlwch, LL68 9ET
Sat 19 October 2024	10.00-14.00	Llanbadrig	David Hughes Village Hall, High Street, Cemaes, LL67 0HL
Tues 22 October 2024	18.00-19.00	Online (Welsh)	Zoom – register to attend via project webpage lightsourcebp.com/maenhir-cymraeg
Sat 26 October 2024	10.00-14.00	Llannerchymedd	The Centre, Llannerchymedd Community School, Llannerchymedd, LL71 8DP
Mon 28 October 2024	13.30-19.30	Mechell	Llanfechell School Community Centre, Mountain Road, Llanfechell, LL68 0SA
Tues 29 October 2024	13.30-19.30	Rhosybol	Rhosybol School Community Centre, Rhosybol, Amlwch, LL68 9PP
Weds 30 October 2024	18.00-19.00	Online (English)	Zoom – register to attend via project webpage: lightsourcebp.com/maenhir-english

Document Inspection Locations

In addition to our website and engagement events, and to ensure that our consultation is as accessible as possible, we are proposing Document Inspection Locations where people can access our Statutory Consultation materials, which are:

- Statement of Community Consultation (SoCC)
- Consultation Leaflet
- Project Information Booklet (this document)
- Consultation Feedback Form

- FAQ document
- Preliminary Environmental Information Report (PEIR)
- PEIR non-technical summary
- Maps and plans
- Document Navigation Booklet
- Posters

Our Document Inspection Locations are listed below:

Venue & address	Opening times	Telephone / Email
Anglesey Business Centre Isle of Anglesey County Council Bryn Cefni Business Park Llangefni Anglesey LL77 7XA	09.30 – 16.30 Monday to Friday	T: (01248) 750 057 E: pmo@ynysmon.llyw.cymru
Amlwch Library Lôn Parys Amlwch Anglesey LL68 9EA	Tues 09.30-12.30 14.00-17.00 Wed 09.30-12.30 Closed Thu Closed 14.00-19.00 Fri 09.30-12.30 Closed Sat 09.30-12.30 Closed	T: (01407) 830145 E: kbxlh@anglesey.gov.wales
Benllech Library Bangor Road Benllech Tyn y Gongl Anglesey LL74 8TF	Mon Closed 14.00-17.00 Tues Closed 13.00-17.00 Wed 10.00-13.00 14.00-17.00 Fri Closed 14.00-18.00 Sat 10.00-13.00 Closed	T: (01248) 852348 E: dcxh@anglesey.gov.wales
Holyhead Library Market Hall Stanley Street Holyhead Anglesey LL65 1HH	Mon 09.30-18.00 Tues 09.30-18.00 Wed 09.30-13.00 Thu 09.30-18.00 Fri 09.30-18.00 Sat 09.30-12.30	T: (01407) 762917 E: kpxlh@ynysmon.llyw.cymru
Llangefni Library Lôn y Felin Llangefni Anglesey LL777RT	Mon 09.00-19.00 Tues 09.00-17.00 Wed 09.00-13.00 Thu 09.00-18.00 Fri 09.00-19.00 Sat 09.30-12.30	T: (01248) 752095

Next Steps

Once this second stage of consultation comes to a close, we will carefully review all the feedback we have received, alongside the findings from our ongoing assessments, to finalise the proposals for Prosiect Maen Hir.

Once the proposals are ready, we will submit our application for development consent to the Planning Inspectorate (PINS). We currently anticipate submitting the application towards the end of 2025.

PINS will then examine our proposals and produce a Recommendation Report for the Secretary of State for Business, Energy, and Industrial Strategy, who will make the final decision on the application.

The Application Process

Our application will include:

- **A Consultation Report:** As part of the process, we are required to demonstrate how we have taken the views of the community into account when shaping our final proposals. This report will summarise the feedback received during all stages of consultation and explain how we have considered these views in developing our final proposals.
- **An Environmental Statement:** This document will outline the anticipated environmental effects of the project and detail the measures we propose to reduce them where appropriate. The project has potential to deliver significant environmental benefits and enhancements.

These reports, along with other key application documents, will be made available on the Planning Inspectorate's website once the application is accepted.

This second stage of consultation is expected to be the final opportunity to provide feedback on the Prosiect Maen Hir proposals before we submit our DCO application to the Planning Inspectorate.

Further Opportunities to share your views

After our application is submitted and accepted, you will have the opportunity to register your interest with the Planning Inspectorate directly. The Planning Inspectorate will keep you informed about the progress of the application during the examination phase and notify you of any further opportunities to contribute to the process.

Thank you for taking the time to share your views.

Contact us



Email: maenhir@lightsourcebp.com



Freephone (Welsh): 0808 175 6663
(available Monday – Friday, 09.00 – 17.00)



Freephone (English): 0808 175 6375
(available Monday – Friday, 09.00 – 17.00)



Freepost: FREEPOST MAEN HIR PROJECT (no stamp required)



Web (Welsh): lightsourcebp.com/maenhir-cymraeg



Web (English): lightsourcebp.com/maenhir-english