

# Solar Energy

SUPPORTING A MORE SUSTAINABLE FUTURE



## Why choose solar?

Owning and managing land in today's financial climate can be a challenge - costs are high, profits are uncertain, and the future feels very unclear. Leasing your land for a solar farm is one way to make sure that your business can continue moving forward.

### How can you benefit from a solar lease?

- **Predictable, long-term revenue stream**  
When we enter into a 30+ year lease agreement with a landowner, we are committing to a competitive rental income which is paid per acre, from the beginning of construction. The rental income is index-linked so it will rise annually with inflation, providing a secure revenue stream for years to come.
- **Multi land-use**  
Our solar panels and equipment typically occupy only 40% of the leased land, and the design of the solar farm can incorporate grazing of small livestock like sheep. We pride ourselves on designing the solar installation to accommodate your farming priorities, allowing you to draw additional income from the land.
- **Biodiversity**  
The design of every solar farm includes a biodiversity management plan that outlines measures to avoid or mitigate biodiversity impacts, details compensatory and enhancement measures and sets out an ongoing monitoring and reporting regime. Our solar farms include habitat enhancements like bird and bat boxes and log piles, while others are home to bee hives. Sites that are not used for grazing are often sown with wildflower seed mix, to encourage the presence of birds, insects and mammals.
- **Contributing to UK energy security**  
By partnering with Lightsource bp to host a solar project on your land, you are helping to generate clean, renewable electricity for businesses and communities. Each solar project contributes to diversifying the UK's energy mix, and to the country meeting its net zero target by 2050.
- **Financing growth and planning for succession**  
Solar farm rental income is considered a favourable revenue stream by banks and lenders, which has allowed our solar farm landowners to successfully secure financing for their own business development. This also allows landowners to address and improve future financial planning for their business and family.



# Why choose Lightsource bp?

## Your trusted solar development partner

Our proposition is very simple – you allow us to construct a solar farm on your land and we pay you an index-linked rent for the lifespan of the lease, or we offer to purchase your land at a premium above agricultural market value.

Lightsource bp is a leading UK solar company – we were among the first to develop utility scale solar in the country and our unique approach to project development sets us apart from the competition. We are extremely experienced at raising capital so funding for our projects is secure, and our teams of industry experts can handle every aspect of solar development in-house, from start to finish.



Trusted partner



Experienced financier



Responsible developer



UK leader in solar



In-house expertise



Excellent track records



Committed to sustainability



HOW IT WORKS

# Ground mounted solar

Our team of in-house planners and development managers will work closely with you to design a scheme that truly integrates with your business, the environment and supports the values of the local community. As well as financing, developing, constructing and operating utility-scale solar and storage projects, we also sell our renewable power at a discounted rate directly to businesses and utilities. This means that a solar project on your land could provide power to homes and businesses locally and across the nation.



**Transformers**  
Increase the voltage.



**Substation**  
Holds the switchgear and is the electrical exit of the site.

TYPICAL FEATURES OF A SOLAR FARM



**Inverters**  
Convert the Direct Current (DC) into Alternating Current (AC).



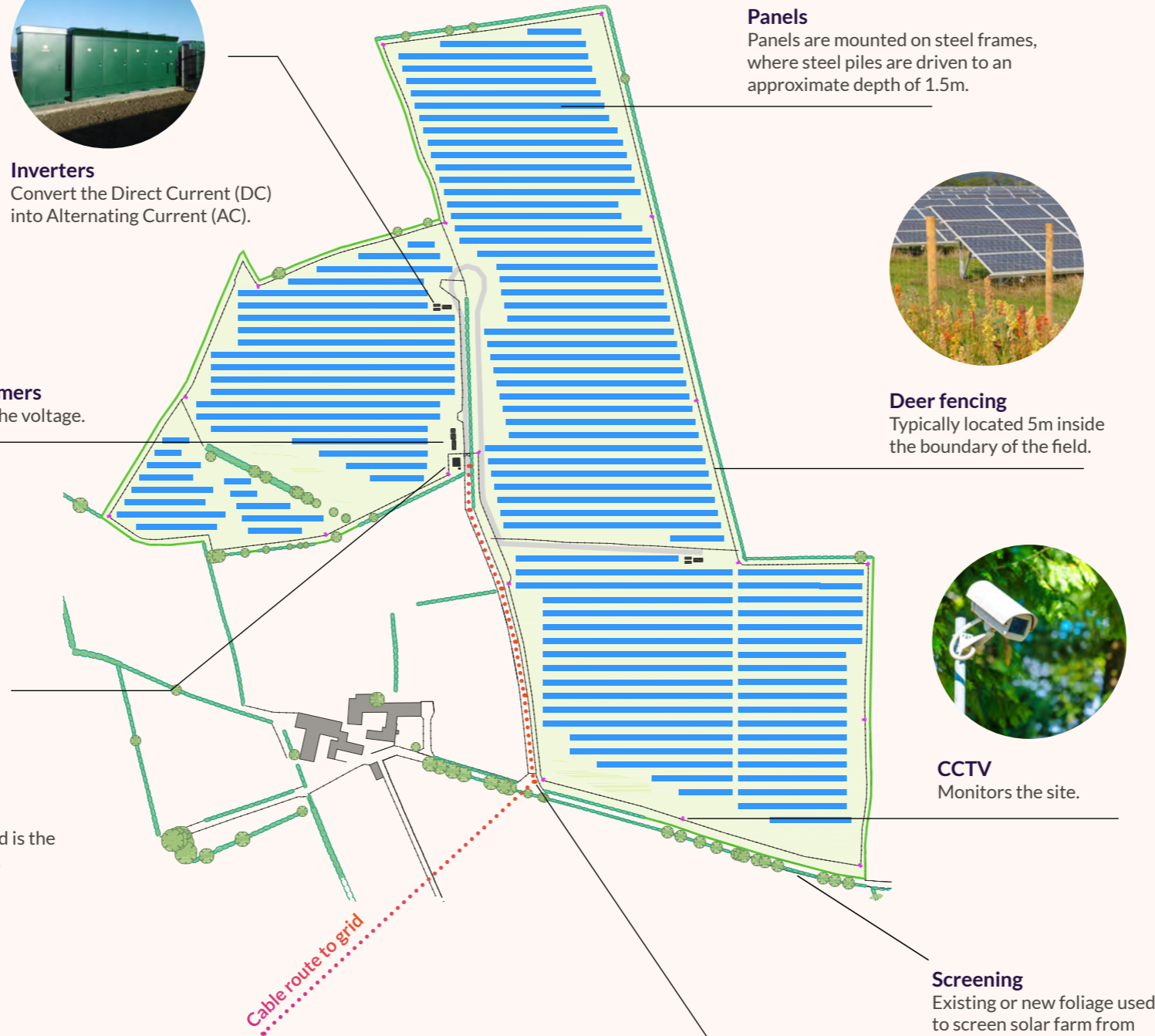
**Panels**  
Panels are mounted on steel frames, where steel piles are driven to an approximate depth of 1.5m.



**Deer fencing**  
Typically located 5m inside the boundary of the field.



**CCTV**  
Monitors the site.



**Energy storage**  
Energy storage enables more renewable power to join the UK grid as efficiently as possible. Many of our UK planning applications include a provision for battery storage to future-proof our sites.

**Access**  
Construction and maintenance access points selected for accessibility.

**Screening**  
Existing or new foliage used to screen solar farm from surrounding viewpoints.

SOLAR, STORAGE, CO-LOCATION AND MORE

We're doing more than just solar. As part of our goal to enable the energy transition in the UK and beyond, we're exploring and deploying new technologies alongside solar energy projects. We've established a battery storage pipeline and are actively exploring the potential for co-locating wind and solar on some of our projects. Each of these opportunities offer additional benefits to our land partners.

TIMELINE

SITE ASSESSMENT



We assess the suitability of your land for a solar installation, including environmental surveys that will require frequent access to the land. We review the availability of grid capacity with the Network Operator.



GRID APPLICATION



We request and accept an offer from the Network Operator for the electricity generated by the solar installation.



PLANNING APPLICATION



We work with the local authorities and other stakeholders on the preparation and determination of planning applications, we engage in detailed surveys and assessment to understand and mitigate any potential impacts of the project, and engage the community on the development of the proposals, including community consultation events.



CONSTRUCTION & 1ST LEASE PAYMENT



Lightsource bp construct the solar farm and enter into the lease paying the first quarter's rent upfront.



OPERATIONS & MAINTENANCE



Once operational, our in-house asset management and operations & maintenance teams can oversee long-term care for the solar farm.

HOW IT WORKS

# Planning permission

Our in-house Environmental Planning and Sustainability team are experts in working with local planning authorities across the UK to obtain planning permission for solar projects. We employ a thorough process for each site, drawing on local knowledge from communities and specialists to develop successful planning applications.



## 1. Preparation & pre-application engagement

Any successful planning application requires extensive surveys of the land and local environment. The surveys will allow us to gain an understanding of key aspects of the environment, for example the ground conditions, any archaeology present, if protected or migratory species call the land their home, the location of underground utilities etc. Some of these studies will require occasional access to your land. We will always work around your schedule to reduce disruption caused by surveying work.

Once we have a provisional design, we typically seek to meet with the local planning authority or relevant authority to discuss the proposal. This is typically a confidential meeting held either on site or at the Council offices.

Our next step is typically to submit an Environmental Impact Assessment (EIA) screening request to the Council to determine the type of planning application we must make – note that this request is publicly available, and your permission will be sought prior to submission.

In Northern Ireland and Scotland, we are also required to submit a Proposal of Application Notice (PAN) which gives a general outline of the proposed development and how we intend to engage with the local community. As with the EIA screening, the PAN is publicly available, and your permission will be sought before it is submitted.

### Environmental assessments

In preparing our planning application a number of technical environmental assessments will be carried out – this will involve several consultant specialists visiting the site, including archaeologists, ecologists, landscape architects and surveyors. We will liaise with you about granting access and any issues such as requirements to move stock or time certain surveys to follow crop harvesting.

### Community engagement

We also engage with the local community prior to submission of the planning application – including councillors, nearby residents, local wildlife trusts and interest groups – in order to introduce our project, address concerns, answer questions and gather support.

As part of this process we would:

- Hold a community consultation event, in the local area
- Distribute notification letters to local councillors and the MP
- Produce and distribute an information leaflet to residents
- Notify local media about our information event and provide a press statement

### Community updates

Following a period of community consultation, should there be significant changes to our initial proposals, we may issue a community update leaflet or reconsult detailing the changes in our proposals.



## 2. Processing the planning application

Once the application is submitted, statutory consultees will be informed such as transport, ecology and heritage officers, for review. The site may also be inspected by the Council and the neighbours notified.

The decision-making authority will consider the application and any representations of support or objection, and whether the application is consistent with planning policy.

Then a decision is made. The Council process typically takes:

- 13-16 weeks in England (the longer timeframe for EIA development)
- 6 months in Northern Ireland
- 4 months in Scotland
- 9 months in Wales

These timeframes are indicative, and we often see the process taking much longer, especially if the application is to be determined by elected councillors.



## 3. Decision making

In England, Northern Ireland and Scotland, there are different regimes dependant on the scale of the project. Generally smaller scale projects are decided by local planning authorities and a designated case officer, or by committees of elected councillors, while larger scale projects are decided at a higher level:

- In Wales, projects over 10MW but under 350MW are considered a Development of National Significance (DNS) and are ultimately determined by the Welsh Minister.
- In England, projects over 50MW (or over 350MW in Wales) are considered as Nationally Significant Infrastructure Projects (NSIPs) and are ultimately determined by the relevant Secretary of State.
- In Scotland, projects over 50MW are ultimately determined by the Scottish Government.
- In Northern Ireland, projects over 30MW are ultimately determined by the Department of Infrastructure.



### Supporting the proposal

Developments of all kinds are met with varied opinions from the community, and solar is the same. Some will be inherently supportive, or at least recognise the importance of renewable energy and remain neutral, but others will oppose the idea.

Concerns often come from uncertainty. Our community engagement work is important because it enables us to answer questions, address concerns and take suggestions on board before a formal application is submitted.

HOW IT WORKS

# Community engagement

Lightsource bp takes great pride in engaging with local communities, not just during planning and development, but throughout the lifetime of its solar farms.

As well as hosting open days and guided tours for residents, schools and local groups, we have also assisted several higher education students and ecologists with biodiversity research projects by providing access to our sites.

## Educational opportunities

The education sector is a leader in addressing sustainability and climate change issues. Our future generations will guide the world through a remarkable energy transition to smarter and cleaner energy generation.

Solar technology is passive and easily accessible, with no emissions or pollution during operation, unlike more complex energy generation methods. As such, our projects can provide an excellent educational resource for communities wanting to learn more about solar power on their doorstep. Lightsource bp is keen to involve communities and facilitate educational activities as much as possible.



## Community benefit

We're committed to supporting the communities around our solar projects, and so for every project we develop we offer some form of community benefit. We've partnered with community funds and local councils to provide financial benefits in a number of different structures. The positive impact of these benefits is wide ranging, from new playgrounds to public defibrillators, endowments for community groups, cost-of-living mitigations and more.



## Local interest groups

Local knowledge and input is greatly encouraged to ensure our proposals fit with the activities and aspirations of the local community; and we continue this process once a site is installed. We engage with local interest groups to help us improve and develop both new and existing sites.

For example, The Devon Hedge Group visited our solar farm at Barton Farm in Devon, following initial conversations about the potential for solar farms to harbour biodiversity. The visit gave them a helpful insight into solar farm habitats and we now consult with them regularly on our planting plans for new sites in the South West. We have also completed projects with the RSPB and are currently working with local bee-keepers and bee-keeping associations to install hives on suitable sites to promote and encourage biodiversity.



HOW IT WORKS

# Construction

Once all relevant permits and authorisations have been secured, Lightsource bp assigns a project manager to oversee construction and connection of the solar farm. Construction timeframes vary based on the project size, during which security staff monitor the site 24 hours a day. Upon completion of the build, the solar photovoltaic (PV) system is tested, before being connected to the grid.

Following stringent best practice guidelines, the construction process is tailored to the land, community and season to minimise any adverse impacts. Appropriate equipment and materials are specifically chosen to minimise soil compaction, damage to land drains and ensure longer-term benefits in productivity and optimal grazing conditions. We make regular checks to ensure that our installers and contractors adhere to our thorough health & safety guidelines, and to confirm that the site is being constructed in accordance with the planning conditions.



CONSTRUCTION PROCESS

Step 1:

### Project manager assigned

Once planning approval is received Lightsource bp assigns a Project Manager to oversee construction of the solar farm and liaise with the landowner during the construction phase.



Step 2:

### Construction begins - lease payments start

This includes site preparation, installation of access roads, civil works, and first delivery of equipment. Lightsource bp will employ security guards to monitor the site at all times until completion.



Step 3:

### Testing and commissioning

Before the site is energised, Lightsource bp will perform a number of checks to ensure the solar farm is built to high standards.



Step 4:

### Solar farm connected

Lightsource bp will arrange connection of the solar farm into the grid.



Step 5:

### Maintenance & land management

Lightsource bp assigns an Asset Manager to maintain the performance of the site for the term of the project.

HOW IT WORKS

# Management

Once the solar farm has been constructed and connected, it requires very little hands-on management to operate successfully. The solar farm will be monitored remotely and visited on a semi-regular basis. The panels will require washing once or twice a year, and regular land maintenance will be carried out in accordance with the planning conditions.



## O&M at Lightsource bp

Lightsource bp has its own in-house Operations and Maintenance business, which often provides services for our developed projects following construction. The O&M team work together in regional teams based across the United Kingdom. Due to such significant local presence, our specialist engineers boast a typical response time of just a few hours. The skillsets within our team include land managers, electricians, and engineers who ensure that every aspect of a project is attended to with the right expertise.



# Case study

## GROUND MAINTENANCE CONTRACTS

# Additional income for landowners

Where Lightsource bp provides O&M services for operational solar farms, we often partner with landowners to provide ground maintenance services. Showcasing how Lightsource bp works with landowners to supply additional income and support the rural economy is our 5.4MW Hillside Lough Road 2 solar farm in Northern Ireland. Covering around 30 acres, the project was connected in 2017 and since 2021 a wide variety of ground maintenance services have been provided by the landowner of the site.

Once the project was completed and successfully connected, we formed a close working relationship with the landowner, set to last for 26 years. The landowner performs vital ground maintenance on the Lough Road solar farm, including grassland management (grass cutting, grazing, spraying), fencing, hedge cutting, road repairs and drainage work.

From a Lightsource bp perspective, partnering with the landowner to provide ground maintenance services is highly beneficial, as the landowner has a strong historical knowledge of the land and is able to suitably time maintenance work to fit around the needs of both parties.

The relationship is mutually beneficial, providing additional income for the landowner, while also raising the profile of solar within the local community and decreasing the number of carbon emissions related to the Lough Road solar farm due to the proximity of the contractor.



ENERGY & FOOD SECURITY

# Two sides of the same coin

One of the frequently asked questions around solar farm development is “why are you using farmland for energy, rather than food production?” The answer is simple – we’re doing both. At Lightsource bp we design our solar farms to coexist alongside agricultural activities, so that each project contributes to energy security and food security, while also providing landowners with additional income.



# Case study

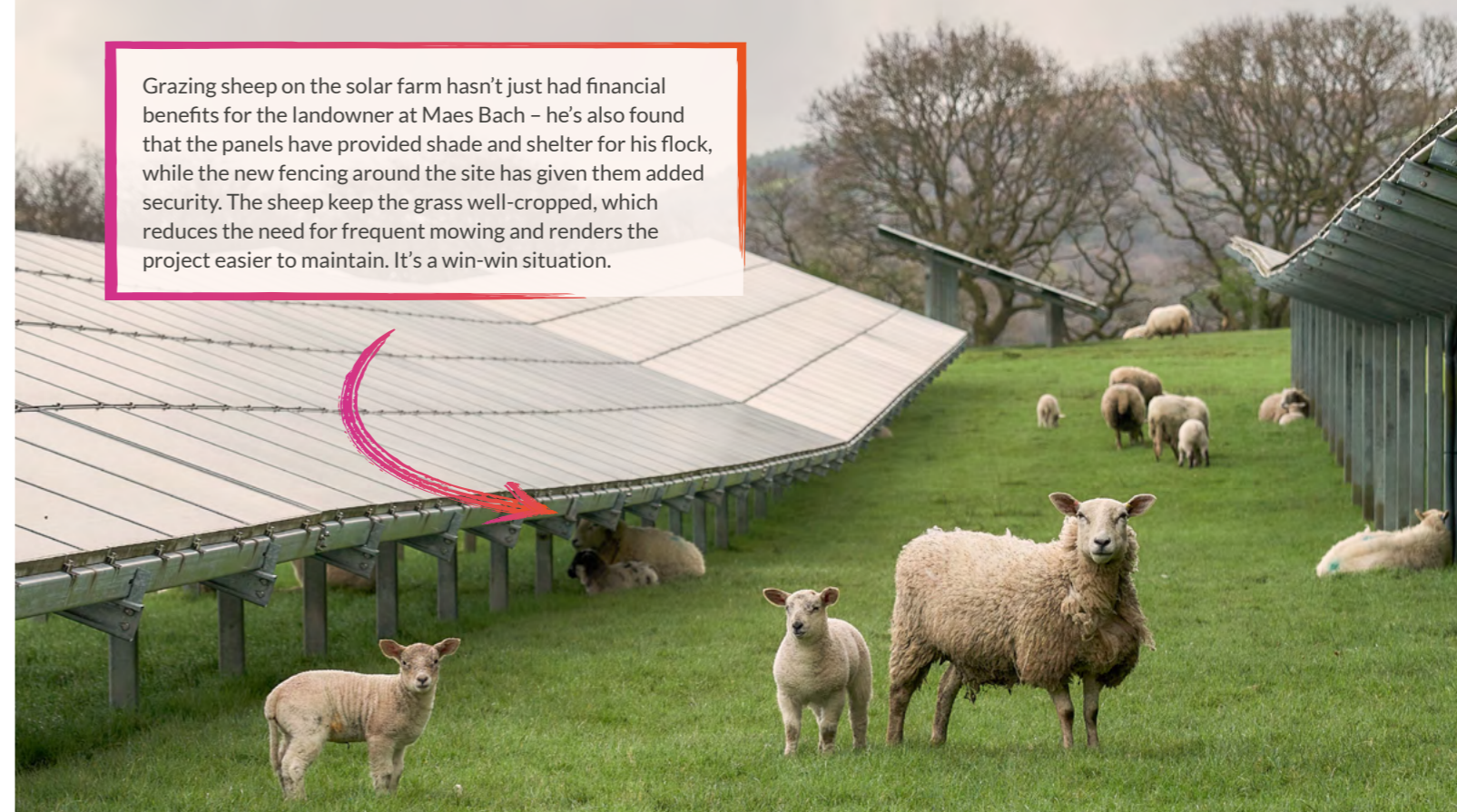
## DUAL USE, DUAL INCOME

# Farming with solar

Demonstrating the way in which solar can coexist perfectly with agriculture is our Maes Bach solar farm in Wales. The 5MW project was connected in 2016, covers 42 acres of land and since day one of connection has been home to a flock of around 60 sheep.

Prior to the solar project being built, the land had always been grazed, and once the installation was complete the sheep returned to the land, meaning that the farmer was able to draw two streams of income from the single plot – not just the profits brought by his flock, but also the fixed, index-linked revenue of the solar lease.

Grazing sheep on the solar farm hasn't just had financial benefits for the landowner at Maes Bach – he's also found that the panels have provided shade and shelter for his flock, while the new fencing around the site has given them added security. The sheep keep the grass well-cropped, which reduces the need for frequent mowing and renders the project easier to maintain. It's a win-win situation.



*How can multi-use of land and solar benefit you?*

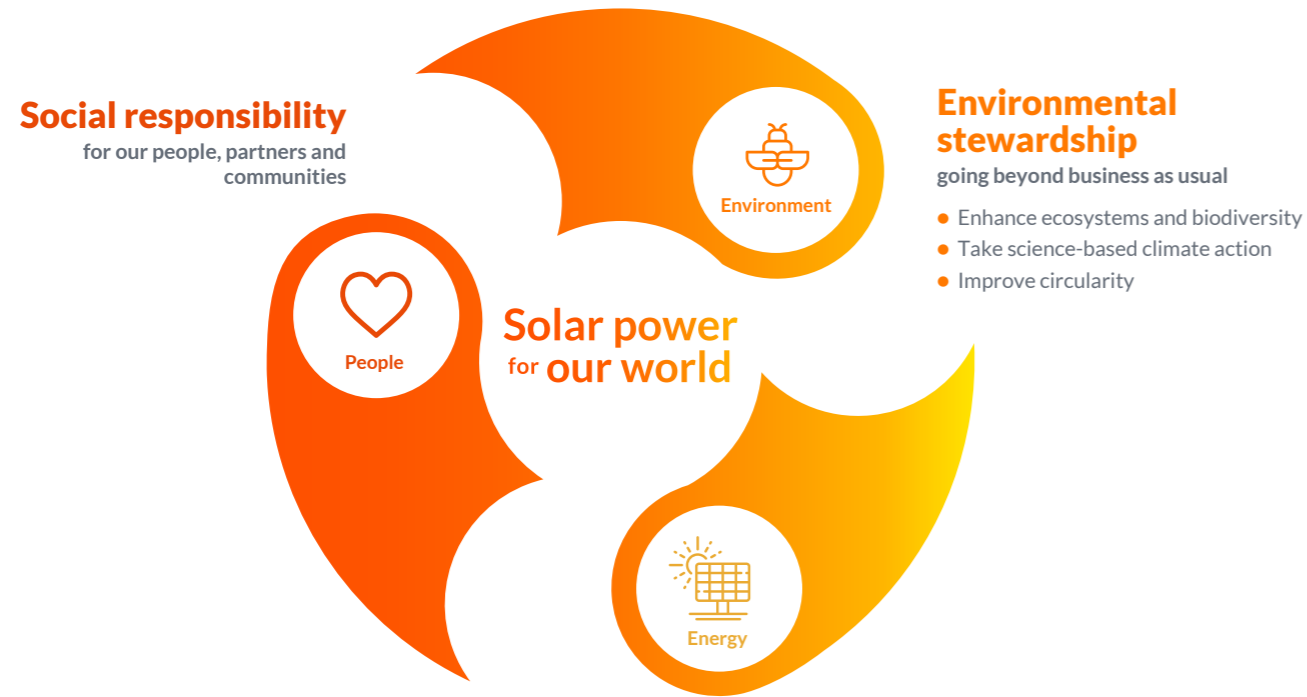
- Diversified income
- Reduction in perceived land use conflicts
- Shelter from heat and rain for small livestock from panels
- Protection of crops from extreme weather events



BEYOND BUSINESS AS USUAL

# Sustainability

Sustainable solar power goes beyond the supply of renewable energy. It's about how we run a responsible business and respect our environment – all while responding to the climate crisis with the urgency and attention it demands. Sustainability is a core value at Lightsource bp, it's foundational to how we do business. In 2021, we shared our sustainability framework spanning three key pillars: **Energy, Environment, and People.**



One of the ways in which we're prioritising sustainability throughout our solar development process is by partnering with organisations dedicated to protecting communities and the environment. An example of this is our membership with the National Farmers Union. We've worked with the NFU on projects across the UK for many years, and are currently members, working with them to champion farmers and growers in England and Wales, to campaign for a stable and sustainable future.

To find out more about how Lightsource bp is going beyond business as usual to champion sustainability, scan the QR code to visit our website.

[www.lightsourcebp.com/sustainability/](http://www.lightsourcebp.com/sustainability/)



BEYOND BUSINESS AS USUAL

# Biodiversity

Losing biodiversity (the range of different species a local habitat) is one of the most important and complex challenges currently facing humanity – and as a solar landowner, you would be able to be part of the solution to the problem. At Lightsource bp, we are taking action to boost biodiversity by protecting, enhancing, and stewarding lands at our solar farms.

As ground-mounted solar is typically in place for over 20 years and less than 2% of land is disrupted by infrastructure, solar farms are areas that provide a huge opportunity for local ecosystems to thrive, enhance habitat creation, and improve soil regeneration.

## Support pollinators, support food security

A thriving insect population boosts surrounding farmland pollination and biodiversity, and is vital for a sustainable future, in the UK and across the world. Unfortunately, globally we're seeing an alarming decline in pollinator insect populations, which is due in large part to disappearing habitats. Solar Energy UK, the UK's solar trade association, has shone a light on new research that suggests that solar farms can contribute positively to food security by enhancing pollinator biodiversity. This new information reveals that good management of solar farms could be a win-win-win scenario for climate change mitigation, biodiversity conservation and food security – and Lightsource bp frequently seeds projects with species-diverse grass and flower mixes, which provide rich forage for local pollinators and insects.

At Lightsource bp, we design every single one of our UK projects with the goal of delivering a biodiversity net gain (BNG) after five years of operation or within an ecologically acceptable timeframe. Our solar projects are developed with bespoke Biodiversity Management Plans (BMP) which include detailed planting schemes.



## Enhance & protect biodiversity

Our BMPs often include...

- Planting plans prioritising local species
- Habitat creation
  - Bird and bat boxes
  - Insect hotels
  - Reptile refuges
- Hedge preservation & infilling
- Wildflower and grass meadow creation

To find out more about Lightsource bp's approach to biodiversity, scan the QR code to access our biodiversity brochure.



# Frequently asked questions

## Is the rent index-linked?

The lease payments are index-linked with CPI for the lifetime of the project. The lease is paid quarterly and in advance of construction of the plant.

## What happens if Lightsource bp divests all or some of the project?

If we choose to sell some or all of the solar project on your land, very little will change. The high standards we set for our sites are locked in at the planning phase. Future owners would be required to adhere to them. It's another reason why working with us from the outset ensures the best long-term outcomes for your land. We sell projects at various stages of their lifecycle as a normal part of business in order to fund future projects and further our commitment to the energy transition.

## What happens if Lightsource bp goes out of business?

The solar farm is a bankable power generation asset which will be backed by established funders. They will have step in rights to continue the project in the very unlikely event that anything goes wrong. They will take over all of the lease obligations for the rest of the lifecycle of the project, including decommissioning, and ensure rent is paid.

## How long does it take to build the solar farm?

The electricity network operator dictates when the solar farm is allowed to connect to the grid. This can be several years down the line depending on any work needed to facilitate the connection. Once a connection offer is in place, we will begin securing planning permission which usually takes 6-12 months. Construction of the solar farm itself will begin 9-12 months prior to the connection date - this is when the first rental payment is made. Lightsource bp will work with experienced contractors who have built the majority of the portfolio under our management. They will meet all planning conditions and additional quality standards we adhere to as part of agreement with our funders.

## What happens to the electricity generated?

Once the solar farm is constructed, the renewable electricity generated by the project will be transferred to the national grid via a local point of connection. The electricity is sold by Lightsource bp to utilities or private offtakers.

## What happens at the end of the lease?

Lightsource bp will remove all the equipment that is located on site and return the land to agricultural use. Following decades of lying fallow, and the biodiversity enhancements instituted as part of the development, land used for solar farms can often improve in quality throughout the lifetime of the project. If, once the lease has ended, there is an opportunity to propose another solar project, we shall consult with you and the local planning authority to submit a new planning application.

## Who maintains the solar farm?

For many of our projects, once constructed, our in-house Operations & Maintenance team will be responsible for maintaining the site throughout the lifetime of the project. We have a dedicated land management team, focussed on exceptional upkeep of the land below the solar farm.

## What happens if I sell my land?

Should you wish to sell the land during the lease period, the Lease Agreement and payments will be transferred to the new landowner once the sale is complete. Lightsource bp can offer to buy the land from you and have a dedicated Acquisition Team that can discuss a potential sale. Offers take into account the underlying land value as well as the value of the unexpired lease term and in most instances are made at premium above agricultural market value.

## How is the equipment protected?

Our solar farms are enclosed - usually by a timber and wire agricultural fence about 2 metres high. This is positioned on the inside of any hedgerows and trees with wide field margins in between the fence and field boundary. We also install CCTV cameras to live monitor any movement on the site.



Remember, if you have further questions or need any other help, just give us a call. One of our solar experts will be happy to assist:

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