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power for good

Steeple Renewables Project

Consultation Brochure - October 2023

Introduction

Welcome to our early informal consultation on proposals for a nationally significant infrastructure renewables project near to West Burton Power Station and Sturton-le-Steeple, Nottinghamshire.

Whilst the UK has been making leaps towards decarbonisation and reducing reliance on fossil fuels, its energy system is still reliant on global gas supplies for electricity and heating. Globally gas prices have risen, and this has only been exacerbated by the war in Ukraine. The UK needs to invest in renewable technology both to play its part in reducing climate change and to decrease reliance on the volatile global gas markets to improve domestic energy security.

Steeple Renewables Project would make an important contribution to the UK's energy transition.

Our early informal consultation aims to introduce our initial proposals to the community and stakeholders across a large geographic area and invite feedback. This feedback will be used alongside ongoing environmental and technical studies to develop our proposals ahead of formal statutory consultation in 2024. We would also welcome suggestions from the community about what schemes or initiatives they think could be supported or facilitated through the project as part of the tailored community benefits package that would be delivered when the project is operational.

Our early informal consultation will run from **Monday 23 October for six weeks until Monday 4 December.**

This consultation brochure provides an overview of the project we are considering and provides more information about how you can respond to our early informal consultation.

Feedback can be provided via our project website, by completing and submitting a feedback form, or by getting in touch with us via our project email address, **info@steeplerenewablesproject.co.uk**.

Who is RES?

RES, a British company, is the world's largest independent renewable energy company.

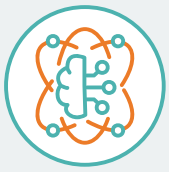
At the forefront of the industry for over 40 years, RES has delivered more than 23GW of renewable energy projects across the globe and supports an operational asset portfolio exceeding 12GW worldwide for a large client base. RES employs more than 2,500 people and is active in 14 countries working across onshore and offshore wind, solar, energy storage, green hydrogen, transmission and distribution. You can find more information at **www.res-group.com**.

ACTIVITIES

DEVELOP

CONSTRUCT

SUPPORT



DIGITAL

TECHNOLOGIES

WIND

SOLAR

STORAGE

TRANSMISSION & DISTRIBUTION

GREEN HYDROGEN

Project overview

RES is exploring the opportunity to develop a renewables project on land at Sturton-le-Steeple, Nottinghamshire. We anticipate that the project could include solar energy generation and battery storage, to help store energy for when it is most needed. RES is also investigating the possibility of incorporating other renewable technologies into the proposals.

Collectively, the solar farm and battery storage facility could offer a mix of renewable energy generation and storage.

The land we are exploring is ideally located for us to utilise grid capacity at the recently decommissioned West Burton Power Station.

Typically, solar energy generation uses approximately just 5% of the total ground area of a site. It is anticipated that a solar led Steeple Renewables Project could be designed to allow dual-purpose land use, generating clean electricity alongside continued agricultural use of the land, for example via sheep grazing.

Identifying suitable sites for solar developments requires a balance between grid accessibility and other factors such as site accessibility, landscape, ecology, archaeology, and the ability to mitigate impacts on the local area.

The opportunity

As you may be aware, West Burton Power Station has recently been decommissioned. This has released grid capacity adjacent to the land where we are looking to bring forward a renewables project. We have secured a connection agreement with National Grid to utilise this grid capacity. We believe that our proposals, alongside other energy projects in the local area, present an opportunity for this part of Nottinghamshire to continue its historic role of helping to power the UK.

If consented, it is anticipated that Steeple Renewables Project will be capable of producing clean, green electricity for approximately 156,884 homes[1] every year, around 45% of all homes in Nottinghamshire.

Why solar?

There is now widespread recognition that the UK, and the rest of the world, is in a climate emergency. To help address climate change the UK has committed to reaching net-zero by 2050, requiring us to quadruple our low-carbon electricity generation.

Solar energy enables more electricity to be generated domestically without reliance on imports and is not subject to sudden price fluctuations or the uncertainty of global markets. It can therefore play an important role in improving the security and diversification of the UK's energy supply.

Government forecasting places solar as the cheapest source of new electricity generation for the coming years. This means investment in solar projects like Steeple Renewables Project is not just good for the environment but also for the consumer.

1. The homes figure has been calculated by taking the predicted average annual electricity generation of the site and dividing this by the annual average electricity figures from the Department of Business, Energy and Industrial Strategy (BEIS) showing that the annual UK average domestic household consumption is 3,748 kWh (Dec 2021).

Our proposals

The proposed site we are exploring comprises a series of land parcels near the village of Sturton-le-Steeple, Nottinghamshire.

We anticipate that Steeple Renewables Project could consist of up to 400MW of solar energy generation and 200MW of battery storage.

As the plans are still at an early stage, the exact layout of panels and infrastructure across the site is still being developed and will be informed by ongoing environmental technical work as well as feedback from this informal consultation with stakeholders and the local community.

The electricity generated from this project would connect into the substation at the decommissioned West Burton Power Station. RES has secured a connection agreement with National Grid for 600MW of electricity generation.

Steeple Renewables Project could:

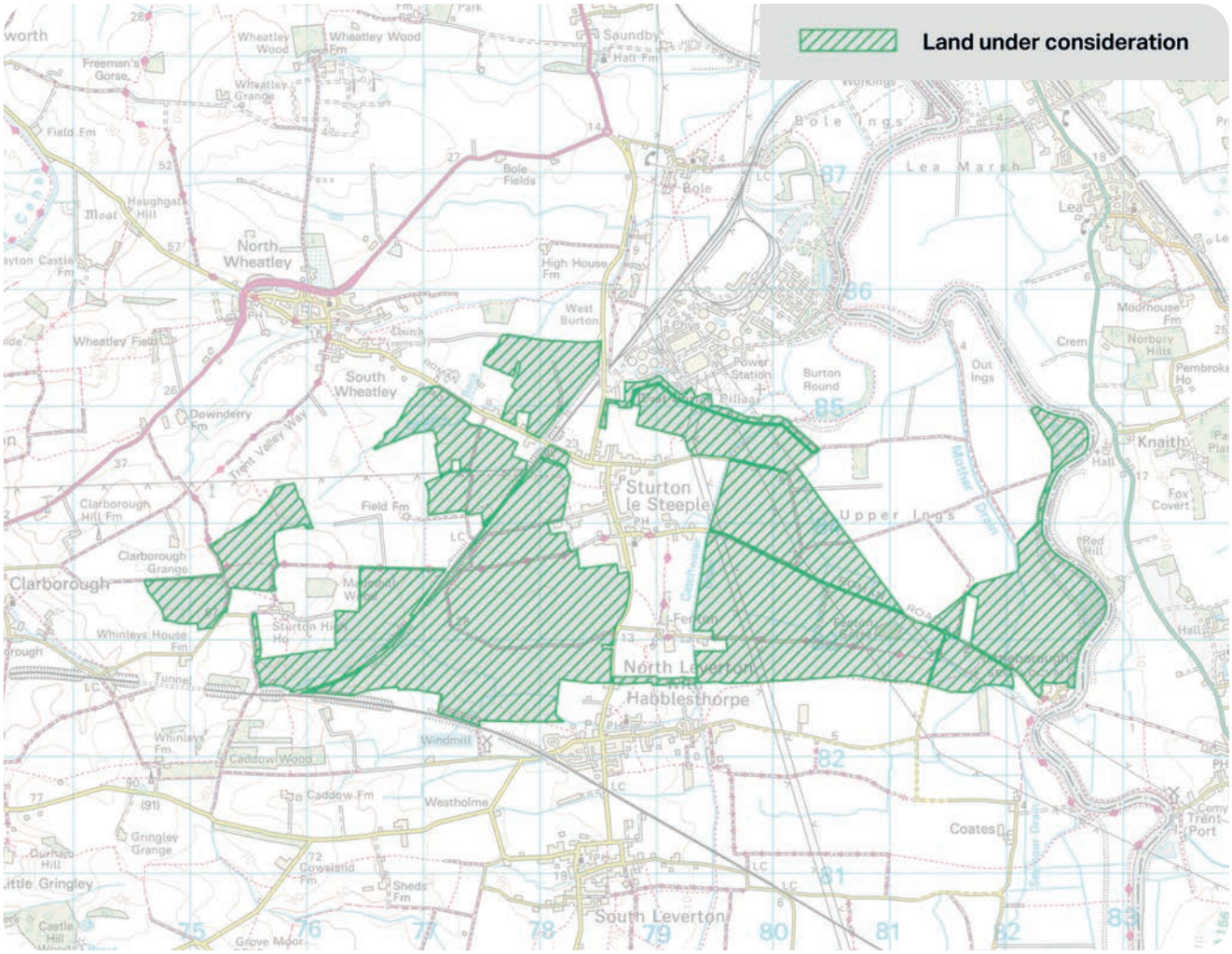
- Generate up to 400MW of renewable energy, enough to power around half of the homes in Nottinghamshire, every year
- Support the UK's targets to reach net-zero by 2050
- Utilise electricity grid capacity made available from the decommissioning of the adjacent West Burton Power Station
- Provide a community benefits package tailored to the needs and priorities of the local community, including a Local Electricity Discount Scheme
- Deliver £224 million of investment into the construction of the scheme, providing a boost to the local construction sector[2]
- Create 400 jobs over the 24-month build programme, supporting skills and employment in the local community[3]
- Enable continued agricultural use of the land alongside the renewable energy project

2. Based on information provided by the client, a value of £560,000 per MW has been used to calculate construction cost. This cost per MW is multiplied by 400MW, an approximate figure for the generation capacity of the project, to reach a total construction cost of around £224 million.

3. Based on previous experience of other solar farms, the construction phase could support around 1 job per MW during the peak of the construction phase, therefore Steeple could support in the region of 400 jobs.

Land under consideration

The below plan is indicative and the precise boundaries of the final application area, which could include or exclude parcels from those shown in green, will be developed as we continue with the detailed design of the proposal.

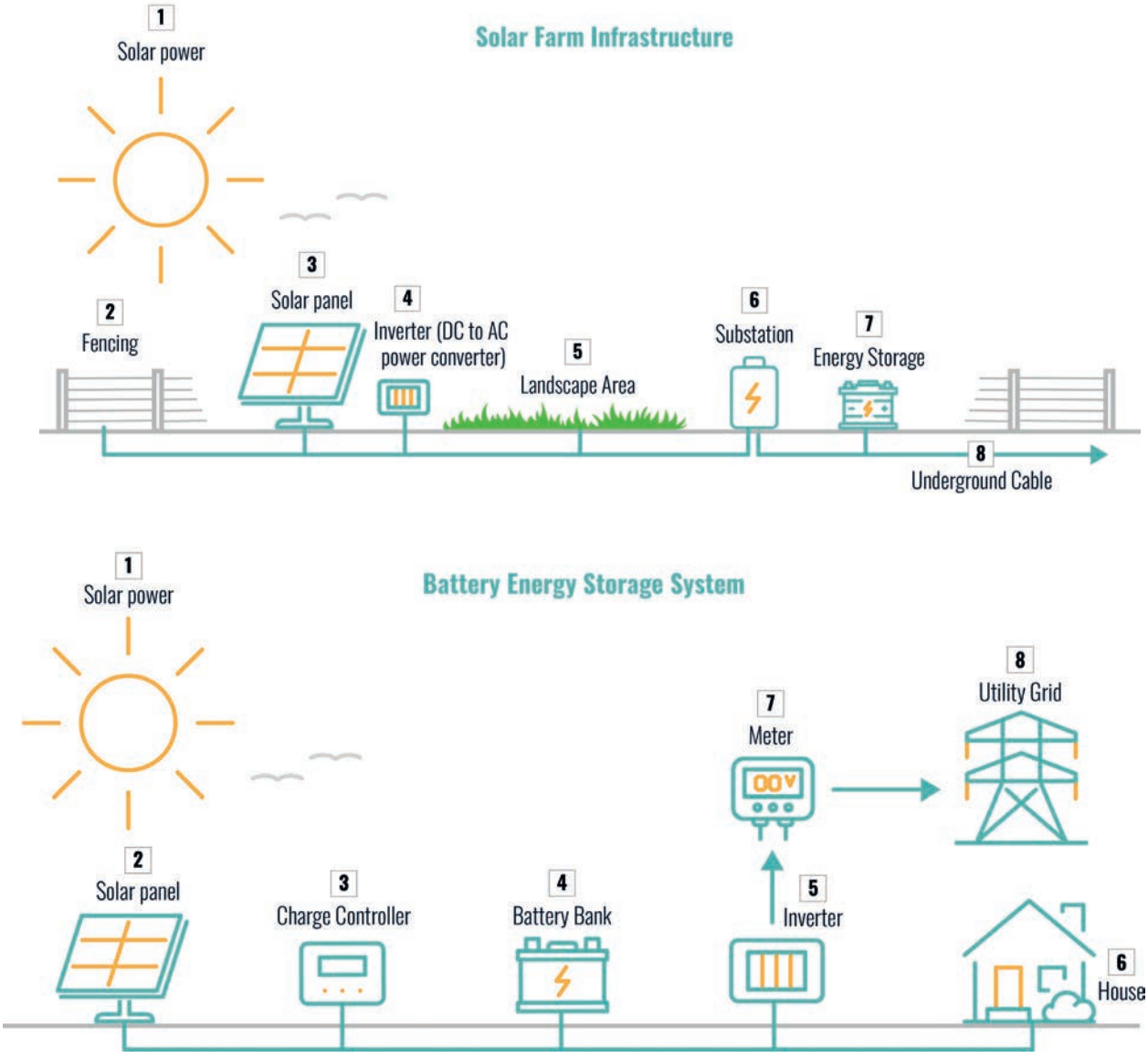


What does a solar farm with battery storage look like?

While the precise configuration and components of the infrastructure at Steeple Renewables Project are still under consideration, the following elements are anticipated to be included in the project:

- Solar PV modules and the associated mounting structures
- On-site supporting equipment including inverters, transformers, and switchgears
- Battery Energy Storage System (BESS)
- Underground cabling within the areas of the solar PV modules and connecting solar PV module areas to the on-site substation
- Supporting infrastructure including access tracks, security measures, gates, lighting
- Opportunities to consider a range of measures to allow for a Biodiversity Net Gain and landscape works upon the site
- Improvements to local footpath network

Please note that these details are subject to confirmation and may be subject to adjustments as the project progresses.



How does battery storage work?

Energy storage is the capture of energy for use at a later time, and a Battery Energy Storage System is a form of energy storage.

Battery energy storage has a variety of useful applications, such as balancing energy demand and supply for either the short or long term. This ensures the grid operates more efficiently. Plus, batteries are able to respond to changing supply or demand levels within a second.

How solar works and recycling

Solar PV panels are typically made from silicon, which is a great semi-conductor, installed in a metal panel frame with a glass casing.

The sun gives off light, even on cloudy days, and when these light particles, or photons, hit the thin layer of silicon on the top of a solar panel, they knock electrons off the siliconatoms which creates a direct current (DC) of electricity. This is captured by the wiring in the solar panels.

This DC electricity is then converted to alternating current (AC) by an inverter which is then funnelled into the grid network. AC is the type of electrical current used when you plug appliances into normal wall sockets.

Bifacial modules have two sides of solar cells, enabling additional energy generation from the diffuse light reflected off the grass, on the rear-side of the panels.

In most cases solar panels are recyclable and there are well established industrial processes to do this. There are organisations around the UK and Europe specialising in solar recycling, such as PV Cycle and the European Recycling Platform.

They are working with solar developers to minimise electrical waste and recycle old panels in line with the Waste from Electrical and Electronic Equipment (WEEE) regulations.

The planning (DCO) process

Due to the amount of renewable energy the project could generate, we anticipate that it will be classified as a Nationally Significant Infrastructure Project (NSIP). This means that to gain consent for the project after this early informal consultation, we will begin preparations for the formal stage of the pre-application process and move towards submitting a Development Consent Order (DCO) application to the Planning Inspectorate (PINS).

The DCO process involves several stages:

1. Pre-application stage:

The developer engages in consultation and prepares a detailed application, including an Environmental Impact Assessment (EIA) and other supporting documents.

2. Submission:

The developer submits the application to the Secretary of State (via the Planning Inspectorate). The Planning Inspectorate shall act on behalf of the Secretary of State, which examines the application as the 'Examining Authority'.

3. Examination:

The Examining Authority shall then conduct an examination process, including public hearings, to assess the application's merits, environmental impact, and public opinion. The Examining Authority then prepares a Recommendation Report to the Secretary of State.

4. Decision:

The Secretary of State reviews the examination report and makes a decision to grant or refuse the DCO. This decision is based on the project's national significance, environmental impact, and other relevant factors.

Commitment to community consultation

RES is committed to meaningful engagement with the local community

To achieve this, we want to ensure that there is ample opportunity for local input and are undertaking a two-stage programme of community engagement and consultation. This stage is early and informal consultation. Once we have developed our proposals for Steeple Renewables Project further, we will be undertaking formal statutory consultation on the detail of our plans in 2024.

Ahead of our formal statutory consultation in 2024, we will be publishing a Statement of Community Consultation (SoCC) for the proposals. This will outline how we intend to engage with stakeholders and local residents throughout the onward development of Steeple Renewables Project. It will also set out how we will consider feedback as part of our formal statutory consultation. The formal statutory consultation will also include findings of our Preliminary Environmental Information Report (PEIR).

Environmental Impact Assessment (EIA)

Following on from our early informal consultation, we will also be undertaking a full and more detailed EIA for the project, including seeking an opinion from PINS on what we should cover in that fuller assessment. The EIA is a detailed process which will assess the potential environmental impacts of Steeple Renewables Project. It will help us determine (amongst other things) the optimal locations for bringing forward a solar energy development and for example, identify areas where we could enhance and protect biodiversity.

The EIA process is made up of several phases:

Screening: This is the initial stage of EIA, where the proposed project is evaluated to determine whether it requires a full EIA. Screening involves assessing the potential environmental impacts of the project based on factors such as the size, location, and nature of the project.

EIA scoping: The EIA Scoping phase is a crucial element within the EIA process. It identifies and outlines the potential environmental impacts that could arise as part of the proposals. Additionally, it defines the scope of activities that will be carried out to aid in producing the Preliminary Environmental Information Report (PEIR) and the final Environmental Statement (ES).

Preliminary Environmental Information Report (PEIR): The PEIR provides an initial assessment of the potential environmental impacts and considerations relating to the project.

Decision making: Based on the EIA report, application, and public consultation process, the regulatory authority will decide whether to approve, reject, or request modifications to the project proposals. The decision may be based on environmental, social, economic, and other factors and compliance with relevant laws and regulations.

Post-decision: If a decision is made to approve, the project can proceed with implementation, subject to any conditions or requirements specified. The regulatory authority will typically monitor the project to ensure compliance with the approval conditions and any environmental management plans that have been developed.

The EIA process seeks to identify any potential impacts that could be caused by Steeple Renewables Project and will also help us to identify which areas of the site will be most suitable for solar development and which areas will be best used for biological mitigation and enhancement.

EIA Assessment Categories

As part of our early informal consultation, we want to understand what issues and impacts relating to the project are important to you.

We are currently in the process of commencing early baseline environmental work, including ecology assessments. At this stage, the matters that may be considered could include those topics set out below.

- **Environmental statement assessment, scope and methodology**
- **Order limits and environmental context**
- **Scheme Description – The proposed development**
- **Alternatives and design iteration**
- **Relevant policy considerations, including consideration of climate change**
- **Landscape and visual amenity**
- **Residential Amenity**
- **Ecology and ornithology**
- **Hydrology, flood risk and drainage**
- **Ground Conditions**
- **Minerals**
- **Cultural Heritage**
- **Socio-Economic**
- **Noise and vibration**
- **Transport and Access**
- **Air Quality**
- **Soils and Agricultural Land Classification**
- **Glint & Glare**
- **Waste**

Are there any impacts you might have questions about, based on the information we are presenting as part of this early consultation? We will carefully consider and review all feedback received and alongside the results of our ongoing technical assessments, and we will use the feedback to help develop our proposals further.

Community benefits

RES seeks to be a power for good in communities that neighbour our projects by working openly and constructively to ensure tangible local benefits. If consented Steeple Renewables Project could deliver a number of lasting benefits to community in Sturton-le-Steeple and the surrounding areas including:

Direct job creation

A solar farm could create and support direct jobs, covering a wide range of skills, during the construction, operational and decommissioning stages. Where possible, RES is committed to local recruitment and is also exploring the possibility of supporting local apprenticeship opportunities.

Indirect job creation

A scheme of this nature could result in the creation of indirect jobs. This will include jobs in local industries providing goods and services to the project's direct employees, e.g., jobs at shops and hotels.

Gross Value Added (GVA)

A project of this type could provide a boost to the regional economy during construction, throughout operation and during the decommissioning phases. This boost to GVA will be the result of increased spending in the local economy.

Annual Business Rates

Throughout its operation, a project of this type could generate annual business rates which will be payable each year.

Local Electricity Discount Scheme (LEDS)

In consultation with the local community, RES will explore the possibility to deliver its Local Electricity Discount Scheme (LEDS) as part of a tailored community benefits package, once the project is operational. Developed in response to research and feedback from local communities around RES' operational wind farms, LEDS has been operating for over 10 years and offers an annual discount to the electricity bills of those properties closest to a participating project, without needing to change energy provider.

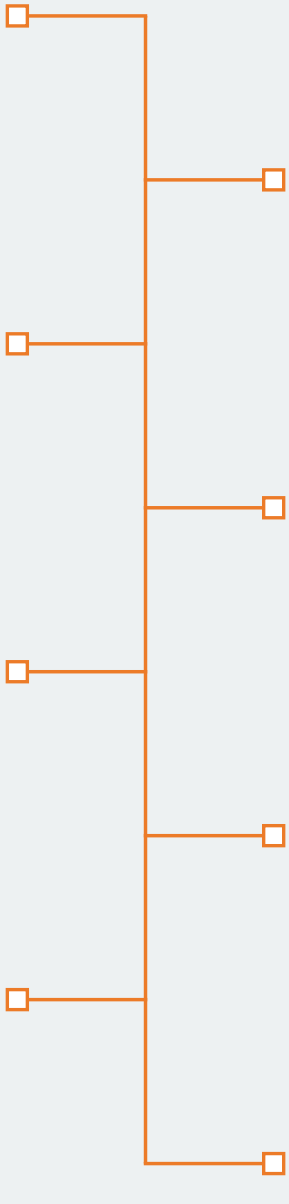
For Steeple Renewables Project we would identify a catchment area which incorporates properties closest to the project. The qualifying properties within the catchment area will be contacted at the relevant time and offered the opportunity to apply for the annual discount which would be paid directly to their electricity provider.

Neighbouring projects

The proposals for Steeple Renewables Project are being brought forward independently by RES. However, we are aware of a number of other renewables projects currently progressing through the planning process in close proximity to our proposed site.

As part of our assessments, we will review and consult on the cumulative effects and our inter-relationship of our project in combination with those nearby schemes to ensure that we take account of your views and that it is fully assessed in our application.

Anticipated project timeline



Q4 2023
Early design development

Q4 2023
Early informal consultation

Q2 2024
Refined design and production of the Preliminary Environmental Information Report (PEIR)

Q3 2024
Formal statutory consultation

Q1 2025
Development Consent Order (DCO) application submitted

Q2 2025
Acceptance

Q2 2025 - Q2 2026
Examination

Q4 2026
Decision

Consultation events and feedback channels

We are committed to working closely with the local community throughout the development of the project.

Our early informal consultation will run for six weeks starting on **Monday 23 October 2023** until **Monday 4 December 2023**.

We will be holding two in-person early informal consultation events on:

Friday 3 November	**2pm-7pm**	**South Leverton Memorial Institute, Town St, South Leverton, Retford DN22 0BT**
Saturday 4 November	**10am-2pm**	**Sturton Hall and Conference Centre, Sturton-le-Steeple, Retford DN22 9HY**

These events will provide the opportunity to learn about the initial proposals we are exploring and provide feedback.

We encourage anyone with an interest in the project we are exploring to come along and meet the project team.

Unable to attend our events?

People who are unable to make the events can view the early proposals at a virtual exhibition from **Friday 3 November** at **www.steeplerenewablesproject.co.uk** or sign up to attend a webinar being held on **Wednesday 22 November from 6pm-7pm**.

The virtual exhibition will allow you to view all of the consultation materials that will be available at our in-person public events, including our consultation brochure and exhibition boards. You will also be able to leave feedback via our online feedback form.

The virtual exhibition will remain open after the early informal consultation closes, so you will be able to view the information at any time, however the online feedback form will close on **Monday 4 December**.

You can also visit one of our community deposit locations to pick up a copy of our consultation brochure and feedback form and a freepost envelope:

Sturton Hall and Conference Centre Brickings Way, Sturton-le-Steeple, Retford DN22 9HY

Gainsborough Library Cobden St, Gainsborough DN21 2NG

Open Monday-Friday 9am-5pm and Saturday 9am-1pm

How to get in touch

We have set up a dedicated project website, project email and phoneline for Steeple Renewables Project. Should you have any enquiries regarding the project, please contact a member of the team using the information below.

www.steeplerenewablesproject.co.uk

0115 718 2070

Info@steeplerenewablesproject.co.uk

FREEPOST Steeple Renewables Project

If you would like this document in large print, audio, braille, or another language please contact us using the details we have set out above.

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