

Oaklands Solar Farm and Battery Energy Storage

The Proposal

Oaklands consists of a ground mounted photovoltaic solar farm with an export capacity of 50MW and battery energy storage system (BESS) with a storage capacity of 50MVA, together with associated infrastructure. The site extends to approximately 127 hectares in size.



Why this location?

The proposed development encompasses 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 Mill Lane).

The site has been assessed for its suitability as a solar farm and battery energy storage system, it has the following positive attributes:

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

The solar farm aspect of the development is proposed to have a maximum export capacity of circa 50MW - this is equivalent per year to:



20,400
Homes powered*

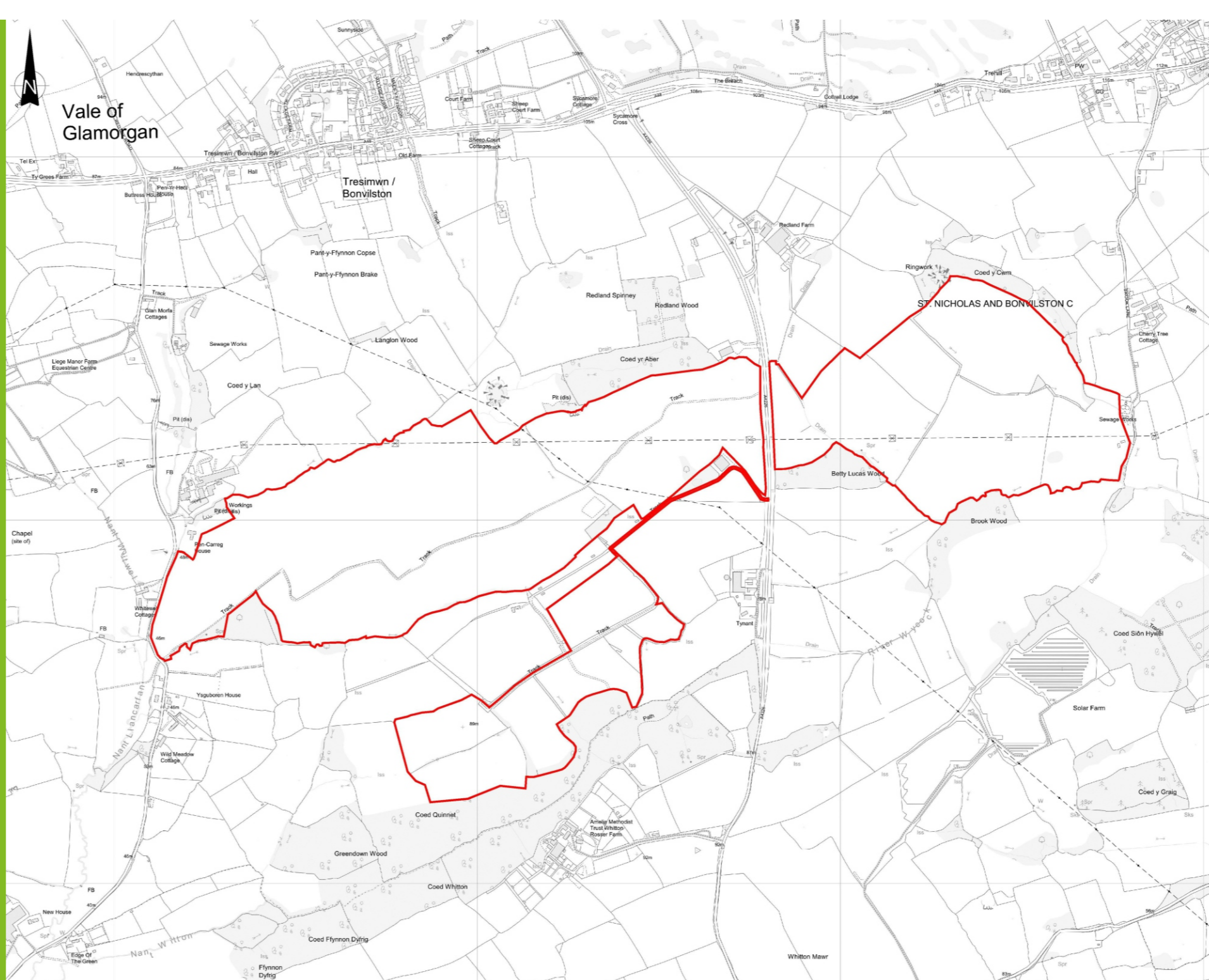


20,200
Tonnes of CO₂
removed*



5,000
Petrol / diesel cars off
the road*

As this project will deliver in excess of 10MW of renewable energy it will constitute a Development of National Significance (DNS) under the Planning (Wales) Act 2015 and we must apply to the Planning and Environment Decisions Wales, which is a Government body, who in turn will make a recommendation to Welsh Ministers on whether or not to grant planning permission.



*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

Biodiversity

It is important that the site is improved for nature and shows biodiversity value being increased across site for the life of the proposal. The proposed development will provide planting of native species of hedgerows, trees, pasture-mix grasses and wildflowers.

Benefits

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.

Community