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Thank you for taking part in this public consultation for Fosse Green Energy. The project is being developed by Windel Energy, Recurrent Energy and a professional project team.

The UK's transition to a low-carbon energy system is necessary to avoid the effects of climate change. The Government expects that a low-cost, net zero and consistent electricity system is likely to be composed predominantly of wind, solar and nuclear.



Fosse Green Energy will have a key role to play in delivering clean energy while supporting the local farming economy and improving the local environment. The UK needs sustained growth in the capacity of the solar sector in the next decade to ensure we are on a pathway that allows us to meet net zero emissions.

Our consultation is running from **21 October 2024 to** 23:59, 2 December 2024.

This consultation

We are holding a statutory consultation on our proposals for Fosse Green Energy, a new solar and energy storage project south west of Lincoln, in North Kesteven. The project includes solar photovoltaic (PV) panels, battery energy storage and a connection using an underground cable corridor to the proposed substation at Navenby, along with the delivery of biodiversity net gain, landscaping and permissive paths.

As the project generates over 50MW of electricity, this means that it is classified as a Nationally Significant Infrastructure Project (NSIP).



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Our latest proposals



Our proposals for Fosse Green Energy have evolved, based on feedback from our initial consultation and the findings from our ongoing survey and assessment work.









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Realigned solar PV panels to preserve views and historic boundaries.

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Selected and refined a preferred grid connection corridor to the proposed National Grid substation near to Navenby to minimise social and environmental impact. We can also confirm the cable will be buried underground. Maximised the opportunities our site could have to deliver clean energy by identifying areas where further panels could be placed.



Optimised the design of the Solar and Battery Energy Storage Systems (BESS) to enhance the safety of the site, and to provide flexibility on the location of BESS.



Relocated solar PV panels to reduce potential impacts on wildlife and views. This includes preserving land for birds south of Moor Lane.



Refined our proposals for vehicular access to the site, providing further clarity on transportation options.



Enhanced links across the site, via permissive paths connecting into public rights of way, to provide greater connectivity to local villages as well as local walking routes.







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Proposed planting, screening measures, and buffering – including on land southeast of Thorpe on the Hill – to reduce visual and noise impacts.

Solar and energy storage



The project is made up of a ground-mounted solar photovoltaic (PV) generating station with battery storage, onsite substations and associated infrastructure to generate and export/import electricity in excess of 50MW, as well as areas of landscaping and biodiversity enhancement.

It also includes a grid connection corridor of approximately 10km in length, which will connect the site to the proposed new National Grid Substation near Navenby, using a 400kV underground cable corridor. Fosse Green Energy will then export and import electricity to the national grid.

The ground-mounted solar PV panels convert sunlight into DC electrical power. Each panel is likely to have a DC generating capacity of between 400 and 850 watts, or potentially more depending on advances in technology at the time of construction. A Battery Energy Storage System (BESS) is proposed for Fosse Green Energy to store the energy produced by the project and release it to the grid when it is most needed. We are considering options for 'decentralised' BESS, with battery containers located throughout the Solar PV Array Areas, or 'centralised' BESS within a single compound, and would welcome your feedback on these options.



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How a solar and energy storage park works







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2 3 4 5

The sun

Harnessing sunlight as the Earth's primary source of energy

1. Solar panels

Convert the sun's energy into DC electrical power 2. Battery

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Storing generated electricity to help the UK Electricity Network meet the needs when demand is high

3. Inverter

Converts DC into AC electrical power

4. Transformers Step up the voltage to the same voltage as the grid connection

6

- 5. Substation Ensures the solar park is safely connected to the grid
- 6. Export Meter

7

Measures the electricity exported to the grid

(8)

- 7. Output to the grid (kWh) National Grid
- 8. End User E.g., homes and businesses

Layout plan





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Connecting to the national grid



The onsite substation at Fosse Green Energy will connect with the proposed Navenby Substation via a buried export cable corridor which is approximately 10km in length. This is shown as a grid connection corridor.

The connection involves running 400 kilovolt (kV) and associated cables from the site to the substation proposed at Navenby which is installed via open trenching and then backfilling trenches to reinstate the land and return it to its current use.



The substation then connects the energy produced by Fosse Green Energy into the grid for use in homes and businesses. The proposed Navenby Substation is subject to a separate planning application put forward by National Grid and is not part of the Development Consent Order (DCO) application for Fosse Green Energy.

? What is a grid connection corridor?

A grid connection corridor is a broad ribbon of land through which a buried electrical connection would be routed. The corridor can vary in width.



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? What is a substation?

Substations are high voltage electric system facilities which are used to gather voltage and step it up or down for export/import.



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Construction, operation and decommissioning



Should development consent be granted for Fosse Green Energy, construction is anticipated to start in 2031, with plans to connect to the Grid by 2033. We anticipate it would take around two years to build.





Construction

Building the principal site for Fosse Green Energy would involve:

- Site preparation such as upgrading existing roads/tracks, upgrading existing crossing points like bridges, and establishing temporary construction compounds.
- Solar and energy storage park construction – such as putting the solar panels in place, installing cabling underground, and constructing the onsite substation and battery storage units.
- Testing and commissioning of the site.
- Landscape, planting, and habitat creation.

Operation

Fosse Green Energy is proposed to be in operation for 60 years. Once operational, activity on the site will be limited to:

- Vegetation management.
- Equipment maintenance and servicing, including the periodic replacement of components. Site inspection including fence inspections.





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Decommissioning

Fosse Green Energy is planned to operate until 2093. When operation ends, the site will need to be decommissioned. All material from the site, including PV panels, substations, and batteries, will be removed and disposed of sensitively to minimise impact over 24 to 30 months. Recent research shows that 99 per cent of a solar panel can be recycled, and we will commit to maximising recycling materials where practicable.

Environmental / biodiversity surveys and monitoring



Agricultural land classification



Agricultural Land Classification are categories of land based on its suitability for food production. When developing solar and energy storage parks, poorer quality land is used in preference, rather than "best and most versatile (BMV) land", which is excellent to good quality land in grades 1, 2, and 3a.



ALC surveys of the Principal Site as of October 2024 showed:

- No Grade 1 or 2 Best and Most Versatile (BMV) land
- 28.35% Grade 3a land
 (BMV)
- 69.30% Grade 3b land



of the land currently used on the proposed principal site for Fosse Green Energy is estimated to be for non-food crop, the majority of which is being used for fuels for carbon-intensive sources of energy.

Climate change and food security

Climate change is the biggest threat to food security. The UK is already seeing unpredictable weather patterns and more rain, which is attributed to climate change and will impact our food security making it harder to produce crops reliably.



Environment and community



We are developing Fosse Green Energy with consideration to the local environment and communities.

We are consulting on some new community benefits



including:



A range of permissive paths linking to Public Rights of Way (PRoW), creating connections between local villages and other paths, and increasing walking and cycling opportunities.



Planting community orchards.



Opening up green areas for schools, community groups and animals – such as birds – to use, delivering biodiversity net gain.

We also continue to welcome further suggestions on local schemes,

? What is biodiversity net gain?

Biodiversity is the variety of plants and animals present in an area, and is a key indicator of the health of an ecosystem. By working to achieve biodiversity net gain, we will ensure our work results in more or better quality environments for plants and animals.

We will be delivering a minimum 10 per cent biodiversity net gain for Fosse Green Energy, and solar farm developments regularly achieve over this percentage. We are considering improvements such as creating pollinator-friendly habitats, orchards, grasslands wildflower meadows and other planting across the site.

projects and initiatives we can support. Let us know about any ideas you have in your feedback.



Taking part in this consultation



This is our second, and statutory, phase of community consultation, which is open from 21 October 2024 to 23:59, 2 December 2024.

We want to hear your thoughts on:

Next steps

- The overall project
- Our Preliminary Environmental Information (PEI) Report
- The grid connection cable corridor
- Environmental mitigation and public recreation
- Construction, maintenance and traffic
- Community benefits

Providing your feedback





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Website:

Fill out the online feedback form at <u>www.fossegreenenergy.co.uk</u>

Feedback Form:

Collect a feedback form today or contact the community relations team to request a copy. You can submit this form at this event or to our freepost address at FREEPOST FOSSE GREEN ENERGY. You do not need a stamp.

Indicative Timeline:

Spring 2023

Outline information shared on the project. Environmental Impact Assessment (EIA) Scoping Request submitted to the Planning Inspectorate.

Autumn 2023

First stage of community consultation (non-statutory).

Winter 2023/2024

Development of a Statement of Community Consultation (SoCC) setting out how we will consult on the project at statutory consultation.

Spring to Autumn 2024

Further environmental survey and assessment work.

Autumn 2024

Second (statutory) stage



Scan this QR code with your phone's camera to access our website.

Email:

Send an email with your feedback to our consultation address at info@fossegreenenergy.co.uk



Letter:

Post a letter with your feedback to our freepost address.

of community consultation.

Autumn 2025

Finalise DCO application for submission to the Planning Inspectorate.

Autumn/Winter 2025 to 2027/2028

Pre-examination and Examination stages held by the Planning Inspectorate. Following this, the Planning Inspectorate will prepare a report and recommendation to the Secretary of State for Energy Security and Net Zero who makes the decision on whether to grant or refuse development consent.

*Dates are indicative and could be subject to change