



THORPE  
ESTATE

PROPOSED SOLAR PV FARM

# Thorpe Estate Solar Farm

## Tamworth, Staffordshire

"Solar farms typically take up less than 5% of the ground they occupy, leaving huge scope for biodiversity enhancements in a protected space"

BRE National Solar Centre Biodiversity Best Practice Guidelines 2014

## Introduction

Thorpe Estate in partnership with solar developer, Elgin Energy, is seeking to develop a ground mounted Solar PV farm on lands at Thorpe Estate, Thorpe Constantine, Tamworth, Staffordshire, B79 0AH. We are seeking your views on this proposal ahead of submitting a planning application to Lichfield District Council. The red line on the map below indicates the site boundary.

Due to the ongoing Coronavirus pandemic, we are unable to hold a public consultation event. As an alternative, we have created a website to share project information. Please visit [www.thorpeestatesolarfarm.co.uk](http://www.thorpeestatesolarfarm.co.uk) to learn more.

Partaking in this process does not affect your statutory rights to make representations to Lichfield District Council in respect of the planning application when submitted.

▲ NORTH



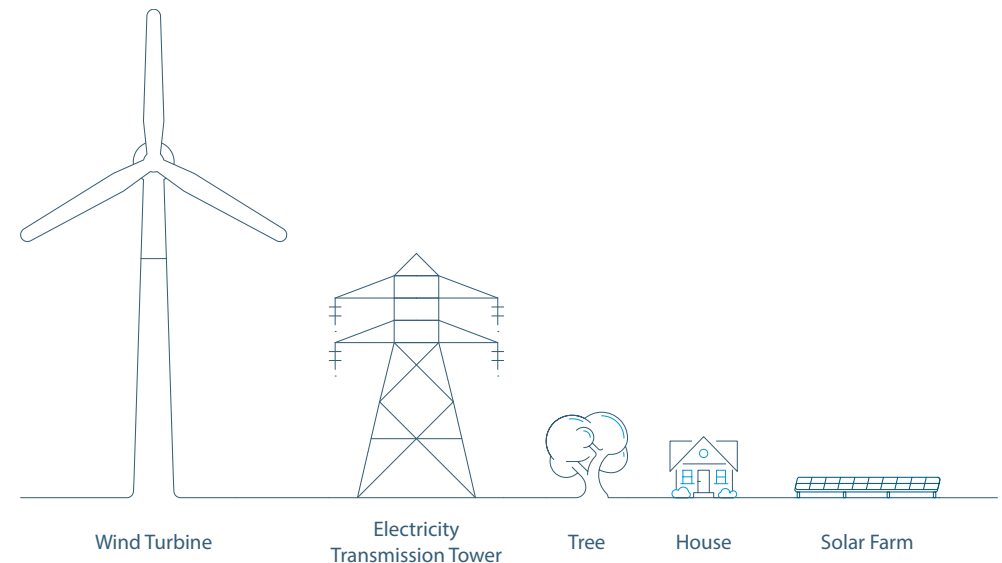
## Project overview

The proposed site is located in the east corner of Lichfield District approximately 1.5 kilometres south west of Clifton Campville. Access to the site will be from Clifton Lane.

The proposed project covers approximately 176 acres and will accommodate approximately 49.9 megawatts (MW) of ground mounted solar photovoltaic (PV) panels. A project lifetime of 40 years is proposed.

The proposed solar farm will generate approximately 49,900,000 kilowatt hours (kWh) per annum powering 14,000 homes or 17,000 electric vehicles (EVs) every year. This is enough energy to supply all the homes in Lichfield City or 30% of all households in Lichfield District.

This project will support progress towards both the national and local target of net zero by 2050. Lichfield District Council established a target of 9,500 kW of solar by 2020 to assist in meeting this target. The national target requires an estimated 85 GW of solar.





## Biodiversity enhancements

Solar farms provide many opportunities to improve local biodiversity and maximise the environmental benefits of the project. They are low impact installations that are easily removed at the end of the project lifetime. Once installed, the land is removed from intensive agricultural use allowing the soil to regenerate. This process combined with biodiversity enhancements result in a net positive gain for local biodiversity. It is also possible for sheep grazing to take place once operational. These enhancements expedite integration of the project into its local environment, and can reduce any potential visual impacts on the local area by way of natural screening with trees and hedgerows.

A Biodiversity Management Plan (BMP) will be included as part of the planning application to ensure proposed biodiversity enhancements are localised and appropriate. The following biodiversity enhancements are proposed for Thorpe Solar Farm:

- Introduction of trees and hedgerows;
- Designated 10 metre wide winter bird food seed mix areas;
- Removal of land from intensive agricultural use;
- Wildflower planting;
- Wide ecological corridors;
- Introduction of beehives and bat boxes.

## Local engagement

Thorpe Estate and Elgin Energy are seeking to engage the local community to identify local initiatives that we can support through a community benefit fund. Please get in touch with the estate or Elgin Energy to share any information you have in this regard.

Local contractors and businesses will be engaged as far as possible during the installation phase. It is estimated that installation will take approximately 16 weeks. For the operational phase it is envisaged that local contractors and service providers will be engaged to maintain the solar farm.

If you would like to obtain further information about a community benefit fund or enquire about providing services for this project, please get in touch with us today.

## Pre-planning process

A number of assessments are being conducted to establish any potential affects of the proposed development on the site and surrounding lands. These reports include ecology, archaeology & cultural heritage, construction access & traffic and flood risk. In addition, a landscape and visual impact assessment will be undertaken to determine any potential impacts on nearby viewpoints. A glint & glare assessment will also be carried out although glint & glare effects from PV panels are rare as they are designed to absorb, not reflect, sunlight. This is evidenced by the installation of PV panels adjacent to the runways at Gatwick airport.

Existing field boundaries, trees and hedgerows will be retained as far as possible. It is intended that ecology and biodiversity will be mitigated and improved where possible over the 40-year operational period.





## Physical elements of a solar farm

The following components are proposed for this solar farm:

- Solar panels arranged in rows of 24-48 panels facing southwards at an inclination no greater than 25 degrees. The rows will be separated up to 8m from each other.
- Panel height will typically be 2.4m–3.2m at the highest point and 0.8m at the lowest.
- Mounting system comprising upright galvanised steel posts which are screwed or pushed into the ground and an aluminium support frame which is bolted together.
- Inverters convert the DC electricity produced by the panels into grid-compatible AC current. Measuring approximately 7m x 2.5m x 3m high, they will be located throughout the site.
- Substation.
- Underground cabling from the panels/inverters to the substation.
- Several permeable stone tracks to facilitate access to the inverters.
- Rural 'timber & post' deer fence measuring 2 - 2.4m in height will enclose the site. A gap of 10cm at ground level will allow ecology to freely enter and exit.
- 3m high pole-mounted CCTV cameras inside the site to monitor the solar farm.

The solar farm requires no concrete foundations apart from the substation base. It is designed to be reversible and leave no trace when removed.

## About Thorpe Estate

At the centre of Thorpe Estate lies the Home Farm, which is managed by James Daw and his family, producing potatoes for McCain, Walkers & McDonalds, wheat for Warburtons, oats for Quaker, and beef for Waitrose.

James has been spearheading conservation efforts and pioneering innovative farming techniques for over 20 years. In partnership with Cambridge University Farms and the Agricultural and Horticultural Development Board, James has delivered open days on the farm to evaluate agricultural innovation, and the Estate has also been used by leading machinery manufacturers to launch their new product lines.

Recently, James and his son Sam won the McDonald's Farm Innovation Award for new practices and the Golden Loaf for Warburton's best UK milling wheat.

For over a decade the family have invested in renewable energy systems to reduce the use of fossil fuels on the Estate. They believe climate change presents clear challenges to both rural and urban environments and are mindful of safeguarding the planet for future generations.

To learn more about Thorpe Estate and the work they do, please visit their website [www.thorpeestate.com](http://www.thorpeestate.com).





## About Elgin Energy

Elgin Energy is a leading solar development platform with operations in the UK, Ireland, and Australia. To date, they have delivered 21 projects / 230 megawatts (MW) including the largest operational solar farms in Scotland (13MW) and Northern Ireland (46MW).

The company's initial development began in the UK in 2011, followed by Ireland in 2015 and Australian offices were opened in 2018.

Elgin Energy is committed to creating a sustainable future and is working towards this goal with their projects.

To learn more about Elgin Energy and the work they do, please visit their website.

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