Plas Power Solar & Energy Storage Project

PLAS POWER ESTATE, RUTHIN ROAD,
WREXHAM LL11 3BS

Statutory Consultation Brochure

FEBRUARY 2024

Welcome

Lightsource bp has developed proposals for the Plas Power Solar & Energy Storage Project, near Coedpoeth, Wrexham. The proposals are for the installation and operation of ground mounted solar panels, an energy storage facility and associated infrastructure, along with landscaping and habitat creation for wildlife.

Lightsource bp continues to work closely with local communities in relation to the Plas Power Solar & Energy Storage Project.

We are grateful that the community took the time to engage with us and provide feedback on our proposals at both our previous consultations. As a result of this feedback, our ongoing wider engagement with community members and the findings from environmental surveys and assessments, we have amended the proposals.

We are now carrying out the statutory consultation on the finalised proposals and draft planning application prior to submission to the Planning Environment Decisions Wales (PEDW).

Find more information at:
lightsourcebp.com/uk/project/plas-power

You can view all the planning documents on this website.

Statistics

57 MWac
(Megawatts alternating current) solar

57 MWac
energy storage

22,700
homes powered per year (equivalent)

136
hectares of land

15,800
tonnes of carbon emissions saved

10,800
combustion engine cars taken off the road per year (equivalent)

Around 64%
biodiversity net gain for habitats across the site

Around 72%
biodiversity net gain for hedgerows across the site

The consultation period runs from Wednesday 21 February to Tuesday 9 April 2024.

This project will contribute towards the Welsh Government 2030 targets for renewable energy and carbon emission reductions.

Drop-in events

Wednesday 13 March, 12pm to 4pm

Thursday 14 March, 9.30am to 1pm

Thursday 14 March, 2:30pm to 6:30pm

The site

The site, which is approximately 136 hectares, is located immediately east of Coedpoeth and 2.5km west of Wrexham. The nearest settlements are Coedpoeth, New Broughton, Wrexham, Rhostyllen, and Talwrn.

The majority of the site comprises two interconnected areas, north and south of the A525 Ruthin Road:

- **the northern part is bound by the A525 Ruthin Road to the south and extends northwards towards the Higher Berse Road.**
- **the southern part of the site is bound by the Ruthin Road to the north, to the east by the A483, to the south by Plas Power Woods and the west by agricultural fields beyond which lies Rhos Berse Road and Nant Road.**

The site is on the Plas Power Estate and comprises several agricultural fields, bound by a mixture of mature woodland, trees, hedgerows, fencing, agricultural tracks and roads. Formerly the site was an open cast coal mine. The agricultural fields are mostly grassland used for grazing, an activity that can continue after the solar panels are installed.

The location of the site was chosen carefully as the existing woodlands, trees and hedgerows, together with the topography provide good screening and minimise the visual impact of the project. The land is lower grade agricultural land, and not classed as 'best and most versatile', and it has minimal other environmental and planning constraints.

The proposals

The Plas Power Solar & Energy Storage Project will provide a source of homegrown, renewable energy, helping to reduce carbon emissions, strengthen energy security by reducing reliance on imported fossil fuel energy sources, and because solar power is one of the cheapest ways to generate electricity, it'll help lower bills too.

The proposals include the following elements:

- **Solar arrays comprising solar panels and frames**
- **Inverters**
- **Transformers**
- **Cabling**
- **Substation**
- **Battery energy storage system**
- **Internal access tracks**
- **Landscaping and ecological enhancements**
- **Other associated infrastructure including equipment storage**

The solar project will have a capacity of 57MWac. This is enough to power the equivalent of 22,700 homes per year, which would save 15,800 tonnes of carbon emissions. This is equivalent to removing 10,800 polluting cars off the road per year.

The energy storage system will have a capacity of 57MWac and will allow surplus energy generated during high production and / or low demand to be stored and used at times when the energy is most needed, for example in the evenings.

The battery balances intermittent energy production and maximises the site's efficiency to allow a greater output of clean energy.

The site will connect to the electricity transmission network at Legacy Substation by underground cables to the south-west of the site, thereby avoiding the need for additional overhead pylons.

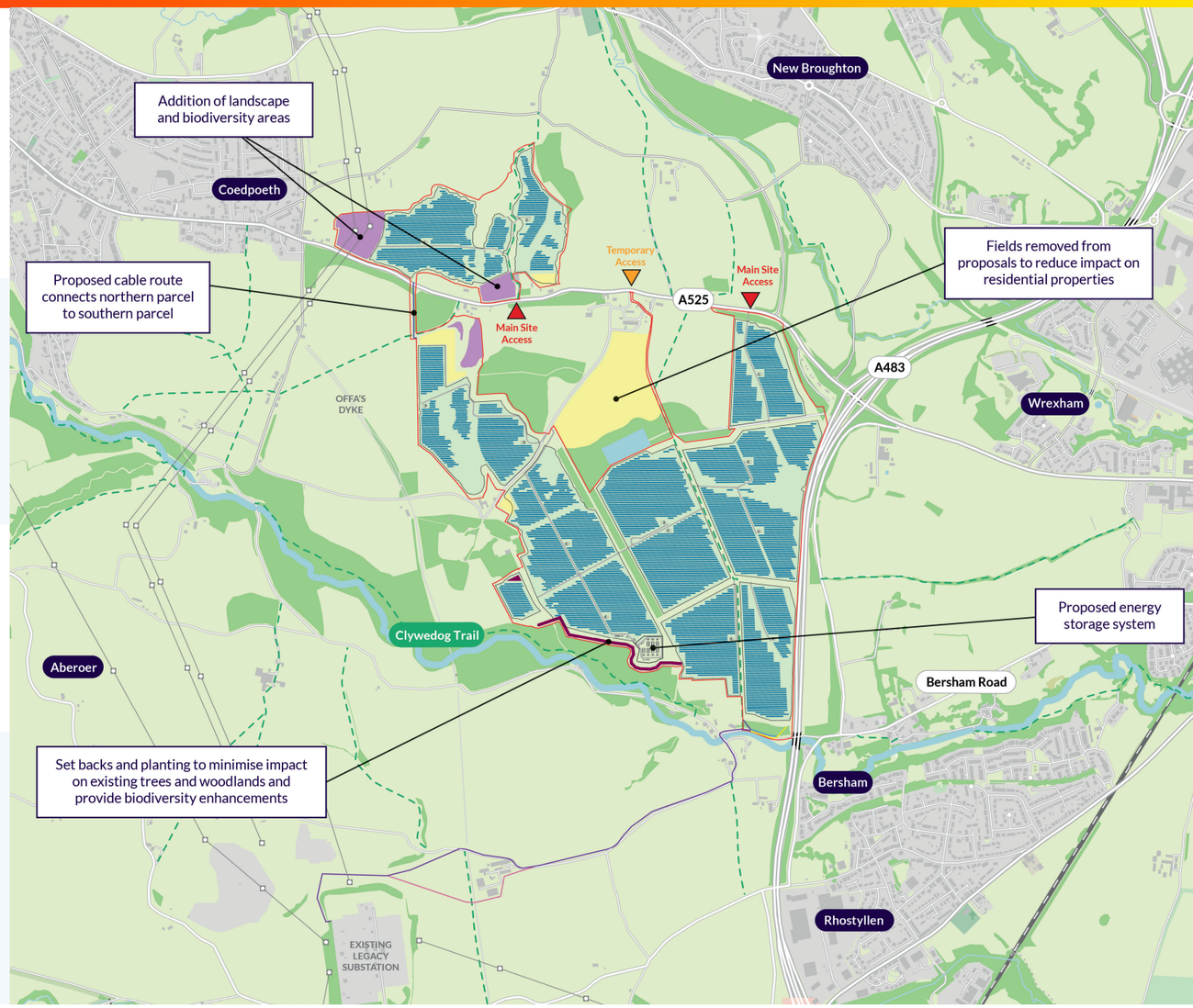
The Plas Power Solar & Energy Storage Project is likely to be operational for 40 years. At the end of its operational life, all equipment can be easily dismantled, removed from site with most of the material being recyclable.

Project Site Map

We held formal consultations in 2021 and 2023, through which we received your feedback and then amended our proposals accordingly.

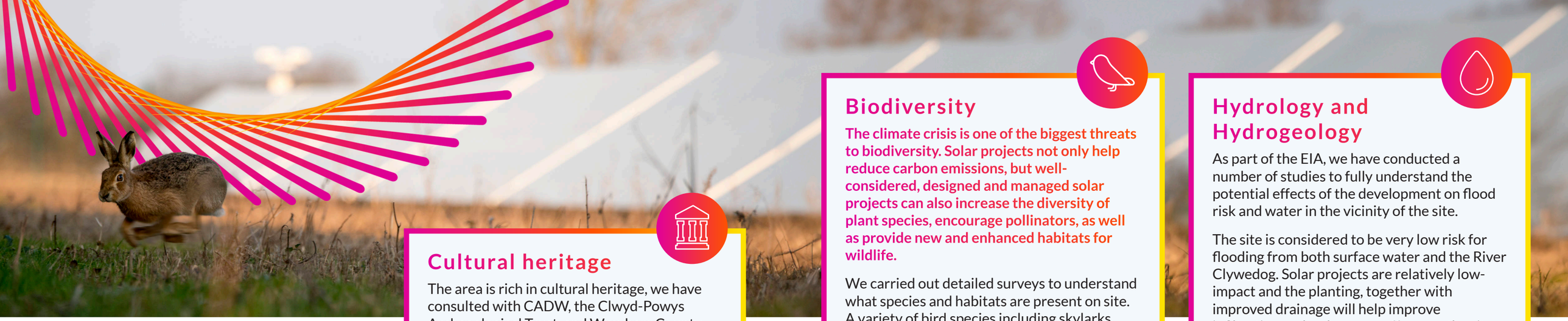
Latest Proposals

You said	We did
You raised concerns about the visual impact of the proposals.	We set back the solar panels from properties along the A525 (Ruthin Road) – to the north and to the south, including the removal of a field to the south of properties on the A525. We also included additional landscaping and planting to screen the proposals from nearby residential properties, distant viewpoints, public rights of way, and transient views from the road. This was an iterative process informed by the environmental assessments, and through engagement with residents closest to the site.
You told us that traffic was a significant local issue.	We assessed the potential impacts of traffic to and from the site, and have concluded that the construction will not significantly affect traffic. We have prepared an outline construction traffic management plan which set out measures to manage our traffic and minimise impact on the community. A detailed plan will be prepared once the main contractor is appointed. In operation, the maintenance team will typically visit the site only once or twice a month.
You told us about your concerns about the cumulative impact of our project and other developments in the area.	We considered the other developments as part of our environmental impact assessment to understand potential cumulative impacts, and to ensure any potentially significant effects are mitigated.
You raised concerns about the loss of land for agricultural purposes.	We have removed any land classed as 'best and most versatile' from our proposed site. Much of the site is currently being used for sheep grazing and this can continue alongside an operational solar farm. In addition, our provision of landscaping and ecology areas will help boost pollinators which will, in turn, improve the quality of crops and support crop production. We also assessed the potential impacts on soils within the environmental statement and we have prepared a plan to manage soils and minimise impacts during construction and decommissioning.
You expressed support for biodiversity improvements to be delivered as part of the proposals.	We will create landscape and ecology areas, including an area to the north exclusively for habitat creation. Our landscaping proposals include tree and hedgerow planting, wildflower meadows, and tussocky grasslands, scrub planting, and ponds to support great crested newt populations. We will use native species wherever possible across the site, and we are proposing to install information boards which will provide details about the habitats and native species across the site, along with detail on the history of the area. These changes will result in a significant biodiversity net gain across the site.
You told us that the land is used for walking.	We will maintain the existing public–rights-of-way that runs north to south across the site.



Key

- Proposed landscape and biodiversity areas
- Proposed wild birdseed crop
- Existing woodland and trees
- Proposed grassland and meadows for grazing and wildlife
- Ground-mounted solar panels and associated infrastructure
- Preferred Cable Route Option
- Cable Route Option 1
- Cable Route Option 2
- Cable Route Option 3
- Cable Route
- Footpath
- Site Boundary



Environmental considerations

As we develop our projects we assess and identify mitigation measures for any possible impacts on people, wildlife and nature through a process called environmental impact assessment (EIA).

The key environmental considerations are as follows and our full EIA can be viewed on the Project website: lightsourcebp.com/uk/project/plas-power

Cultural heritage

The area is rich in cultural heritage, we have consulted with CADW, the Clwyd-Powys Archaeological Trust, and Wrexham County Borough Council about a section of Offa's Dyke and a Schedule 1 monument, which were within the 2021 site boundary. **We have now removed this land from the site.**

We also discussed the impact on the setting of the Grade II listed Plas Power House. **We have updated site layout and proposed landscaping to reduce this impact.**

As much of the land has been used for open cast coal mining in the past, this reduces the chances of finding significant archaeological items on-site.

Landscape and visual impact

We carried out a landscape and visual impact assessment, using computer models to show the impact on viewpoints from around the site. Mature hedgerows and woodlands already border much of the site and where appropriate we will plant additional screening to reduce the visual impact.

Following our consultation in 2023, we updated the proposals to remove and set back solar panels that had a visual impact on properties located near the site. In addition to this, tree and hedgerow planting have been added to screen the proposals.

Climate Change

This project will contribute to reducing the reliance on fossil fuels, decarbonising the grid and reducing greenhouse gas (GHG) emissions.

A whole-life GHG emissions assessment has been undertaken as part of the environmental impact assessment, and whilst there would be some GHG emissions resulting from construction, within three years there would be a net reduction in emissions due to the emissions that are avoided with the operation.

Beyond this point the project will continue to have a beneficial impact by avoiding atmospheric GHG emissions that would have been released via conventional fossil fuel burning electricity generation methods.

Biodiversity

The climate crisis is one of the biggest threats to biodiversity. Solar projects not only help reduce carbon emissions, but well-considered, designed and managed solar projects can also increase the diversity of plant species, encourage pollinators, as well as provide new and enhanced habitats for wildlife.

We carried out detailed surveys to understand what species and habitats are present on site. A variety of bird species including skylarks, snipes, and bullfinches have been recorded on site. Otters live in the River Clywedog to the south and a number of reptiles including adder, grass snake, slow worms, and common lizards have been recorded within 2km of the site. We surveyed for great crested newts, wintering birds, breeding birds, and otters.

The project will:

- preserve and improve most of the existing hedgerows;
- plant additional hedgerows and wildflower areas, providing more habitats for native species;
- protect all habitats which could be of value for bats and dormice by a buffer zone; use artificial lighting only in the event of an emergency during darkness hours, so that nocturnal species are not disturbed; and
- **provide a biodiversity net-gain of ~64% for habitats and ~72% for hedgerows across the site.**

The Project provides an exciting opportunity to enhance the site for native species and boost biodiversity, details for which are set out in our landscape and ecology management plan.

Following our consultation in 2023, we updated the proposals to ensure that no development is located within 25m of the ancient woodland at Plas Power Woods.

We also updated the proposals to allocate land near Coedpoeth to improve biodiversity, and incorporate new habitats across the site, including tree and hedgerow planting, wildflower meadow and tussocky grasslands, scrub planting, and ponds to support great crested newt populations.

Hydrology and Hydrogeology

As part of the EIA, we have conducted a number of studies to fully understand the potential effects of the development on flood risk and water in the vicinity of the site.

The site is considered to be very low risk for flooding from both surface water and the River Clywedog. Solar projects are relatively low-impact and the planting, together with improved drainage will help improve infiltration and reduce run-off across the site.

During construction we will follow Natural Resources Wales's guidelines to ensure that pollutants are not released into nearby watercourses. For example, we will use wheel washers and dust suppression measures on site, and clean the roads of construction waste and dirt.

Agriculture and Soils

The majority of the site comprises agricultural fields, which are predominantly used for sheep grazing. A few fields are in arable use. The Welsh Government's predictive maps and subsequent soils surveys confirm that the site is not 'best and most versatile' land, and lower grade land.

The site will be designed to allow for sheep grazing to continue. Many of Lightsource bp's projects have successfully combined solar with sheep grazing. Sheep can easily navigate under solar panels to graze on all parts of the land area, and help with maintaining grasses without damaging equipment. The panels have the added benefit of providing shade from hot sun and shelter when weather conditions are poor.

During the construction of the project, works will be undertaken in accordance with a soils management plan which ensures that control measures are in place that prevent and reduce damage to soils.

Environmental considerations

Clean, renewable energy

Solar energy is a key part of the future energy mix to generate clean, homegrown energy that will help tackle energy prices and strengthen energy security in Wales and the UK.

- **Our proposals will produce clean renewable energy, helping to reduce greenhouse gas emissions in line with local, national, and international targets and in response to the declared climate emergency by Wrexham County Borough Council in September 2019.**
- **Solar energy produced here in Wales and across the UK will reduce reliance on imported fossil fuel energy sources, such as gas, providing greater energy security.**
- **With the energy crisis, solar power can help to reduce energy costs as it is one of the cheapest forms of generating electricity.**

Sustaining rural communities and businesses

Our projects are designed and developed to support and sustain rural communities and businesses wherever possible.

- **Our proposals will be specifically designed to accommodate grazing alongside the renewable energy generation. This allows landowners to continue using the site for agricultural purposes.**
- **We are eager to work with the local supply chain to help us design, build and manage this solar project.**
- **We lease land from local landowners, in most cases farmers, and this provides a new, reliable source of revenue for up to 40 years, which can help sustain these businesses, many of which have been farmed for generations, into the future.**
- **Like all businesses, solar and energy storage projects pay business rates, 100% of which are retained by the local authority. This benefits local schools, street maintenance, fire stations, parks, and other public services.**

Enhancing biodiversity

Lightsource bp is an industry leader in developing projects which protect and promote biodiversity. The project will enhance existing and create new habitats to benefit local wildlife and deliver biodiversity improvements.

- **Our solar projects will foster pollinator habitats which will help boost nearby crops.**
- **In addition to creating new habitats across the site, we are reserving one parcel of land, next to Coedpoeth that will be used exclusively for habitat creation.**
- **We are exploring the inclusion of bee hives, bird and bat boxes, reptile refuges, and more, as well as native tree planting and hedgerows to create quality habitats for wildlife.**

If you are interested in bee keeping on this site, please get in touch.

Our project timeline

2021

- First consultation on initial proposals

2023

- Second consultation on initial proposals

2024

- Q1 Pre-application Consultation on the draft application
- Submission of DNS Application to PEDW
- Q3 PEDW Consultation on the DNS Application

2025

- Decision on the DNS Application
- Construction

2026 - 2066

- Operation

Planning process

As the solar project is proposed to generate over 10 MW of renewable energy, the project is classified as a Development of National Significance (DNS). The DNS application will be submitted to Planning and Environment Decisions Wales (PEDW) and determined by the Welsh Minsters.

Following engagement with stakeholders and communities surrounding the site we are now consulting on the finalised proposals before submitting the final planning application to PEDW.

Submission to PEDW 2024

Your feedback on the proposals and our responses will form part of the full planning application to be submitted to PEDW in Spring / Summer 2024.

PEDW consultation Summer 2024

PEDW will conduct its own five-week consultation where further comments on the proposals can be submitted directly.

Decision by Welsh Ministers 2025

Following this consultation, a decision will be made by the Welsh ministers using the information submitted as part of the application, and feedback from consultees.

Construction 2025 - 2026

It is anticipated that the construction will start in 2025 and finish in 2026. A construction environmental management plan will be agreed with Wrexham County Borough Council to minimise the impact to the surrounding area during construction.

Grid Connection 2026

A connection agreement is in place with National Grid to connect the project to the electricity network in 2026.

Operation 2026 - 2066

The project will be operational and supplying clean energy to Wales and the UK, helping to achieve net-zero and decarbonise our planet.

About us

Lightsource bp is a global leader in the development, operation, and management of utility-scale solar and battery projects. For over a decade we have been actively working to change the way our world is powered, with sustainable and responsible solar power.

Since 2010 we have been deploying affordable, reliable, large-scale solar to help businesses and communities decarbonise. Our rapidly growing business is constantly learning, investing and pushing boundaries to help drive the energy transition at pace and scale.

We harness and grow talent from all sectors to help accelerate the need for a low-carbon future. Our people and projects are focussed on supporting long-term sustainable growth and strengthening the resilience of the world around us.

8.4 GW solar power developed

lightsource bp

bp

Have your say

We will review your comments, and report both your feedback and how we took it into account in our planning application submission to Planning and Environment Decisions Wales (PEDW).

To view all of the planning documents and to submit your feedback online – please visit:
lightsourcebp.com/uk/project/plas-power

You can also contact the project team by:

Please provide feedback to us by completing your feedback form on the website by 9 April 2024.

If you would like a paper copy of the feedback form, please give us a call.

We are here to listen to your views. You can speak to a member of the team by phoning:
01978 800675

Email us your comments to:
plaspowersolar@lightsourcebp.com

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