Pulse Clean Energy: factsheet

Deal Information	
Deal signed	18 May 2023
Sector	Energy Storage
Location	Various locations
Counterparty	Pulse Clean Energy[i]
Total Investment	£175m
UKIB Finance	£62.5m
Product	Senior debt

Summary

UK Infrastructure Bank is investing £62.5m in Pulse Clean Energy's (PCE) proposed portfolio investment to support the building of 20 Battery Energy Storage Sites (BESS) with a combined supply capacity of approximately 930 MW, as well as one synchronous condenser. These sites are expected to be operational in the near term (2023-2026).

PCE is proposing a portfolio level investment to address some of the market barriers that exist across the sector. Platform financing will help attract more risk-averse investors to the battery storage market and helps PCE have the flexibility and financial capacity to quickly reach operation compared to individual asset debt raises. The investment further supports the Government's aim to have a flexible and decarbonised grid by 2035[ii].

Sector context

Energy storage is crucial in supporting the integration and rollout of renewables in the UK. It helps reduce the need for curtailment of intermittent renewables when supply exceeds grid capacity and provides wider stability to the grid. National Grid forecasts that up to 29 GW of energy storage could be needed by 2030 and up to 51 GW by 2050 – a huge increase on the 5 GW approx. currently on the system. For the UK to reach the level of storage deployment needed, significant investment is required.

Impact and Additionality

UKIB investment directly addresses market barriers to growth in the UK's finance market for battery storage:

- It allows diversification of risk across different sites, which can be more attractive to lenders.
- It helps achieve sector economies of scale, enhancing operational efficiencies associated with the platform business model, and removing the need to obtain individual project finance for each site.
- It has the potential to unlock £500m of investment in the battery storage sector and support the accelerated deployment of ~1GW of BESS capacity on the grid which may not have been possible with traditional business models. This is based on market evidence and engagement to determine if we are needed to accelerate this approach in the UK.

The project supports UK Infrastructure Bank's climate objective:

- Up to 20 battery energy storage sites are expected to be operational between 2023 and 2026, accelerating the deployment of 930MW of energy storage to the grid. This will save approximately 1.9 million tons of CO2 emissions, equivalent to 15 years of 28,000 household emissions.
- In addition, the synchronous condenser project will be key to managing the stability of the electricity system by providing a form of 'inertia', to enable more renewable generation to operate and ensure system stability at lower costs.

The investment attests to our objective of supporting regional and local economic growth, creating or protecting around 200 jobs across construction and site operation. The majority of the investments are targeted towards areas of the UK that have high development potential.

ESRG considerations

The project met UKIB's interim ESRG standards[iii]. PCE is committed to developing appropriate and transparent ESG standards. They are currently developing carbon emissions approach and are committed to align their plans with the Paris Agreement, both of which will be available by the end of 2023.

Impact Metrics

3	# Deals in the clean energy sector
£350m	Total Investment in Sector
200	Jobs created (direct and indirect)[iv]
- 1.9m tCO2e	Emissions[v]
£112.5m	Private Finance Mobilised

[i] Pulse Clean Energy, 197 Kensington High Street, London, W8 6BA

[ii] Transitioning to a net zero energy system: Smart Systems and Flexibility Plan 2021 (publishing.service.gov.uk)

[iii] UKIB developed its approach to ESRG over time, establishing a robust framework which is used to assess all current deals. Before this framework was finalised, a vigorous qualitative assessment based on the Equator Principles was carried out on all investments, including this one.

[iv] 13 jobs attributed across construction and operations, with the biggest proportion towards construction jobs (temporary jobs)

[v] GHG emissions figures are self-reported ex-ante estimates provided by the underlying company/project sponsor. The scope boundaries vary in each case and UKIB cannot guarantee alignment with the GHG protocol. The current methodology used to calculate saved emissions involves using the counterfactual of a gas peaker while accounting for degradation. However, a more accurate methodology is currently being developed and will be adopted once it is ready.