

Invinity deal: factsheet

Deal Information	
Deal closed	May 2024
Sector	Energy storage
Location	North Lanarkshire and West Lothian
Counterparty	Invinity ⁱ
Total financing	£56m
UKIB finance	£25m
Product	Equity

Geography

VALUE

■ NA ■ Catchment



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Summary

Invinity are increasing the company's existing manufacturing capacity in Scotland by expanding its current operation in Bathgate and expanding to a second site in Motherwell. UKIB will cornerstone £25m of a £56m public fundraise and crowd-in other investors. The investment will help Invinity scale up their new Vanadium Flow Battery (VFB) model (Mistral) and improve the automation of the manufacturing process, which will enable Invinity to reduce costs and compete with Lithium-ion batteries in the 4+ hour duration space.

Sector context

Energy storage is crucial for supporting the integration and rollout of intermittent renewables onto the grid needed to meet government's ambition to decarbonize the UK's power grid by 2035. The government's Smart Systems and Flexibility Plan (2021) highlights the important role storage will play in the transition to net zero, by reducing the curtailment of renewables and providing wider stabilization to the grid.

National Grid forecasts that up to 29GW of storage could be needed by 2030 and up to 51GW by 2050 – a huge increase on the approximate 5GW currently on the system. For the UK to reach the level of storage deployment needed, significant investment is required.

Global demand for LDES technology is likely to grow substantially over the short, medium and long term with potentially ~139GWh of new additions in the 4-12h storage segment by 2030. The UK component of the target addressable market is expected to be ~3.8GWh in 2030, growing from <1GWh in 2023.

Impact and additionality

UKIB investment has the potential to create positive impact in emerging long-duration energy storage technology by supporting the manufacturing of Vanadium Flow Batteries (VFB) and proving the technology at a commercial scale through an equity investment in Invinity. As set out by the recent UK battery strategy, supporting novel battery technologies and reducing the reliance on critical minerals, such as lithium ion, is an essential strategy to support the UK battery supply chain and provide the grid with the necessary balancing services.

The project will create up to 40 new jobs in Bathgate and Motherwell in Scotland, in line with the Bank’s mandate to boost regional and local economic growth.

Evidence suggests that UKIB investment will accelerate the deployment of VFB in the UK; funding UK manufacturing, bridging a financing gap, and de-risking and scaling the project to attract investors.

ESRG considerationsⁱⁱ

The project was assessed for ESRG risks in accordance with UKIB’s ESRG framework. Vanadium flow battery systems offer significant safety advantages relative to Lithium ion in the areas of short-circuit fault, blast, “stranded” energy, fire suppression, and deflagration.

Impact metrics	
5	# deals in the storage sector
£348m	Total investment in sector
102 ⁱⁱⁱ	Jobs (created and supported)
1.2m tCO ₂ e ^{iv}	Emissions avoided over five-year period
£31m	Private finance mobilised

ⁱ Invinity UK (Operations) Unit 1, Easter Inch Industrial Estate Bathgate, West Lothian EH48 2FG, United Kingdom

ⁱⁱ By partnering with us, companies agree to follow ESG best practice guidance and report on their: Environmental, social, resilience and governance (ESRG) approach: we will assess how projects manage their direct and indirect environmental and social impact, the resilience of their projects and the robustness of their ESRG governance structures. Material climate and environmental-related financial risk: we will check projects have incorporated the relevant recommendations of the Taskforce on Climate-Related Financial Disclosures (TCFD) and the International Sustainability Standards Board.

ⁱⁱⁱ 46 Jobs attributable to UKIB based on proportion of finance. 41 new jobs created in addition to the Invinity current 61 jobs.

^{iv} -527,333 tCO₂e emissions attributable to UKIB based on proportion of finance. Emissions calculated are based on the cumulative manufacturing capacity of Invinity over five years.