

Scawby Brook Solar and BESS Project

January 2025

About us

Brockwell Energy was established in 2017 as a vehicle to develop and monetise a portfolio of energy assets across Scotland. The management team, led by Alex Lambie successfully completed an MBO In 2018 supported by Davidson Kempner and Pioneer Point Partners.

In March 2024 RNA-Energy was acquired by Brockwell to form the new Brockwell Storage & Solar Limited (BSSL). This further enhanced Brockwell's existing Solar & Storage pipeline adding a further 3GW's across asset classes.

We are a Multi Technology renewables platform, having diversified from the initial focus on Onshore Wind and Energy from Waste.

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

£750m

Energy from Waste & Onshore Wind

Organic Onshore Wind pipeline **500MW** **Organic Battery** Storage pipeline 2GW



Onshore









Live Construction Projects

Earls Gate Energy Centre - Energy from Waste (EfW)

General Overview

CHP with conventional moving grate combustion technology, Siemens turbine & generator, Martin grate and LAB flue gas treatment.

Location:	Grangemouth, Scotland	Performance:	Capable of processing up to 274,000 tonnes of waste per annum. Design point based on 10 MJ/Kg of 220,000 tonnes per annum
Electrical Capacity	22 MW (Fully condensing)	Typical Output	15 MWe, 20 MW IP/LP Steam (CHP mode)
Ave Heat Demand	171 GMW pa	Plant Efficiency	28.33%

Brockwell Role

- Originated
- Developed
- Financed
- Delivery currently in construction

- Principal Contractor
- Lender interface lead
- MSA provider
- Lead JV partner

Key Financial Metrics

- Capex: £250m (EPC)
- Opex: Ave £8.5m per annum
- Revenue (waste): 72% of feedstock on 15 year index linked supply agreements
- **Revenue (energy):** 60% supplied to private network under a 15 year index linked Energy Supply Agreement

Land

- Plot: 6.5 ac
- Status: Fully consented
- Tenor: 125 year lease
- **Operation:** EfW plant + 3 x 11MWth back up boilers
- Fees: Paid on entry, peppercorn thereafter

Carbon Capture Status

- Land: Adjacent plot identified
- **DESNEZ:** Bilateral discussions ongonig
- Pre FEED: Complete
- Budget & Programme: Complete
- Utilities Agreement: In negotiation
- Stakeholder Status: Working group established and meetings with Acorn, INEOS, Storegga, Scot Gov & SNGT

Grid Connection

- Substation: Calachem 33Kv
- Connection Regime: Distribution
- Import Connection: July 2023
- Export Connection: Dec 2023





Westfield Energy Recovery - Energy from Waste (EfW)

General Overview

CHP with conventional moving grate combustion technology, Siemens turbine & generator, Hitachi Zosen Innova process technology provider and EPC.

Location:	Fife Scotland	Performance:	Capable of processing up to 280,000 tonnes of waste per annum. Design point based on 9.5 MJ/Kg of 224,000 tonnes per annum
Electrical Capacity	24 MW (Fully condensing)	Typical Output	24 MWe
Ave Heat Demand	WIP	Plant Efficiency	32.00%

Brockwell Role

• Originated

• MSA provider to Equitix & Viridor

- Developed
- Financed
- Delivery currently in construction

Key Financial Metrics

- Capex: £230m (EPC)
- Opex: Ave £8.5m per annum
- **Revenue (waste): 71**% of feedstock on 15 year index linked supply agreements
- **Revenue (energy):** Fully condensing mode, PPA to be agreed.

Land

- Plot: 6.5 ac
- Status: Fully consented
- **Tenor:** 50 year lease wit option to extend by a further 50 years
- **Operation:** EfW plant + option for gas fired back up boilers
- Fees: Paid annually

Carbon Capture Status

• **Status:** Supporting the owners with strategy and options to progress.

Grid Connection

- Substation: Westfield 33Kv
- Connection Regime: Distribution
- Import Connection: June 2023
- Export Connection: Aug 2024





North Kyle Wind Farm - Onshore Wind

General Overview

Technology: Vestas V-136 4.5 MW Turbines with 149.9m tip height.

Location:	East Ayrshire, Scotland	Grid Cost:	£12.9m (Apr 19) £16.9m (Oct 23) £79.7k / MW paid across asset life (£5.7k/MW 1 st year ops)
TEC:	212 MW	P50:	634,740 MWhr (K2)
Installed Capacity	220.5 MW	Capacity Factor	32.8 %

Brockwell Role

- Originated
- Developed
- Financed
- Delivery currently in construction
- Management Service Agreement (MSA) provider

Land

- Land Status: Leases exercised with FLS and Hargreaves. Options held with Kier and Laird (access).
- Lease Tenor: Up to 40 years.
- Rent: Turbines 6% of revenue Y1-Y15, rising to 8% Y15 onwards for 40 turbines.
 2% Rising to 4% Y12 onwards for 9 turbines (with increase up to 4% rising to 6% depending upon energy price

Planning Overview

- Status: Fully Consented
- Planning Reference: ECU00000580
- Planning Authority: Energy Consents Unit ("ECU")
- Planning Term: 40 Years

Grid Connection

- Substation: New Cumnock
- Connection Regime: Transmission
- Connection Date: August 2024
- ANM/Intertrip: Category 1&2 Intertrip
- First Generation: c 80MWe array will be connected Q4 2024

Key Financial Metrics

- TSA Capex: £167.0m (£757k /MW)
- BoP Capex: £73.8m (£335k / MW)
- Other Capex: £39.8m (£181k / MW)
- Total Capex: £280.7 (£1273k / MW)





Scawby Brook - Project Location

- **Location**: Situated to the east of Scawby Road (B1206), close to the town of Brigg and the village of Scawby.
- Area: The project covers approximately 85 hectares (210 acres) of mixed-use land.
- Administrative Boundary: Located within the administrative area of North Lincolnshire Council.





Scawby Brook - Proposed Development

Brockwell Storage and Solar Ltd is proposing the development of a 49.9-megawatt (MW) solar array with a 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 site consists of four distinct plots, which will be accessed via agricultural roads and the existing renewable energy plant access.

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





Scawby Brook - Site Selection

Proximity to Grid	 The Scawby Brook Solar and BESS project will connect to Northern Power Grid's network by teeing off an existing 132 kV overhead line, located approximately 600 meters from the proposed development site.
Agricultural Land Quality	 The proposed solar scheme is located on Grade 3b agricultural land. This classification plays a key role in the site selection process, ensuring compliance with North Lincolnshire Council's ("NLC") planning policies. These policies state that land classified as "best and most versatile" agricultural land is not suitable for solar development.
Industrial Land	 The BESS area is situated on previously used industrial land, benefiting from existing roads and infrastructure. Its proximity to established energy generation facilities continues the area's legacy of energy production, which was a key factor in our site selection process.



Scawby Brook - Masterplan (North)

Mitigations have been built in during the design phase to reduce impacts on residents closest to the project.

Here we have removed panels closest to Sangreat Kennels





Scawby Brook - Masterplan (South)

Mitigations have been built in during the design phase to reduce impacts on residents closest to the project.

Here we have reduced impacts on New Farm





Scawby Brook - Masterplan (BESS)







Scawby Brook - Supporting information

Report/Assessment	Summary
Noise and Vibration Assessment	The noise assessment has been informed by background noise monitoring that was completed in September 2024. The assessment concludes that the Proposed Development would not have adverse effects on any noise sensitive receptor.
Ecology	The site is currently agricultural land with low ecological value. The proposed development will introduce species-rich habitats, including grassland, woodland, and hedgerows, significantly enhancing biodiversity.
Drainage	The development is designed to minimise the risk of flooding affecting equipment. Report concluded that the site has no significant impact on flooding on or off-site. The supporting drainage strategy will ensure surface water is appropriately managed without affecting surrounding areas.
Traffic and Transport	Construction traffic to last a period of 52 weeks with a maximum traffic volume of approx. 247 two-way movements per weekday, split across three points of access, during peak activities. During operation, visits limited to occasional LGV maintenance access. The project generates limited levels of traffic which are not expected to expected to result in any material impact on highway safety or the free flow of traffic on the surrounding highway network.
Archaeological and Heritage	Heritage assessment concluded that the proposed development would cause very limited harm to heritage assets, and that where harm exists this would be 'less than substantial harm'. A geophysical survey was untaken which did not identify any significant archaeological remains.
Landscape and Visual	The assessment concludes that the landscape and visual impact of the proposed development will be highly localised. Combined with existing topography, vegetation, and proposed mitigation planting, the visual effects will be effectively screened and minimised.
Glint and Glare	Assessment concludes that the effects of glint and glare and their impact on local receptors would result in low or no impacts, and therefore no significant effects would occur.



Scawby Brook - Access and Transport



We are preparing a Transport Statement (TS) to accompany the application, which outlines that construction traffic will access the site from the **M180** to the north, via the **A18** and then the **B1206** Scawby Road.

The construction phase will last for 52 weeks, with a peak traffic volume of 247 two-way movements per weekday, distributed across three access points. These movements will primarily be related to staff travel and will be scheduled outside of peak congestion periods.

During the operational phase, traffic visits will be limited to occasional LGV maintenance access.



Scawby Brook - Viewpoints and Visual Assessment

Photo impressions have been produced from multiple viewpoints to show both the initial impact of the proposed development and the longterm effects of coordinated planting on its visibility. These images will be uploaded once finalised to the project website.





Scawby Brook - Community Benefit Fund

Brockwell Storage and Solar Ltd is committed to supporting local communities by establishing a Community Benefit Fund for the Scawby Brook Solar and BESS project. The fund will be set up in line with industry guidelines, with a strong focus on early engagement with the community to ensure that local funds are allocated by local people.

Brockwell Energy has a proven track record of delivering meaningful community support throughout the lifespan of its projects. The North Kyle Trust was set up as part of the North Kyle Wind Farm and provided significant amounts of community funding to drive regeneration and local investment.

Please see the link below for more details on the North Kyle Trust:

https://www.brockwellenergy.com/projects/onshore-wind/north-kyle/



Scawby Brook - Timeline







O&A Stay involved

- More information at <u>https://scawbybrooksolar.co.uk/</u>
- Feedback form available at <u>https://scawbybrooksolar.co.uk/feedback/</u>
- Email us your thoughts and questions: info@scawbybrooksolar.co.uk
- Ask your questions by post FREEPOST SEC
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