

NEW OAK ENERGY STORAGE Battery Energy Storage System

Brockwell – Independent Renewables Platform

Brockwell Energy is a renewable energy platform established and backed by Davidson Kempner, Pioneer Point Partners and the BEL Management Team.

Brockwell was designed from inception to capitalise on the new era of renewable energy with:

- A multi-technology portfolio consisting of onshore wind, solar PV and storage and hybrid co-located assets
- Best-in-class team to execute across the value chain, including developing, M&A, financing, energy offtake, constructing, operating and optimising renewable projects

Brockwell's value creation strategy involves anticipating market evolution via:

- Strategic project selection
- Early investment in emerging energy sectors
- De-risking through innovative financing
- Optimising revenue via market opportunities
- Leveraging new technology



Originated, developed, financed and managed the delivery and build out of energy assets.

£900m

Capex successfully funded and delivered

Total Devlopment Pipeline **3.0GW**

Organic Battery Storage pipeline **2GW**













Battery Energy Storage

Clean power 2030

- The UK is committed to reaching net zero by 2050. This means that the total greenhouse gas emissions would be equal to the emissions removed from the atmosphere, with the aim of limiting global warming and resultant climate change.
- A crucial part of the strategy is to transition to an electricity system with 100% zero-carbon generation and much of this is expected to come from renewable energy, including wind and solar.
- The UK Government's Clean Power by 2030 Action Plan states that the country needs up to 27GW of battery storage by 2030 to help manage the volatility of renewable energy, including days when there is little wind or sun. There is currently only 7.5GW of capacity on the system.

*Biggar Economics: Solar Energy UK, April 2024



Net Zero by

Zero-carbon generation 100%

Battery storage by 2030

Battery Storage capacity 7.5GW*

Battery Energy Storage

The role for Battery Energy Storage

- Battery Energy Storage Systems can reduce the UK's use of fossil fuels by capturing renewable energy that would otherwise go to waste and making it available when the sun isn't shining, or there is insufficient wind to turn a wind turbine.
- Renewable energy providers are currently paid a fee or curtailment payment - to switch off production when electricity supply outstrips demand. Not only does this energy go to waste, the cost of curtailment is passed on to consumers through their electricity bills.
- Battery storage is crucial to guaranteeing a secure, affordable and clean energy supply for the UK. While wind and solar farms rely on changeable weather patterns, batteries allow us to store this intermittent electricity during generation and release it at times of peak demand.

Annual curtailment costs £1bn

Predicted increase in electricity demand 50%

Curtailment premium

Organic Battery Storage pipeline **2GW**





NEW OAK ENERGY STORAGE THE PROJECT

NEW OAK ENERGY STORAGE Proposal



Brockwell Energy is proposing the development of a 100-megawatt (MW) Battery Energy Storage System (BESS) to store electricity, which can be exported to the National Grid for both local and national use.

The development is intended to be temporary, operating for 40 years before being decommissioned and restored to its original use.

The site will be accessed via an existing point of access from the A645.

In addition to the operational components, landscape planting will be incorporated across the site to provide ecological benefits and visual screening.



NEW OAK ENERGY STORAGE Proposed Location



- Location: Land to the southeast of the A645 at Camblesforth, North Yorkshire.
- Area: Total development of 3.16 hectares, including a 1.3 hectare battery storage compound. The additional area is required for drainage, with 1.77 hectares dedicated to biodiversity enhancement.
- Administrative Boundary: Located within the administrative area of North Yorkshire Council.



NEW OAK ENERGY STORAGE Proposed Location



• Area: 1.3 hectare battery storage compound. The additional area is required for drainage, with 1.77 hectares dedicated to biodiversity enhancement.



NEW OAK ENERGY STORAGE Site selection

Proximity to Grid

• New Oak Energy Storage will connect to the National Grid via an underground cable to the Drax 400/132 kV Grid Supply Point.

Agricultural Land Quality

• Most of the site forms Grade 3 (good to moderate quality) agricultural land.



NEW OAK ENERGY STORAGE Supporting information

Report/Assessment	Summary
Noise and Vibration Assessment	A noise assessment has been prepared to determine specifications for battery technology and acoustic screening that would ensure no significant adverse impact.
Fire	Fire strategy will be based on National Fire Chiefs Council guidance. Health and Safety in Grid Scale Electrical Energy Storage Systems guidance was also referenced in line with existing legislation, regulations, standards, and fire safety guidance. H and S guidance is applicable to grid scale battery applications rated at 1MW and greater, and primarily targeted at variants of lithium-ion batteries.
Ecology	An ecological assessment is being prepared. This involves undertaking a record search and 'walk over' survey of the site to determine the habitats and potential presence of species. Where necessary species surveys will be undertaken. In line with legislation, a biodiversity net gain assessment will be carried out to demonstrate that the BESS would result in enhancements to the site.
Drainage	A flood risk and drainage assessment is being prepared. This considers the potential for the site to increase flooding and illustrates a drainage design where water run off from the site would not exceed the rate that would occur naturally before development, preventing increased flood risk downstream. This approach ensures that neither the site or the wider area result in an increased risk of flooding.



NEW OAK ENERGY STORAGE Supporting information

Report/Assessment	Summary
Traffic and Transport	A Transport Statement is being prepared. This will consider the vehicle movements associated with the construction and operation of the BESS and ensure that there is no potential highway capacity or safety issue. Peak construction activity (in terms of vehicle numbers) would occur during enabling works phase. HGV traffic would not be maintained over any lengthy period of time. During the operational phase, the Proposed Development would be operated remotely, and it would only be necessary for an operative to undertake a site visit on a monthly basis. This would be undertaken using a small van, pickup or equivalent vehicle.
Archaeological and Heritage	A heritage assessment is being prepared. This work will demonstrate that the BESS would not result in any impact to heritage assets in the surrounding area. Furthermore, through geo-physical survey work it will be demonstrated that the potential for buried archaeology is unlikely.
Landscape and Visual	A landscape and visual assessment is being prepared. This work will include preparing a Zone of Theoretical Visibility which will demonstrate the potential visibility of the BESS within the wider environment. This will enable viewpoint photography to be focused on areas where there could be visibility. The assessment will consider both landscape character and fabric alongside the visibility of the BESS.



NEW OAK ENERGY STORAGE Community Engagement

Our renewable energy projects aim to bring lasting benefits to local communities. Our approach to community engagement is built on listening, understanding, and acting with purpose. We do this through:



Case Study:

Please visit our North Kyle Wind Farm project page to learn about how the <u>North Kyle Trust</u> is supporting the local community



Collaborative community benefits

We engage with communities from the earliest stages of each project, shaping community benefit packages around their feedback. By working closely with residents, we create innovative, lasting benefits tailored to community aspirations. Whether supporting local businesses or fostering long-term economic initiatives, we're committed to realising community goals together.





From Concept to Completion

Brockwell Energy provide complete solutions across the lifecycle of renewable energy projects, with expertise across all project stages. Brockwell energy is committed to building a sustainable future.









February 2025

Next steps and contact information

Project Website: www.brockwellenergy.com/projects/new-oak/

Provide your feedback using the form on: www.brockwellenergy.com/projects/new-oak/

Get in touch:

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