



A brief note on Solar Farms and how Epping Forest Heritage Trust might respond to proposals to develop them on land adjacent to the Forest

Introduction.

Recently, EFHT has learnt of two proposals for the large-scale installation of solar panels on land adjacent to Epping Forest. One is for a solar farm in Buckhurst Hill and the other is for the installation of panels at the West Essex Golf Club near to Gilwell Park. Both applications present the Trust us with a challenge as to how it should respond. On the one hand, we support the switch to greener energy, not least because of the effect of pollution from vehicles powered by fossil fuels have on the Forest. On the other hand, we are opposed to inappropriate development on the Forest's boundaries which can harm its status as a Special Area of Conservation (SAC).


This note suggests how EFHT might respond to these and future applications for the installation of solar farms and large-scale solar panels on land near to the Forest.

About Solar Farms.

In 2019 the Climate Change Committee recommended that the by 2035 the UK will need and additional 54GW of solar capacity is we are to meet its target of net zero carbon 2050.

So, it's clear that we can expect a growth in the use of solar panels and more solar farms; but it's important that we also understand what's needed to make solar farms and solar installations work. First, they need the right site. Ideally, land that's flat or on a south facing slope. They also need lots of land. For a farm to generate one megawatt of electricity then 6-8 acres of land is needed. To put this in context, solar farms currently require 120 acres of land to generate enough electricity to be financially viable. Solar panels then need to be connected to the grid or have a connection to the buildings they will power. However, connecting to the grid can be a problem if the local grid doesn't have the capacity to accept the electricity generated. A solar farm also needs inverters, storage batteries, and depending on its size various buildings.





At the moment, installing more than 5 large solar panels requires planning permission and there is a presumption against solar farms being created inside the green belt. When the farm is on agricultural land then that land must be grade 3b or less for the proposal to receive approval.

Solar Farms and their effect on the environment.

Other than their visual impact, there are concerns about the effect solar panels and solar farms have on the environment. For example, it's been argued that chemical run off from the panels can enter the watercourse, though there are few conclusive studies on this problem. However, these concerns have been challenged and modern solar panels contain fewer potentially damaging chemicals or minerals and are less likely to leach them. The installation of panels, if done sensitively, can benefit wildlife through the planting of wildflowers and the creation of new habitats for birds and mammals.

Current proposals for Solar Farms around Epping Forest


The two proposals are for small scale installations. The Buckhurst Hill proposal is for a site that's probably too small to be financially viable. The land is not flat and is one west facing hillside that abuts the edge of the Forest. The proposal for the West Essex Golf Club & Crematorium is different [West Essex Golf Club Solar Project - Welcome \(westessexsolar.co.uk\)](http://www.westessexsolar.co.uk). Electricity generated there will be used to power the needs of the Golf Club & the nearby crematorium, with any excess electricity exported to the national grid. However, like the Buckhurst Hill site, the Golf club sites, at just over 10 acres, are smaller than the size recommended for a viable solar farm or installation and its estimates for the electricity the sites will generate are ambitious. The project estimates its panels will generate 10.7 MW from 11 acres. As has been mentioned before, at the moment it's estimated that 10 acres of land are needed to generate 1 megawatt. The land the Golf Club is proposing to use within the Greenbelt.

Looking ahead: should EFHT worry about Solar Farms and Solar panels?

From Whipps Cross northwards the Forest lies on a series of steep valleys than run south to north. There are few south, if any, facing slopes, it's not flat and neither is the land that surrounds it. So, I doubt if we will see too many proposals for solar farms. Small developments, on brownfield sites or which, as the CPRE has suggests, make use of roof space to provide power to a business or a set of buildings are more likely and should be welcomed. [Rooftop-Revolution-Report.pdf \(cpre.org.uk\)](http://www.cpre.org.uk).

Given the above, I don't think that we need to be overly concerned about solar farm development around the Forest. Large and viable solar farms are more likely to be installed on land north of Harlow and up through Essex than around the Forest. We should remain concerned about proposals for small scale developments that encroach upon the Forest.





Given the importance of solar energy in our nation's move to being carbon neutral then perhaps EFHT should follow the CPRE's lead and encourage the installation of roof top solar panels and small-scale community led solar installations. The proposed developments at Latton Priory and South Epping could be great examples of this. We could also suggest that the Forest's local authorities, that is Newham, Waltham Forest, Redbridge, and Epping Forest, take a lead in encouraging the creative installation of solar panels. This could be done by their being placed on top of buildings at retail parks or above council offices, and when considering planning applications have a presumption in favour of roof top and brownfield solar.

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