



low carbon

powering tomorrow



Aurora Solar Farm,
Twelve Acre Farm,
Eynsham

Solar Farm
Development

The Site

The proposed development is situated on land west of Twelve Acre Farm, Chilbridge Road, Eynsham, Witney, OX29 4BH. The site has been deliberately located in close proximity to a UK Power Networks substation, approximately 1.5 kilometres ('km') to the north east, as this is one of the few places where such plants can connect efficiently to the electricity distribution network.



Figure 1: Aerial View of the site location (57 hectares / 140 acres)

Development overview

- The proposed development is a renewable energy development consisting of both solar PV panels and battery storage. The proposed site area is approximately 57 hectares (140 acres).
- It is estimated that the solar panels would generate up to 31.9 megawatts peak, enough to power approximately 9,900 homes. The battery storage system (up to 18 megawatts in total) would charge at times of low demand and export power back onto the electricity grid at times of high demand or when solar irradiation is low.
- The proposed development would consist of arrays of solar PV panels up to 3 metres ('m') high with separation distances of approximately 3 m, along with batteries contained in cabins. Associated infrastructure includes inverters, substations and internal site access roads.
- The site would be surrounded by an approximately 2 m high post and wire 'deer fence' and a number of fixed CCTV cameras measuring no higher than 2.5m. These are required for security purposes.
- Access is proposed to be from the existing entrance to Twelve Acre Farm off Chilbridge Road to the east of the site.
- Existing trees and hedges would be retained and extra landscaping provided for additional screening.
- No public rights of way would be impeded or are proposed to be diverted by the proposal, however there is one public right of way that runs through the middle of the site and another runs along the south of the site. Appropriate screening (e.g. hedgerows) would be provided from the proposed development.
- The proposed development is subsidy-free with no assistance from government.
- Planning permission will be sought for the development to operate for 25 years, at which point it would be decommissioned and the land returned to its previous state.



Figure 2: Indicative Site Layout

Pre-application discussions

Environment Impact Assessment Screening Opinion

An Environmental Impact Assessment ('EIA') Screening Opinion was submitted to West Oxfordshire District Council on 10 April 2019, which has still yet to be formally decided. Low Carbon considers, however, that owing to the nature of the proposed development and the site, that an EIA is unlikely to be necessary.

Pre-application Advice

A request for pre-application advice was submitted to West Oxfordshire District Council on 13 April 2019 and we are currently awaiting a meeting with planning officers from the Council. The feedback from this meeting and written feedback will feed into the final design of the proposed development.

Key drivers behind solar energy and energy storage

The UK has committed to meeting the legally binding target to cut greenhouse gas emissions by at least 80% by 2050, compared to 1990 levels as indicated in the National Policy Statement for Energy (EN-1). This requires major investment in new technologies, electrification of much of the heating, industry and transport, prioritisation of sustainable energy and cleaner power generation.

As traditional energy generation sources using fossil fuels are steadily reduced it is vital that Britain harnesses clean, secure, 'home-grown' energy therefore reducing the reliance on imported fuels whilst honouring commitments to reduce emissions.

Due to the continuing fall in costs, large scale solar power generation is now competitive with other forms of electricity generation in the UK and this proposed development is being brought forward on the basis of not requiring any form of financial support or subsidy from the government.

Solar power production generates electricity with a limited impact on the environment as there is no need for extensive ground disturbing foundations, there are no tall vertical structures or moving parts involved and there is no noise associated with solar PV arrays.

Energy storage has a crucial role to play in both the management of energy supply in the UK and in the wider uptake of renewable energy technologies in the future. As the UK's energy requirements continue to grow, storage technologies and projects will help to ensure that energy is always available where it is needed.

Main environmental and planning considerations

The planning application for the proposed development will address the following matters with specialist reports:

- Landscape and Visual;
- Ecology and Biodiversity;
- Flood Risk;
- Archaeology and Heritage;
- Transport and Access;
- Consultation; and
- Design and Access Statement.

The information included in this brochure represents the preliminary design only. Any future application for planning consent will seek to comply with all relevant planning policy and address any concerns raised by consultees during the consultation and application process. Net gains to biodiversity and the local environment will be sought and incorporated into the solar farm.

