

Introduction

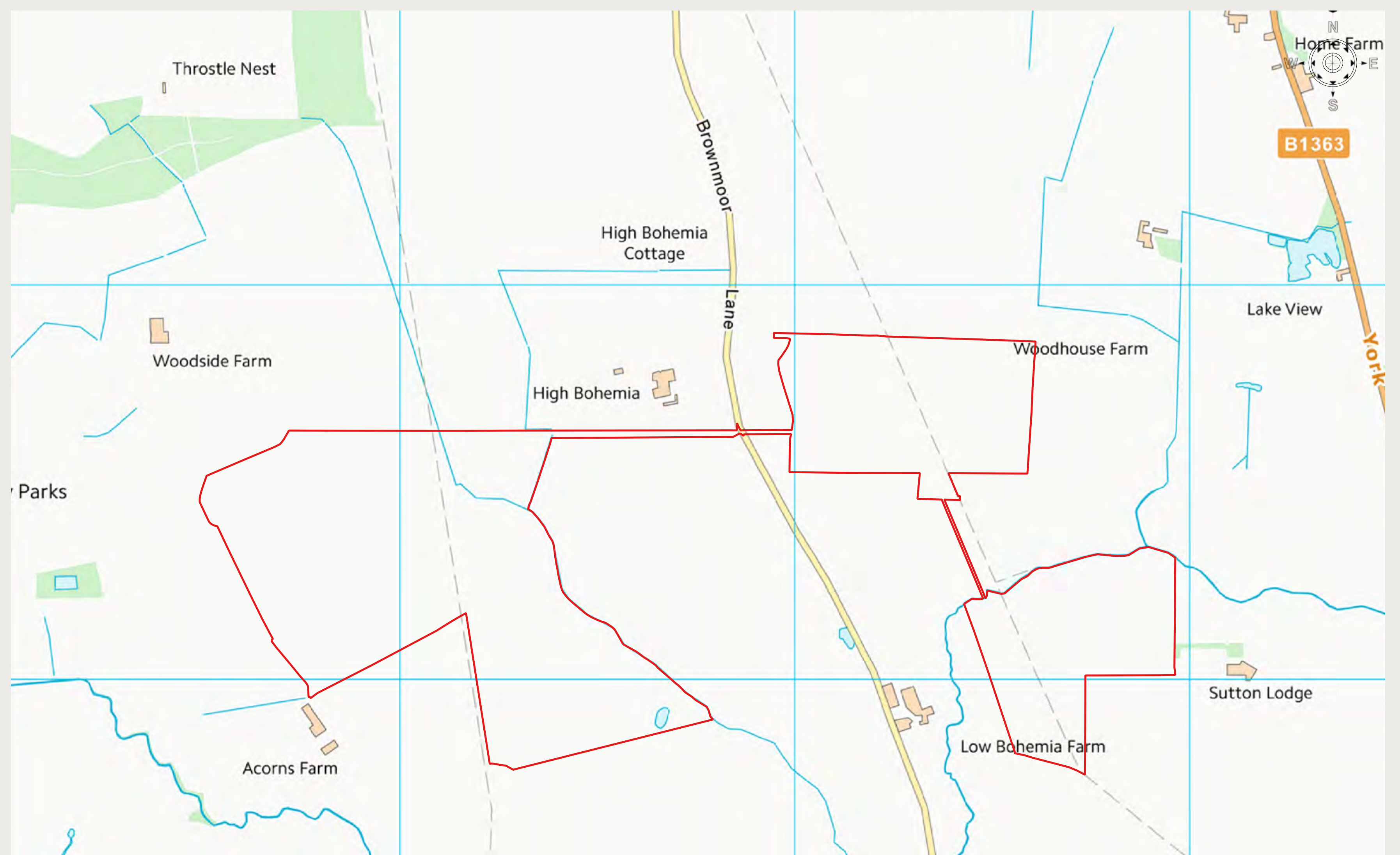
Welcome to our public consultation on Sutton-on-the-Forest Solar.

Ampyr Solar Europe (ASE) is putting together proposals for a solar development (including battery storage) approximately 1.5 kilometres to the southwest of the village of Sutton-on-the-Forest, in North Yorkshire. The proposed site is around 101 hectares in size and the solar development itself would be approximately 85 hectares within the site.

We anticipate that Sutton-on-the-Forest Solar will be able to supply the electricity needs of approximately **24,400 homes a year**.

The clean energy generated could save up to **21,000 tonnes of CO₂ per year**, which adds up to just over **950,000 tonnes of CO₂ over the next 50 years**.

The solar development will also help to decarbonise the North Yorkshire area and aligns with North Yorkshire Council's ambition for it to be net zero carbon by 2034.



Potential Sutton-on-the-Forest Solar development location (boundary shown in red)



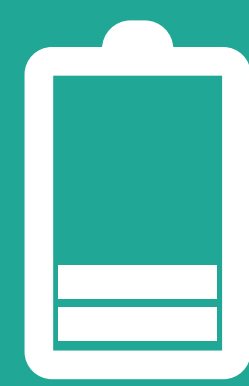
The site as it is today



Why do we need the solar development?



The UK is transitioning to zero and low carbon sources of power. All coal fired power stations have to close by 2025, meaning over a quarter of the UK's energy generation needs to be replaced. The UK's climate change ambitions are amongst the highest in Europe and the aim to achieve net zero carbon emissions by 2050 is set in law.



By 2050 we could also use 80% more electricity than we do today. For example, electric vehicle ownership has grown thirty-fold and is set to rise with the abolition of new diesel and petrol cars by 2040.



Currently the UK's electricity price is the among the highest in Europe, meaning that we need to find ways of generating more affordable, renewable and clean electricity. Energy security for the country is also now of paramount importance.

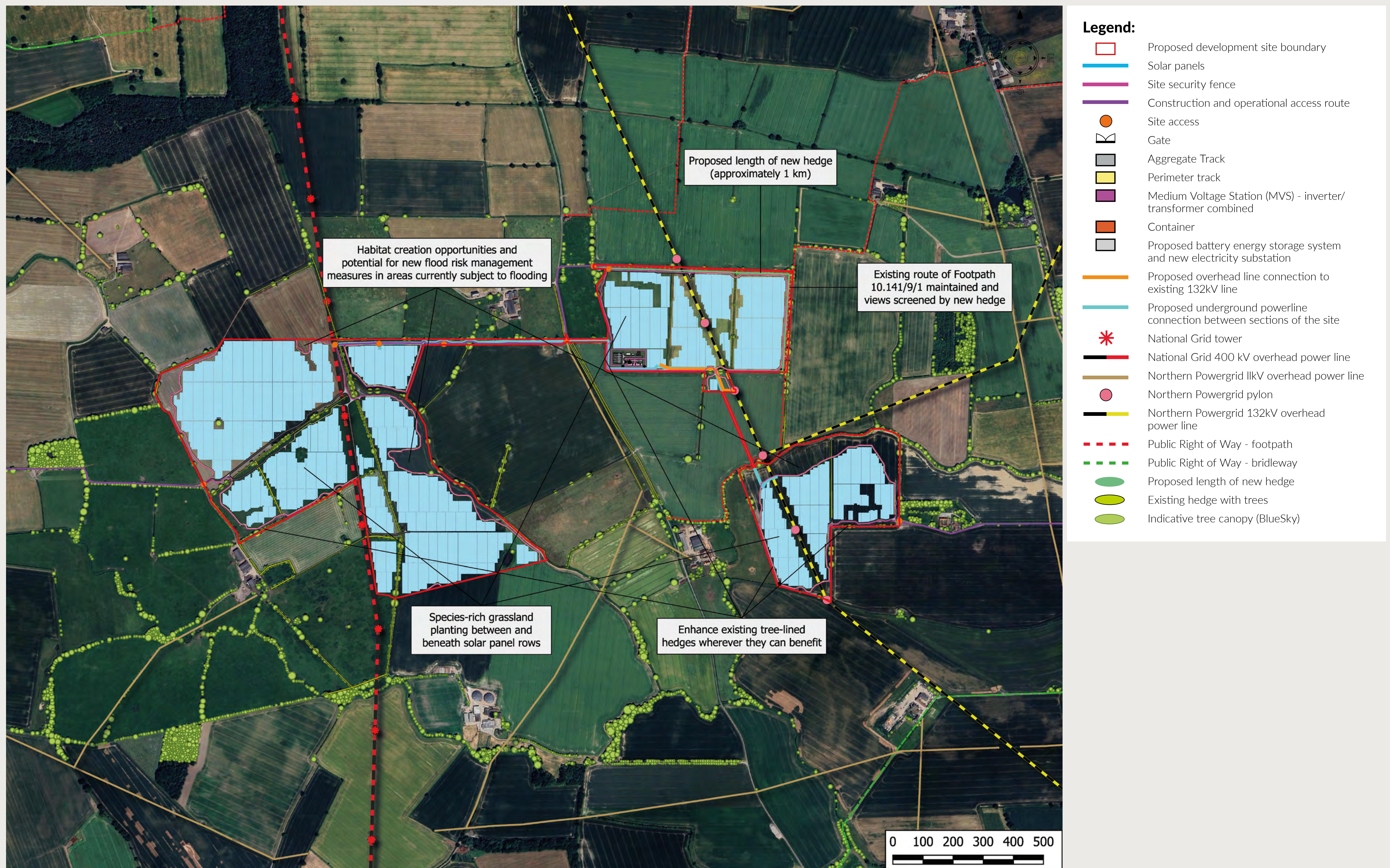
About us

ASE is the developer of this project and was created in 2021 through the merger of NaGa Solar with the existing Ampyr Energy UK joint venture between AGP Group and Hartree Partners.

For this project, we have created a Special Purpose Vehicle (SPV) called Sutton-on-the-Forest Solar Limited. SPVs are often used for solar developments and operate as separate legal entities, which help attract investment. This SPV brings together highly experienced partners to help accelerate the transition to a zero-carbon future.

Our proposals

Our proposals are for a new solar development capable of generating up to 49.9 megawatts (MW) of energy, with a battery storage system capable of storing up to 10MW. It would be located to the southwest of the village of Sutton-on-the-Forest.



Proposed site layout

The layout of the site and the route of the grid connection have been designed, where possible, to protect walking routes and local views, and to avoid disruption to the local community. As part of this, we are developing a landscaping approach that includes enhancing and improving the biodiversity of the area.

Site selection

We have carefully considered the best location for the solar development, both operationally and in terms of minimising impacts on the community and environment. The steps we have followed are set out below.

- 1. Find a grid or private wire connection.** Solar developments depend on demand for electricity, so proposals always starts with finding a good connection into a wider electricity network.
- 2. Conduct a desktop assessment.** Once we had a potential connection location, we conducted a desktop assessment to find suitable areas for the solar panels. This considered a number of things including national and local designations, heritage, ecology, flood risk, agricultural land grading, neighbouring land uses, visual impacts, and proximity to homes.
- 3. Identify land options in the search area.** Based on the search area identified during the desktop assessment, we then engaged with landowners to find suitable sites.

Proposed development

- Approximately 101 hectares of land.
- Solar panels with a power generation capacity of 49.9MW.
- Battery Energy Storage System (BESS) with a capacity of 10MW, to store and supply power when the sun doesn't shine.
- Solar panels set on lightweight frames in rows spaced 2.5m apart, with a minimum ground clearance of 0.6m and a maximum panel height of up to 3m. As tracker panels, the height of the solar panels will vary from their midday point at 1.83m high, to their full height.
- Substation with a control room, storage units and electrical bay.
- Inverters and transformers to convert power from DC (Direct Current) to AC (Alternating Current).
- Site access and exit points and internal access tracks through each field for construction, operation and maintenance.
- Deer fencing up to 2m tall around the site.
- Maintenance of the Public Right of Way that borders the site, with appropriate planting and mitigation.
- Connection into the National Grid through underground cables and a single new above-ground pole adjacent to an existing power line.
- Approximately 1km of new hedgerows on the site boundary, and enhancement of existing hedgerows to screen the development from view and enhance biodiversity.

- 4. Carry out a detailed assessment on suitability of the land.** Once we had identified a site in the right area, we conducted a detailed assessment of its suitability.

Public Rights of Way

A Public Right of Way (PRoW), known as Footpath 10.141 9/1, borders the site to the east and the north. We do not anticipate any impacts on this route.



Close up image of solar panel

How will it look and how does it work?

We know that the overall look of Sutton-on-the-Forest Solar is likely to be a key point of interest for the local community.

We have been mindful of situating it carefully to reduce the overall impact on both the environment and the community. This board explains how the solar development may look, as well as how the solar panels would work.

How will it look?

We have carefully considered how Sutton-on-the-Forest Solar will fit into the landscape in order to reduce any visual effects on the community and local wildlife. It is unlikely to be visible from any of the nearby villages, and only a few surrounding properties will potentially have view of the site.

Height: The panels will have a minimum ground clearance of 0.6m and a maximum panel height of 3m. This means that the visual effects of the development will be limited for the communities surrounding the site.

Glint and glare: Glint and glare are visual effects that can sometimes affect nearby motorists or homes. Solar panels are designed to maximise the absorbency of the sun's rays, and this means that glint and glare levels will be lower compared to surfaces such as window glass, water, or snow. We are also undertaking a Glint and Glare assessment, which will be submitted with the planning application and, where necessary, any significant effects would be mitigated through additional planting.

Screening: Hedgerows around the site will be maintained and enhanced to minimise its visibility, and to enhance biodiversity. We are exploring filling gaps in existing hedgerows with native hedgerow species, and will be developing a landscaping plan informed by a Landscape and Visual Assessment, which will be submitted with our planning application.

How does it work?

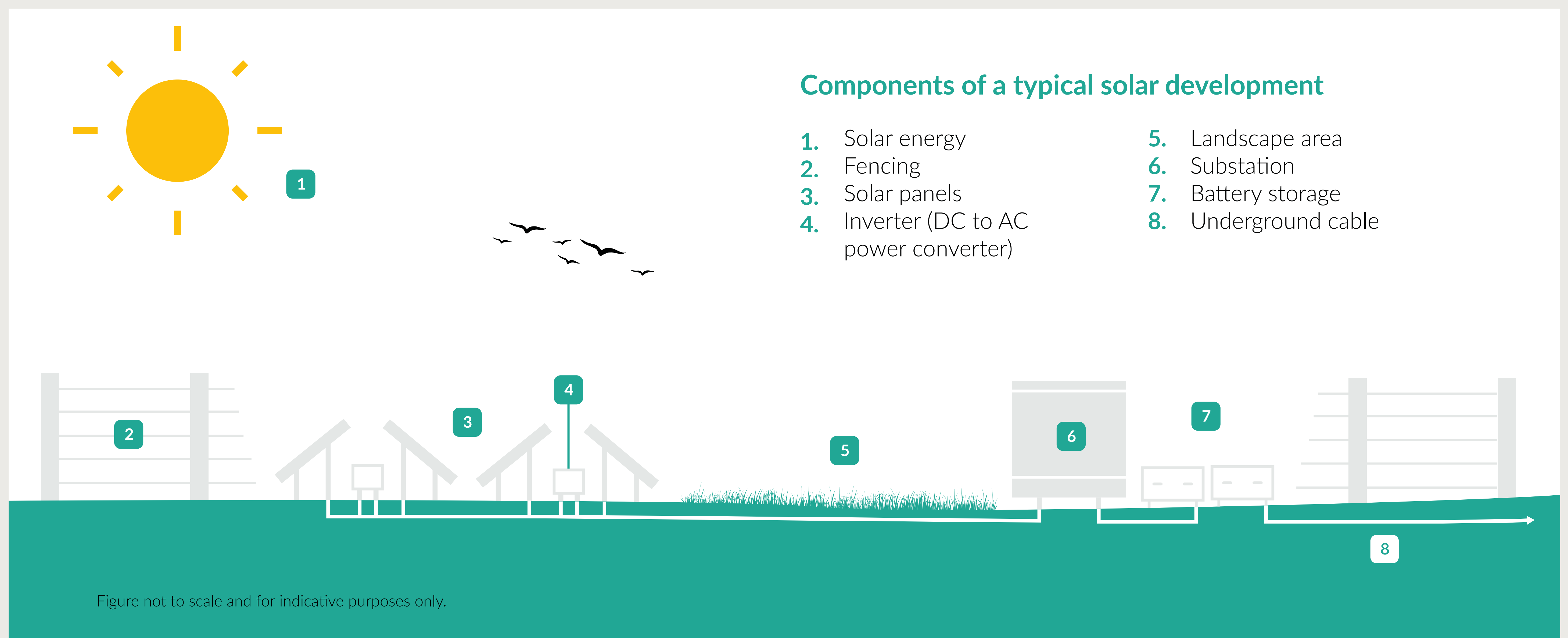
Solar panels: Solar panels are made out of photovoltaic cells (which is why generating electricity with solar panels is also called solar PV) that convert the sun's energy into electricity.

Photovoltaic cells are sandwiched between layers of semi-conducting materials such as silicone. Each layer has different electronic properties that energise when hit by photons from sunlight, creating an electric field. This is known as the photoelectric effect, and this creates the electrical current.

Solar panels generate a Direct Current of electricity. This is then passed through an inverter to convert it into an Alternating Current, which can then be fed into the National Grid, or directly to large local power users.

Solar panels need daylight and sunshine, not high temperatures, so solar panels can and do work well in England.

Battery storage: BESS are devices that enable solar energy to be stored and then released when the power is needed most. The battery storage at Sutton-on-the-Forest Solar will facilitate the storage of solar energy and supply power even when the sun doesn't shine. The battery storage uses computerised control systems to release energy during times of peak demand, helping to keep electricity flowing.



Environment

We are mindful of the existing environmental context of the site. We are doing this by undertaking surveys to make sure we understand the impacts our proposals may have.



Surveys are being carried out to assess Sutton-on-the-Forest Solar's likely effects on the environment, landscape, heritage and local community. We are also looking at ways to enhance local ecology and biodiversity through the project.

Early engagement has been undertaken with regulatory bodies and we are in discussions about whether an Environmental Impact Assessment will be required for this development.

Ecology and biodiversity

Conserving and enhancing the biodiversity around Sutton-on-the-Forest Solar is important to us. We have undertaken surveys to understand if there are any protected wildlife and habitats at the site, as well as to identify any mitigation required to minimise impacts on them. These surveys have concluded that the solar development will not have a significant impact on the local ecology, wildlife or habitats of the area.

We will also be working to enhance the natural environment through our work. Some options we are considering include:

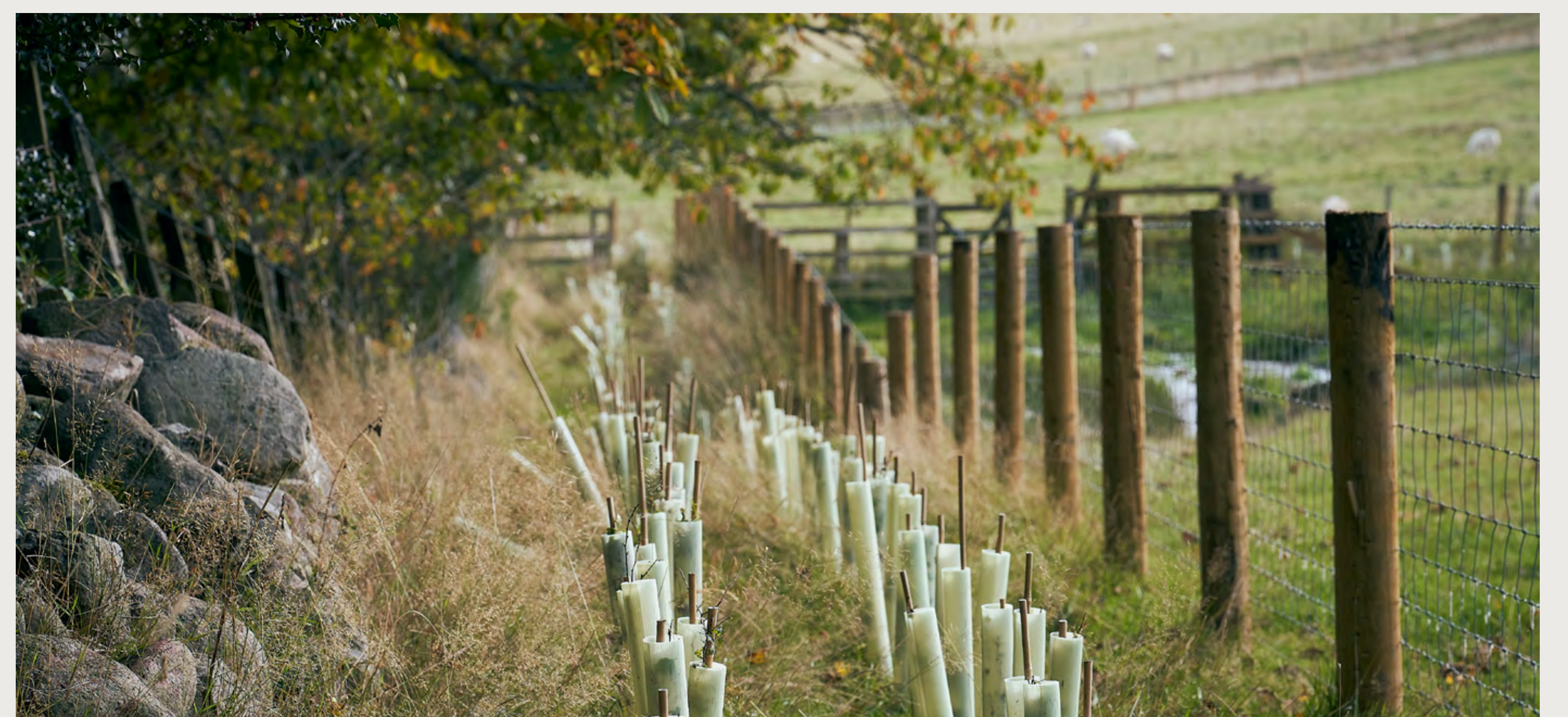
- species-rich grassland seeding in the fields containing the solar panels (beneath, in between and surrounding them); and
- planting trees, hedgerows, a species-rich grassland mix, and a wildflower meadow on sections of the site to support habitat creation and help with screening.



Agriculture

We know that food security is important and we are working closely with the families that currently farm the land.

We are exploring options to graze sheep under the panels. This will help to continue agricultural use of the land after the site is built. After 50 years, the solar development will be decommissioned and the land returned to full agricultural use.



Noise

Solar panels themselves do not make any noise and there are no known health issues associated with being near solar developments. When the solar development is operational, low levels of noise can be generated by the electrical system, such as from the inverters, which can sound like a quiet buzz or fan noise. The closest homes to any potential noise emitting equipment, including the inverters and the BESS, will be at least 250m away, meaning any such noise will not be audible.

Construction will take place quickly as minimal digging is required. The potential effects of noise and vibration during construction will be limited to specific locations within the site and only for short periods. We will make the community aware when works are likely to take place and details of our limited working hours will be set out in our planning application.

Environment

Traffic

We anticipate that the construction of the Sutton-on-the-Forest Solar development will take up to six months to complete. During construction, there is likely to be more traffic due to materials being delivered to the site, but when it is operational additional traffic would be limited to maintenance vehicles less than once a week.

During the construction phase, access to the site will be via the A19 and local roads into New Parks Estate, connecting into the rest of the site, as well as via York Road and Sutton Road (B1363) to the east and existing field accesses. Site traffic will consist of HGVs, light goods vehicles and cars. Movements during the construction phase are expected to have a minimal impact on local network, and measures to mitigate any such impacts will be detailed in the Transport Statement submitted with the planning application.

Traffic management measures may be needed for cable installation works, however these will be short term and are not likely to cause significant disruption. We will also consider any cumulative impacts from other nearby works.

Flooding

Most of the site is within Flood Zone 1, meaning it is categorized as an area with a 'lowest' risk of flooding. However, some areas of the site are within Flood Zone 2 and Flood Zone 3 (highest risk of flooding). This means we are carefully considering potential flood mitigation measures in our design process.

As part of our planning application, we will submit a Flood Risk Assessment that will demonstrate how the risk of flooding will be managed without increasing flood risk to the development itself, or elsewhere.



Heritage

The planning application will include a Heritage Assessment that assesses any potential impacts on the setting and character of heritage sites, and the potential for undiscovered archaeological remains.

Ageophysical survey will be undertaken, using magnetometry (magnetic detection) in order to determine the potential for buried archaeology beneath the ground, including proposed cable route. Consultation with the North Yorkshire Council archaeologist and further assessment will determine whether and how any findings are investigated.



Community benefits and next steps

This consultation is the local community's opportunity to shape our proposals before we submit a planning application later this year.

Community benefits

We are looking at ways to help ensure that the community benefits from the solar development. This may include setting up a Community Benefit Fund to support local projects and we would like to hear your ideas on what benefits you would like to see delivered. Please share any ideas or suggestions with us using our feedback form.

Timeframes and next steps

We are currently doing surveys and assessments, which will inform our proposals alongside the outputs from this consultation. We will then submit a planning application to North Yorkshire Council in early 2025.

Once the planning application is submitted, North Yorkshire Council will host a statutory consultation, where you will be able to comment further, directly to the council. At this point, we will also share an update with the local community on how feedback has influenced our proposals.

We would look to begin construction soon after planning permission being granted. During the construction period, initial site setup works would take place followed by construction of the internal access route(s), ground works for cabling and grid connection and the installation of the solar panels and other associated infrastructure, including the battery storage. We expect that construction will then take up to six months.



This consultation is your opportunity to fully understand our proposals, ask us questions, and share your feedback. We will consider all feedback received and use it to inform our proposals. We would also like to hear suggestions on how we can deliver community benefits.

This consultation is running from **Tuesday 12 November to Tuesday 10 December 2024**. You can share your views on the project in one of the following ways.

- **Online:** using the online form at www.suttononthe Forests solar.co.uk
- **Email:** using the scheme email address, contact@ampyrsolareurope.com
- **Post:** using the scheme Freepost address, Freepost ASE
- **At this event:** by filling in a hard copy form and submitting it to a member of the project team

We will stay in touch through the development of the scheme, including through our scheme website: www.suttononthe Forests solar.co.uk

Decommissioning

The development will be temporary, with an operational period of approximately 50 years. At the end of the development's lifespan, the site will be decommissioned with the land returned to full agricultural use, with improved soil quality.