Future Energy Llanwern

Future Energy Llanwern Solar Farm

Consultation brochure

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A dual-use site combining renewable energy generation and sheep pasture

Welcome to the Public Consultation

Future Energy Llanwern (FEL) is a proposed solar farm located on land south-east of the Llanwern Steelworks between Goldcliff and Magor. If consented, FEL would be capable of generating approximately 380 megawatts (MW) of clean electricity, enough to power approximately 108,000 homes.

You can provide feedback in the following ways:

- Online: complete the feedback form at **futureenergyllanwern.participatr.io**
- By email: send your comments to **enquiries@futureenergyllanwern.co.uk**
- In person: view consultation materials and collect a feedback form at our deposit locations
- By post: return your completed feedback form to **FREEPOST FEL SOLAR FARM** (no stamp required)

All feedback must be received by **Sunday 15 February 2026 at 11:59pm** to be considered as part of the Development Consent Order application.

A dual-use site combining renewable energy generation and sheep pasture

The consenting process for Future Energy Llanwern

Future Energy Llanwern is a Nationally Significant Infrastructure Project (NSIP). This means it needs permission from the Secretary of State for Energy Security and Net Zero, through a Statutory Instrument called a Development Consent Order (DCO).

- **Statutory consultation**: From 10 December 2025 to 15 February 2026, communities and stakeholders can review the plans and share feedback.
- **Application submission**: The DCO application will be submitted in Autumn/Winter 2026.
- **Examination and decision**: After submission, the application will be examined. The final decision will be made by the Secretary of State for Energy Security and Net Zero.

Statutory consultation

- Formal public consultation led by the developer
- Includes events, feedback channels and bilingual materials
- Key opportunity for stakeholders to shape the proposal

Application submission

- Developer submits the DCO application to the Planning Inspectorate
- Marks the transition from consultation to formal review

Acceptance

- Planning Inspectorate checks the application for completeness and legal compliance
- Confirms whether the application can proceed to examination

Pre-examination

- Interested parties register and prepare representations
- Preliminary meetings may occur to set the scope and timetable

Examination

- Structured, time-limited process led by the Examining Authority
- Stakeholders present views, evidence and responses

Decision

- Secretary of State reviews the Examining Authority's report
- Final decision issued, with potential conditions attached

Post-decision

- Implementation begins, including discharge of requirements
- Monitoring and legacy planning may involve stakeholders

What is Future Energy Llanwern?

Future Energy Llanwern is a proposed solar farm with an installed capacity of approximately 380 MW, enough to supply around 108,000 homes. The solar farm will be located on land south of the Llanwern Steelworks and has been carefully planned to minimise visual and environmental impacts while contributing to Wales' and the UK's renewable energy targets.

The scheme has been informed by extensive technical, environmental, and community engagement to ensure it provides maximum benefit while protecting the surrounding landscape and habitats.

Inherent design mitigation

- **Setbacks from highways:** The site boundary has been positioned away from nearby roads leading in and out of the village, reducing visibility for residents and travellers.
- **Buffers to sensitive habitats:** Dedicated separation zones have been maintained around reen and ditch habitats, protecting ecological features and softening views of the development.

Environmental planning and benefits

The project has been **carefully planned to minimise environmental impacts** and to deliver key benefits to the local environment. This will be achieved through sensitive design and proposed land management measures that will be in place for the duration of the development.

About the Developer

NextEnergy Solar Fund (NESF) holds one of the UK's largest utility solar portfolios, together providing c.1GW of home grown green solar capacity across over 100 UK based projects. It is the funder sitting behind the Development Consent Order (DCO) application that will consent Future Energy Llanwern.

NESF is managed by NextEnergy Capital, a specialist UK-based solar manager that has played a central role in developing, constructing and owning solar energy projects across the globe since 2007. NextEnergy Capital continues to manage the ownership/operation of the existing Llanwern solar farm.

With direct experience managing development, construction and ongoing operations on the Gwent Levels stretching back to 2017, NextEnergy Capital understands the importance of careful stewardship, environmental sensitivity and community engagement when delivering renewable energy infrastructure.

NESF are committed to maintaining transparent communication with local communities and stakeholders throughout the development process and onwards through its operation. Our goal is to ensure the project delivers lasting benefits for the area while minimising impacts on the landscape, wildlife and local people.

We are committed to maintaining transparent communication with local communities and stakeholders throughout the development process and **onwards through its operation**.

Ribbon-cutting ceremony at a NextEnergy Capital solar farm

Our existing work in the area

For over five years, NextEnergy Capital has worked closely with local landowners to deliver and operate the existing Llanwern Solar Farm, supporting farming livelihoods, enhancing biodiversity, and creating new opportunities through Llanwern Solar Services (LSS).

Llanwern Solar Services (LSS) was established by local landowners determined to maintain their role as land managers. Together they oversee operations and maintenance site. The business has been a success, creating job opportunities and providing financial stability that has enabled reinvestment in their agricultural business. With solar helping them weather market fluctuations, they have been able to maintain traditional farming practices while undertaking active land management.

Future Energy Llanwern will apply lessons learned from these existing operations by:

- Restricting loud activities to reduce disruption
- Refining the management prescription for sensitive ecological areas
- Ensuring effective traffic management by minimising traffic through local villages

This partnership demonstrates how solar and agriculture can thrive together — securing farming livelihoods while enhancing biodiversity and environmental stewardship. It is a model we are proud of, and one we are building on as we continue to invest in the area.

Tractor operating alongside solar panels at the Llanwern site

The need for the project

Powering 108,000 homes: approximately 380 MW project to supply clean energy for 8% of Welsh households.

Fighting fuel poverty: Boosting domestic energy to cut reliance on volatile markets and protect vulnerable families.

Creating Jobs: FEL is expected to support around 5,000 Wales-based workers and contribute £13.5 million during construction.

Supporting Local Farmers: The scheme enables continued livestock grazing, improves soil and water quality, and provides a stable income for local farmers for 40 years.

Restoring Nature and enhancing Biodiversity: FEL seeks to improve the ecological status of key features of the SSSI

Driving Wales' Clean Energy Future: Future Energy Llanwern aligns with national goals to meet 100% renewable electricity by 2035.

Further information about the project can be found at **www.futureenergyllanwern.co.uk**, or by scanning this QR Code.

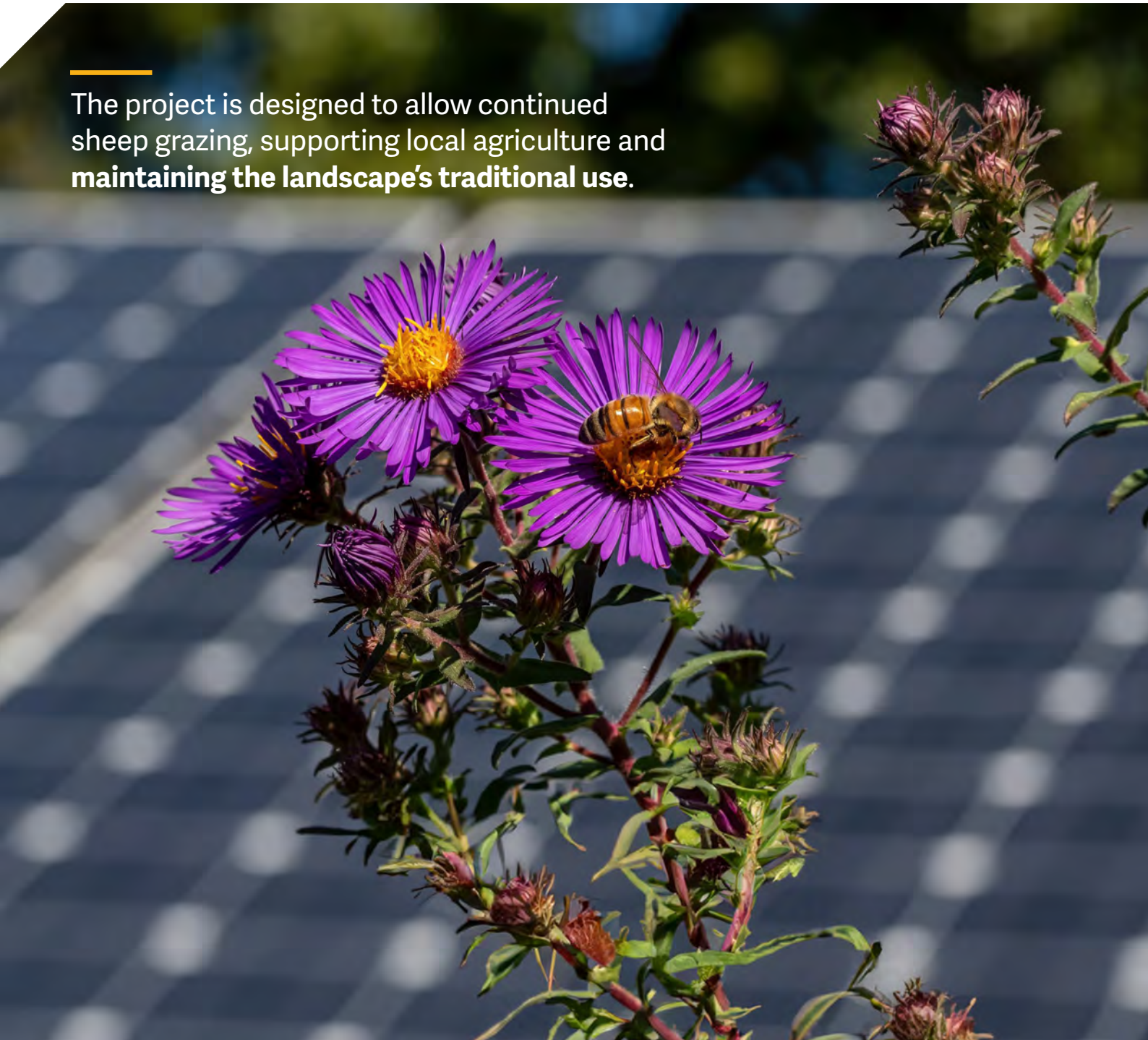
Our commitment to the environment

Environmental stewardship is a core principle of Future Energy Llanwern. The project has been designed to generate clean electricity while protecting and enhancing the natural environment.

FEL seeks to restore the SSSI Features to a 'favourable' condition and will create wildlife friendly corridors to support pollinators and biodiversity. The solar arrays are arranged to minimise visual intrusion, while native planting and the active management of watercourses across the site will provide additional ecological benefits.

The project is designed to allow continued sheep grazing at a lower density, supporting local agriculture and maintaining the traditional use of the landscape. By combining clean energy production with habitat restoration and farming, Future Energy Llanwern aims to demonstrate how renewable energy can coexist with nature and the local community.

The project is designed to allow continued sheep grazing, supporting local agriculture and **maintaining the landscape's traditional use**.

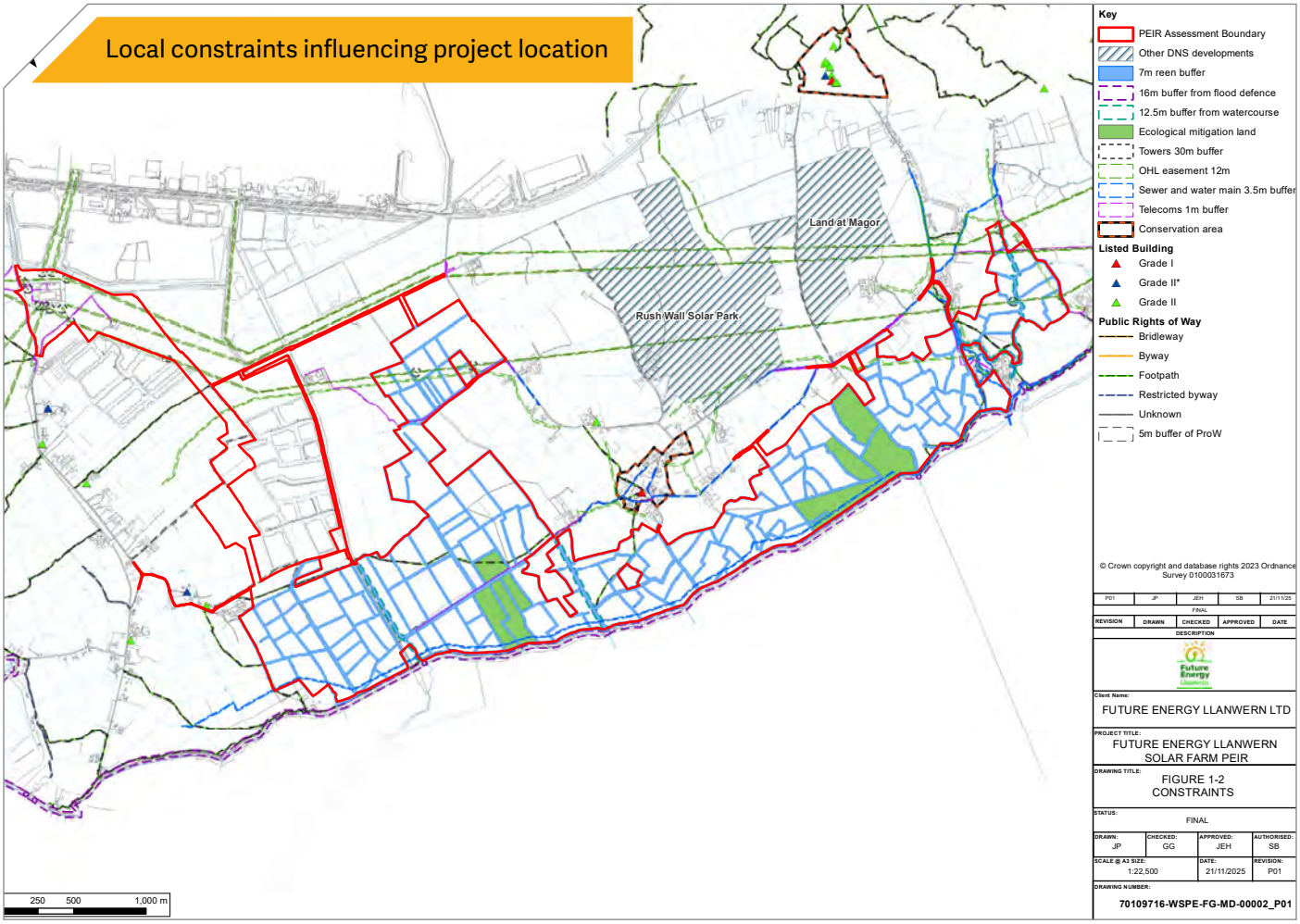


Why solar, and why here?

Solar energy is a key part of the UK's strategy to reduce carbon emissions, meet net zero targets by 2050, and secure a reliable domestic energy supply to meet our own energy demands. Future Energy Llanwern (FEL) will generate clean electricity to support these goals and contribute to Wales' target of generating 100% of electricity from renewables by 2035.

The site south of the Llanwern Steelworks was carefully selected for its proximity to the Whitson Substation, and was configured so as to avoid main throughfares into local villages. The process of site selection has considered technical, environmental, and social factors, ensuring that the project is sensitively designed and utilises existing electricity infrastructure.

By choosing this location, FEL supports a reliable, low carbon energy supply for the region while enhancing biodiversity, supporting local economy and providing community benefits.



Overview of the Preliminary Environmental Information Report (PEIR)

The Preliminary Environmental Information Report (PEIR) sets out our early findings on likely environmental effects. These effects relate to construction, operation (including maintenance) and decommissioning of the proposed new solar farm.

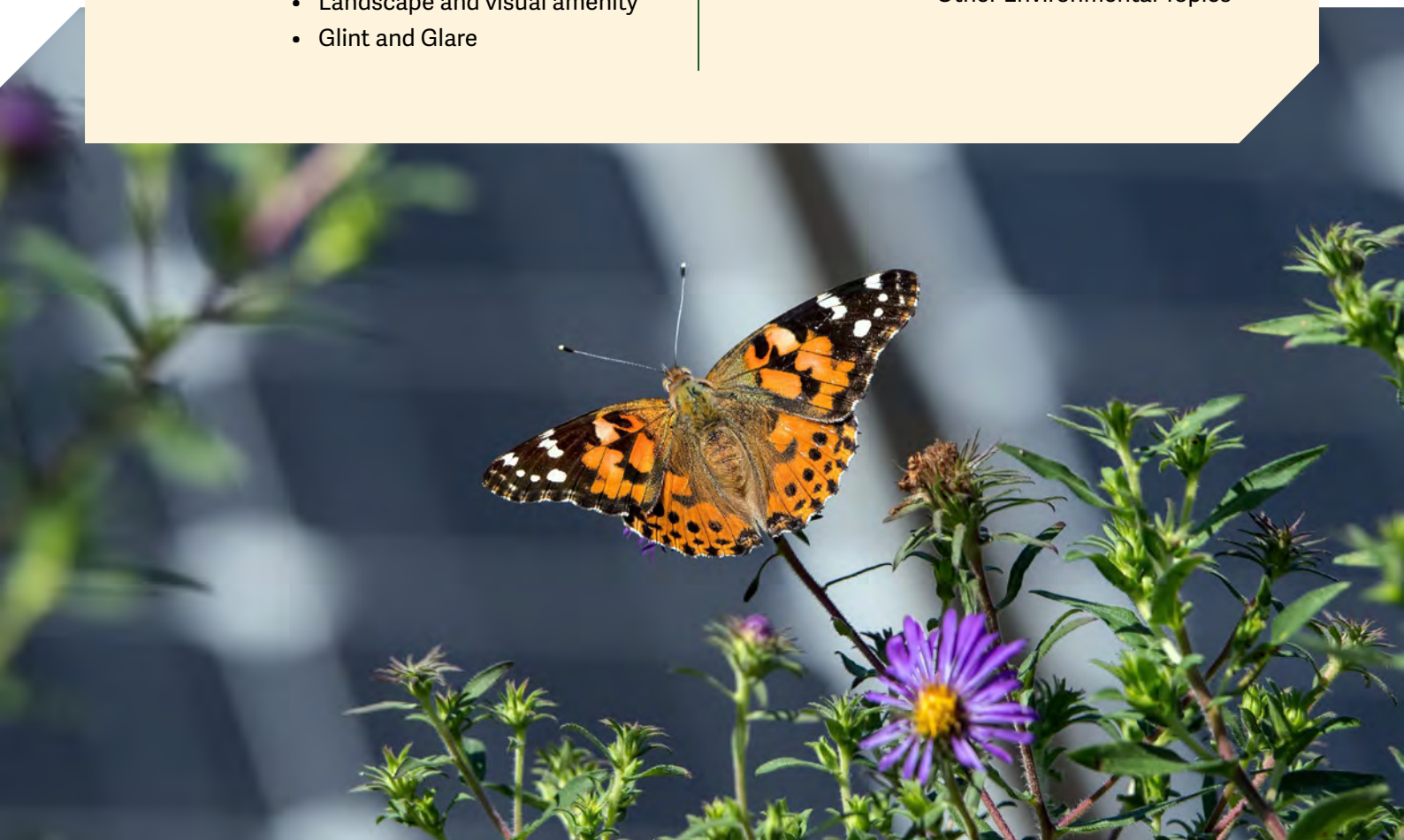
We have published the PEIR which is now subject to public consultation until 15th February 2026. Following the current consultation, we will be developing the PEIR into the Environmental Statement that will support the DCO application. To read a copy of our PEIR, please visit our website: **www.futureenergyllanwern.co.uk/**

A **Non-Technical Summary (NTS)** is also available online, outlining the key findings in accessible language.

Topics assessed in the PEIR

- Cultural heritage and archaeology
- Noise and vibration
- Socio-economics, tourism and recreation
- Transport and access
- Landscape and visual amenity
- Glint and Glare

- Greenhouse Gas Assessment
- Ecology
- Ornithology
- Water Environment
- Ground Conditions
- Cumulative Assessments
- Other Environmental Topics

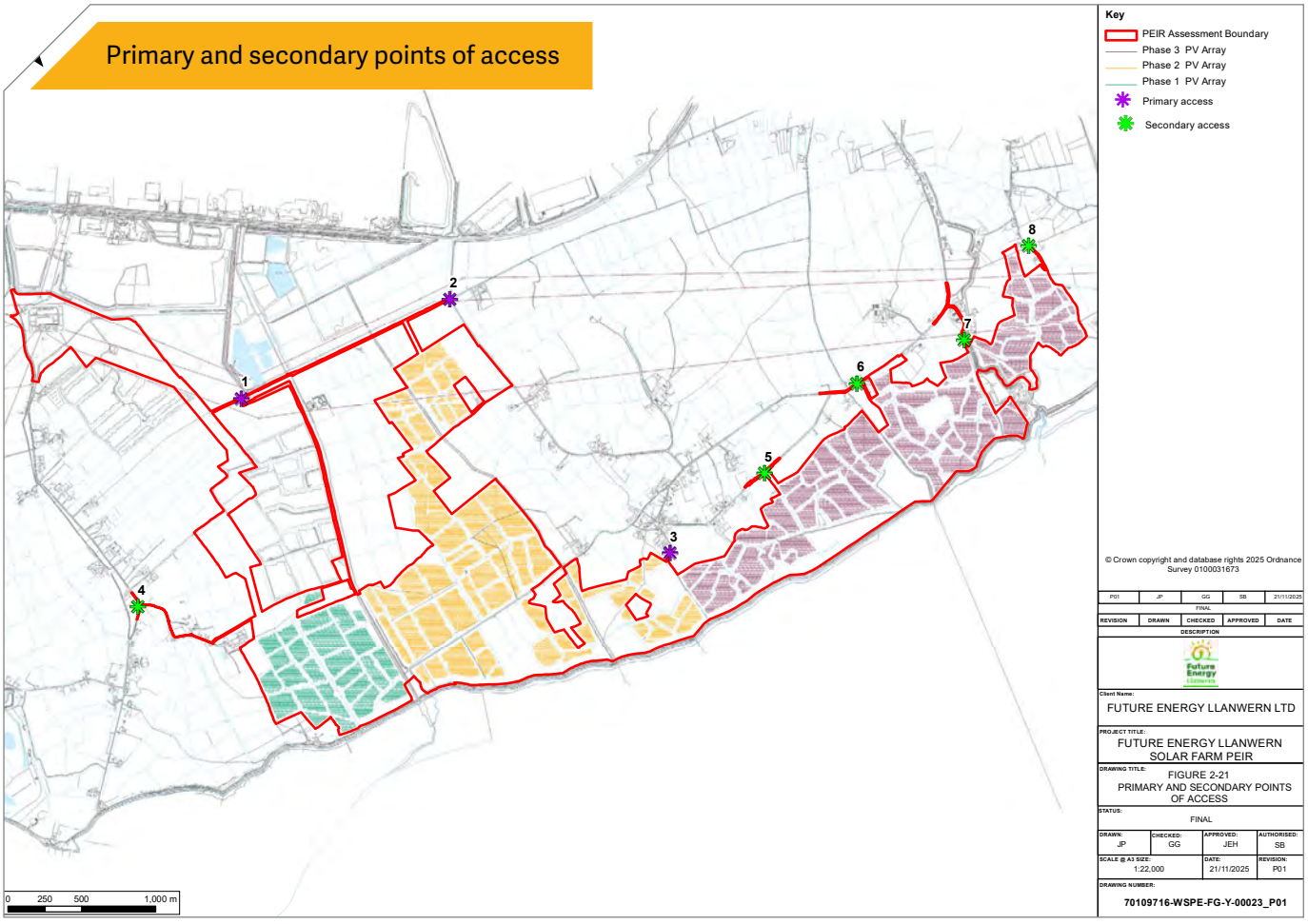


Transport and Access

We have assessed how the solar farm may affect local roads, paths, and cycle routes. This included public rights of way such as the Wales Coast Path and National Cycle Network Route 4, as well as the local highway network.

- **Construction and decommissioning phase**: Minor, short-term impacts may occur. These will be carefully managed to minimise disruption.
- **Operation phase**: Once operational the proposed development would generate minimal traffic movements
- **Mitigation**: A draft Travel Plan has been prepared to encourage sustainable access arrangements

Overall, we are managing transport and access responsibly by keeping local paths and cycle routes safe, minimising disruption for road users,and encouraging sustainable travel for staff and contractors.



Cultural Heritage and Archaeology

We have assessed how the solar farm may affect buried archaeology, historic features above ground, and designated heritage sites within 5 km of the site, including how the project may influence their setting and views. We are also assessing potential impacts on the Historic Landscape itself including the wider Landscape of Outstanding Historic Interest (LOHI).

- **Construction and operation phase**: Impacts would be carefully managed and it is anticipated that an archaeologist would be appointed to monitor invasive works
- **Designated assets**: For local, designated sites, combined impacts from the project would not be significant

Overall, we are committed to protecting the area's historic environment. The project would maintain the historic field patterns and drainage features and seeks to respect the landscape's rich archaeology and heritage.

A view of the Gwent Levels from the Seawall

Landscape and Visual

The solar farm would introduce new structures into the landscape. Views have been assessed from nearby villages, scattered rural homes, local roads, the Wales Coast Path, cycle routes and recreational areas.

- **Construction and maintenance phase**: Construction activity and machinery would temporarily change the appearance of the landscape and views.
- **Operation phase**: Once in place, the solar farm would create a noticeable change to the local landscape character and to some views. Effects are anticipated from certain recreational viewpoints including the Coast Path. However, the scheme has sought to mitigate impacts through the configuration of the panel layout.

Overall, the solar farm would lead to landscape and visual effects due to its scale and visibility from certain locations. These effects have been clearly identified, and inherent design mitigation has sought to reduce such impacts.

Solar infrastructure integrated into rural landscape

Noise and Vibration

The solar farm would introduce new sources of noise and vibration affecting nearby homes, local roads, the Wales Coast Path, cycle routes, and recreational areas. Baseline monitoring and a desk-based review identified sensitive receptors, which are mostly isolated dwellings in a rural setting with some industrial and transport influences.

- **Construction and maintenance phase:** Temporary noise and vibration could arise from machinery and construction activities. Percussive piling may cause short-term effects, but these would not result in building damage. Residents in close proximity would be informed of the timing and duration of works.
- **Operation phase**: Operational noise is anticipated to be not significant at nearby dwellings with mitigation measures in place. Users of the Wales Coast Path are unlikely to be affected, and operational noise levels along the path are expected to be lower than at nearby properties.

The Solar Farm would result in temporary or controlled noise and vibration effects. Mitigation measures are incorporated to ensure that impacts remain not significant.

Solar panels installed in a local field, well separated from residential receptors.

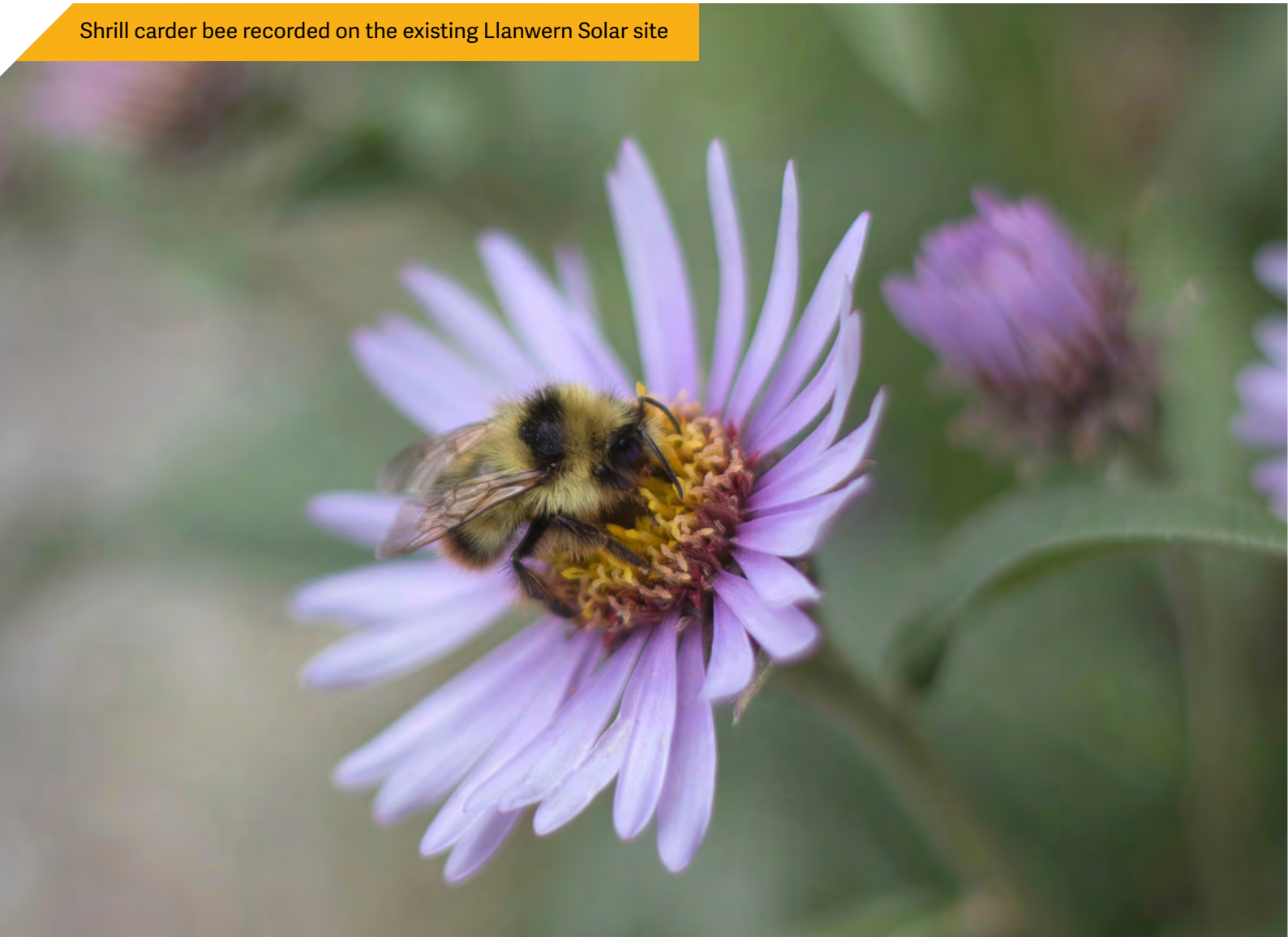
Ecology and Ornithology

The site lies within an area designated as a Site of Special Scientific Interest (SSSI). Surveys show the area supports valuable habitats such as grazing marsh, reens, hedgerows and a wide range of protected species. Therefore, the implementation and operation of the development is of great importance and has been carefully considered by the project team.

- **Construction and maintenance phase:** Construction could temporarily disturb wildlife through noise, activity and pollution risks, but these will be tightly managed through observation of buffer zones, pollution controls and ecological supervision.
- **Operation phase**: During operation, the shift to low-intensity grazing and the active management of on-site habitat seeks to ensure long term enhancements to key features of the SSSI(s). Dedicated mitigation land is set aside for bird species. Some hedgerow loss will occur but this is carefully planned so as to open up reen and ditch habitats to help improve these habitats. A 'Bee Highway' is proposed to the south of the site in order to benefit the Shrill Carder Bee.

With strong mitigation, habitat creation and long-term management the project seeks to deliver meaningful biodiversity benefits over its lifetime.

Shrill carder bee recorded on the existing Llanwern Solar site



Socio-economics, Tourism and Recreation

We have assessed how the solar farm may affect local rights of way and recreation routes, including the Wales Coast Path, NCN Route 4, and the Redwick Circular Walk. The site has been deliberately configured to be set back from the local highway network, ensuring that residents can continue to travel through the landscape without direct views of the development.

- **Construction and operation phase**: The site will be visible from sections of the Wales Coast Path and Redwick Circular Walk. The site is set back from the National Cycle Network.
- **Temporary disruption**: During construction, compounds, traffic, and site activity may cause short-term disturbance. These will be carefully managed to minimise inconvenience.
- **Mitigation**: Additional measures are being developed to reduce impacts and enhance the experience of local routes including the maintenance of a large buffer distance to the Wales Coast Path. Details will be reported in the Environmental Statement.

Existing landscape of the site seen from the Wales Coast Path

Environmental Impact Assessment Topic Summary

The below illustrates the remaining topic areas covered in our Preliminary Environmental Information Report (PEIR).

Topic area	PEIR findings
Glint and Glare	The solar farm will operate safely, with no significant risk of glare affecting visibility or amenity.
Water Environment	The Proposed Development is expected to have no significant long-term impacts on the water environment, with construction and decommissioning posing temporary risks to surface water, groundwater, and flood receptors, mitigated by embedded controls, while operational effects are minor or neutral due to robust drainage systems and pollution safeguards.
Landscape and Visual Amenity	Significant visual effects may occur for certain receptors within 1km of the site including nearby residents, users of the Wales Coast Path, Redwick Circular Route and local footpaths. The Proposed Development would bring about a change to the landscape character of the site itself, however, the site is nevertheless flat and well contained by existing hedgerows and other features of the landscape.
Greenhouse Gas Assessment	The Proposed Development would result in a net reduction in GHG emissions.
Cumulative Assessments	Upon consideration of the information available for the PEIR, it has been concluded there is potential for significant effect interactions as a result of the Proposed Development. Further mitigation measures will be identified through the iterative design process and the final conclusions on effect interactions will be set out in the ES.
Other Environmental Topics	Additional assessments were carried out in relation to the following topics: • Telecommunications, Television Reception and Utilities, • Waste and; • Heat and Radiation There are no significant effects predicted in relation to these matters.
Ground conditions	The project has been designed to operate alongside ongoing agricultural use while keeping ground disturbance, land-use change, and contamination risks to a minimum. There will be some adverse effects on soil resources due to permanent soil removal and sealing; however, even when considered cumulatively with other projects, these effects are assessed as not significant in EIA terms.

Our commitment to working with the community

The project will deliver a £10 million Community Benefit Fund that will provide £250,000 annually over the 40-year lifetime of the project. This fund will be locally led, with money available to support local priorities. These could include:

- Education and skills development
- Biodiversity and nature recovery
- Local well-being and community initiatives
- Energy efficiency and climate resilience

We are working to ensure these benefits deliver meaningful impact.

We need your feedback

Your feedback helps shape the project and ensures it reflects community needs. You can provide feedback by:

- Completing a feedback form at one of our consultation events
- Visiting our project website and submitting comments online
- Writing to us directly using the contact details provided.

Upcoming events

This statutory consultation is your opportunity to help shape our proposals before we submit a formal application. We're committed to ensuring that local communities, landowners, stakeholders and technical consultees can understand the details of what's being proposed, share feedback and ideas, and influence key aspects of the project through meaningful input.

The following consultation events will take place:

In person: **Redwick Village Hall** drop in event Church Row, Caldicot NP26 3DE | **Tuesday 13 January 2026** | 4pm-8pm
In person: **Magor and Undy Community Hub** Main Rd, Caldicot NP26 3GD | **Friday 16 January 2026** | 4pm-8pm
In person: **Magor and Undy Community Hub** Main Rd, Caldicot NP26 3GD | **Saturday 17 January 2026** | 9am-2pm
Online: **Statutory Consultation Webinar #2** | **Wednesday 28 January 2026** | 3pm-4pm

To register for a webinar please visit our website: **www.futureenergyllanwern.co.uk**

Next Steps

Your role in the consultation

This statutory consultation is your opportunity to help shape our proposals before we submit a formal application. We're committed to ensuring that local communities, landowners, stakeholders, and technical consultees can understand the details of what's being proposed, share feedback and ideas, and influence key aspects of the project through meaningful input.

Feedback from this consultation will be used by Future Energy Llanwern to influence and shape the final designs of the solar farm and will accompany the application for a Development Consent Order (DCO).

You can provide feedback in the following ways:

Online: complete the feedback form at **futureenergyllanwern.participatr.io**

By email: Send your comments to **enquiries@futureenergyllanwern.co.uk**

In person: view consultation materials and collect a feedback form at our deposit locations

By post: Return your completed feedback form to **FEL SOLAR FARM** (no stamp required)

All feedback must be received by **11:59 on Sunday February 15th 2026**, to be considered as part of the DCO application.

Contact us

If you would like to talk to us about the project, you can contact our Community Relations Team using the following contact information:

- **Email:** enquiries@futureenergyllanwern.co.uk
- **Call:** 0800 783 5601 (9:00am to 5:30pm, Monday to Friday)
- **Write:** to the project team at **FREEPOST FEL SOLAR FARM** (no stamp required)

Consultation materials can be made available in alternative formats, such as large print, audio, or Welsh language, upon request. Please contact our Community Relations Team if you require materials in an alternative format.