



West Midlands
Combined Authority

Economic Growth Board

Date	6 March 2024
Report title	West Midlands Plan for Growth: Electric Light Vehicle and Associated Battery Production Cluster Update
Portfolio Lead	Councillor Stephen Simpkins
Accountable Chief Executive	Laura Shoaf, Chief Executive, West Midlands Combined Authority Email: Laura.Shoaf@wmca.org.uk
Accountable Employee	Ed Cox, Executive Director for Strategy, Economy & Net Zero, West Midlands Combined Authority Email: Ed.Cox@wmca.org.uk
Report has been considered by	n/s

Recommendation(s) for action or decision:

Economic Growth Board is recommended to:

- (1) Note the activity in support of the Electric Light Vehicle and Associated Battery Storage cluster for the West Midlands Plan for Growth.

1. Purpose of Report

- 1.1 The purpose of this report is to provide a summary of the activity undertaken across the West Midlands Combined Authority (WMCA) and partner organisations to support the “Electric Light Vehicle and Associated Battery Storage” cluster (“the ELV cluster”), identified in the West Midlands Plan for Growth.
- 1.2 The report also serves as a cover note for a presentation that will be shared by Daniel Cox, Senior Technology Officer at WMG. WMG, working closely with several regional partners, are leading and developing a number of initiatives aimed at growing the ELV cluster in the region. The presentation covers topics

such as an overview of the cluster at present, the importance of the cluster to the region and priorities for the future.

2. Background

- 2.1 After forging a position as the fastest-growing region outside London in the decade to 2019, the region's industrial mix and demography meant that the West Midlands was hit particularly hard by the economic impact of the Covid pandemic and new trade frictions with the EU. The West Midlands Plan for Growth sets the path to returning to that trajectory, spreading opportunity and jobs across the region and helping level-up the UK.
- 2.2 The West Midlands Plan for Growth¹ pinpoints eight economic clusters where the region can ignite above-forecast levels of growth. These are clusters where the West Midlands has comparative advantage and businesses are confident to invest.
- 2.3 To that effect, the West Midlands Plan for Growth identified the ELV cluster as one of the eight primary clusters which could beat the average growth profile of the UK and help the West Midlands on its journey to being the leading region outside of London by 2030.
- 2.4 Our regional comparative advantage in the ELV cluster is in the established original equipment manufacturers (OEM) and automotive supply chains, the R&D assets based in the region and expertise in battery processing and recycling.
- 2.5 It is particularly worth noting that the West Midlands has an incredibly rich ecosystem of institutions set-up to support regional industry. In addition to WMG, there is the Manufacturing Technology Centre, Birmingham Centre for Strategic Elements and Critical Materials, Coventry Centre for Connected and Autonomous Automotive Research, MIRA Technology Park, Black Country Innovative Manufacturing Organisation (BCIMO) and the UK Battery Industrialisation Centre to name a few.

3. National Policy Context

Advanced Manufacturing Plan

- 3.1 HM Government's Advanced Manufacturing Plan² (AMP) was published on 26th November 2023. The AMP's ambition is for the UK to be the best place in the world to start and grow a manufacturing business. The AMP intends to support advanced manufacturing by making available £4.5bn of funding to support strategic manufacturing sectors over 5 years from 2025. At least £2bn of this has been earmarked for the automotive sector to support the development of zero emission vehicles, their batteries, and associated supply chains.

¹ <https://www.wmca.org.uk/documents/strategies/plan-for-growth/>

² <https://www.gov.uk/government/publications/advanced-manufacturing-plan>

UK Battery Strategy

- 3.2 The UK Battery Strategy³ sets out HM Government's approach for creating a globally competitive battery supply chain by 2030 to help achieve its net zero ambitions and promote economic growth. The UK Battery Strategy outlines HM Government's current and planned activities to achieve this, as well as a framework and priorities for future work with industry. The document describes the scale of the opportunity that batteries represent, with nearly 200GWh of capacity required to satisfy demand for all types of electric vehicles in the UK by 2040 and a potential 100,000 highly paid productive jobs across the battery ecosystem.

4. Support from the WMCA

- 4.1 In addition to working closely with WMG and regional partners to develop and implement a clear delivery plan to unlock the potential of the ELV and battery cluster across the region, there are several WMCA initiatives underway that support the growth of the industry.

Meeting the skills demand for the future

- 4.2 WMCA is working with WMG to develop an Electrification Skills Strategy with further education colleges. This will be a core theme in our approach to delivering strategic 'green skills' for the region with a focus on fast emerging technology domains eg battery, electronics and electric motors, robotics, software and materials.

Meeting the infrastructure demand for the future

- 4.3 At the time of writing this report, Transport for West Midlands (TfWM) are developing the Regional Zero Emission Vehicle Infrastructure Strategy which will describe the type of activity the public sector will lead on in terms of the infrastructure required to support the use of zero emission vehicles (ZEV). The Strategy will set out:
- Up-to-date technological roadmaps for battery electric and hydrogen vehicles and infrastructure.
 - Articulation of ZEV charging/refuelling archetypes (characterising provision by location, customer/vehicle, and suitable infrastructure)
 - The best commercial arrangements for ZEV infrastructure.
 - Baseline and projections of the current vehicles, infrastructure, grid constraints in the West Midlands.
 - Priority areas where TfWM has a role to play; and
 - Strategic pillars for Electric Vehicle Infrastructure (EVI) delivery through an action plan.

³ <https://www.gov.uk/government/publications/uk-battery-strategy/uk-battery-strategy-html-version>

- 4.4 The strategy is intended to form a component part of the emerging West Midlands Local Transport Plan and will meet anticipated requirements from Government for local government to set out plans for ZEV infrastructure. More information on the LTP can be found online (<https://www.tfwm.org.uk/who-we-are/our-strategy/local-transport-plan/>).

Supporting innovation and R&D for this cluster

- 4.5 The West Midlands Innovation Board has adopted “clean-tech” as a priority cluster for R&D and innovation-led growth support. It prioritised this prominently through the Innovation Accelerator, funding the “Clean Futures” project that is supporting over 40 companies to work with the BCIMO and Coventry University to develop new products and services for sustainable and net zero mobility.
- 4.6 Through its Strategic Innovation Partnership with Government as set out in the Deeper Devolution Trailblazer Deal (March 2023), the WMCA is continuing to make the case for very significant investment in West Midlands “clean-tech” via a regional innovation deal with HM Government. Specifically, the evidence suggests the region has distinct “clean-tech” strengths and capabilities in the future of automotive including electric light vehicles.
- 4.7 As part of the West Midlands Innovation Programme 2.0, funded by the West Midlands Innovation Accelerator, Transport for West Midlands and WMG have received funding for their “Last Mile” project pilot. The challenge is to develop policy and practice to enable sustainable last mile delivery using Low Speed Zero Emission Vehicles (LSZEVs) which will be battery powered. The project intends to explore what needs to change in the regulatory framework for transportation and logistics using LSZEV’s for last mile delivery to become an effective business model.

5. Priority Activities and Next Steps

- 5.1 Working with regional partners, WMG priority activities for cluster leadership include an immediate term focus on unlocking battery manufacturing opportunities linked to the Investment Zone (alongside Coventry City Council); and creating a clear short-term vision which defines success, priority opportunities and interventions in three other areas of potential West Midlands competitive advantage: propulsion systems; micromobility and vehicle innovation in supply chains.
- 5.2 Led by Coventry City Council and Warwick District Council, the WMCA, WMGC, and the wider ecosystem are continuing to collaborate in order to secure the necessary funding for the Coventry-Warwick Gigapark, which includes a proposed Gigafactory. The Gigafactory would be able to deliver up to 60 gigawatt hours of batteries per annum and the wider Gigapark (which would include the associated supply chain companies) would span over a space of 975,000 square meters and bring in an estimated 9,300 jobs. The total Coventry-Warwick Gigapark investment opportunity is £2.4bn. This site, and companies within it, would serve as valuable anchor institutions to leverage in additional funding to unlock potential growth for the cluster across the region.

6. Financial Implications

- 6.1 There are no direct funding implications from this paper, as WMCA will only be providing support from existing budgets and resource for the Plan for Growth Electric Light Vehicle and Associated Battery Storage cluster.
- 6.2 Should any future financial implications arise; they will be resolved through the WMCA governance routes and demonstrate value for money.

7. Legal Implications

- 7.1 There are no direct legal implications.

8. Equalities Implications

- 8.1 There are no direct equalities implications.

9. Inclusive Growth Implications

- 9.1 The proposed regional activities set out in this paper to support the ELV cluster will likely have a positive impact on supporting the WMCA's definition of [Inclusive Growth](#). Likewise, the proposed activity in support of this cluster is aligned to several of the West Midlands Inclusive Framework fundamentals, most notably the Climate Resilience fundamental.
- 9.2 The work on supporting the ELV cluster supports the growth of our education and learning fundamental, by encouraging the sustainable growth of WMG in the advanced manufacturing space. Through the WMG academy, this will create opportunity and improve aspirations for young people aged 14-19. This work can contribute to Improved levels of skills for all to flourish and realise their potential.
- 9.3 Creating ZEV infrastructure contributes to the connected communities fundamental by making it easier for owners of ZEV to commute to their places of work, particularly in industrial sectors where public transport is not viable, for instance, in warehousing and the transportation of goods.
- 9.4 As projects relating to the establishment of the Electric Light Vehicle and Associated Battery Storage cluster develop over time, we will work closely with the Inclusive Growth Team to ensure that the inclusive growth fundamentals are embedded into all of aspects of the project.

10. Geographical Area of Report's Implications

- 10.1 The report refers to the West Midlands core economic area comprising Coventry and Warwickshire, Sandwell, Dudley, Walsall, Wolverhampton, Birmingham and Solihull.