

WHO IS ETHICAL POWER?

- ✓ Ethical Power is the only independent British renewable energy company with competency across the entire life cycle of a project, from design through construction and grid connection to asset management.
- ✓ Ethical Power has a track record of over 100 solar and battery energy storage projects across the UK and a growing international presence.
- ✓ Ethical Power is committed to delivering clean energy projects which help tackle the climate and ecological emergency.
- ✓ The development arm of Ethical Power is responsible for finding appropriate locations for new projects and managing the planning, design and community engagement activities.

Find out more about Ethical Power on our website at <https://ethical-power.com>



WHAT ARE THE BENEFITS OF SOLAR POWER?

- 1 **Cleaner power: reduced carbon emissions**
Tackles the climate emergency by contributing to the UK government's target of Net Zero carbon emissions by 2050.
- 2 **Cheaper electricity for future generations**
Solar power is one of the cheapest new energy generating technologies helping to keep electricity costs lower for everyone. It is one of the cheapest technologies to build and the fuel used throughout its operational lifetime is free!
- 3 **Increased energy independence**
Renewable energy projects help us reduce reliance on energy generation derived from burning fossil fuels and imported gas. This means the UK can become more self-sufficient in terms of generating power and less susceptible to global market price rises.
- 4 **Improved biodiversity of the land**
Solar parks achieve significant biodiversity net gain through the planting of new native trees, hedgerows and wildflower meadows which create additional habitats and foraging opportunities for wildlife. As a result, the land and its surrounding environment is left in a measurably better state after the operational period of the solar park.



WHY COBHAM ROAD?

A viable grid connection

The site at Cobham Road benefits from a viable grid connection close to the site. This means the project will generate power and feed it into the grid close to where it is needed.

The site avoids environmental designations

The site is not subject to any important ecological, heritage or landscape designations. The Green Belt designation means it is unsuitable for permanent development such as residential. Noise associated with the M25 adversely affects the tranquility of the site.

Limited visual impacts

The site benefits from natural screening and is not overlooked by residential properties. There are opportunities for new tree and hedgerow planting to mitigate potential visual impacts.

An effective use of land

Assessments of the site indicate that the majority of land is classed as sub-grade 3b meaning it is not the 'best and most versatile' agricultural land. The scheme is located outside the areas of high flood risk.

The image below shows the site location.



Learn more about the Cobham Road project on our website: www.ethical-power.com/cobham-road



PROPOSED SCHEME



Size of the project
A 49.5 MW ground mounted solar scheme



Planting
We will plant trees and hedgerows to increase biodiversity and reduce the visual impact



Project Site
A 123-acre site accessed from Cobham Road



Power Generated
The project will generate enough electricity to power over 13,000 homes

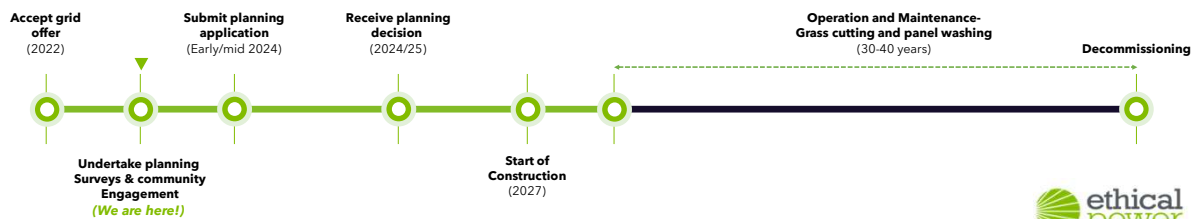


Site Security
The site perimeter will be enclosed with livestock fencing and secured with infrared CCTV



Lifespan of project
The project is temporary and has a planned lifetime of 40 years, after which it will be decommissioned, and the land fully restored

Estimated Project timeline





BIODIVERSITY AND SOIL REGENERATION

Cobham Road Solar Park is expected to achieve a biodiversity net gain in excess of 50% and would enhance to the Mole Valley River wildlife corridor.



Time of rest: soil regeneration

A solar park gives the soil a break: it allows the soil to rest and recover from intensive farming practices and artificial inputs. Once the project is decommissioned at the end of its operational life (approx. 40 years) the soil quality will have improved.



New plants and habitats

The Cobham Road Solar Park would provide many ecological enhancements including:

- ✓ Over 2.5km of enhanced hedgerows and new tree planting along the site boundaries and public footpath
- ✓ Over 10,000sqm. of dedicated wildflower meadow
- ✓ Areas around the panels sown out with species rich grassland
- ✓ Provision of minimum 5m ecological buffers from all trees and field boundaries to ensure existing habitats are protected and enhanced
- ✓ A mix of locally native species to significantly increase biodiversity
- ✓ Installation of new bat and bird boxes in appropriate locations



Dual-use land: for power and agriculture

The project would ensure continued agricultural use by allowing sheep to graze between the arrays.



Community investment scheme

The community investment scheme provides an opportunity for you to invest financially in the project and receive an annual dividend.



Community investment scheme

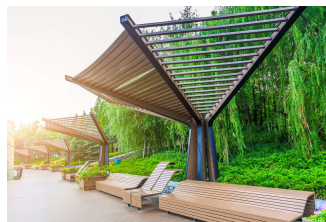
A community benefit fund of £300 per MW, (approximately £15,000 per annum) would be set up and could be used for local community and environmental projects. For example, funding new children's play equipment, planting trees, supporting community groups or upgrading local facilities.

We welcome your suggestions on how to use the community benefit fund!



Local Council funds

The project would contribute approximately £187,500 per annum in business rates to Mole Valley District Council.



WHAT MAKES UP A SOLAR PARK?



Solar Panels

Photovoltaic (PV) panels collect solar energy from the sun by absorbing sunlight.



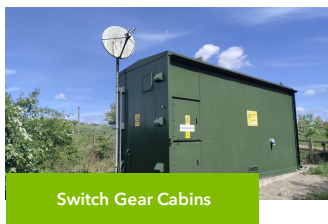
Fencing

Livestock fencing is used to secure the site and make it suitable for sheep grazing.



Transformer

Transformer units take the electrical current from the inverters and increase the voltage to 33kV so it can be used in the site substation and distributed onto the grid.



Switch Gear Cabinets

Switch gear cabinets contain sensitive electrical, electronic and mechanical components to perform control, drive, power supply and safety functions.



Inverters

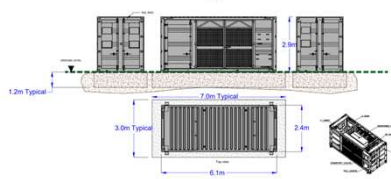
An inverter is a device that converts the direct current (DC) output of the solar panels into alternating current (AC).



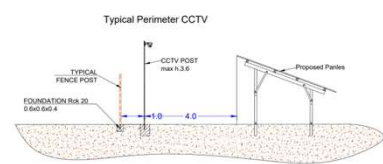
TECHNICAL DRAWINGS

TECHNICAL DRAWINGS OF THE MAIN COMPONENTS OF THE SOLAR PARK

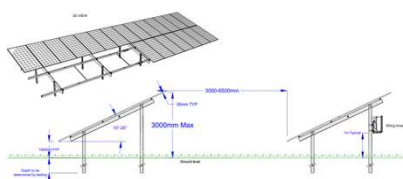
Transformer Cabin



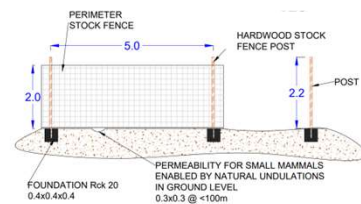
CCTV



Solar Panels



Stock Fencing



FAQs



What is the environmental payback time of a solar park?

Studies show that on average a solar park pays back its energy and carbon footprint within 2-3 years.

How do you ensure that the supply chain is monitored?

As a fully integrated company, Ethical Power is able to closely monitor its supply chain through each stage of the project. We use the top tier 1 suppliers who are carefully and regularly audited. We ensure the best industry standards are always maintained with stringent due diligence procedures.

What is the impact of solar park development on local traffic?

A solar park generates very little traffic impact apart from during the brief construction phase (generally 3-6 months). We will instruct a traffic consultant to produce a Transport Statement to assess the impact on highway safety and local network capacity. A Construction Traffic Management Plan will also be produced to ensure minimum traffic disruption during the construction phase. During the operational phase, the site would be visited once a month by engineers in a small van for routine maintenance.

Do solar parks create a lot of noise?

No, a solar park doesn't generate noise that could be audible beyond the site boundaries. The transformers and the fans in the inverters create a low humming sound, but this would not be audible beyond several metres. This equipment would be positioned away from the nearest residential properties.

Do solar panels create glint and glare? Does this affect animals?

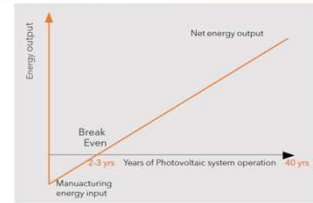
Solar reflections would only be geometrically possible in areas to the south of the site due to the orientation of the panels. Screening by way of topography and natural planting would prevent any reflections from affecting residential properties and road users. A glint and glare consultant will be instructed to produce an assessment of the potential impacts and recommend mitigation measures if required. There is no known evidence to confirm that glint or glare from solar panels can have a demonstrable effect on animals.

Why don't you put the solar panels on the roofs of houses or previously developed land?

Ethical Power strongly support rooftop installations, but it is recognised that ground mounted solar is also required if we are to meet the Government's Net Zero targets. Previously developed land is prioritised in our site searching process, but we are not aware of any such sites in the area that are capable of hosting a viable solar project.

Why are you using agricultural land for solar PV?

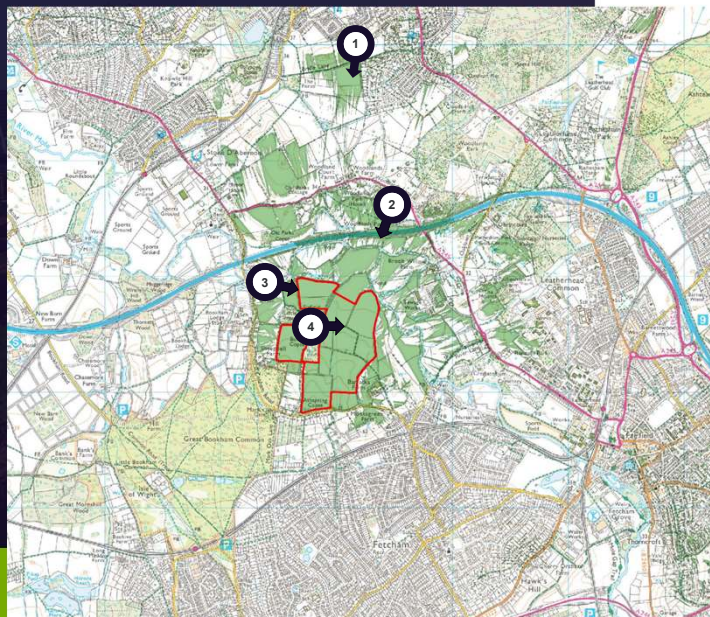
The majority of the site is located on land with an Agricultural Land Classification (ALC) of Grade 3b, indicated by a desktop survey. Grade 3b is defined as moderate quality agricultural land capable of producing moderate yields of a narrow range of crops and therefore does not represent 'Best and Most Versatile' land. The site will remain in agricultural use during the operational phase of development through allowing the areas around the panels to be grazed by sheep. A solar park is a temporary and fully reversible development - at the end of its operational life, the land will be returned to its current state with significant biodiversity net gain.



SOURCE: 'THE RENEWABLE ENERGY HUB UK'



VIEWPOINT LOCATIONS




As part of our planning surveys, we've completed an assessment of the visual impact the site could have on the surrounding areas.

The map shows areas from which the site is currently visible.

Photomontages have been created to illustrate to how the solar development might look from each of the viewpoint locations indicated.

New planting is proposed to limit the visual extent of the site further and will reduce the site visibility over time.

 The green shading on the map indicates areas from which the site is currently visible

 Proposed Site Boundary



VIEWPOINT 1

EXISTING VIEW



YEAR 1 VIEW

YEAR 7-15 VIEW



VIEWPOINT 2

EXISTING VIEW



YEAR 1 VIEW

YEAR 7-15 VIEW



VIEWPOINT 3

EXISTING VIEW



YEAR 1 VIEW

YEAR 7-15 VIEW



VIEWPOINT 4

EXISTING VIEW



YEAR 1 VIEW

YEAR 7-15 VIEW



Cobham Road Solar park

