NATIONAL WEALTH FUND

clean technology partnerships initiative

Building UK battery supply chain resilience

Opportunities, capital and catalytic investment for a competitive and resilient UK battery industry

July 2026

Executive summary

Foreword

The post-COVID supply crunch, Russia's illegal invasion of Ukraine and now the blockade in the Strait of Hormuz have exposed the UK's industrial base to disruptions beyond its borders. Each shock has reinforced the same lesson: energy security and industrial security are inseparable.

Battery manufacturing underpins both within the intersection of the National Wealth Fund's (the Fund) three strategic ambitions: to accelerate place-based investment, unlock clean technology and energy growth opportunities and strengthen sovereign and strategic capabilities.

To underpin resilient economic growth, we have a time-bound opportunity to catalyse investment in this sector, accelerate the transition to clean energy and increase resilience across the supply chain.

In the first paper of our Catalytic Capital series, we set out our assessment of the UK market in the context of global trends and where we see the greatest clean technology co-investment opportunities, for investors and international partners.

This paper was developed in partnership with the Clean Technology Partnerships Initiative (CTPI), to be clear eyed on where the UK has current and potential future competitiveness in the global marketplace, which the Fund's toolkit can enable.

We look forward to hearing from investors and our international and domestic partners as we work together to land the investment needed to secure resilient and competitive battery supply chains.

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Batteries are critical to UK growth, the clean energy transition and national security. To support a competitive automotive industry, balance a clean energy grid and power defence capabilities, the UK requires 115 GWh of batteries per year by 2035 (nearly 100 GWh for cars alone)[1]. Currently, China produces 70–90% of batteries and over 85% of key battery materials, creating a geographically concentrated disruption risk[2]. There is an estimated 30% - 50% cost disadvantage for European manufacturers, reflecting structural factors such as higher industrial electricity costs and lack of economies of scale[3].

Using market analysis from the CTPI, this paper sets out the most significant opportunities for the UK to grow its battery production base, close the competitiveness gap and increase economic resilience with catalytic investment from the Fund. The priority areas identified build on areas of UK comparative advantage that will be most competitive when complemented by overseas supply chain partnerships. This includes:

- An opportunity to fill the cell assembly gap, including in the growing **Lithium Iron Phosphate (LFP) battery market**;
- Land **domestic production of the cathode active material value chain**, and sourcing secure anode active materials (AAM), following EU-UK Rules of Origin (RoO) on content requirements;
- Build on **UK innovation and recycling strengths** to scale companies, retain intellectual property (IP) in next-generation cells and materials, and increase critical material feedstocks; and
- Develop a resilient supply chain with trusted partners to support grid balancing, including **Battery Energy Storage Systems (BESS) and Long Duration Electricity Storage (LDES)**.

The UK has demonstrated it can secure gigafactory investment at scale. A combination of £150 million of grant funding and £544 million of loan guarantees from both the Fund and UK Export Finance (UKEF) helped to secure over £1 billion of investment into the construction and operation of AESC's gigafactory in Sunderland[6].

The Government's Modern Industrial Strategy, Clean Power Action Plan, and the Strategic Defence Review 2025 collectively create strategic direction and policies to increase UK competitiveness. As a policy bank, the Fund has a unique role in addressing the current barriers in the market to build a robust domestic supply chain and increase UK economic growth.

Unfortunately, the UK is not on track to meet the 115 GWh demand a year by 2035[4]. Over £4 billion in research & development (R&D) and capital grant funding, alongside the Fund and finance from other Public Finance Institutions, is available to support closing the gap and bring forward opportunities in battery manufacturing, grid-scale storage, recycling, electrode active material production and associated technologies.

The Fund addresses the mismatch between battery investment risk profiles and risk appetite from available capital. Battery technology investment occupies an 'uncanny valley', £70 – 150 million+ is too capital-intensive for venture capital (VC); outside the technology risk appetite for infrastructure funds; and the 5 – 7 year payback is too long for growth equity[5]. For larger-scale manufacturing investments, production cost competitiveness and offtake uncertainty makes project finance challenging without loan guarantees.

The Fund's new catalytic approach fills this gap by providing patient, targeted and flexible capital coordinated with cross-government policy to build UK resilience using a dual-track strategy, depending on the level of commercial maturity. First, by anchoring domestic production of cells and materials through debt and guarantee support. Second, by scaling innovations in the Technology Readiness Level (TRL) 7+ phase through cornerstone equity investments in UK technology companies to crowd in other investors. The aim is to secure a stronger position for the UK in the next generation of battery technologies, chemistries, recycling, components and cell formats, reducing dependence on overseas IP.

Executive takeaway: The National Wealth Fund offer

Selective, collaborative, and staged: backing UK strengths, aligned with trusted partner supply chains, where commercial logic and policy align.

Anchoring: Debt and guarantees (£100 million+)

Securing the industrial base. Anchor cells, cathode and critical components, including through joint ventures (JVs) with Chinese, Japanese and Korean manufacturers. Use debt and loan guarantees to support the financing of large-scale projects.

> **Example:**
> £272 million National Wealth Fund guarantee (£544 million combined with UKEF) for 15.8 GWh of UK cell capacity.

Scaling: Equity (£25 million+)

Backing UK technology companies at TRL 7+. Target advanced battery materials, next generation cell chemistries, advanced recycling and cell formats — sectors where UK R&D leads and the Fund's equity can crowd in strategic and venture investors.

> **Example:**
> £55 million of equity funding for Cornish Lithium to secure a domestic supply of lithium.

The Fund invites overseas and domestic partners to get in touch to seize these opportunities in the UK and access the finance available to scale.

1. The strategic imperative and market context

Strategic rationale

Batteries are a platform technology of the clean energy transition and of modern industrial economies, critical to:

- Underpinning the shift from Internal Combustion Engines to Electric Vehicles (EVs) in the automotive sector, with domestic transport responsible for ~31% of UK greenhouse gas emissions;
- Grid storage systems to enable the UK to manage its grid effectively as the share of renewables increases; and
- Sovereign and strategic capabilities, from defence applications to AI data centres and Critical National Infrastructure resilience.

The battery manufacturing sector delivers significant benefits for the national economy, employing over 10,000 people directly[7]. Competitiveness in the battery sector anchors manufacturing across its applications. The UK automotive manufacturing sector, for example, generates ~£21 billion in gross value added and supports ~132,000 jobs across the UK, including clusters across the North of England and the Midlands[8].

The global context

China's dominant position in the battery supply chain is structural, built on years of systematic industrial policy, vertical integration, cost and technology advantages. China produces 70–90% of global battery cells, over 85% of CAM and more than 90% of AAM, including graphite[9]. China leads refining for 19 of 20 strategic energy minerals at ~70% market share, with the highest concentration in battery-relevant inputs: ~65% of lithium, 75–90% of graphite, and ~60% of fluorspar mine production – the upstream feedstock for PVDF binders and $LiPF_6$ electrolyte salt[10].

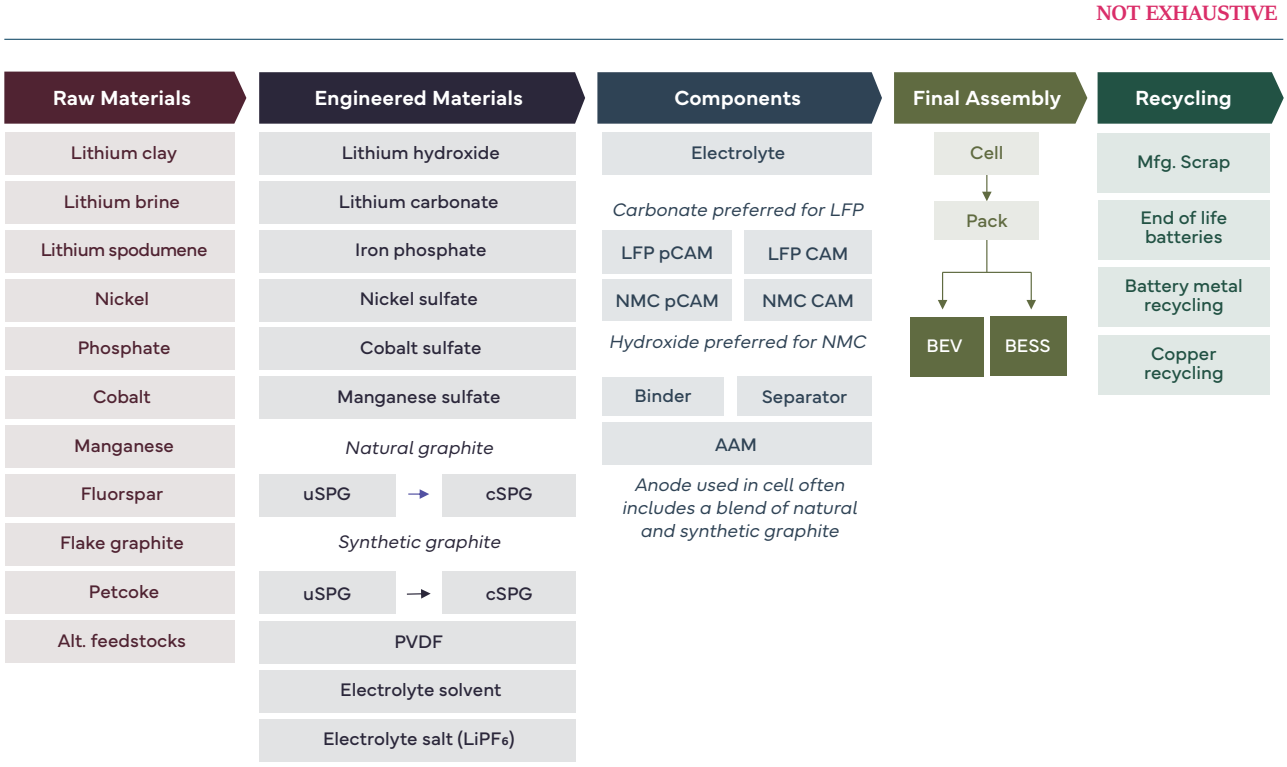
This concentration creates disruption risk that can amplify through UK supply chains, reducing economic activity in downstream and reliant sectors. China enacted graphite export controls in December 2024 and proposed restrictions on LFP cathode materials in January 2025[11]. China's 3.1 TWh of cell manufacturing capacity represents 2.5 times current global demand, creating structural oversupply leading to challenging market conditions for UK and European producers[12].

Meanwhile, the chemistry landscape is also shifting. Chinese producers have moved rapidly to LFP — now 75% of the global market, 30% cheaper than Nickel Manganese Cobalt (NMC) with 98% of global LFP cathode production capacity located in China[13].

Figure 1. Battery supply concentration by high level supply chain segment[14]

Supply Chain Segment	China's Share	UK Position	Risk Level
Cathode (CAM — LFP)	>98%	Zero domestic production	Critical
Anode (AAM — Graphite)	>90%	Zero domestic production	Critical
Battery Cells	>80%	AESC Sunderland (15.8 GWh); Agratas Somerset (due 2027)	Critical
Cathode (CAM — NMC)	85 – 90%	Zero domestic production	High
Battery Materials (lithium, graphite, fluorspar)	60 - 90%	Limited domestic capability	High
Advanced Recycling	Emerging	UK has comparative R&D advantage	Opportunity

Figure 2. Lithium-ion battery supply chain[15]



UK demand outlook

UK battery demand is structural and rapidly scaling across three vectors:

Automotive: The Zero Emission Vehicle (ZEV) mandate requires that by 2035, 100% of new car and van sales are ZEV. This equates to 97 GWh of annual cell demand by 2035 for the UK market alone[16]. In addition, the EU-UK RoO on content requirements mean that UK automotive exports are at risk without domestic battery components, creating strong demand growth for UK batteries.

Grid-scale storage: The Government's Clean Power Action Plan has an ambition for up to 27 GW of short-duration battery storage and up to 6 GW of long-duration storage by 2030, up from ~7 GW and ~3 GW today respectively[17]. However, stronger government demand signals would be needed to support a shift toward domestic content in grid-scale storage and time would be needed for these to feed through to supply chain composition.

Defence: The Strategic Defence Review 2025 commits 10% of the MOD equipment budget to novel technologies, with battlefield electrification identified as a core capability across submarines, ground vehicles, unmanned systems and naval electrification[18].

UK battery demand at a glance

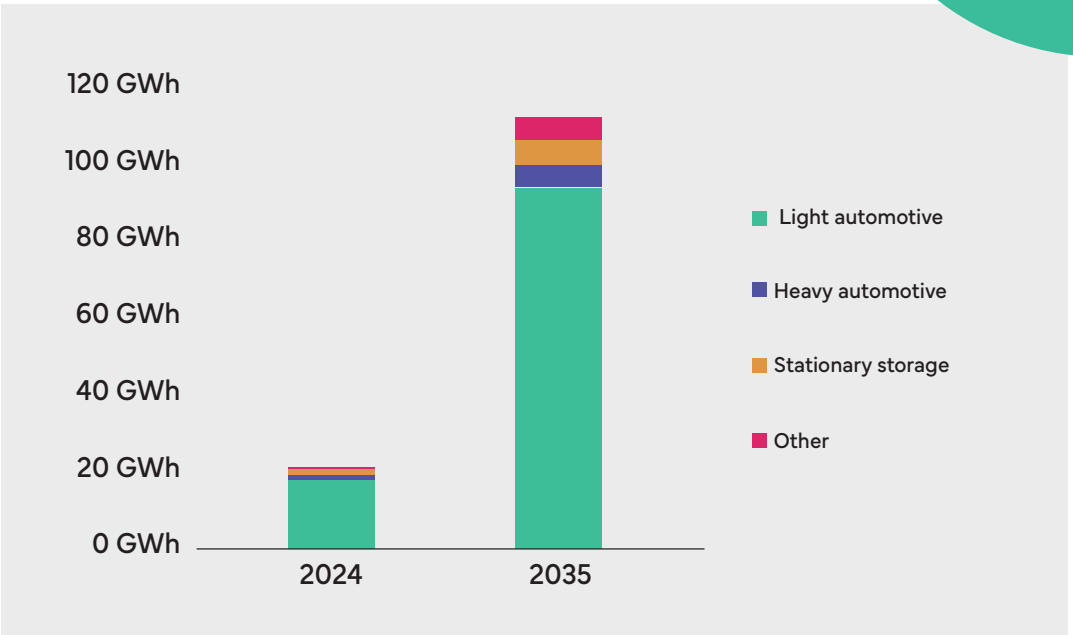
115 GWh by 2035

UK Gigafactory Commission - "Without at least one further large-scale plant announced in 2026 or 2027, the UK risks becoming dependent on imports, which would undermine the UK automotive industry, trade and long-term competitiveness"[19].

Clean power 2030 ambition

up to 27GW of short-duration battery storage and up to 6GW of long-duration storage installed by 2030.

Figure 3. Predicted annual UK demand for batteries by 2035[20]



2. The market opportunity for the UK

To meet the UK's demand, the objective is to build on areas of UK strategic advantage and work with international partners to seize growth opportunities and increase resilience. By retaining meaningful domestic capability and diversified supply routes with international partners, the UK can reduce vulnerability to disruption while remaining integrated within global markets.

Current UK production

The UK's only operational gigafactory, AESC Sunderland (15.8 GWh), provides ~14% of the UK's projected demand by 2035[21]. The Agratas Somerset facility — a £5.2 billion, 40 GWh plant — is due to commence production in late 2027, with an initial capacity of around 15 GWh. Even with both facilities fully operational, the UK will not be on track to meet addressable UK demand by 2035[22].

Upstream, the UK has no industrial scale production of CAM, a key value-add segment (see Figure 1 above). Scaling-up production will take time, so it is imperative to act quickly.

Finance gap

The barrier to UK battery manufacturing is not a shortage of private capital — over $100 billion sits across 100+ climate funds and investors globally[23]. The problem is a fundamental mismatch between battery investment risk profiles and the capital available to fill them. Battery manufacturing occupies an 'uncanny valley' of investment:

- Capital-intensive for venture capital (£70–150 million minimum);
- Higher technology risk for infrastructure funds;
- Payback periods, typically 5 - 7 years, are too long for growth equity;
- Cost competitiveness uncertainty requires long-term firm offtake.

To address the financing gap, CTPI analysis identified four strategic opportunities where targeted intervention can help close the competitiveness gap, build resilience and attract private capital at scale. These opportunities are not equally urgent: cells and cathode are binding near-term constraints; recycling and electricity storage are the UK's most distinctive medium-term bets.

Figure 4. Analysis of investor type, risk profile and target returns[24]

Investor Type	Target IRR	Tech Risk	Cost Risk	Offtake Risk
Venture Capital	25 – 35%	Medium	Low	OK
Growth Equity	20 – 30%	Low	Minimal	Low
Project Finance	7 – 10%	Low	Low	Minimal
Infrastructure Funds	8 - 14%	Minimal	Minimal	Minimal
SWF / Pension	8 – 12%	Low	Minimal	OK

Opportunity 1: Fill the LFP cell production gap

The UK has no LFP cell production capability, and the global market is moving in the direction of LFP. LFP is now the dominant battery energy storage chemistry (lower cost, higher safety) and its automotive market share is increasing rapidly. The CTPI analysis points to an LFP cell manufacturing JV — co-located with CAM production — as the highest-priority near-term investment for the Fund. In the short-term, this inward investment is most likely to come from China, Japan or Korea, due to their existing market position in current generation battery technologies. They bring proven at-scale manufacturing, original equipment manufacturer (OEM) relationships and process know-how, while the UK brings the policy framework, demand anchors and Fund capital.

Opportunity 2: Attract anode and cathode production

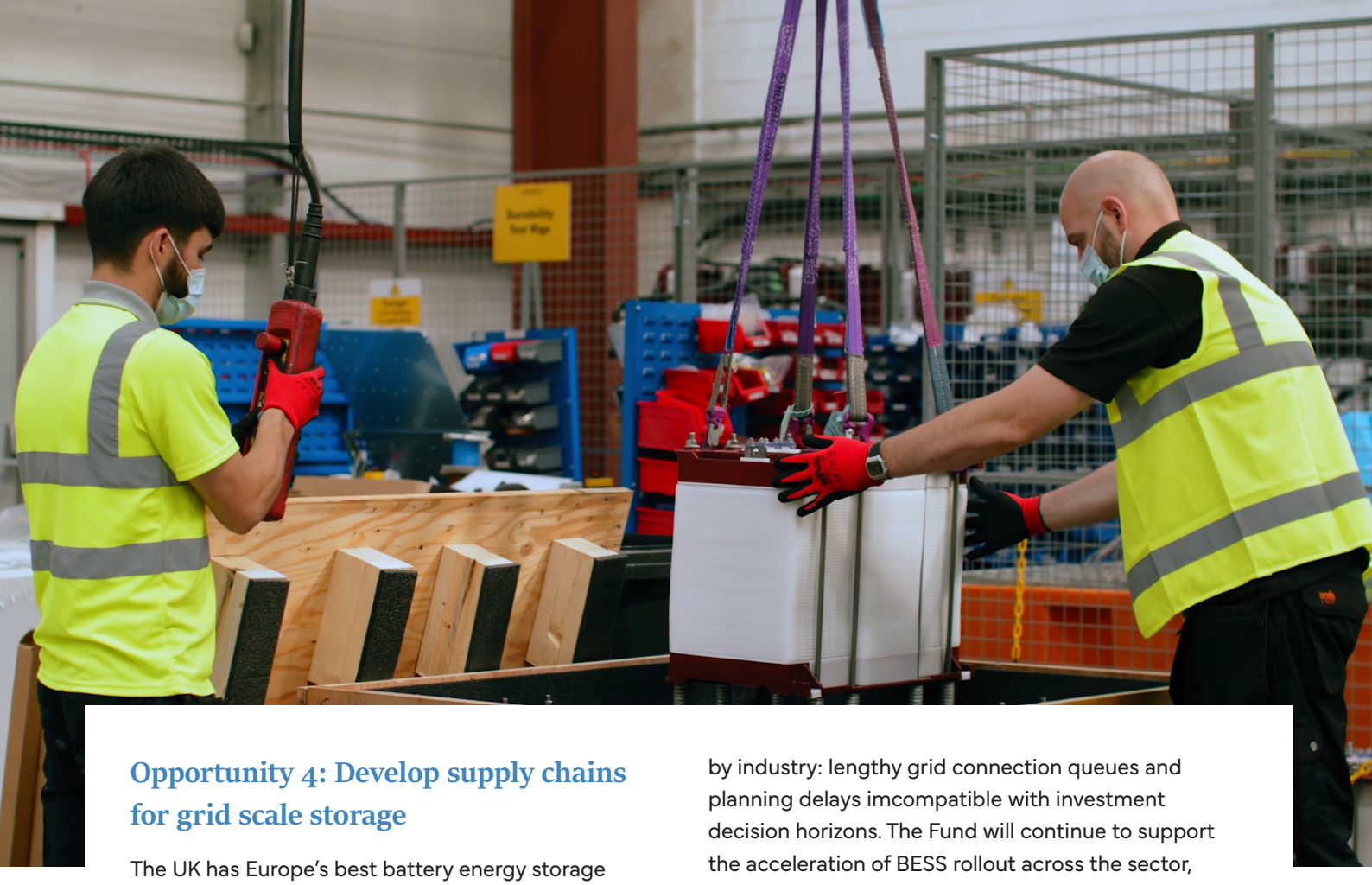
EU-UK RoO require battery packs to contain 70% locally produced content to qualify for tariff-free trade between the UK and EU. Currently, ~98% of LFP cathode active material and over 93% of graphite AAM manufacturing capacity is in China[25]. Without domestic or allied-country cathode and anode production, UK automotive manufacturers will face significant tariff exposure from 2027.

CAM represents 30–40% of cell cost — the single largest cost input[26]. Building a UK CAM facility, co-located with a cell JV, is both a strategic chokepoint to address and an opportunity to anchor significant value-add in the UK. Experienced partners in the chemicals sector are potential co-investors. For AAM, the energy intensity of graphitisation makes purely domestic UK production challenging at current electricity prices.

Opportunity 3: Advanced battery recycling and other emerging technologies

The UK is home to a wide array of battery technology start-ups, an ecosystem that has been underpinned by the UK's deep university research base and government funding initiatives such as the Battery Innovation Programme and DRIVE35. These start-ups are aiming to shape the future of the industry in both mass-market and high-value applications. Promising approaches include novel anode materials for high-energy density or ultra-fast charging, more space- and energy-efficient manufacturing processes and the development of software optimising battery performance.

In CTPI's view, advanced battery recycling is the area where the UK holds its most distinctive competitive advantage. These technologies could recover over 95% of cathode metals and 99% of graphite from end-of-life batteries, with lower costs and significantly lower carbon emissions than primary production. By 2035, UK recycling has the potential to reduce vulnerability in supply chains by increasing domestic critical minerals supply up to 20% of domestic market share, if UK innovation in graphite, lithium and nickel recovery can be scaled to production. The EU Battery Regulation mandates minimum recycled content from 2031, for example, 6% of lithium used in batteries will need to be recycled content, creating both a compliance requirement and an export market opportunity.[27]



Opportunity 4: Develop supply chains for grid scale storage

The UK has Europe's best battery energy storage signal (rated 4.0 by RMI, ahead of the US at 3.6), with an ambition for 23 - 27 GW under Clean Power 2030[28]. However, stronger demand levers from government would be required to support the business case for domestic LFP cell supply chains for grid scale use. Such domestic capabilities could also support the business case for resilient LFP EV battery supply chains and serve potential export opportunities to North Sea neighbours (Denmark, Netherlands, Germany, Belgium). As an energy asset, grid scale storage is classed as Critical National Infrastructure, meaning that supply disruption directly affects resilience and recovery from shocks, including cyber and physical attacks. As such, governments are increasingly considering trusted-supplier sourcing essential to managing supply disruption and the risk of embedded vulnerabilities from components, including inverters, transformers and control systems.

BESS deployment has progressed in the absence of a dedicated government revenue stabilisation mechanism. Its rollout has been commercially led, driven by merchant models and supported by private tolling agreements and floor contracts. However, the cells have been imported and faster buildout of grid scale projects is constrained by barriers identified by industry: lengthy grid connection queues and planning delays imcompatible with investment decision horizons. The Fund will continue to support the acceleration of BESS rollout across the sector, including utility-scale grid storage, commercial and industrial use and aggregated residential projects, using debt, equity and guarantees. This follows on from the deals we have already done with Fidra Energy, EelPower, AMP Clean Energy, Sosteneo and Pulse Clean Energy.

In addition, LDES will be needed to balance the electricity system where this volatility sustains for days or weeks. In recognition of this, the Clean Power 2030 Action Plan sets an ambition for 4 - 6 GW of LDES by 2030 and National Energy System Operator estimated a system need of 5 – 10 GW by 2035[29]. Current installed capacity sits at 2.7 GW. The Fund can provide finance to support projects with LDES Cap and Floor contracts. The Fund's product offer of equity (minimum £25 million ticket size), debt and guarantees (typically over £100m ticket size) will be tailored to the specific circumstances of the given project. The nascent technology stream (e.g. Flow batteries, Liquid Air Energy Storage and Compressed Air Energy Storage) of the Cap and Floor in particular presents opportunities to support UK manufacturing and assembly.

International comparators

The race to secure domestic battery manufacturing is competitive. A combination of catalytic capital, grants, policy signals and private investment has produced landmark results internationally — providing direct lessons for the UK approach (see Figure 5 below).

Figure 5. International examples of support for battery manufacturing

Country / Model	Public support	Key lesson for the UK and the National Wealth Fund
Canada — PowerCo/VW	CAD ~$3.5 billion construction/ITC support (total ~$16–17 billion; 2.4:1 public-to-private) and $13.2 billion production subsidies	Demonstrates mid-sized economy can anchor globally significant EV battery investment
France — BPIfrance/ Verkor	€353 million Strategic Project Guarantee unlocked 16 commercial banks (€1.3 billion green loans); €850 million Series C equity; ~€650 million France 2030 subsidies	Guarantee instruments can unlock commercial bank capital at scale without direct production subsidies. 12-year Renault offtake (75% of capacity) was critical to bankability
Spain — Stellantis/CATL Zaragoza	€300 million+ EU funding; €130 million+ Spanish Government support	50/50 JV between established OEM and leading cell manufacturer, with public support was effective at de-risking ramp-up phase
USA — EnerSys/DOE	~$199 million DOE grants; ~$200 million state incentives; uncapped 45X credits ($35/kWh cells); $50 million DOD defence production line	Defence demand as premium anchor transforms manufacturing bankability. Layered federal + state + procurement support is the template for the Fund + MOD + BICS

The through-line across these successful models has been: (i) proactive government structuring of the deal (not waiting for industry), (ii) layered instruments across grant, guarantee, public finance offer and/or tax incentives, (iii) demand-side certainty through offtake or procurement policy and (iv) explicit cross-government coordination.

3. Government support: Demand signals and enabling policy

The UK's policy environment for battery manufacturing has developed substantially, providing a platform for catalytic investment by the Fund. The ZEV mandate and upcoming EU-UK RoO changes are the two most significant near-term milestones driving demand for UK-made batteries. The Government's Clean Power Action Plan, the Industrial Strategy and the Strategic Defence Review 2025 collectively create strong incentives and policies that increase UK competitiveness.

DRIVE35 is the primary grant programme for domestic battery manufacturing (with a £4 billion total envelope), and the Battery Innovation Programme (formerly Faraday Battery Challenge), continues to fund world-class R&D. The UK's research base — the Faraday Institution, UK Battery Industrialisation Centre, UK Research and Innovation, Innovate UK — provides a strong pipeline of companies at TRL 1–6. To scale, at TRL 7+, is where the Fund's catalytic investment can anchor and scale key capabilities.

The Fund's catalytic power is greatest when paired with aligned policy from across government. The battery strategy requires deeper cross-departmental integration than most sectors, spanning defence, energy, industrial, technology, trade and environmental policy simultaneously. The Fund will continue to work closely with the Department for Business and Trade (DBT) and the Advanced Propulsion Centre (APC) as they administer DRIVE35 to support and grow the UK's battery supply chains. The Fund will work with key public sector actors above, including with Public Finance Institutions (see Figure 6 below) through the Public Investment Roundtable (PIR) and the Department for Energy Security and Net Zero as it supports increased grid storage and battery manufacturing in the UK.

Figure 6. Overview of Public Finance Institutions[30]

Innovate UK

Innovate UK is the UK's innovation agency and part of UK Research and Innovation (UKRI).

Innovate UK provides:

- Grants
- Loans
- Pre-procurement
- Tailored support

Innovate UK supports businesses seeking to develop and commercialise new products, processes and services alongside a growing network of Investor Partners providing aligned private capital.

British Business Bank

British Business Bank (BBB) is the UK's economic development bank. The BBB uses its £25.6 billion capitalisation to increase the finance available to SMEs through:

- Investment into partner funds
- Direct investment into companies
- Providing debt, guarantees and loans through commercial partners

The BBB supports investors looking to partner with the BBB or SMEs looking for investment in the UK.

National Wealth Fund

Based in Leeds, the National Wealth Fund is a policy bank, bringing together the strengths of both the public and private sectors to unlock the UK's future. It has £27.8 billion to crowd in private finance through:

- Equity, debt and guarantee investments in capital intensive projects and companies, generally at later funding stages
- Advisory services and lending to local authorities (LAs)

The Fund supports LAs and those seeking investment into large projects or companies.

UK Export Finance

UKEF is the UK's export credit agency. UKEF drives growth by helping exporters access capital and manage the risk of not getting paid.

UKEF partners with private sector finance providers to grow UK exports and international trade, providing support for:

- Working capital loans
- Export insurance
- Guarantees to international buyers

UKEF supports UK exporters, businesses looking to export from the UK and international businesses sourcing goods and services from the UK.

Banc

The Development Bank of Wales provides equity financing, business and property loans to businesses in Wales.

The Scottish National Investment Bank

The Scottish National Investment Bank provides debt and equity to projects and businesses based, or looking to relocate to, Scotland.

Invest Northern Ireland

Invest NI helps new and existing businesses to compete internationally, and by attracting new investment to Northern Ireland, including by providing loans and equity investment in NI.

Great British Energy

GBE is the UK's publicly owned energy company. It will utilise its multi-billion pound capitalisation to accelerate delivery of clean power, whilst securing greater public ownership of energy generation, flexibility and storage assets via investments and in-house development of energy projects.

Office for Investment

The Office for Investment (OFI) provides a bespoke concierge service to help the most strategically important investors navigate the UK landscape, including the public finance offer, working with the Fund, BBB, and other Public Financial Institutions.

The Fund's catalytic approach is coordinated and designed to come in alongside broader enabling reforms. Reforms to increase Advanced Manufacturing competitiveness is central to the UK's Modern Industrial Strategy, including addressing one of the most significant barriers identified: high electricity costs. The British Industrial Competitiveness Scheme (BICS) — delivering a £35–40 per MWh reduction — is available to manufacturers in battery production from 2027, with one off payments for 2026.

4. Keys for success – The National Wealth Fund's catalytic role

The Fund has a central role to play in securing battery manufacturing in the UK by providing patient, targeted capital, combined with sector expertise and working with partners across UK Government.

Crowding in private capital is central to successfully onshoring battery manufacturing due to the capital-intensive nature of the supply chain. The Fund invests where there is potential to unlock significant private finance over time, co-investing with the private sector to crowd in finance throughout the lifecycle of individual investments and the sector.

The Fund will pursue these opportunities using a dual-track strategy, led by the level of commercial maturity. First, anchoring production in areas of potential comparative advantage where manufacturing is critical for security and competitiveness: cells, CAM, and niche defence-grade. Second, with longer-term scaling investments in anode coating and finishing, advanced recycling, and TRL 7+ next-generation technology and materials, crowding in strategic and equity investors to support UK leadership in next generation clean technologies.

The National Wealth Fund's dual-track battery strategy

Track 1 — Anchoring:
Securing the industrial base. Anchor cells, cathode and critical components, including through JVs with Chinese, Japanese and Korean manufacturers. Use debt and loan guarantees to support the financing of large-scale projects.

Track 2 — Scaling:
Backing UK technology companies at TRL 7+. Target advanced battery materials, next generation cell chemistries, advanced recycling and cell formats — sectors where UK R&D leads and the Fund's equity can crowd in strategic and venture investors.

Catalytic finance

To support this dual-track approach, the Fund offers three types of finance:

Anchoring - Debt & Guarantee deployment (£100 million+): For major supply chain investments by leading global cell manufacturers and battery material producers. Attracting foreign direct investment is necessary to localise battery manufacturing supply chains and to import process know-how. The Fund's debt and guarantees can help to attract this foreign investment, with particular value-add in supporting inward investment from gigafactories producing differentiated technologies (e.g. LFP). This will help to diversify and strengthen the supply chain, as well as reduce concentration risk. Attracting AAM and CAM producers to the UK would be a significant win as well, further strengthening supply chain resilience. Combining Fund capital with UKEF, as happened in the AESC deal, can further strengthen the UK offer to foreign investors. This will also help to support the recommendations in the UK Gigafactory Commission to accelerate gigafactory delivery, build domestic AAM/CAM production and potentially attract new OEMs to the UK[31].

Scaling - Equity deployment (£25 million+): Supporting strong domestic IP and scaling-up UK-founded battery technology companies by deploying equity finance. Attracting inward investment can also help support these UK next-generation battery technology scale-ups by potentially unlocking R&D partnerships and offtake agreements. Having an environment that supports scaling UK firms is key to short- and long-term prosperity. The Fund will target TRL 7+ companies with demonstrated value creation, material recurring revenues or strategically significant offtake agreements. The Fund takes a minority position and ordinarily will not want to be the largest shareholder. A strategic investor on the cap table is preferred.

Anchoring and Scaling - Regional Project Accelerator: Low-cost lending direct to local government. The Fund has £4 billion lending capacity to Local Authorities throughout the UK to support complex, transformational and higher-risk projects that align with government priorities and regional and local ambitions. This also includes advisory, partnership and support services to Local Authorities.

Proven track record

The Fund has already demonstrated the catalytic model for battery supply chain investment. The AESC Sunderland guarantee — £272 million the Fund, £544 million combined with UKEF — unlocked over £1 billion in total investment, creating the UK's first at-scale lithium-ion cell manufacturing facility (15.8 GWh, over 1,000 jobs, capacity for 100,000 EVs per year).

Figure 7. Battery supply chain projects supported by the National Wealth Fund

Company	National Wealth Fund commitment	Location	Rationale	Key Impact
AESC[32]	£200 million bridge loan (Dec'23) £272 million guarantee (Apr'25) (alongside UKEF)	Sunderland	Support AESC's second EV battery manufacturing plant	Delivering 15.8 GWh p.a. of battery manufacturing capacity once operational, enough batteries for 100,000 EVs p.a.; supporting 1,000+ jobs; avoiding ~20mtCO2e emissions
Cornish Lithium[33]	£24 million equity (Aug'23); £31 million equity (Sep'25)	Cornwall	Enable domestic battery-grade lithium production	Trusted domestic lithium supply; scaling EV value chain; deepening supplier ecosystem; supporting ~1,200 jobs at full commercialisation; avoiding ~35,000ktCO2e emissions
Cornish Metals[34]	£29 million equity (Jan'25); £35 million debt (May'26)	Cornwall	Enable domestic tin production	Restarting South Crofty mine and securing 4,000t of tin p.a.; creating skilled local jobs at a wage premium; globally competitive industry
Highview Power[35]	£165 million debt and equity (Jun'24)	Carrington	Enable construction of FOAK liquid air energy storage project	Accelerating investment in grid scale nascent long-duration technology; support up to 380 jobs across construction and operations; avoiding ~8.5mtCO2e emissions
Invinity Energy Systems[36]	£25 million equity (May'24)	Scotland	Expand vanadium flow battery manufacturing for long-duration storage	Reduced reliance on lithium for energy storage; greater grid stability; catalysing place-based growth in devolved nation; avoiding ~1.2mtCO2e emissions

What success looks like by 2035

The Fund's battery strategy, in collaboration with the public and private sector, targets the following outcomes:

- **A domestic cell manufacturing base** that supports the UK automotive sector's compliance with EU-UK RoO requirements, supported by debt and guarantees.
- Securing and then scaling-up **CAM and/or AAM producers**, supported by debt and guarantees.
- Improved **security of critical mineral supply**, through increased domestic production and recycling, reducing reliance on concentrated global supply chains.
- **Scaling a number of UK next-generation battery technology and supply chain companies**, supported by equity finance, in beginning to reach profitability.
- Working with international partners to increase supply chain resilience and the competitiveness of the UK sector.
- Reduced reliance on high-risk supply chains, with improved traceability and responsible sourcing across battery materials.
- Strengthened regional industrial clusters, skills development and supply chain depth.

In-line with the Fund's triple bottom line, these outcomes will be assessed against:

- How impactful have the investments been in supporting the Government's growth and clean energy missions?
- How can the investment crowd-in private finance and catalyse sector development via both financial and non-financial additionality?
- Has it generated a positive financial return for the taxpayer?

5. Seizing the opportunity: The National Wealth Fund's invitation to partners

The UK has the demand, the policy direction, the research base, including access to high-quality talent, and the public finance to build a resilient, competitive battery supply chain. What it needs now is speed, coordination and the right partners to convert opportunity into anchored industrial capacity.

The UK is not on course to meet the projected domestic demand available by 2035 and production is far below the 70% of local content needed to comply with the upcoming RoO requirements. There is over £4 billion in R&D and capital grant funding and substantial funding from Public Finance Institutions to close the gap — in cell manufacturing, BESS deployment, advanced recycling and anode/cathode production. The Fund will work closely with DBT and the OFI to coordinate cross-government support to ensure that the UK can seize the opportunity to anchor and scale battery manufacturing domestically.

Battery manufacturing investment decisions are path-dependent meaning that if this opportunity is missed, it is unlikely to ever materialise. Targeted public capital at critical decision points can influence siting, scale and supply chain integration in ways that crowd in private investment and deliver long-term strategic value. Without early action, the UK risks seeing battery supply chains and EV production become structurally embedded overseas. Once capacity and supplier relationships are anchored elsewhere, dependence becomes persistent and difficult to unwind.

The National Wealth Fund invites the following partners to engage:

Cell manufacturers and JV partners:
Cell manufacturers seeking to establish manufacturing capacity in the UK with public financial support, including LFP.

Cathode and anode material producers:
Anode and cathode producers seeking financing for new UK capacity, whether for domestic use or export.

UK technology companies (TRL 7+):
Developers of next generation cell chemistries, battery materials, advanced recycling and process technology seeking growth equity and strategic co-investment.

Potential co-investors and co-lenders:
Including funds and strategic investors looking to take equity stakes in innovative UK battery technology companies, lenders with appetite for the project financing of major greenfield battery, FDI projects with expert sponsors, infrastructure funds and Mansion House Accord pension capital seeking to co-invest alongside the Fund in de-risked battery manufacturing assets post-construction.

Endnotes

1 Innovate UK, Sector Wide UK Battery Demand Projections To 2035 (April 2025)

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