Wrington Solar Farm & BESS



PRODUCING CLEAN, LOW-COST ELECTRICITY FOR SOMERSET







Introducing Wrington Solar Farm & BESS

Pathfinder Clean Energy (PACE) is preparing to submit a planning application to North Somerset Council for a solar farm and co-located battery energy storage system on land north of Wrington, Bristol, Somerset.

The project would have a generating capacity of 49.9MW with 49MW of battery storage. The proposed development would create enough renewable energy to meet the annual electricity demands of approximately 13,980 homes. It would also offset approximately 10,354 tonnes of CO_2 each year, the equivalent of taking around 3,606 cars off the road. The co-located battery storage facility will supply electricity to the electricity network at times of peak energy demand and help make the renewable energy output of the solar farm a secure and reliable part of the UK energy supply.

Access Track Wrington Hill 33kV Substation KFY Planning Application Area: Solar array: New Access Track centerline: Public right of way: Existing Access Track: Proposed BESS area: Vertical Farm

Why do we need to do this?

The Climate Emergency, the cost of living crisis and the ongoing war in Ukraine have all highlighted the salience of energy production and energy independence. We urgently need to generate energy from new, low cost, low carbon sources and solar is the lowest cost and quickest to deploy of all energy sources.

It currently costs one-tenth of the cost of gas and less than one-third the cost of nuclear.

In 2019, the UK became the first country in the world to declare a Climate Emergency. It has subsequently committed to reach Net Zero carbon emissions by 2050. The new UK Government wants to make the UK a "clean energy superpower". As a key mission, the Government has committed to achieving a zero-carbon electricity system by 2030.

The proposals at Wrington will provide wide ranging benefits, including:

- It will assist North Somerset Council in reducing greenhouse gas emissions in line with local and national targets in response to the Climate Emergency.
- It will contribute towards the security of energy supply in North Somerset through the provision of local, renewable electricity.

- Careful consideration has been given to the development to avoid effects on landscape, heritage, or ecological designations.
- A community fund will be established to invest in local projects and initiatives.
- This is a temporary development, allowing the land to rest for a period of operation up to 40 years.
- Decommissioning and full restoration of the site at the end of life of the development will be secured via planning condition.
- The proposed solar farm will not require Government subsidy.



Who are we?

PACE was established in 2017 as a global developer and investor in clean energy and brings together over 85 years of experience from across the technical and financial supply chain.

We are working with the National Grid to develop a portfolio of strategically located solar photovoltaic and battery storage installations that ensure low carbon electricity is delivered when and where it is most needed.





Public consultation

We invite you to provide feedback on our draft proposals in the following ways:



Attend our public consultation event on Thursday 19th September 2024 from 2pm to 7pm.

You are invited to attend our public consultation event at which you can see our plans, learn more about our proposal and talk to the project team. We're holding our public consultation event at Redhill Village Hall, Church Road, Redhill, North Somerset, BS40 5SG.

2

Fill in the feedback form that accompanies this public consultation brochure.

Please read through the leaflet and provide feedback to us by way of the free post feedback form that came with the brochure.

3

Visit the dedicated public consultation website www.wringtonsolarfarm.com

We have set up a dedicated public consultation website, where you can find information about our draft proposals and provide feedback.

Indicative timeline



Frequently asked questions

Why Solar?

There is an urgent need to generate energy from new, and environmentally friendly sources, and solar power emerges as the most cost-effective and rapidly deployable among all energy sources. Currently, its cost is one-ninth that of gas and less than one-third of nuclear energy.

Solar power is already yielding tangible results. For instance, during the period from June to August in 2022, solar power frequently contributed up to 25% of the UK's daytime electricity (according to the National Grid ESO carbon app).

Even in winter, solar panel technology is still effective; at one point in February 2022, solar was providing more than 20% of the UK's electricity (According to the National Grid).

Solar power is a core part of the Governments' Net Zero target, and it intends to more than triple solar power capacity by 2030.

Achieving this objective requires the deployment of larger scale solar farms as well as on the rooftops of industrial and residential buildings.

Why Here?

For our solar farm projects we require a nearby grid connection, a well-screened site that is consistent with planning policy and a supportive landowner. Wrington Solar Farm & BESS offers all of these features.

Will the proposal change the land classification?

The solar farm & accompanying BESS is a temporary development and will not change the land classification.

Are solar farms noisy?

No, solar panels have no moving parts and emit no sound. Inverters and transformers can emit very low level sound, but these are sited away from houses and cannot be heard from more than a few metres away. Battery energy storage sites are not usually audible above ambient noise-levels. A full noise assessment has been conducted for the site and the project design will include mitigation, if necessary.



Are solar farms a threat to food security?

The UK Food Security Report (2021) found that "the biggest medium to long term risk to the UK's domestic production comes from climate change and other environmental pressures such as soil degradation, water quality and biodiversity".

Solar farms currently account for 0.08% of total land use in the UK (Solar Energy UK 2022). The Government targets for a fivefold increase in solar would result in 0.3% of the UK land area being used by solar (Carbon Brief, 2022). This is the equivalent to around half of the space used by golf courses.

Will the solar farm harm wildlife?

There is no evidence that solar farms have a negative impact on wildlife. In fact, wildlife thrives within the sites when managed sensitively.

Is battery energy storage safe?

The battery enclosures are specifically engineered to guarantee secure operation throughout the project's lifespan. Advanced safety measures, including continuous monitoring of individual battery cells, are in place to promptly address any potential concerns and manage operations for utmost safety.

Battery energy storage systems are designed to adhere to stringent safety standards established by international regulatory bodies like the International Electrotechnical Commission (IEC). These comprehensive standards encompass various facets of battery storage systems, including installation, operation, and maintenance, to ensure their compliance with the highest safety protocols.

How long will this project take to build?

It typically takes 6-9 months to build a solar farm of this size. Site working would typically be Monday to Friday and Saturday mornings only.

A construction traffic management plan will be conditioned and subject to detailed liaison with the highways department post planning. Once the solar farm is constructed, monitoring will be carried out remotely by PACE, minimising visits by maintenance staff.

Biodiversity Net-Gain

We are committed to significant net biodiversity gain at Wrington through the creation of new habitats to support local wildlife. Existing hedgerows will be strengthened, and new hedgerows will be planted to improve habitat connectivity across the site.

We will set aside a significant proportion of the land for Biodiversity Enhancement Areas which will provide wildflower meadows for pollinators and grassland habitats to support mammals, birds, and invertebrates. Further ecological enhancement measures such as bird boxes and bat boxes will be placed within the site to encourage those populations to prosper.

Have your say

Please take your time to consider the information within this brochure and don't hesitate to contact a member of our team should you have any questions or matters you need to be clarified. Comments provided by the local community will be considered in shaping the final planning application submission. Please provide any comments you have on the proposal by email or via the feedback form on the website. We would be grateful if you could answer the feedback form and let us have your contact details for the purpose of informing the project design and providing feedback to the council.

For further information, please do not hesitate to email: **feedback@alpacacommunications.com**

Register for Updates

Please visit www.wringtonsolarfarm.com where information about our proposals will be updated, and where you can register to receive updates.



Feedback form

To return your completed feedback form please tear it from the brochure and pop it in the post by **Thursday 3rd October 2024**. Alternatively, you can return your form via email to **feedback@alpacacommunications.com**

Title:		Name:						Destanda
Address: Email:						Teleph	one:	Postcode:
1. Has this	brochure be	en helpful in	understand	ling our pro	posal?	☐ Yes	□ No	□ Not sure
2. With reg		oroposals you In objec			n this leaflet, opinion	are you:		
3. Please use this space to provide any comments on the proposal. We would welcome your feedback on all aspects of the emerging design shown in the brochure.								

Please provide your contact details if you wish to get a response. Any information provided will only be used for the purpose of the planning application to the Local Planning Authority and will not be disclosed with any third parties. Your contact details will not be listed on the planning application documentation.

Freepost ALPACA COMMUNICATIONS LIMITED

FOLD HERE

Instructions

To return your feedback form, please fold and put it in the post to us.

written on the front. You don't need any further address or stamp. If you'd like more space to share your thoughts, send us an email, or just write your comments down and pop them in an envelope with 'FREEPOST ALPACA COMMUNICATIONS LIMITED'

Any queries or problems? Get in touch via feedback@alpacacommunications.com.