

BOTLEY WEST SOLAR FARM

Submission from Margaret Bailey registration identification number [REDACTED]

Residential Visual Amenity

Houses around the perimeter of the site will have most of the landscape in their sights affected. Transformed from a 'heritage' Cotswold landscape of farms, hedges, large specimen trees and ancient churches to an artificial landscape of panels, fences and other security infrastructure. Residents will also lose the amenity, enjoyed for generations, of being able to walk a range of public footpaths through the countryside. Not only the immediate surroundings of the paths will no longer be countryside, but also any remaining view will be obscured by the panels from people of average height. The footfall on these paths increased greatly during the COVID emergency period, and has not diminished since. From many villages there will be no paths unaffected.

The local churches have many ancient architectural features that attract groups of visitors from far and wide. The enjoyment of these is enhanced by the rural setting, and will be diminished by the industrial environment of a vast solar farm.

Flood Risk

Scientific studies have found that run-off of rain from solar panels forms a drip line below the base of the panels, compacting the soil below. The run-off is concentrated here, which means that much more of the rain is unable to penetrate the soil before it runs off than if it fell evenly across bare ground or crops. The lower parts of the area suffer from flooding after heavy rain. The farm is on sloping river catchments, and many villages are located by spring lines, which migrate as the water table rises and falls. Extra run-off due to the panels will exacerbate this, as will the predicted increase in stormy wet weather expected due to climate change.

Safety issues due to birds

Large flocks of birds, including geese, occur regularly and some have overwintered in the large fields in certain parts of the proposed solar farm for decades. It is hard to understand how PVDP surveys have not seen these flocks. Presumably they have not been done at regular intervals through the seasons. Fewer birds gather there from late spring to early autumn.

Decommissioning

Since the initial proposal, I have been concerned about the lack of clear plans for decommissioning or for its financing. The driving of such vast numbers of piles into the ground will compact the soil and destroy its present structure and drainage. Solar panels are known to produce some pollutants, too. Remediation will require considerable earth-moving even after the panels and posts have been removed, to provide soil suitable for crop cultivation or wildlife meadows. Again. Such projects required maintenance for years after they have been initiated. What sources of finance are planned for this, and what kind of insurance is there to cover the possibility that finance may not be available when the time comes? I have worried since the beginning that if finance for remediation fails, this large site will be deemed a brown-field site for the purposes of building and development, thus further reducing countryside amenities and biodiversity.

Creation of 'replacement' nature-rich areas

This will require considerable scientific study beforehand to determine exactly what will work in a particular area, followed by years of maintenance. Again – how is this to be financed, and what are the arrangements to keep maintaining it until it is fully established? The last few summers show what the unstable climate is capable of in terms of drought – this would be magnified on a 'new' site with vegetation that is not fully established and lacks the structure provided by mature trees and shrubs and mature soil.

Claims about biodiversity are suspect. While not all the farmland is of high quality, even lower grade farmland can be rich in biodiversity. The area is rich in wildflower species from a variety of habitats, 3 species of deer, otters, and all the recently arrived species of egrets are seen across the site. As in my earlier submission, plant diversity studies commissioned by PVDP appeared to be inadequate, failing to show the considerable diversity of other professional studies of the area, which took into account the range of species across all seasons.

I have not seen details of the visual impact of the proposed Nation Grid substation and battery storage. The site is on quite a prominent part of the landscape, at the watershed of a number of water courses. Has a study been done of the visual impact of this, run-off from the site and possible pollution it may contain, and their effects on biodiversity and land use of the surrounding area both nearby and down-stream?

In the early stage of the project, flyers produced for public attention were misleading about the science and environmental considerations, as well as the efficiency of solar panels. Many people I met who lacked a scientific background were misled by these.

Proposed routes for cables

I have not seen a final plan for the route of cables. Original plans suggested they may well run through established local sites of important scientific interest, in particular the extremely rare (internationally and nationally) water meadows alongside the rivers and streams. These are now being restored and it is planned to link them up to give a better chance of survival. A good example is Long Mead near Eynsham, where studies have been continuing for many years.

Contribution to net zero

Finally, since this project was first announced, the climate crisis has accelerated faster than anticipated by scientific studies. The increasing frequency of extreme weather around the world, including here in the UK, is already evident. The pattern of hurricanes has changed. The oceans are warming much faster in places than expected by scientific data, and so is the melting of glaciers, which already suggest a rise of sea level well above that expected at the start of the project. It is worrying that the rate of change is faster than the scientists predicted. While the renewable energy produce by the solar farm will reduce CO2 emissions from energy release, the CO2 output from the manufacture of 2,660,570 solar panels, which will mostly be from fossil fuels in China, as well as their transport to and around the UK, fossil fuel emissions in transforming the site and installing the panels. And the low efficiency of solar panels in the English climate in relation to other forms of renewable energy, means that any contribution to net zero may on balance be small.