Flaxlands Solar Farm Frequently Asked Questions

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Overview

Who are AMPYR Solar Europe?

Ampyr Solar Europe is the developer of this project and was created in 2021. Ampyr Solar Europe have operational solar farms across the UK, Netherlands and Germany, with multiple projects in different stages of development throughout the UK.

How big is Flaxlands?

The application area covers 87.5 hectares (216 acres) and the solar farm has an expected generating capacity of up to 49.9 megawatts (MW), with a 49.9MW Battery Energy Storge System (BESS), as well as an area dedicated to biodiversity improvement.

The layout of the site has been designed, where possible, to consider the continued use of public footpaths, protect local views and minimise impacts on the local community.

What will Flaxlands Solar Consist of?

- Fixed-tilt solar photovoltaic panels. This means that they are fixed in position facing south and do not move during the day. Solar Panels will cover approximately 54 hectares (134 acres).
- Around 102,028 panels with a power generation capacity of up to 49.9 megawatts (MW) peak.
- Solar panels set on lightweight frames in rows spaced 3m apart with a minimum ground clearance of 0.6m and a maximum panel height of up to 3m.
- Power will be converted from Direct Current to Alternating Current and the voltage stepped up suitable for the UK grid via onsite inverters and transformers.
- An on-site substation and site facility covering just less than 1 hectares (2.2 acres).
- Battery Energy Storage System (BESS).
- A security fence up to 1.8m high, and CCTV cameras and a thermal imaging detection system located on 3m high poles.
- Internal access tracks through the field to enable operation and maintenance.
- Ecology mitigation and enhancement areas to protect the ecology and habitats of the site. The project will set aside approximately 4 hectares (10 acres) of land for BNG purposes.

The substation, batteries, and transformers have all been located away from potential noise receptors, including the Public Right of Way.

Why have you chosen this location?

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

1. Securing connection agreement. A 49.9MW connection agreement was secured with National Grid at the Minety Substation via a connection point on the existing 132kV overhead power line approximately 1.8km (1.12miles) north of the Site. This will be the point of connection with the grid and a separate application will be made at a later date by Ampyr Solar Europeor the District Network Operator for a buried cable route between the connection point and the Solar Farm site.

2. Conduct a desktop assessment. Desktop assessments have been carried out to find suitable areas for the solar farms These considered a number of factors including national and local designations, heritage, ecology, flood risk, agricultural land grading, neighbouring land uses, visual impacts, and proximity to homes and other committed developments.

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.

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, including a number of environmental surveys.

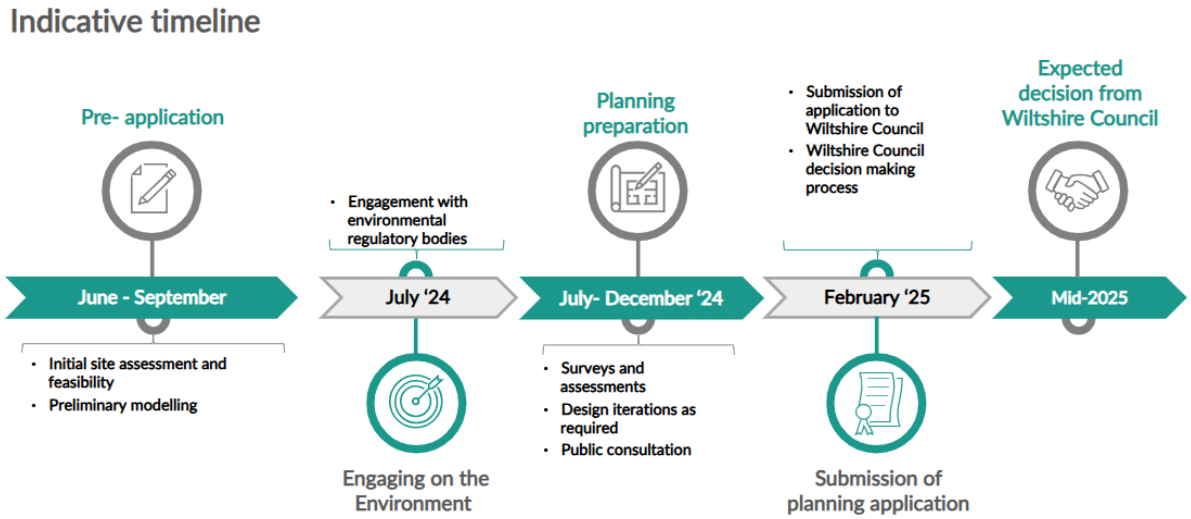
Why is Flaxlands Solar Farm needed?

The UK is transitioning to zero and low carbon sources of power. All coal-fired power stations have to close by 2025, meaning the amount of energy generated from renewable sources needs to increase. 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 the UK is expected by National Grid to be using double the amount of electricity than we do today. For example, the growth in electric vehicle ownership has grown thirty-fold year-on-year since 2022 and is set to rise with the abolition of new diesel and petrol cars by 2035.

Currently the UK's electricity price is 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 of paramount importance.

What are the timescales for Flaxlands Solar Farm?



Will there be a lot of construction traffic?

All construction materials will be delivered by Heavy Goods Vehicle (HGV) lorries with no abnormal indivisible loads (AILs).

During construction, there is likely to be more traffic due to materials being delivered to the site. We estimate an average of five HGV arrivals and departures per day. This is considered very low volumes of traffic; however, we will ensure appropriate and proportionate management measures are implemented via a Construction Traffic Management Plan (CTMP) (or similar) which we will include as part of our planning application. Given the very low additional traffic flows during the construction period, the additional traffic on the local road network is considered to be minimal and therefore not likely to result in significant effects.

When the solar farm is operational, additional traffic would be limited to maintenance vehicles visiting around once a month.

During the construction phase, access will be from the M4 motorway (J16), providing access to the site via the A3102 directly to Flaxlands Lane which runs through the middle of the site (joining the northern and southern sections of the site).

How long will construction take?

The construction period is expected to last up to 24 weeks, and it is proposed that construction working hours would be as follows:

- 08:00 – 18:00 Monday to Friday; and
- 08:00 – 13:00 Saturday.

No construction work will be undertaken on Sundays or Bank Holidays.

Should work be required to be undertaken outside of these times, this would be agreed in advance and in writing with the Local Planning Authority.

Will solar really work in this location?

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

What will happen when the solar farm is no longer needed?

The Flaxlands Solar Farm development will be reversible, with an operational period of approximately 40 years. At the end of the development's lifespan, the site will be decommissioned with the land returned to the landowner ready for agricultural use, with improved soil quality.

On decommissioning of the solar farm, the majority of materials removed from the site will be either re-used or recycled. It is anticipated that few waste materials would be generated during the operational period – transformers and inverters will be the most frequently replaced components of the solar farm, and these would also be either re-used (e.g. reconditioned) or recycled.

Traffic during decommissioning is expected to be similar to the levels during construction.

How will Flaxlands Solar Farm be constructed?

During the construction period, initial site setup works would take place followed by construction of the internal access route(s), ground works, and the installation of the solar panels and other associated infrastructure including the battery storage.

Facilities would be provided on-site for construction workers, including provision of a site office and welfare facilities. Fencing would be installed around the perimeter of the site, and temporary parking would be provided for the construction workers.

The components for the construction phase are largely pre-fabricated and therefore any construction waste generated would be reduced to a minimum. Site waste management will be in accordance with appropriate licenses.

How will Flaxlands Solar Farm be operated?

During operation the site will be remotely operated and would only be visited for maintenance and inspection purposes.

When the solar farm is operational, we expect traffic would be limited to maintenance vehicles around once a month.

Environment

How have you considered the impact of Flaxlands Solar Farm on the environment, ecology and biodiversity?

We are working hard to be mindful of the environment at the site. Surveys are being carried out to assess Flaxlands Solar Farm'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.

Conserving and enhancing the biodiversity around Flaxlands Solar Farm is important to us. We are undertaking 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 farm will not have a significant impact on the local ecology, wildlife or habitats of the area.

The site will have a combination of solar panels and areas of ecological mitigation to protect the ecology of the site.

We are committed to delivering at least 10% biodiversity net gain through habitat enhancement onsite, and it is currently expected that this can be substantially bettered through hedge and tree planting, bird mitigation and enhancement areas, and the planting of species rich grassland under the solar PV areas. See our site plan for areas we've set aside to support enhancement.

How will local wildlife benefit?

We will be working to enhance the natural environment through our work at Flaxlands Solar Farm. In our site plan for Flaxlands Solar Farm we've set aside areas to support enhancement. Some options we are considering include:

- Habitat creation
- Biodiversity net gain
- Maintenance and planting of hedgerows

Will Flaxlands Solar Farm create a glint/glare issue?

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 consider the visual effects of those near the site. In general, the panels are designed to absorb the sunlight and are proven to reflect less light than waterbodies or glass, and therefore do not normally create issues.

Will any noise be generated?

Solar panels themselves do not make any noise and there are no known health issues associated with being near solar developments. When the solar farm 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. This is audible only within proximity to the inverters, transformers and substation, with the sound dropping away to background levels quickly with distance from these noise sources.

The Battery Energy Storage System (BESS) will be located around 250m away from the Public Right of Way (PRoW), to minimise noise impacts from its cooling fans on those using it. We are also undertaking detailed noise modelling to understand any likely noise impacts on surrounding communities.

The construction of the solar farm will take place quickly as minimal activities are 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.

Is there a risk of flooding at the site?

Rivers and water courses near the development will not be impacted by the solar farm. Maintaining the grass below the site itself wherever possible will ensure that the land will remain permeable, meaning surface water can pass through easily.

The site is located within Flood Zone 1 (land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding) and has been identified to be at a very low risk to surface water flooding.

As part of our planning application, we will submit a Flood Risk Assessment and Drainage Strategy, which will demonstrate that the site will not be affected by flood risk, nor affect flood risk elsewhere. It will also demonstrate how any residual risk of flooding will be managed.

Will there be any impacts on local heritage?

Heritage assets are divided into two categories: designated assets (these have national protection due to their significance) or non-designated assets (these are identified by the local planning authority as having local interest).

While there are no World Heritage Sites, Scheduled Monuments, Registered Battlefields or Conservation Areas within 1km of the site. We have identified:

- Eight Grade II Listed Buildings within 1km; and,
- One Registered Park and Garden, Lydiard Park, 960m east of the site.

We have also identified a few heritage assets located within 2km of the site, including:

- Two Scheduled Monuments within 2km of the site: Ringsbury Camp hillfort (located over 1.2km northeast) and Rabbit warren east of Woodlane Farm (1.6km west from the site); and,
- Lydiard Green and Wootton Bassett Conservation Areas are within 2km.

Alongside these, we have identified five non-designated assets:

- Infilled Post-Medieval Quarry in the northernmost part of the site,
- Ridge and Furrow Ploughing in the southeast of the eastern part of the site,
- Former Post-Medieval Field Boundary to the southeast; and,
- Two WWII Anti-Tank Ditch continuations – one south of Flaxlands Lane and one west of Morris Copse.

We have considered impacts on local heritage and used it to inform our design and location of the solar farm and BESS. In our planning application we will include a Heritage Assessment that assesses any potential impacts on the setting and character of heritage sites. We will be undertaking geophysical surveys on the land in the coming months to help identify the potential for undiscovered archaeological remains. We will then conduct any further archaeological evaluation and/or a mitigation strategy as required by Wiltshire Council's archaeologist.

How high will the infrastructure be?

The solar development will range from 0.6m in height at the lowest point, rising to no more than 3m at the highest point. This means that the visual effects of the solar farm will be limited for the communities surrounding the site.

The BESS containers will be a maximum 3m height, and the inverters and transformers are expected to be a similar height. The onsite substation will have some components up to 7m height but most components will be around 3m high.

How will the solar panels be screened?

Existing hedgerows and trees around the site would be maintained to help screen the development from external views, and also provide biodiversity benefits. Where there are existing gaps in the hedgerow, additional infill planting with native hedgerow species would be considered to improve screening and enhanced biodiversity benefit.

We will also look at other ways to introduce planting, such as wildflower meadows, or hedgerows and trees to further minimise any visual effects and support wildlife. This will all be considered as part of our Landscape and Visual Assessment, which will be submitted with our planning application.

Will there be any impacts on food security and agricultural land?

AMPYR welcomes sheep grazing on its solar farms to manage the grassland under the solar panels; new companies have established in the UK that match sheep farmers with solar farms. Should the grass need to be cut mechanically, AMPYR will investigate whether the cuttings can be shared with farmers to ensure an end use for the grass/hay.

Following decommissioning, the land will be restored back to a state ready for its return to arable farming.

Community

Will local communities be able to have their say on your proposal?

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

The consultation on our proposals will take place between Tuesday 5 November until 23:59 on Tuesday 3 December 2024 and will include a drop-in event at the Hook, Greatfield and Greenhill Village Hall on Tuesday 19 November from 2pm to 7pm.

- Online: by completing the online feedback form at www.flaxlandssolar.co.uk
- Email: by sending your feedback to the scheme email address – flaxlands-solar@aecom.com
- Post: by posting your feedback to the scheme Freepost address (no stamp required) – Freepost ASE
- At one of our consultation events: by filling in a hard copy feedback form and submitting it to a member of the project team.

How are we involving the community?

We are now consulting the local community on our proposal, in advance of submitting a planning application to Wiltshire Council next year. This consultation is your opportunity to fully understand the scheme, ask us questions, and share your feedback. We will consider all feedback received and use it to inform our proposal.

Once the planning application is submitted, Wiltshire Council will host its own 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 your feedback has influenced our proposal.

We will stay in touch through the development of the scheme, including through our scheme website: **www.flaxlandssolar.co.uk**

What benefits will Flaxlands Solar Farm bring?

- Supply energy needs of approximately 21,000 homes per year
- Help to decarbonise the local area saving: c. 17,900 tonnes of carbon per year and over 716,000 tonnes of CO_2 over 40 years
- Biodiversity net gain / habitat creation
- Local farm diversification
- Supports UK transition to zero and low carbon power sources

We are also looking at ways to help ensure the local community directly benefits from the development of the solar farm. This could include:

- A Community Benefit Fund to support local projects, initiatives, or community cooperative electricity
- Creating opportunities for local business in the supply chain

We would also like to hear your ideas on what benefits you would like to see delivered. Any ideas or suggestions can be shared with us using our consultation feedback form.

Will Flaxlands Solar Farm impact any public rights of way (PRoW)?

It is proposed to divert Public Right of Way (PRoW) LTRE 28 and sections of PRoW LTRE 26 that currently run through an open field within the site. These diverted PRoWs would instead follow the existing field boundaries and run alongside a new 30m wide new species-rich grassland would be planted between it and the solar farm. The PRoWs would be actively managed to ensure the routes are accessible and usable all year round and there is an opportunity to replace old styles with new gates that would be more accessible to all users of the PRoW network.

As part of the proposal, the public right of way network within the red line boundary will be more easily identifiable and usable within the landscape through landscape and ecological mitigation measures.

All public right of ways will have a minimum 30m buffer zone and will likely be planting with native wildflowers to ensure increase amenity of the routes.

Other

Are there any risks associated with the battery energy storage system (BESS)?

AMPYR will liaise with the local Fire and Rescue Service and Council on battery safety and will produce a Battery Safety Management Plan and Emergency Response Plan following consent. An Outline Battery Safety Management Plan will be included as part of the planning application and will demonstrate adherence with the National Fire Chief's safety guidelines.

Does the UK risk being covered with solar farms?

The Government's 'Net Zero Strategy: Build Back Greener' commits the UK to be powered entirely by clean electricity by 2035, subject to security of supply. To deliver the strategy, overall electricity demand is expected to increase 40-60% by 2035, all met from low carbon sources. This means that the number of solar farms in the UK will increase. However, solar farms in the UK currently account for around only 0.1% of total land use.