



The UK's EV Battery Economy

A strategic review of the UK's battery manufacturing sector

About this Report

For over a year, New AutoMotive has tracked the battery supply chain across Europe, monitoring every disclosed project from lithium extraction through refining, cell manufacturing and recycling. That work has previously produced country and regional case studies covering Poland, Germany, Hauts-de-France and Galicia. This report applies the same approach to the UK.

In this report we set out a comprehensive audit of the UK's battery ecosystem, split into two main sections. First, we profile the supply chain's industrial profile, detailing the UK's current market standing, workforce impact, gigafactory capacity gaps, macroeconomic head- and tail-winds. In the second section we detail the anatomy of the UK as a battery manufacturing centre, with deep dives into each segment of the value chain - mining, refining, battery manufacturing, and recycling - evaluating active projects, near-term opportunities, critical bottlenecks, and specific policy interventions needed to continue progress and unlock growth.

As with the wider tracker, this report draws on publicly available information: company announcements, government publications and reports from respected research institutions. It focuses on projects that are, or are becoming, commercial-scale operations serving the EV battery market, although pilot facilities that are scaling up are included. Capacity and investment figures are the headline figures disclosed by companies.

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Key Figures

£7bn

Announced Investment

14+

Projects analysed

55 GWh

Potential Gigafactory Capacity

Recycling, R&D innovation

Key strengths

Mid Stream

Critical weakness

Introduction

The automotive industry is central to the UK's industrial identity and international image. The spy aesthetic of Aston Martin, the 'Cool Britannia' of the Mini, or the status symbols of Rolls-Royce and Bentley, all served to build a reputation for engineering excellence and cemented the UK's craftsmanship tradition into the 20th Century.

Although far off its global peak in the 1950s when it was the second largest producer of vehicles in the world, second only to the USA¹, the sector still sits at the heart of UK industry accounting for 11% of all manufactured goods. Around three quarters of the vehicles produced in the country are made for export and that contributes around £47 billion a year to the economy today².

The sector supports 183,000 jobs in the direct manufacture of vehicles, and a further 613,000 in the wider automotive sector³. These jobs are largely located in England, with the North East boasting one of the highest-volume car manufacturing plants in Europe⁴, the West Midlands seen as the powerhouse of OEM manufacturing accounting for over 40% of the UK's total automotive exports⁵, and the South hosting BMW's mini plants⁶.

As global vehicle production shifts towards electric vehicles (EVs), battery manufacturing has become one of the single most important factors determining where future vehicle production is located. As co-located battery and vehicle manufacturing plants are becoming increasingly the norm, in order to electrify car manufacturing, battery manufacturing must be prioritised as well.

This has driven a new wave of investment across the battery supply chain in the UK. £7 billion has been committed to disclosed projects spanning lithium extraction, refining, battery manufacturing and recycling, with several further projects yet to disclose investment figures⁷. Together, these projects have the potential to establish one of Europe's most complete battery ecosystems. In particular one that has real strength in the recycling and materials-recovery stage of the chain as well as in cell production.

¹ Coventry Transport Museum, Undated, [Motor City UK 1950 to the present](#)

² SMMT, 2026, [Powering the Economy](#)

³ SMMT, February 2026, [SMMTMOTOR INDUSTRY FACTS 2026](#)

⁴ North East Automotive Alliance, 2026, [NORTH EAST AUTOMOTIVE SECTOR](#)

⁵ Invest West Midlands, 2026, [The West Midlands is a global centre of automotive R&D and is trailblazing future mobility technologies.](#)

⁶ BMW Group, 2026, [BMW Group plants Welcome to MINI plant Swindon](#)

⁷ Figures from New AutoMotive Research

However, unlike many of its European peers, the UK relies heavily on vehicle exports rather than domestic market scale. While three in four UK-built cars are exported, domestic policy cannot be treated as separate from export success. In a changing geopolitical landscape, in which governments are erecting tariff and non-tariff barriers to trade, a strong domestic EV market provides the guaranteed baseline demand required to secure multi-billion-pound supply chain investments at home.

This is where we see some mixed signals, EV registrations are up, yet the government is considering weakening supply-side policy. August 2026 saw BEVs take 30% of the new car market, one of the highest month ever seen outside December which usually see spikes in BEV uptake⁸. Despite this growth, the government has been reported to be considering a weakening of the Zero Emission Vehicle (ZEV) Mandate targets that have underpinned it⁹. The UK ZEV Mandate governs domestic sales, but the UK is fundamentally an export-led vehicle producer, with the majority of cars destined for European markets. A weaker UK Mandate would not, on its own, reduce demand for the roughly four in five UK-built cars that are exported. However, demand for UK-built vehicles and investment in the battery supply chain are not driven by exactly the same considerations.

Ultimately, investment across the battery supply chain relies on long-term policy stability. Businesses making multi-billion-pound investment decisions need to have confidence that the UK's direction of travel will remain consistent. Revising a flagship industrial policy undercuts that confidence, increasing perceived investment risk even where underlying vehicle demand remains strong.

⁸ New AutoMotive, July 2026, [Electric car sales up 38% in June as motorists seek cheaper motoring](#)

⁹ The Gaurdian, June 2026, [UK urged not to further weaken EV rules as CO2 impact revealed](#)

Industry Profile

The UK battery supply chain is at an early stage of development, with most projects either announced or under construction rather than operational. Despite this, the industry already supports more than 10,000 direct jobs and generates £4.2 billion in annual turnover¹⁰. The UK currently has one operational at-scale cell plant, AESC's Sunderland facility, with 15.8 GWh of planned total capacity¹¹, equivalent to around 14% of projected 2035 demand. Agratas' 40 GWh Somerset gigafactory is aiming to begin production in late 2027 with an initial capacity of around 15 GWh¹².

Even once both plants are fully operational, domestic battery supply will fall well short of demand. The ZEV Mandate will drive battery demand to around 115 GWh a year by 2035, with the automotive sector accounting for almost 90% of this. This leaves a supply gap of around 55 GWh, including around 35 GWh needed for electric vehicle production alone¹³.

The greatest opportunity lies further upstream. The UK has no industrial-scale production of cathode or anode active materials, despite cathodes accounting for 30 to 40% of cell costs¹⁴. At the same time, battery supply chains remain highly concentrated in China, which produces more than 98% of LFP cathodes, over 90% of graphite anodes and between 70 and 90% of battery cells globally¹⁵. Recent export controls on graphite and proposed restrictions on LFP cathode technology have reinforced the commercial case for building alternative supply chains, with automotive manufacturers increasingly seeking secure, allied-country suppliers.

The wider market is also becoming more favourable. While Europe's gigafactory pipeline has contracted in recent years, battery demand continues to grow rapidly and fewer speculative projects have improved the long term supply-demand balance for those that do proceed. High industrial electricity prices remain a significant challenge, but the British Industrial Competitiveness Scheme is expected to reduce electricity costs for battery manufacturers by £35 to £40 per MWh from 2027¹⁶, improving the UK's competitiveness for future investment.

¹⁰ Department of Business & Trade, February 2026, [Mapping the UK Battery Sector](#)

¹¹ AESC, Undated, [AESC UK](#)

¹² Millbank, December 2025, [Agratas Gravity Campus: The £4bn Gigafactory Shaping Somerset](#)

¹³ Innovate UK, April 2025, [SECTOR-WIDE UK BATTERY DEMAND PROJECTIONS TO 2035](#)

¹⁴ Advanced Propulsion Centre UK, March 2025, [Insight Report: L\(M\)FP batteries for EV adoption from a UK perspective](#)

¹⁵ ICCT, 2025, [Global Critical Minerals Outlook 2025](#)

¹⁶ The National Energy Hub, July 2026, [What Is the British Industrial Competitiveness Scheme \(BICS\)? A Complete Guide for UK Manufacturers](#)

The Recipe for Success: Why the UK

In a country which increasingly views the battery supply chain as strategic national infrastructure, rather than a green side project, there are a number of advantages that must be utilised in order to realise its full potential. But the UK must break a historic cycle: Britain has repeatedly pioneered battery technology only for other countries to commercialise them. The government's industrial strategy is an attempt to ensure that this does not occur again.

Established Demand: The UK remains one of Europe's largest vehicle producers, with major facilities operated by Nissan, Jaguar Land Rover, BMW Mini and Toyota. In addition, the UK is home to a range of luxury vehicle production, hosting brands such as Bentley, Rolls Royce, Aston Martin, McLaren. This provides a ready-made customer base for domestic battery production and creates strong incentives for localisation. This pull is substantial, the government is targeting 1.3 million cars produced a year by 2035, with the emphasis being on EV production¹⁷. The Advanced Propulsion Centre estimates that it will require 140,000 tonnes of cathode active material and 90,000 tonnes of anode material every year¹⁸. The key caveat is that UK automotive manufacturing has been in decline since 2016. Any policy aimed at increasing domestic production would therefore first need to reverse a long-established downward trend.¹⁹

World-Class Research and Innovation: The UK has an outstanding record of battery invention, the lithium cobalt oxide cathode that underpinned the modern lithium-ion battery was developed at Oxford in 1980. But the technology was not commercialised domestically and it was Sony instead that brought the first commercial lithium-ion battery to market in 1991²⁰. A similar challenge later saw UK sodium-ion pioneer Faradion acquired by India's Reliance Industries before large-scale deployment of its technology took place in the UK²¹. The current strategy is built explicitly to break that cycle, pairing frontier research through the Faraday Institution with commercial scale-up infrastructure such as the UK Battery Industrialisation Centre.

Cambridge's Nyobolt is attempting to commercialise niobium-tungsten-oxide cells that the company says can charge from 10% to 80% in under five minutes and last thousands of

¹⁷ Department for Business & Trade, December 2025, [DRIVE35: Summary Business Case](#)

¹⁸ Altium, April 2026, [Altium secures DRIVE35 funding for production and validation of EV battery cells with recovered cathode and anode materials](#)

¹⁹ BBC Indepth, August 2025, [The UK car industry is at a tipping point - can it be saved?](#)

²⁰ Spectrum, July 2023, [Remembering Lithium-Ion Battery Pioneer John Goodenough The Nobel laureate's technology is used in electric cars and laptops](#)

²¹ Faradion, December 2021, [Reliance New Energy Solar to Acquire Faradion Limited](#)

cycles²². Ilika is advancing solid-state battery technology, including cells designed for future automotive applications²³. And the Faraday Institution's £34m ReLiB programme is pioneering AI-enabled approaches to battery diagnostics, automated disassembly and recycling, including technologies to rapidly assess the state of health of used cells²⁴. This is the kind of specialist, high-value innovation where the UK can compete globally without attempting to win a volume race it is unlikely to dominate.

Transferable Chemical and Process Expertise: Cell assembly is only one link in the supply chain, and the UK's deepest advantages sit upstream and downstream of it. A long heritage in specialty chemicals maps directly onto the production of electrolytes, cathodes and anodes. All of which remain a major supply gap right across Europe. A long heritage in specialty chemicals provides a transferable skills base, with expertise in areas such as separation chemistry and process engineering.

Public Capital Changing Focus: The UK has broadened its industrial support from predominantly early-stage R&D to backing the full commercialisation pathway. This is in recognition that promising British technologies have historically struggled to progress from innovation to manufacturing at scale. The government's DRIVE35 programme is a ten-year, multi-billion-pound commitment; its spring 2026 round alone deployed over £600m, including a £380m grant anchoring the Agratas gigafactory, and the programme is designed to unlock up to £7.46bn of private investment and more than 50,000 jobs by 2035²⁵. Alongside it, the National Wealth Fund has named battery manufacturing and the EV supply chain one of its ten priority sectors²⁶, while the Green Finance Institute's (working with government) dedicated battery facility is purpose-built to crowd in private capital²⁷.

²² University of Cambridge, November 2024, [Cambridge spin-out Nyobolt demonstrates ultra-fast charging in ultra-fast sportscars](#)

²³ Ilika, Undated, [Goliath Solid State Batteries](#)

²⁴ ReLiB, Undated, [Our Technologies](#)

²⁵ Department for Trade & Business, December 2025, [DRIVE35: Summary Business Case](#)

²⁶ National Wealth Fund, Undated, [Our Strategy](#)

²⁷ Green Finance, Undated, [Battery Investment Facility \(BIF\)](#)

Anatomy of the Hub

Mining and Lithium Extraction

The UK has emerged as one of Europe's most promising sources of domestic lithium. Cornwall's granite hosts one of Europe's largest lithium deposits, and the county's geothermal waters offer a second, lower-impact route to production. Further north, lithium-bearing brines beneath County Durham and the UK's largest known nickel deposit in Aberdeenshire point to a broader domestic critical minerals base. None of these projects is yet producing at commercial scale, and the collapse in global lithium prices since 2022 has made financing harder for every junior miner, but the geology is real and the projects are advancing.

The Projects

Cornish Lithium is advancing projects to extract lithium from both geothermal waters and hard-rock deposits in Cornwall, supported by more than £50 million of private investment and government funding, including backing from the National Wealth Fund.²⁸ The company has successfully demonstrated lithium production at pilot scale and is working towards commercial production, seeking to establish the UK's first domestic source of lithium for EV batteries²⁹.

Imerys British Lithium holds one of the UK's largest confirmed lithium deposits at St Austell, with the potential to become one of Europe's largest lithium mines. In February 2026, however, Imerys placed the project on care and maintenance, pausing active development to focus resources on its more advanced Emili project in France. Imerys has stressed that the decision reflects the difficulty of financing two major projects simultaneously rather than a loss of confidence in the UK deposit, which it says remains strategically valuable³⁰.

Weardale Lithium is developing geothermal lithium extraction in County Durham, aiming to produce battery-grade lithium from naturally occurring underground brines. The company is progressing pilot operations to demonstrate direct lithium extraction technology, which could potentially offer an alternative to hard-rock mining³¹.

²⁸ National Wealth Fund, August 2023, [Cornish Lithium equity investment](#)

²⁹ BBC, October 2024, ['Milestone moment' as lithium plant set to open](#)

³⁰ Imerys British Lithium, February 2026, [Imerys British Lithium Project Placed into Care and Maintenance](#)

³¹ Weardale Lithium, Undated, [Weardale Lithium](#)

Northern Lithium is pursuing additional domestic production opportunities in the North East, also targeting lithium-rich brines, and aims to scale towards commercial production in stages over the coming decade³².

Aberdeen Minerals is exploring the Arthrath nickel-copper-cobalt project in Aberdeenshire, the largest known nickel deposit in the UK. Backed by a £294,000 Automotive Transformation Fund grant for a processing feasibility study and around £3.85 million from London-listed Central Asia Metals, it points to a potential domestic source of two of the cathode metals EV batteries need most³³.

Look forward: Opportunities & Challenges

The opportunity is significant. Developing these projects could help reduce Europe's dependence on imported lithium and provide a domestic source of some of the battery sector's most critical materials. Domestic extraction also carries a much lower carbon footprint than material shipped from Australia via Chinese refineries, an increasingly important consideration as the EU's carbon footprint rules for batteries begin to take effect.

The challenges are equally clear. Lithium prices have fallen more than 80% from their 2022 peak³⁴, and the pause at Imerys British Lithium shows how exposed capital-intensive mining projects are to commodity cycles and competing calls on investor capital. Mining also comes with local consenting challenges. And crucially, extraction alone does not capture value, without domestic midstream capacity, of which the UK currently has none, anything mined in the UK would still need to be exported to Europe or Asia for processing before it could go into a battery³⁵. Mining and refining need to be developed together, or the UK simply swaps one import dependency for another.

The Support Needed

Faster, more certain consenting. The EU's Critical Raw Materials Act gives designated strategic projects streamlined permitting timelines. The UK's Critical Minerals Strategy recognises domestic extraction, but projects would benefit from an equivalent fast-track route and a named decision-making pathway.

Price and offtake support. The lithium price crash, not geology, is what has stalled UK extraction. Mechanisms that give projects revenue certainty, such as government-backed

³² Northern Lithium, February 2024, [Northern Lithium secures significant new mineral rights from the Church Commissioners for England](#)

³³ Aberdeen Minerals, October 2023, [Aberdeen Minerals awarded UK Government grant for Aberdeenshire battery metals project](#)

³⁴ Ion Group, September 2025, [From boom to bust: the next chapter in the lithium market](#)

³⁵ Fast Markets, July 2026, [UK's EV battery sector moves to industrial scale, but can it build a midstream?: Battery Cells & Systems Expo](#)

offtake agreements, price floors or contracts-for-difference-style support for critical minerals, would do more than grants to unlock private finance.

Joined-up midstream planning. Extraction projects should be planned alongside refining capacity so that UK-mined material can be processed domestically, keeping the value chain, and the jobs, in the UK.

Continued early-stage support. Feasibility grants through DRIVE35 and the Automotive Transformation Fund, and patient equity through the National Wealth Fund, remain essential for junior miners that cannot yet access commercial capital.

Refining

Refining is the UK's biggest gap, and arguably Europe's. Turning mined lithium, or recycled black mass, into battery-grade chemicals is where much of the value in the upstream supply chain is captured, and it is a stage almost entirely absent from the UK today. Around 89% of the world's hard-rock lithium is currently refined in East Asia³⁶, and every gigafactory operating or planned in the UK currently depends on imported refined material. The UK's specialty chemicals heritage, its industrial clusters in places like Teesside, and its port infrastructure make it well suited to hosting this capacity, but refining projects are capital-intensive, energy-hungry and hard to finance without long-term certainty on demand.

The Projects

LevertonHELM operates the UK's largest lithium chemicals manufacturing facility at Basingstoke, producing specialist lithium compounds used in battery cathodes and other industrial applications. The company is investing to expand production capacity and develop battery grade lithium chemicals³⁷.

Green Lithium is developing a large scale lithium refinery at Teesport, representing the UK's first commercial lithium refining facility. The plant is designed to produce enough battery grade lithium annually for around one million EVs³⁸.

Tees Valley Lithium has moved on from its original plans at the Wilton International site, selecting a new location at Billingham in Teesside following its front-end engineering design study³⁹. The £185 million project is targeting a final investment decision and pre-construction work in 2026, with a first phase of 25,000 tonnes a year of lithium hydroxide from 2027, scaling

³⁶ Ikagai Capital, September 2026, [Ikigai AXL backed green lithium receives planning permission](#)

³⁷ Helm, April 2025, [LevertonHELM celebrates opening of Lithium Chloride Solution plant](#)

³⁸ BBC, July 2026, [Teesport: Green light given for lithium refinery plant](#)

³⁹ Tees Valley Lithium, February 2026, [FEED outcomes confirm low-cost, strong economics](#)

towards 100,000 tonnes, and is projected to generate £2.1 billion of economic value over its lifetime⁴⁰.

Look forward: Opportunities & Challenges

The demand case for UK refining is strengthening. From 2027, tightening rules of origin under the UK-EU trade agreement mean cells will increasingly need locally produced materials to qualify for tariff-free trade, and the EU Battery Regulation's recycled content requirements from 2031 will create demand for refined material with verified origin⁴¹. The EU's decision to classify black mass as hazardous waste and ban its export to non-OECD countries is already redirecting recycled feedstock towards refiners inside Europe, a flow the UK could capture with the right capacity⁴².

The challenges are financing and energy. Merchant refineries must raise hundreds of millions of pounds without a mine or gigafactory parent to guarantee offtake, in a market where Chinese refiners hold spare capacity and can undercut on price. UK industrial electricity prices, among the highest in Europe, weigh particularly heavily on this energy-intensive stage. The past year has demonstrated the difficulty: no UK refining project has yet reached construction, and progress has been slower than the sector hoped.

The Support Needed

Deliver competitive electricity, on schedule. The British Industrial Competitiveness Scheme's £35-40/MWh reduction from April 2027 must reach refining projects; energy costs are consistently cited as the single biggest barrier to final investment decisions.

Move beyond grants for capital support. Refineries need debt guarantees and equity at scale, of the kind UK Export Finance and the National Wealth Fund provided for the AESC gigafactory, alongside vehicles like the Green Finance Institute's Battery Investment Facility.

Create demand pull. UK recycled content requirements mirroring the EU's, and alignment with rules of origin, would give domestic refiners the long-term offtake certainty that unlocks private finance.

Strategic project status. Designating refining projects as nationally significant, with fast-tracked planning and permitting, would recognise that the UK cannot close its supply chain without them.

⁴⁰ The Northern Echo, June 2026, [Billingham refinery 'will bring £1bn and 1,700 jobs' to North East](#)

⁴¹ EUR-Lex, [Sustainability rules for batteries and waste batteries' \(summary of Regulation \(EU\) 2023/1542\)](#).

⁴² Sustainability Directory, November 2025, [EU policy secures battery black mass, boosting domestic recycling capacity](#)

Battery Manufacturing

Cell manufacturing is somewhere in which the UK has genuine momentum alongside a genuine shortfall. One at-scale plant is now operating, a second is under construction, and further projects are in development. But against projected demand of around 115 GWh by 2035, confirmed capacity still leaves a gap of around 55 GWh⁴³, and the Gigafactory Commission has warned that at least one additional large-scale plant needs to be announced by the end of 2026 if the UK is to avoid a lasting supply gap⁴⁴.

The Projects

The UK's gigafactory ambitions are anchored by two major projects, with a third potentially in the works.

Envision AESC's two Sunderland plants equal a £1.5 billion investment supplying Nissan, with the first beginning commercial operation in 2012, and the second in 2025. The second gigafactory is the largest operational battery manufacturing site in the UK to date, with an initial capacity of around 16 GWh and potential to scale toward 35 GWh⁴⁵. In August 2026 it was announced that plans for an expansion to a third line were on hold due to talks breaking down with JLR⁴⁶. However, two further lines are still in the works, but will likely face delays⁴⁷.

Agratas, the battery arm of the Tata Group, is investing £4 billion in a gigafactory at the Gravity Smart Campus near Bridgwater, Somerset, intended to supply Jaguar Land Rover. Construction is well underway though the programme has slipped from an original 2026 opening to 2027, and the project has seen some contractor turnover during the build. The UK government reaffirmed its backing with a further £380 million grant in April 2026⁴⁸.

LionVolt, the Dutch battery technology developer selected Scotland for its first manufacturing facility, with plans to produce three dimensional lithium metal batteries for automotive and aerospace applications. The project, supported by public funding, is expected to create hundreds of skilled jobs while establishing the UK as an early manufacturing base for next generation battery technologies⁴⁹.

⁴³ UKRI, April 2025, [Sector-wide UK battery demand projections to 2035](#)

⁴⁴ UK Gigafactory Commission, January 2026, [UK Gigafactory Commission sets out roadmap on the future of battery production](#)

⁴⁵ Electrive, December 2025, [AESC opens gigafactory in Sunderland](#)

⁴⁶ The Guardian, August 2026, [UK's biggest EV battery gigafactory shelves expansion as Jaguar Land Rover talks stall](#)

⁴⁷ Battery Tech Network, August 2026, [AESC Delays Sunderland Battery Expansion as EV Demand Slips](#)

⁴⁸ Advanced Propulsion Centre, April 2026, [UK Government announces £380 million investment in Somerset gigafactory](#)

⁴⁹ Electric Drives, January 2024, [LionVolt brings solid-state battery innovation to Scotland](#)

GreenPower Park has reached an important milestone: Coventry Airport, the site earmarked for the facility, formally closed on 11 June 2026 after planning permission for the full £2.5 billion, 60 GWh development was confirmed in April 2026⁵⁰. As of this report, however, no battery manufacturer has yet been confirmed as the anchor tenant, though several are reported to be in discussions, and the CEO has admitted plans may need to be downsized⁵¹.

Look forward: Opportunities & Challenges

The shadow of Britishvolt still hangs over UK gigafactory ambitions, but the past three years have shown that scaling cell production against Chinese competition is a Europe-wide struggle, not a uniquely British one; Northvolt's collapse made that clear. If anything, the UK hit these challenges earlier and its two surviving projects look more robust than much of the speculative capacity that has fallen out of the European pipeline. The contraction of that pipeline improves the supply-demand outlook for the plants that do get built.

The central challenge is landing the next plant. Realistically, this may involve partnership with established Asian manufacturers, including Chinese firms, who hold the experience to build at scale. The task for policymakers is to structure such partnerships so that the UK retains value, jobs and expertise. Alongside the volume race, the UK's specialist cell developers, Nyobolt, Ilika and others, offer a complementary path of higher-value, niche batteries where margins do not depend on out-scaling China.

The Support Needed

Maintain the demand signal. Gigafactories are built against decade-long demand forecasts; a stable ZEV Mandate is the single clearest signal the UK can send.

Minister-led deal-making. The Gigafactory Commission's call for a named minister, supported by a dedicated secretariat, to lead negotiations with global OEMs and cell makers should be adopted⁵².

Competitive energy and ready sites. Delivering the British Industrial Competitiveness Scheme, prioritising grid connections for strategic sites through the Connections Accelerator, and maintaining shovel-ready locations such as GreenPower Park are prerequisites for winning mobile international capital⁵³.

⁵⁰ Coventry Telegraph, June 2026, [What next for Coventry Airport as site closes for good](#)

⁵¹ Flight Training News, July 2026, [Coventry Airport closes for gigafactory that may never be built](#)

⁵² UK Gigafactory Commission, January 2026, [UK Gigafactory Commission sets out roadmap on the future of battery production](#)

⁵³ [Gov.uk](#) April 2026, [Government cuts electricity bill for 10,000 manufacturers in boost for UK competitiveness](#)

Skills. Gigafactories need thousands of trained operators; the battery training capacity being built around Agratas should be scaled into a national programme.

Recycling

Recycling is one of the areas where the UK is best placed to succeed. Unlike mining or gigafactories, the raw material is already here and in the batteries powering the UK's growing EV fleet, which passed two million vehicles this year⁵⁴. And two quirks of the UK market, which count as disadvantages elsewhere in the supply chain, are distinct advantages for recycling. One, the UK is an island, and two, it drives on the left. Where continental European used EVs flow freely across borders to second-hand markets abroad, right-hand-drive vehicles registered in Britain are more likely to stay in Britain until the end of their lives. The UK's EV fleet is, in effect, a captive future feedstock. As more vehicles reach the end of their lives, recovering and reusing those critical materials will become an increasingly important part of the domestic battery supply chain, and, notably, this holds true regardless of where the vehicles were built. Every imported EV, including the growing number of Chinese-made models, becomes a domestic materials resource once it is on UK roads.

The Projects

Recycling is one of the areas where the UK is best placed to succeed. Unlike mining or gigafactories, the raw material is already here - in the batteries powering the UK's growing EV fleet. As more vehicles reach the end of their lives, recovering and reusing those critical materials will become an increasingly important part of the domestic battery supply chain.

Recyclus Group is developing one of the UK's first commercial lithium ion battery recycling businesses, with its Wolverhampton facility processing end-of-life EV batteries and manufacturing scrap into black mass for the recovery of critical minerals. The company has also secured additional sites in Scotland and the South West of England as it seeks to establish a national recycling network capable of supporting the UK's growing battery industry⁵⁵.

Altilium is developing a domestic battery recycling and critical minerals refining business, with its ACT technologies designed to recover over 95% of lithium, nickel and cobalt from end of life EV batteries. The company is scaling operations through its ACT 3 processing facility in Plymouth while advancing plans for a large commercial refinery in Teesside, positioning recycled materials as a key source of cathode inputs for UK gigafactories⁵⁶.

⁵⁴ New AutoMotive, April 2026, [ECC](#)

⁵⁵ Recyclus, [About Us](#)

⁵⁶ The Next Web, May 2026, [UK startup Altilium bags £18.5m to build Britain's first commercial EV battery refinery](#)

Ecobat is expanding beyond its established lead battery recycling business into lithium ion battery recycling, commissioning a demonstration plant at its Darlaston site in the West Midlands. The project aims to establish domestic processing capacity for end of life EV batteries, supporting a more circular battery supply chain while building on the company's existing recycling expertise⁵⁷.

Look forward: Opportunities & Challenges

The UK's battery recycling industry faces several near term challenges, the first being timing. Recycling capacity is being built ahead of the wave of batteries that will eventually reach the end of their lives. Most EVs on UK roads are still relatively young, while battery lifespans have proved longer than initially expected, increasing from around 10 to 12 years to as much as 15 to 20 years⁵⁸. As a result, end of life battery volumes are not expected to grow significantly until after 2030⁵⁹. In the meantime, much of the available feedstock will come from manufacturing scrap as gigafactories ramp up production.

A further challenge is that many batteries reaching the end of their lives today are not entering the recycling system at all. Salvage yards often struggle to sell used battery packs and instead face disposal costs.

At the same time, expectations that large numbers of used EV batteries will find second life applications are fading. Falling prices for new LFP batteries mean energy storage developers can often buy new, warranted batteries more cheaply and with lower technical risk than repurposed packs. Even batteries that are reused will still require recycling eventually, meaning second life applications are unlikely to significantly reduce future recycling demand. Beyond collection, another major challenge lies further down the value chain. While the UK and Europe have rapidly expanded shredding and black mass production capacity, there remains a shortage of facilities capable of refining black mass into battery grade materials. As a result, much of the UK's black mass is exported for processing before refined materials are imported back into the supply chain. Expanding domestic refining capacity alongside recycling will therefore be essential if the UK is to retain more of the value from recovered battery materials.

The Support Needed

Update the UK's battery regulations. The UK's producer responsibility regime still rests on regulations from 2008 and 2009, written before EVs existed at scale, and a long-promised overhaul has been repeatedly delayed. Defra's expected consultation on reformed battery

⁵⁷ EcoBat, [Transforming resources to power a more connected, sustainable world.](#)

⁵⁸ Generational, February 2026, [2025 Battery Performance Index](#)

⁵⁹ Advanced Propulsion Centre, [UK's biggest opportunity from battery waste is to feed its cathode manufacturing industry](#)

regulations should proceed without further delay, creating a distinct category for EV and industrial lithium-ion batteries with producer obligations that ensure manufacturers remain responsible for packs at end of life.

Adopt recycled content targets and battery passports. The EU Battery Regulation requires digital battery passports for EV batteries from February 2027 and minimum recycled content, 16% cobalt, 6% lithium and 6% nickel, from 2031⁶⁰. Mirroring these requirements would create guaranteed domestic demand for recycled materials; UK-built cells exported to the EU must comply anyway, so alignment adds certainty without adding net burden.

Tighten controls on battery material exports through the producer responsibility system. Existing waste export mechanisms allow materials such as black mass to leave the UK with limited assurance that valuable resources are recovered. A dedicated EV battery EPR scheme should introduce stricter export requirements, requiring producers to prove that overseas recycling facilities meet equivalent standards. This would prevent the loss of strategic materials while allowing legitimate international recycling partnerships to continue.

Resource the regulators. Companies consistently report that environmental permitting is the slowest step in scaling novel recycling technologies, with under-resourced regulators defaulting to caution when faced with unfamiliar processes, even as another arm of government funds those same projects. Properly resourcing Defra and the Environment Agency, and creating a fast-track route for strategically important recycling and materials-recovery projects, as the EU does for its strategic projects, would remove a self-inflicted bottleneck.

⁶⁰ Official Journal of the European Union, July 2023, [Regulations](#)

Company Profile: Altilium

Altilium is a UK clean technology company focused on recovering critical battery materials from end-of-life EV batteries and manufacturing scrap. Rather than simply producing black mass for export, the company is developing a closed-loop recycling process that recovers battery-grade materials and returns them directly to the battery supply chain.

At the heart of its operation is the UK's only hydrometallurgical pilot plant for EV battery recycling, based in Plymouth. Using its proprietary EcoCathode process, Altilium recovers lithium, nickel, cobalt and graphite before producing high-nickel CAM⁶¹. The company says this process can reduce embedded carbon emissions by around 50% and lower production costs by around 20% compared with using virgin mined materials⁶². The UK lacks a mid-stream capacity so projects such as this can help to lessen the impact of this by essentially creating the mid-stream through recycling.

The company is now preparing to scale up. Its ACT3 facility, supported by £18.5 million of UK government funding and due to open in 2027, is expected to process around 24,000 EV batteries each year, producing battery-grade nickel, lithium sulphate and graphite⁶³. Alongside this, Altilium is involved in a number of collaborative projects across the UK battery ecosystem, including work with Nissan on battery reuse and recycling, and Lunaz on the safe handling and transport of end-of-life battery packs⁶⁴.

If scaled as planned, Altilium's facilities could play a role in creating a domestic circular supply chain, keeping valuable materials recovered from UK EV batteries within the UK and reducing reliance on overseas processing.

⁶¹ Altilium, [Altilium delivers second shipment of CAM from EV battery recycling for cell production at UKBIC and validation by a leading automaker](#)

⁶² Altilium, [Altilium's recycled battery materials cut EV emissions by 25%](#)

⁶³ Transport+Energy, April 2026, [Altilium awarded £18.5m in DRIVE35 fund](#)

⁶⁴ Altilium, [Altilium partners with Nissan for UK Government backed multimillion-pound Electric Vehicle Battery Recycling Project](#)

The Policy Imperative: Maintaining Investment Confidence

It would be a mistake to present the ZEV Mandate as the solution to the challenges facing the UK automotive industry. Manufacturers consistently point to a different set of pressures: intense competition from China, high energy costs, weak productivity growth and ongoing supply chain disruption. None of these issues would be solved by weakening the Mandate.

Nor is the shift to electric vehicles something being driven by the UK alone. EV adoption continues to grow across Europe, China and other major markets, meaning the real risk for the UK is not moving too quickly, but falling behind a transition that is already underway elsewhere.

That said, the Mandate still matters for the battery supply chain. The projects highlighted in this report are not investments in the automotive sector in general; they are investments in the EV economy specifically. Together they represent £7 billion of committed capital across lithium extraction, refining, battery manufacturing and recycling.

The experience of Sunderland provides a useful illustration of why that confidence matters. Nissan has built one of the UK's most successful EV manufacturing hubs in the city, alongside significant investment in battery production. That investment has not happened because of the ZEV Mandate alone, but because Nissan has been able to build a long-term business case around a growing market for EVs in the UK and Europe. The same principle applies in the wider automotive industry. Jaguar Land Rover's recent decisions to slow parts of its EV transition and reassess planned investment demonstrate how quickly manufacturers can respond when the outlook for electric vehicle demand becomes less certain.

These examples do not mean that the ZEV Mandate determines where manufacturers invest, or that weakening it would suddenly cause investment to disappear. The relationship is more indirect. A credible mandate helps reinforce the expectation that EV demand will continue to grow, giving manufacturers, battery producers and their suppliers greater confidence to invest ahead of that demand. Where that policy signal becomes weaker or less predictable, companies have greater reason to delay, scale back or redirect investment. For an industry built around projects with decades-long investment horizons, that uncertainty matters.

These are long-term industrial projects with investment horizons measured in decades. Companies do not make decisions based on current sales figures alone. They make them based on confidence that demand for electric vehicles will continue to grow over time. The companies we speak to are direct about this: when investors ask what a diluted Mandate would mean, the honest answer is that the transition will not reverse, but it might slow, and slower adoption means smaller markets, later feedstock and harder investment cases across the whole chain.

The ZEV Mandate has helped provide that confidence. More than anything, it acts as a signal that the UK remains committed to electrification and is serious about building a domestic battery ecosystem.

Weakening that signal may not have a significant impact on overall vehicle production, but it does risk creating uncertainty for investors considering where to deploy capital. Battery manufacturers, lithium refiners and recycling companies need confidence that the direction of travel is clear. Frequent changes to policy make investment decisions harder and increase risk.

Countries attracting battery investment are generally those providing long-term certainty around electrification. For the UK, maintaining a stable and credible framework for EV adoption remains one of the most important ways of supporting the battery supply chain. Not because it solves every challenge facing the automotive industry, but because it gives investors confidence that the market these projects are being built to serve will continue to grow.

Conclusion

The UK has assembled the foundations of a domestic battery supply chain spanning lithium extraction, refining, battery manufacturing and recycling. With £7 billion invested or committed, and multiple gigafactories under development, the sector has the potential to secure the future of British automotive manufacturing in the electric era.

Its strengths are distinctive: world-class research, deep chemical process expertise, and a recycling opportunity, built on a captive, right-hand-drive island market that few countries can match.

Investment alone is not enough. The battery supply chain exists to serve vehicle demand. Maintaining clear and consistent policy signals through mechanisms such as the ZEV Mandate, updating battery regulations for the electric era, keeping recycled materials in the country, and closing the midstream gap will be essential if the UK is to convert announced projects into operational facilities, long-term jobs and industrial growth.