

Oaklands Solar Farm and Battery Energy Storage

The proposal

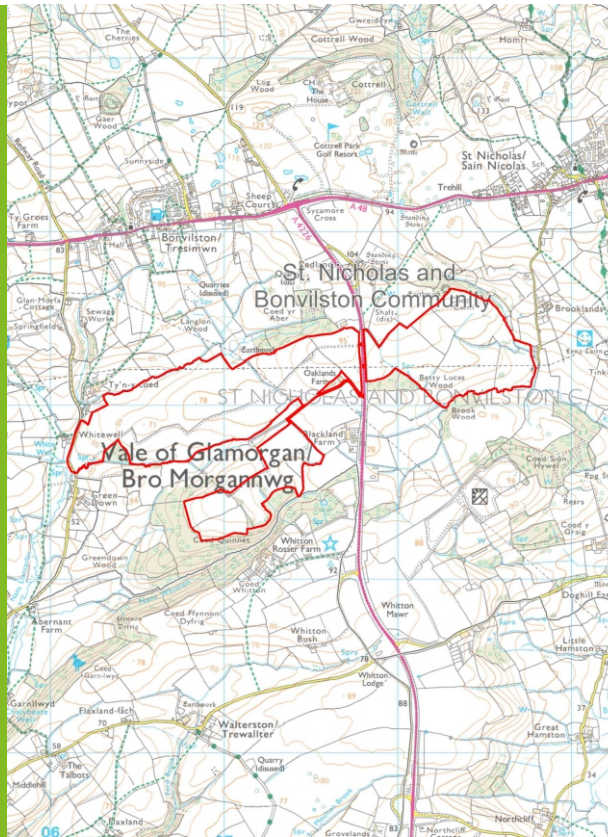
The proposed development is for a solar farm and battery energy storage system on three parcels of land (Development Areas) which are located approximately 750m to the south of the villages Bonvilston and St Nicholas. The development areas are located west and east of the A4226 (Five Mile Lane).

It is anticipated that Oaklands Solar Farm and Battery Energy Storage System will extend to approximately 127ha of land. The solar farm aspect will generate up to approximately 50MW of electricity directly from sunlight, equivalent to powering approximately 20,400 homes. This will offset over 20,200 tonnes of CO2 every year, equivalent to taking around 5,000 petrol/diesel cars off the road*. The battery storage facility will have a storage capacity of 50MVA.

Undertaking the necessary environmental assessments

A series of environmental assessments have been undertaken to accompany the planning application. These include:

- Landscape and Visual Impact;
- Ecology;
- Traffic and Transport;
- Cultural Heritage and Archaeology;
- Flood Risk;
- Noise;
- Soil; and
- Glint and Glare.



Why this location?

The site has been assessed for its suitability for this renewable energy project and has the following positive attributes:

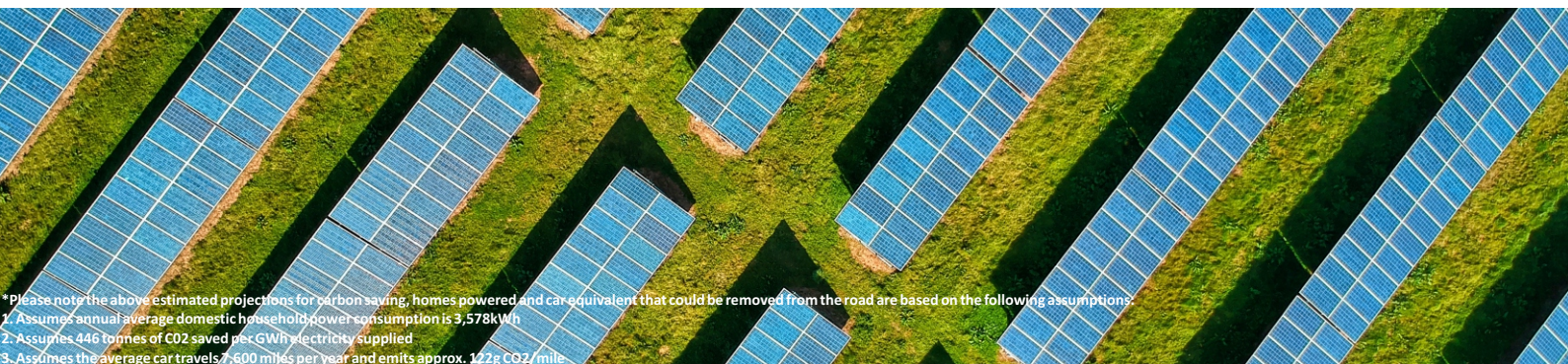
- The majority of the site is designated as a 'Search Area for Solar Energy' in the Local Development Plan;
- The availability and close proximity to the grid connection;
- The opportunity for biodiversity enhancements;
- Available land; and
- Existing vegetative screening along the site boundaries and opportunity to reinforce where necessary.

Benefits of the proposal

As the UK faces a climate emergency, the proposed solar farm will provide a source of safe and clean energy which produces zero emissions when in operation. During periods of high demand, batteries can provide an increase supply, essential in eliminating power shortages and blackouts.

The proposal will enhance local biodiversity, for example through planting a species of rich wildflower mix and hedgerows, creating areas of scrub planting to provide a more diverse habitat.

The solar farm and battery energy storage facility will operate for 40 years, after which it will return to agricultural use.



*Please note the above estimated projections for carbon saving, homes powered and car equivalent that could be removed from the road are based on the following assumptions:

1. Assumes annual average domestic household power consumption is 3,578kWh

2. Assumes 446 tonnes of CO2 saved per GWh electricity supplied

3. Assumes the average car travels 7,600 miles per year and emits approx. 122g CO2/mile



For further information,
please visit the project website at:
www.oaklands-solar.co.uk

Project Timeline:

Spring 2022

Pre-planning and
project inception

Summer 2022

Community
consultation

Autumn 2022

Review of feedback
and submission
of a planning
application

Summer 2023

Subject to planning
permission,
construction
will begin

Frequently Asked Questions

Will the solar farm and battery energy storage make a noise?

The only noise that will occur during the operation of the solar farm and battery energy storage facility is a low level noise emitted by the batteries, the transformers, the substation and the air conditioning units associated with the batteries. It is anticipated that no noise will be audible at residential properties in the area.

Will the solar panels and battery energy storage be visible from my house?

We appreciate that for many local residents, what the scheme looks like is a key consideration. The height of the panels will be relatively low lying therefore much of the site won't be visible from local residential areas, however we know that there are some properties closer to the site which we will be considering very carefully. Provision of additional screening planting and enhancing the hedgerows throughout the site will improve screening from local roads and properties.

Will the panels cover the whole area?

No, the panels are distributed at a ratio of between 40 to 60% (ground cover ratio). There will be a maximum of 3.2m between each row of solar panels which will remain grass, and will provide opportunities for additional wild meadow planting.

How long will the proposed development take to build?

It will take around 6 months to construct the proposal. A construction method statement will be submitted alongside the planning application, outlining the proposed access arrangements, the anticipated schedule, construction vehicle numbers and type, construction worker numbers and the proposed construction hours.

Will the site increase flood risk in the area?

Solar panels are mounted on frames which are driven into the ground. Very little concrete is used on solar farms, generally limited to the bases for the batteries, transformers and the substations. Rainwater falling on the panels will fall to the ground below.

How will the site be secured?

The site will be secured by deer fencing and closed-circuit television (CCTV).

Does it have to be sunny for the panels to work?

No. Photovoltaic (PV) panels, such as the ones that would be installed on site, if permission were granted, can still generate electricity even on a cloudy day.

