

PARKWAY ENERGY STORAGE

Battery Energy Storage System



Robert Watson MRICS Senior Development Manager Brockwell Energy Limited

Jack Hutchinson Senior Project Manager Brockwell Energy Limited

George Thomas
Senior Account Manager
SEC Newgate





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

3.0**GW**

Organic Battery Storage pipeline

2GW



Onshore Wind



Solar PV



Battery Storage



Energyfrom-Waste







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

Battery storage by 2030

27GW

Zero-carbon generation

100%

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%





PARKWAY ENERGY STORAGE
THE PROJECT



PARKWAY ENERGY STORAGE

Proposal

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

- 140 prefabricated containerised modular Battery Energy Storage Systems
- 70 Transformers / 60 Power Conversion Units
- 35 Ring Main Units
- A 400kV Substation Area (including transformer, and other electrical infrastructure and DNO Control Room set within its own fenced compound)
- A Customer Control Room and Water Reserve Tank.

300

Megawatts of electricity storage

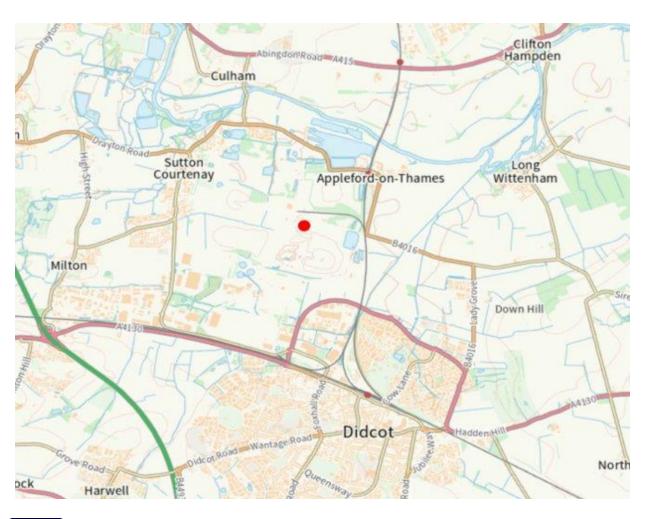
660,000

Homes powered for two hours





Parkway BESS Proposed Location



- Location: Land at the Sutton Courtenay Waste Management Site (SCWMS), Appleford Sidings, Sutton Courtenay.
- Area: Total development of 6.11 hectares, including a 2.71-hectare battery storage compound. The additional area will be used for drainage and biodiversity enhancement.
- Administrative Boundary: Located within the administrative area of Vale of White Horse District Council.



Parkway BESS Proposed Location



- Brockwell Energy is proposing the development of 300-megawatt (MW) Battery Energy Storage System (BESS) to generate and store renewable energy, which will be exported to the 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 development is situated within the Sutton Courtney Waste Management Site and will be accessed via Portway.
- In addition to the operational components, landscape planting will be incorporated across the site to provide ecological benefits and visual screening.



Parkway BESS Site Location

Proximity to Grid

 Parkway Energy Storage will connect to the National Grid via an underground cable to the Didcot Substation located just south of the Parkway BESS site.

Non-hazardous landfill site with minimal visual impact

- Sutton Courtenay Waste Management Site is an active non-hazardous landfill site covering circa 260 hectares of former sand and gravel workings.
- Set within an industrial context, with landscape influenced by intensive human intervention, meaning its impact would be limited.
- Bound by an area of woodland to the north; landfill (active and restored), and infrastructure such as rail sidings, substation to the east and south; Corridor Road to the west; with overhead electrical power lines crossing the site.



Parkway BESS Site Impact

Access & Transport Links

- Primary access will be via Portway, connecting to A4130 roundabout (1.2 km southeast).
- New highway scheme (Didcot-Culham dual carriageway) granted planning in 2024, will improve site access once constructed.

Proximity to Key Areas

- Nearest homes: 700m east (railway crossing at B4016).
- Settlements: Appleford (1km), Sutton Courtenay (1.1km).

Environmental considerations

- Located in Flood Zone 1 (lowest flood risk).
- No ecological designations within 2km.
- No impact on Air Quality Management.



What will our planning application include?

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.



Parkway 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









Next steps

Please provide feedback

Online form via: https://www.brockwellenergy.com/projects/parkway-bess/

Post: PARKWAY BROCKWELL ENERGY, FREEPOST - SEC NEWGATE LOCAL

Email: parkway@brockwellenergy.co.uk

Phone: 0203 667 4501

