

WELCOME TO OUR EXHIBITION

Thank you for showing your interest in coming to our event about the University of Surrey's proposed solar energy facility. We hope you will find the information interesting and informative.

The University of Surrey is committed to contributing to a greener and more sustainable society and is planning to increase its on-site renewable energy generation, as part of its plan to become carbon neutral by 2030.

To achieve this, the University has teamed up with SSE Energy Solutions to propose a new solar energy facility on some of the University's land to the west of Guildford.

This facility will deliver clean renewable energy side-by-side with nature, providing carbon reduction benefits along with new and improved habitats for local wildlife. It will provide electricity directly to the University by a cable link to an existing substation on the campus at Stag Hill.

A range of studies is underway to provide information for inclusion in a planning application. The subjects include heritage, ecology, landscape and visual, transport, and drainage. The findings will be included with a planning application that we intend to submit to Guildford Borough Council later this year.

We'd therefore like to find out about your views on our proposal before we do this, so once you have looked at the information and asked any questions you may have, please do give us your feedback on one of the forms available here at the venue next to the final banner (please don't hesitate to ask if you can't find these).

If you don't wish to leave any comments today, the information about the project is also available at our website <https://www.sseenergysolutions.co.uk/university-of-surrey-energy-partnership>

for you to review at your leisure.

Comments and questions can also be submitted via email to

universityofsurrey@sse.com

Please let us have your comments by 2 July.

About SSE Energy Solutions

SSE Energy Solutions provides low carbon energy infrastructure, including solar energy generation and battery storage, low carbon heat networks and electric vehicle (EV) charging infrastructure. SSE Energy Solutions is part of SSE plc which is committed to invest £12.5 billion in crucial low carbon infrastructure in the next five years to support achieving a net-zero carbon society. This is about £7 million of low carbon investment per day. Sustainability is one of SSE's core values, defined as 'we do things responsibly to add long-term value'.

We are UK listed, employing 10,000 talented and skilled people and are real Living Wage and Fair Tax Mark accredited. We are driven by our purpose: to provide energy needed today while building a better world of energy for tomorrow.

We are also committed to a Just Transition and we have launched a 'Powering Net Zero Pact', committing to tangible actions to support human rights, sustainable jobs and local communities, as well as decarbonisation and nature.



WHY CHOOSE SOLAR POWER

Solar power has an important role to play in tackling climate change by helping to reduce the use of non-renewable fossil fuels such as gas and oil and the associated carbon dioxide (CO₂) emissions.

In providing this renewable energy source, the proposed solar facility will contribute to local and national targets for reducing emissions and creating energy that does not rely on fossil fuels. This will make a valuable contribution to local and national targets for carbon reduction and renewable energy generation. It will also help to reduce UK fossil fuel imports.

Solar panels are quick to install, and once it is in place the solar facility will be able to produce electricity for thirty-five years with a low need for maintenance to keep it running effectively.

At the end of its life, it's easy to remove the panels and their supporting frames. The materials - mainly steel, silicon, aluminium and copper - are all easily recycled.

The solar photovoltaic (PV) panels will generate renewable electricity cleanly and with no carbon emissions.

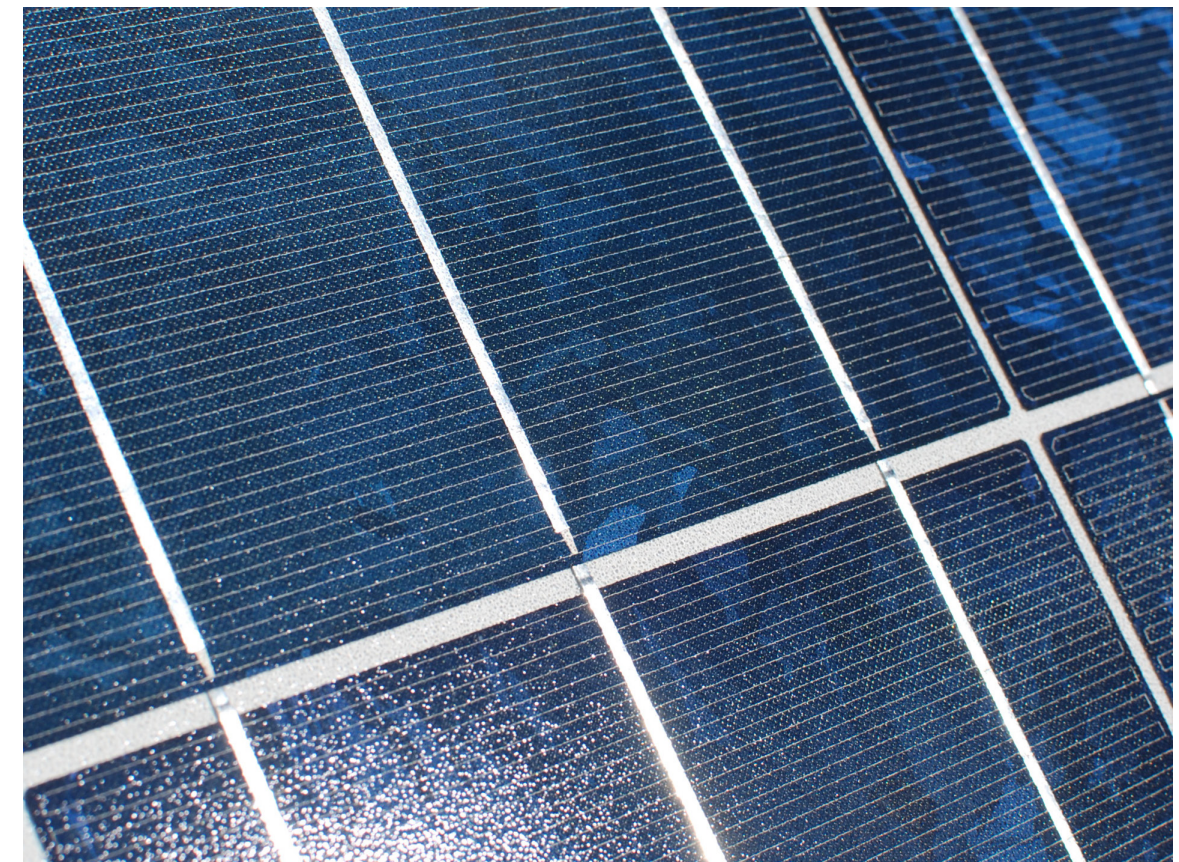
The cost of solar panels is very reasonable today compared with even a few years ago.

The basic science is that energy from the sunlight is absorbed by the PV cells in the panel. This sunlight energy creates electrical charges in the cells that provide a direct electrical current.

A type of equipment called an inverter then converts this to an alternating current suitable for use by most types of electrical equipment that people use in everyday life and business.

The electricity will flow from the inverters to an existing electrical substation at Stag Hill, via a connecting cable. This cable will be laid underground.

The cost and speed of installation compared to other energy sources means that clean energy can be delivered quickly to address the urgent need to help to meet the University's net-zero carbon goals.



OUR LOCATION

We believe that this is an excellent site for our solar energy project.

It is large enough to provide space for the number of panels needed to provide a significant contribution to the University's needs and receives enough sunlight to ensure that energy generation is efficient.

The site is made up of three fields that are currently used for growing crops. In total these fields have an area of about 21.6 hectares (ha). The site was selected after consideration of all the land owned by the University to find the best location taking into account existing and proposed uses (such as land earmarked for other forms of development) and environmental constraints.

Existing hedges, trees and woodland around the fields are valuable for nature conservation, and there are some areas of ancient woodland.

The layout of the solar panels has been designed to ensure that there are suitable buffers to the adjacent woodland and hedges to avoid and minimise potential for adverse impacts on these. Tracks to access the fields, and underground cable routes, will use existing openings in the hedges where possible.

We recognise that agricultural land is an important resource.

The quality for agriculture varies across the site, but most of the land is of a lower quality (grade 3b). It is also important to note that conditions on planning permission will require that after 35 years the solar panels would be removed. The soils will be in a better condition than today, having been taken out of intensive agriculture for this time.

The site is affected by some planning policy designations. These will be addressed in the planning application.

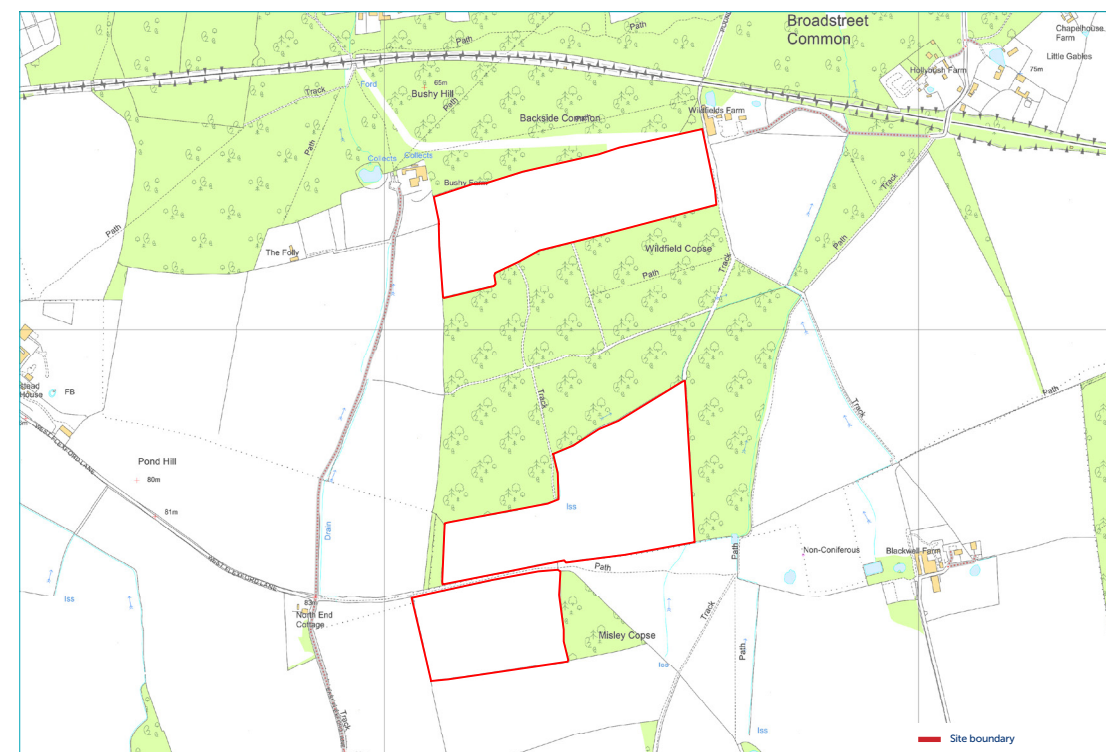
Whilst the southern field is part of a wider area that is an Area of Great landscape Value (AGLV), in common with the whole site it has strong landscape boundaries that can be added to with new planting to improve visual screening. The solar panels will be no higher than 3 metres and will not be prominent in views.

The whole site is covered by green belt policy, so development will only be allowed in very special circumstances.

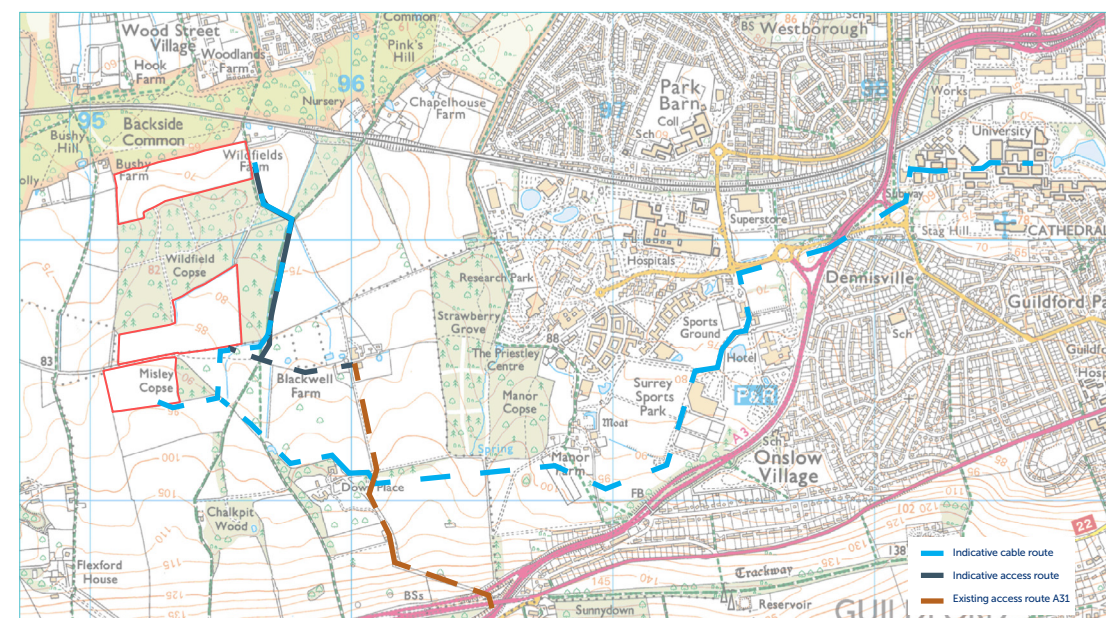
We believe that these exist, because there is a national and local need to tackle climate change by generating more power from renewable sources, and the University is seeking to address this using its own land to help achieve its zero-carbon target by 2030. There are no alternative sites outside the green belt where the University can make this happen on the required scale.

The planning application will include the route of the cable connection to the University and also the access for vehicles during construction of the solar farm.

These are still under investigation to confirm the best routes.



Site location



Access and cabling

OUR PROPOSAL

The main part of the proposal will be the rows of PV panels on metal frames, set no more than three metres above the ground at the highest point.

The rows will face south and have an angle of around 25 degrees to the ground. There will be gaps between the rows to prevent overshadowing and to allow access around them for maintenance.

Each of the three fields will be surrounded by a 2.45 metre high deer fence, with a field gate at each field entrance. Poles up to 4.5m high will be installed to support movement sensors and cameras for site security.

There will be a transformer in each field, inside a rectangular box that will look like a small shipping container.

As the frames will be supported by posts driven into the ground, there is very little impact on the ground itself. Less than 5% of the land will actually be disturbed by the installation of the panels.

The area beneath, between and around the panels will be managed to become a haven for wildlife.

Solar panels create sheltered spots for insects, reptiles and ground nesting birds. They provide habitats that support a range of plant and animal life. This will be encouraged by sowing of native grass and wildflowers, selected to be of value for locally native species, and by careful management to maximise the wildlife benefits.

Chemical pesticides and fertilisers will no longer be applied to the land within the site as the land will be taken out of use for arable farming. This will allow the soil to recover from years of intensive agriculture and will improve the quality of water that runs off the site into the local drainage network.

SSE has partnered with expert ecologists Buglife to develop a best-in-class biodiversity project that will be regularly monitored through the life of the project.

The existing field boundaries will be kept and added to with new planting.

Instead of annual cutting, they will be allowed to grow to about 6 metres high. This means they will provide more wildlife habitat and better screening to hide the panels from view.

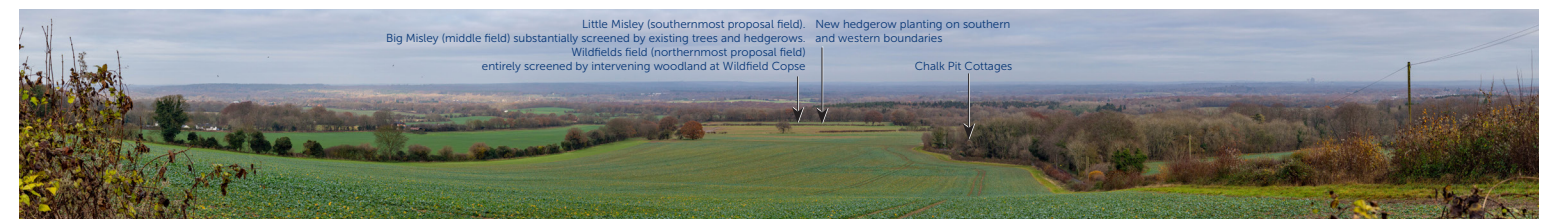
"Well designed solar facilities can make a big positive impact on biodiversity. By making space for wildlife, creating wildflower-rich grasslands for bees and other pollinating insects – we hope that we can make a contribution to nature's recovery, as well as providing low-carbon energy."

**Andrew Whitehouse
Head of Operations at Buglife -
The Invertebrate Conservation
Trust**



- 1 Planting on the eastern boundary to strengthen the screening effect of the existing hedgerow
- 2 This area of solar panels will be screened by woodland to the north and south
- 3 Footpath 479 Worpleston
- 4 Planting on the western boundary to strengthen the screening effect of the existing retained trees and hedgerows
- 5 East Flexford Lane (Footpath 452 Worpleston)
- 6 This area of solar panels will be screened by woodland to the north, east and west and tree and hedgerow-lined track to the south
- 7 Public Bridleway 447 Worpleston
- 8 New crushed stone access track
- 9 Planting on the southern boundary to strengthen the screening effect of the existing hedgerow
- 10 This area of solar panels will be screened by woodland to the east and hedgerows to the west
- 11 Planting on the southern and western boundaries to strengthen the screening effect of the existing hedgerows
- 12 Bridleway 447 Compton
- 13 Footpath 480 Compton

- New solar panels set in wildflower grassland to enable recovery of the soil and benefit pollinating insects and other wildlife
- All new planting will be native species suitable for the local area and managed to maximise both screening effect and biodiversity



Viewpoint 1 from the A31 Hog's Back looking south towards the proposal. Photograph of existing view



Viewpoint 1. Photomontage 15 years after completion. Plant growth estimated at average 6m height

THE BENEFITS OF OUR PROPOSAL

Up to 12.2 megawatts (MW) of clean renewable electricity is expected to be generated, providing a significant part of the University's energy demand.

This will help the University to meet its target to achieve net-zero carbon by 2030. The University is committed to contributing to a greener and more sustainable society. Increasing the production of clean energy forms part of its ambitious 'net zero' plan, to the benefit of the local community and wider society. Clean energy and better energy security will be provided to thousands of Guildford residents and workers, and to campus facilities to which the community has access. This includes facilities such as the Surrey Sports Park and other social, arts and supporting facilities.

Importantly it will also provide a significant contribution to Guildford Borough Council's own local carbon reduction targets and to local and national targets for renewable energy production. The UK Government has announced the intention to increase the generation of solar energy by up to five times by 2035.

The solar facility will make a real positive difference to local biodiversity.

This is important, as research has shown that 60% of British wildlife species have declined since 2019 and 15% are facing extinction.

There is a significant opportunity to increase knowledge and awareness of renewable energy, biodiversity, and related topics.

SSE is committed to exploring opportunities for the involvement of the local community and is exploring ways to involve and inform local people through links with the University and local schools.

In this context, the partnership with Buglife will not only bring the practical benefits of site management for biodiversity, but also links to the community and education through Buglife's wider charity work and the advice it provides.

Recognising its role as a responsible developer and operator, SSE

aims to conduct its business in a way that contributes positively and shares value, giving back to the local communities in which it operates. **In line with SSE practice, a community fund will be provided, aimed at supporting the community, enhancing local amenity and helping deliver local decarbonisation.** This is independent of the planning application and is not a factor to take into consideration in the planning decision.

The solar facility will allow the land to rest for the duration of the planning permission.

When the solar facility is removed at the end of its life, the soil at the site will be in better condition than it is today, having been taken out of intensive agriculture for 35 years.



NEXT STEPS

Thank you for taking the time to visit. Do please let us have your feedback as your comments will help to inform the planning application that we will make later this summer.

Once we have submitted our planning application, Guildford Borough Council will carry out its own consultation on the proposal before a decision is made.

You can find out more by visiting our website at

<https://www.sseenergysolutions.co.uk/university-of-surrey-strategic-energy-collaboration>

You can leave your comments by

- filling in a feedback form here at the exhibition venue (do ask one of our team if you can't find these)
- sending an email via the link in the website
- by email to this address: universityofsurrey@sse.com

Please submit your comments by 2 July.

Key dates

- **Summer 2022** - submit planning application
- **November 2022** – estimated planning decision
- **August 2023** – construction starts if granted approval
- **July 2024** – solar facility begins to generate energy.

