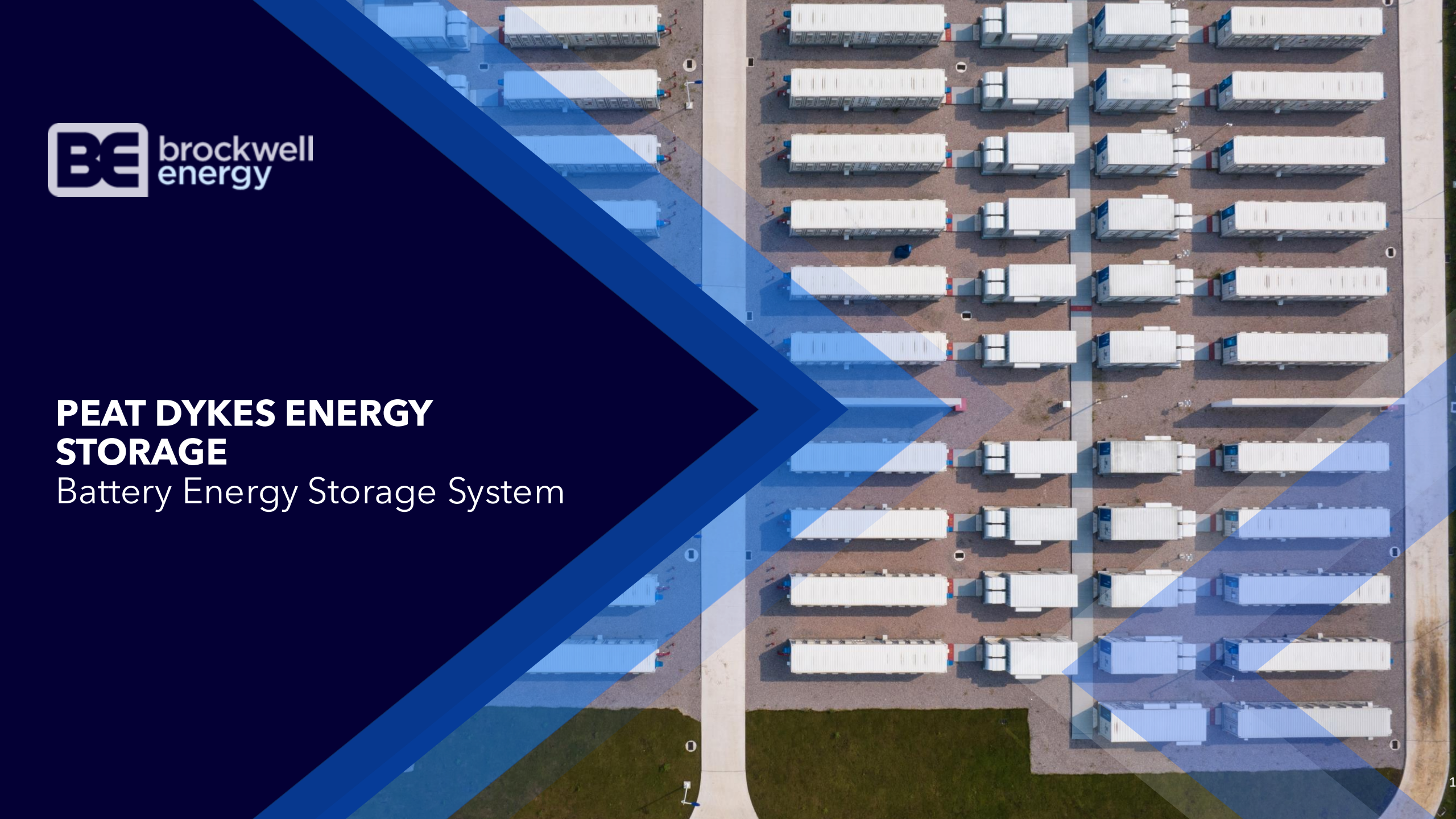




PEAT DYKES ENERGY STORAGE

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 Development Pipeline

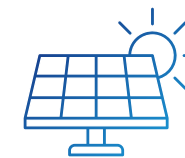
3.0GW



Onshore Wind



Battery Storage



Solar PV

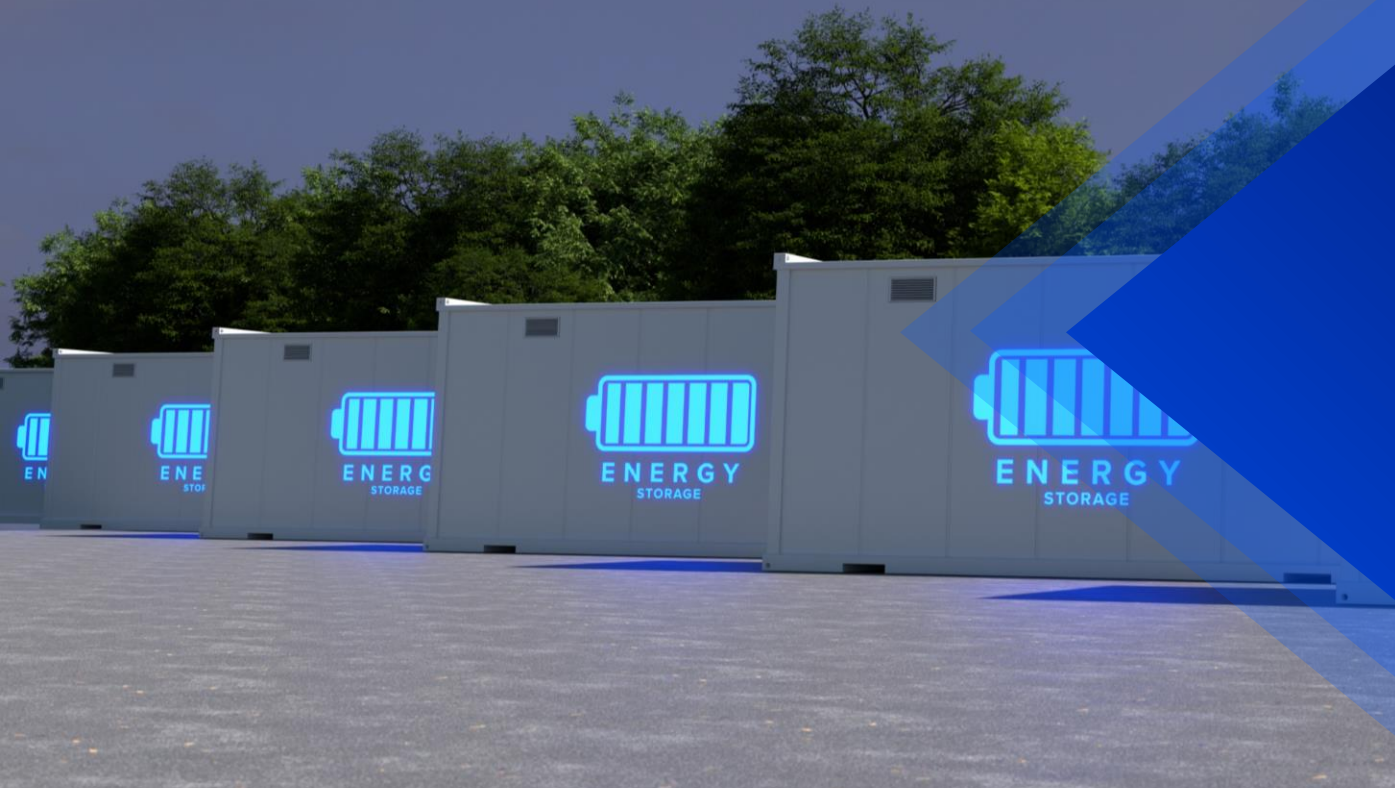


Energy-from-Waste

Organic Battery Storage pipeline

2GW

Need for Battery Storage



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.

Net Zero by
2050

Zero-carbon generation
100%

Battery storage by
2030
27GW

Battery Storage
capacity
7.5GW*

*Biggar Economics: Solar Energy UK, April 2024

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

Curtailment premium

£40

Predicted increase in electricity demand

50%

Organic Battery Storage pipeline

2GW



PEAT DYKES ENERGY STORAGE THE PROJECT



PEAT DYKES ENERGY STORAGE Proposal

The Proposed Development would include a compound within which the following infrastructure would be installed:

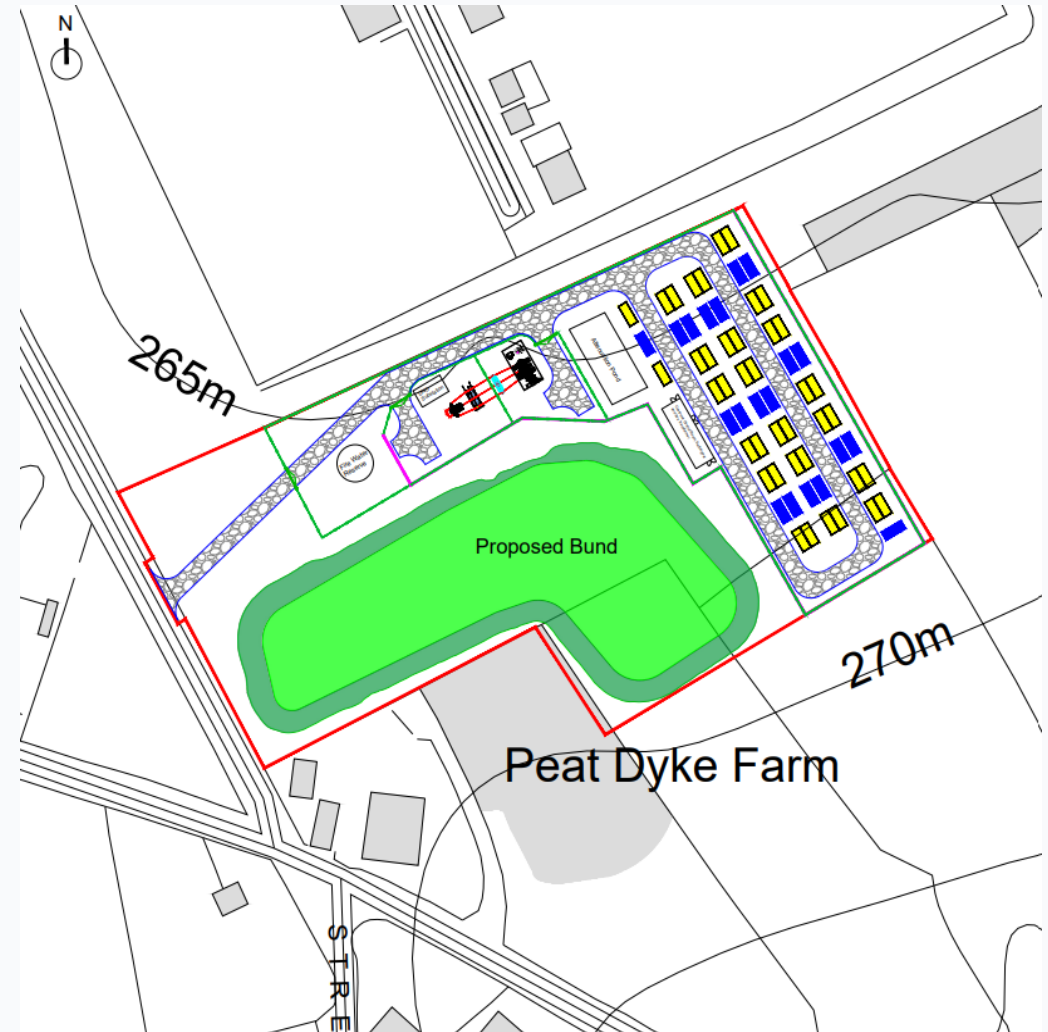
- 40 prefabricated containerised modular Battery Energy Storage Systems
- 20 Medium Voltage Transformers / 20 Power Conversation Units
- 10 Ring Main Unit
- A 132 kV substation area (including transformer, and other electrical infrastructure and distribution network operator substation set within its own fenced compound)
- A customer switchroom
- Attenuation basin and water drainage pipe

100

Megawatt-hours of
electricity storage

220,000

Homes powered for two
hours



PEAT DYKES ENERGY STORAGE

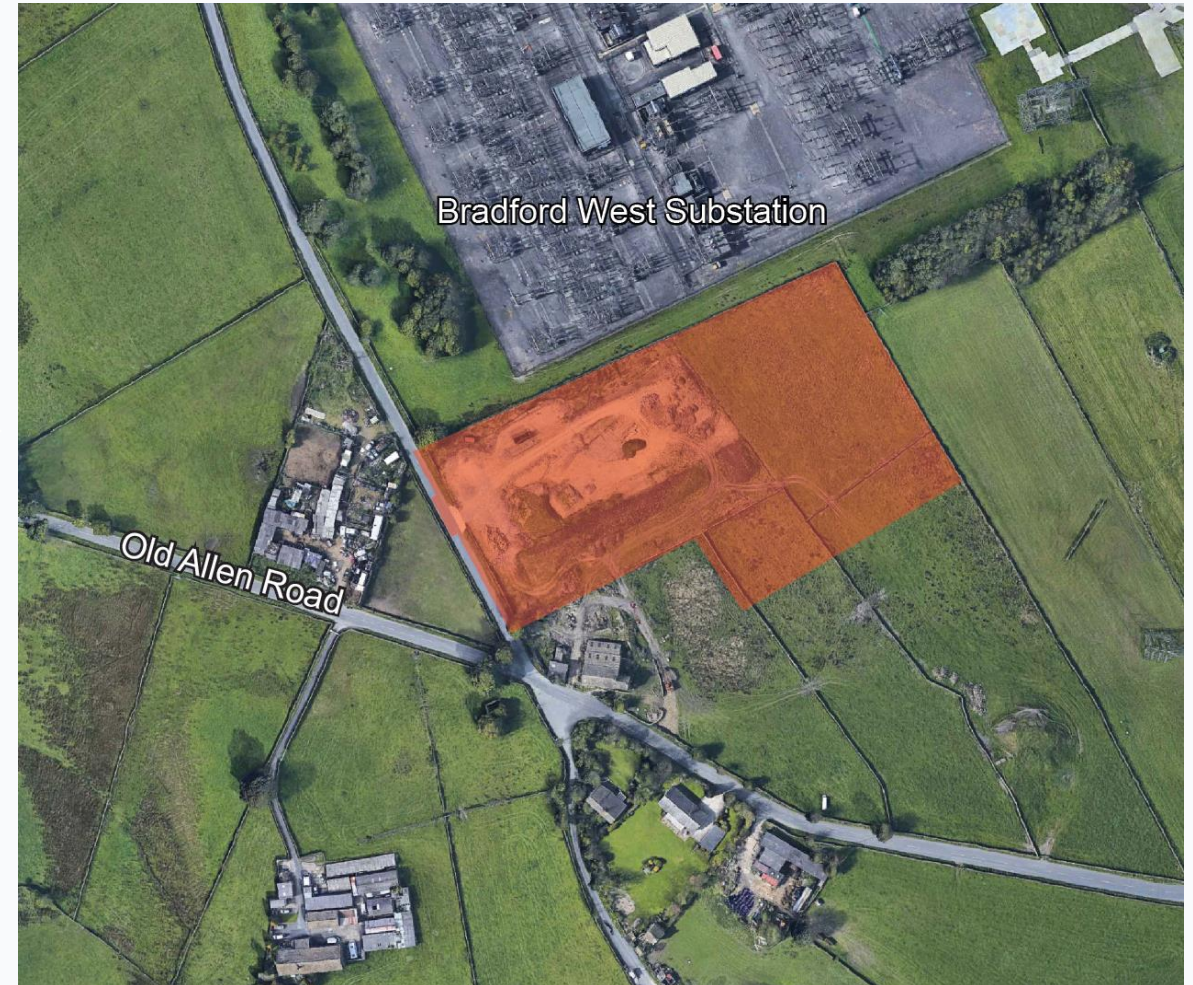
Proposed Location

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.

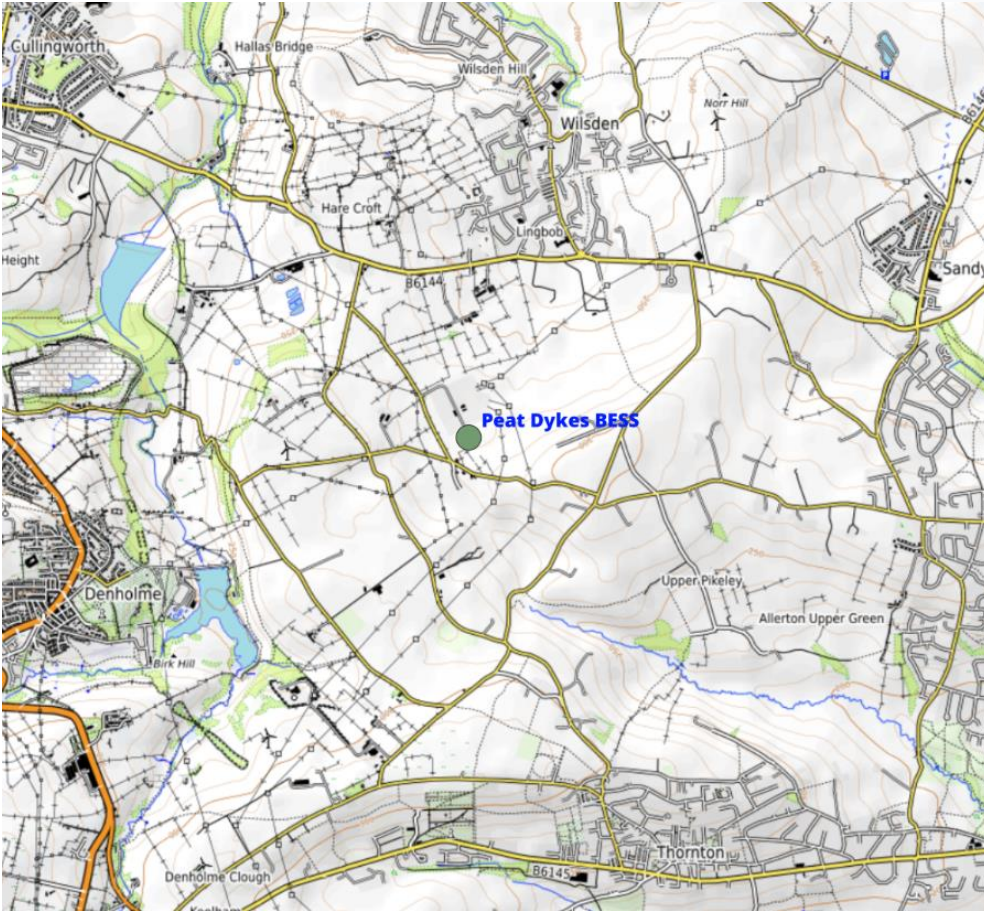
The site will be accessed via an existing point of access from Harrop Lane.

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



PEAT DYKES ENERGY STORAGE

Proposed Location



- **Location:** Land at Peak Dyke Farm, south of the village of Wilsden, near Bradford, West Yorkshire .
- **Area:** Total development of 1.8 hectares, including a 0.73 hectare battery storage compound. The additional area is required for drainage, access and biodiversity enhancement.
- **Administrative Boundary:** Located within the administrative area of Bradford Council.

PEAT DYKES ENERGY STORAGE

Site Selection

Proximity to Grid

- Peat Dykes Energy Storage will connect to the National Grid via an approximately 100-meter underground cable to the Bradford West Substation. This short distance limits environmental disturbance from the cable laying and was a key factor in the site selection process.

Agricultural Land Quality

- The proposed scheme is located on Grade 4 agricultural land. This classification plays a key role in the site selection process, ensuring compliance with the Joint Local Development Policy which seeks to protect the best and most versatile land.

PEAT DYKES ENERGY STORAGE

Design Considerations

Given the sensitive location and landscape characteristics, additional design considerations have been incorporated to help minimise visual impact, reduce noise emissions, and provide as much biodiversity enhancement as possible. These include:

- Sunken design level incorporating retaining boundary walls to provide a workable construction platform and reduce visual impact in the wider landscape
- Acoustic fencing across site perimeter to minimise noise emitted from site
- Natural bund along the development perimeter to further mitigate visual impact, provide a further noise barrier to nearby receptors, reduce the requirement for transporting spoil off-site, and add ecological features
- Attenuation pond to regulate surface water discharge and add additional ecological feature
- Extensive planting schemes incorporated to provide biodiversity enhancements and additional screening

PEAT DYKES ENERGY STORAGE

Supporting information

Report/Assessment	Summary
Transport Statement (TS)	Assesses accessibility, traffic impact, and sustainability, covering existing conditions, trip generation, parking, policy compliance, and mitigation.
Landscape and Visual (LVA)	Evaluates the impact on landscape character and visual amenity, proposing mitigation and ensuring policy compliance.
Noise Impact	Examines noise levels, predicting emissions, assessing effects, and suggesting mitigation to minimise disturbance
Flood Risk and Drainage Strategy	Identifies flood risks and drainage impacts, proposing mitigation, sustainable drainage, and policy compliance.
Ecology and Biodiversity Net Gain	Assesses wildlife impact, ensuring at least 10% biodiversity net gain through surveys, mitigation, and habitat enhancements.
Archaeological and Heritage	Reviews impact on heritage assets, outlining mitigation, preservation, and compliance with protection policies.
Fire	Assess the development against National Fire Chiefs Council guidance and relevant Health and Safety standards for grid-scale lithium-ion battery systems of 1MW and above.

PEAT DYKES 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 [North Kyle Trust](#) 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.



Project Timeline

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.

Parkway BESS Development Timeline



Q&A

Next steps and contact information

Project Website: www.brockwellenergy.com/projects/peat-dykes-bess/

Provide your feedback using the form on: www.brockwellenergy.com/projects/peat-dykes-bess/

Get in touch:

peatdykes@brockwellenergy.co.uk