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Local empowerment by co-creating place-based challenge-driven opportunities: lessons from the West Midlands Innovation Accelerator Pilot

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Executive summary

How can a region take an ownership and leadership of place-based innovation strategies where public procurement can be an effective co-creation tool as part of the regional innovation ecosystem?

This Research Brief examines the Innovation Accelerator pilot in the West Midlands. The Innovation Accelerator, funded by Innovate UK on behalf of UK Research and Innovation (UKRI) and the Department for Science and Innovation (DSIT), aimed to bridge the gap between national strategies and more localised decision-making aiming to respond to place-based needs and opportunities.

The four accelerator projects under the West Midlands Innovation Accelerator Pilot aimed to develop the West Midlands' innovation ecosystem by helping to drive economic growth, increase industry engagement and accelerate the commercialisation of SMEs in the region. The core of these accelerators is tackling the key challenges faced in the region by deploying technologies and accelerating innovation. As an exemplar of such transformative processes, the accelerators collectively present how the challenge-driven opportunities are co-created through the public-private partnership model of procuring innovation.

Recommendations for the regional leaders – both public and private sectors – to enable future growth include:

- To create a system that enables SME growth beyond the duration of the public grants.
- To continue to build place-based ecosystems with effective brokerage facilitating collaboration (e.g. Innovation Accelerators)
- To support innovation as part of the value chain – SMEs as part of supply chain – as part of a growth roadmap
- To help SME growth journey with public-private partnership and engage with innovators, industry and investors, particularly with scaleup investment
- To make the public procurement part of the challenge-driven growth pathways for SMEs

1. Introduction

These are growing examples of “place-based policymaking” across industrialized countries which may lead to a variety of forms of “place-based innovation ecosystems” (European Commission, 2020). This process entails developing “existing place-based technologies, capabilities and specialisms” as well as taking advantage of new opportunities that arise (Bailey et al., 2018 p. 1525). In the previous IPEC Research Brief (Kitagawa, 2025)¹, it was argued that by adopting a place-based approach, local governments can tailor procurement policies to address specific regional economic and social challenges to deliver public value. To better understand processes of place-based public procurement of innovation, we conceptualised a public-private partnership model of value creation set in a place-based innovation ecosystem. To illustrate this, we examined recent evolution of a regional innovation ecosystem in the West Midlands, by focusing on the design, implementation and evaluation of the “West Midlands Innovation Programme” (WMIP). Key lessons from Digital Innovation in Public Services (DIPS) pilot project delivered as part of the WMIP 1.0 (2019-2022, funded by the West Midlands Combined Authority), were presented as a valuable guide for policymakers, businesses, and researchers seeking to maximise the impact of public procurement on regional development.

In this piece of work, we will revisit the West Midlands region under the UK government funded Innovation Accelerator (IA) programme (2023-2026). The IA programme, funded by Innovate UK on behalf of UK Research and Innovation (UKRI) and the Department for Science and Innovation (DSIT), was designed to bridge the gap between

national strategies and more localised decision-making aiming to respond to place-based needs and opportunities.² Three city regions - Glasgow City Region, Greater Manchester and the West Midlands - were chosen by the UK government as “pilots” in recognition of their strong research and development (R&D) institutions, diverse economies and robust local governance. Initially announced in the Levelling up White Paper in February 2022, a total of £100 million was invested between March 2023 and March 2025 across the three pilots where 26 projects were selected based on collaborations among local governments, the business sector, and R&D institutions. These projects showcase the “co-creation approach and place-based strategic alignment” facilitated local, regional and central governments as well as local businesses and research organisations. In March 2025 £30 million extension funding was announced to continue these projects for another year until March 2026.³

The diversity and breadth of the projects and experiences across the three IA pilots would provide valuable insights into the policy experiments on creating place-based innovation opportunities.⁴ Glasgow City Region has focused on advanced manufacturing, space and photonics, healthcare, precision medicine. Greater Manchester has put emphasis on high performance materials, health innovation, advanced manufacturing, digital technology, while the West Midlands has been harnessing strengths in advanced manufacturing to unlock new opportunities and sectors in healthcare, health diagnostics, the transition to net zero. It is also noteworthy that the IA experiences have enabled a step change in working relationships between local, regional and central governments.

Set against this broader context, this Research Brief paper focuses on one of the IA pilots, the West Midlands Innovation Accelerator programme. This paper seeks to identify insights and lessons learnt from the IA pilot and to shed light on the role of the public sector in facilitating innovation. Building on the public-private partnership model of value creation, we are particularly interested in the place-based and challenge-driven approaches of the accelerator projects in the region including the role of public procurement to enhance innovation.

The next section introduces the West Midlands Innovation Accelerator regional pilot programme - how it was designed, its governance structure, vision and five projects under the programme. The third section presents four accelerators under the West Midlands Innovation Accelerator programme and examines the nature of support provided to the growth of innovative and entrepreneurial firms selected for the accelerator projects. The fourth section discusses the insights from the two accelerator projects with their respective models of connecting innovators with challenge-driven opportunities. The paper concludes by discussing public-private partnership model of value creation in an evolving regional innovation system and by asking how the public procurement could enhance more innovative firms to enhance the regional economy.

The West Midlands Innovation Accelerator Pilot

To recap recent evolution of the regional governance in England - the West Midlands Combined Authority (WMCA) was established in 2016 as one of the mayoral combined authorities in England. As shown in the West

Midlands Local Industrial Strategy (WMCA 2019)⁵ and the West Midlands Plan for Growth (WMCA 2022)⁶, the West Midlands region has been the centre for advanced manufacturing and has potential to boost the “Green Industrial Revolution”.

The West Midlands Innovation Board (WMIB)⁷ was created in 2018 preceding the Innovation Accelerator Pilot and has provided regional leadership and governance of the IA pilot programme from public, private and academic sectors.⁸ The WMIB played an important role in the identification of priority areas of the IA - following initial expressions of interest in June 2022, the WMIB targeted the IA investment on projects enabling new solutions around Medical and Clean Technologies.

The West Midlands IA is designed to “bolster the region’s innovation and R&D capability and spark commercial growth and investment”, delivered in partnership with the DSIT, Innovate UK and the WMCA with the following vision:

“To accelerate the growth of regional clusters of excellence in HealthTech & MedTech and CleanTech, delivered through the exploitation of applied and translational research; the application of regional strengths in engineering, manufacturing and advanced computing; and supported by a robust regional innovation framework”.

The principles of the West Midlands Innovation Accelerator are identified as follows: ⁹

- be focused on specific clusters of comparative advantage identified in the West Midlands Plan for Growth.
- support cross-sector R&D and innovation. This means using the region's strengths in R&D – particularly in engineering and advanced manufacturing – but helping to stimulate applied and translational R&D in diversified fields and grow private R&D investment.
- position the region on the global scale as a beacon for Foreign Direct Investment.
- provide a sustainable framework for building innovation capability and capacity.
- be driven by market demand with strong private sector business leadership.

There are five projects under the Innovation Accelerator in the West Midlands. The West Midlands Innovation Programme phase 2 (WMIP 2.0) ¹⁰ is led by the West Midlands Combined Authority, and aims to enhance the connectedness and operation of the region's innovation ecosystem by supporting cross-sector, demand-led innovation. In addition to the WMIP, there are four separate accelerator

projects: DIATOMIC, Clean Futures Accelerator, Biochar Cleantech Accelerator and West Midlands Health Technology Innovation Accelerator (WMHTIA). While these accelerators have different sector focus, partnership models and structures, they are all designed with place-based innovation and growth objectives targeting innovative firms tackling relevant challenges. Overall aim of the accelerators is to develop the West Midland's innovation ecosystem helping to drive economic growth, increase industry engagement and accelerate the commercialisation of SMEs in the region.

Four Accelerator Projects in the West Midlands

This section provides an overview of the four accelerator projects delivered as part of the IA pilot, with contexts of each of the projects, including the partnership structure, sectoral focus and how the accelerator programme was run with the nature of the cohort. Table 1 below shows an overview of the four Accelerator projects in the West Midlands region.

Table 1 Four Accelerator projects in the West Midlands IA

	DIATOMIC	Cleant Futures	Biochar CleanTech Accelerator	WMHTIA
Project lead	Connected Places Catapult	Connected Places Catapult	Aston University	University of Birmingham
Project Partners	Aston University, Birmingham Chambers of Commerce, Birmingham City Council, Birmingham City University (BCU) and the University of Birmingham	Black Country Innovative Manufacturing Organisation (BCIMO), Coventry University and Coventry University Services Limited		Lead Partner – NHS; with 20 partners representing academia, industry
Accelerator location	STEAMHouse	Dudley (BCIMO); Coventry University	Aston University	University of Birmingham

DIATOMIC

As illustrated in the earlier Research Brief ¹¹, a pilot project under the WMIP 1.0, *Digital Innovation in Public Services* (DIPS) ¹² supported Birmingham City Council's work with innovative procurement to go beyond "approved suppliers" so that tech SMEs can access City Council contracts. This had been triggered by the realisation that "procurement into the public sector as being one of the largest hurdles" for innovative companies. The models and insights developed by Birmingham City University form the DIPS project was incorporated into DIATOMIC project.

DIATOMIC project is led by Connected Places Catapult in collaboration with partners: Aston University, Birmingham Chambers of Commerce, Birmingham City Council, Birmingham City University and the University of Birmingham. There are different components under DIATOMIC project (i.e. Inclusive growth, DIATOMIC UK Accelerator, Digital Twins ¹³, Global connections ¹⁴) encompassing several critical objectives. Together the DIATOMIC project seeks to "empower civic leaders to articulate innovation challenges, assist local SMEs in addressing them, and enrich the community by establishing the UK's inaugural Inclusive Innovation hub". Furthermore, it will advocate for the "utilization of data to enhance localized decision-making processes and develop an impact assessment toolkit". ¹⁵

The DIATOMIC Accelerator is based at STEAMHouse in the centre of Birmingham. The DIATOMIC Accelerator, led by Connected Places Catapult in collaboration with STEAMHouse, Birmingham City Council and Greater Birmingham Chambers of Commerce, supported cohorts of SMEs addressing Birmingham City Council's housing and waste management challenges. With later cohorts, Wolverhampton City Council and Wolverhampton University provided challenges. These SMEs focused on Data Insights, Performance, Citizen Engagement

and Knowledge Sharing. Their products and services support cities to become cleaner and healthier and provide a better experience for citizens. The SMEs received £368,000 in trial funding as well as bespoke business support, mentoring and showcasing opportunities. ¹⁶ At the end of the second year, 36 SMEs participated in the Accelerator programme and 3.8 million co-investment was raised.

Clean Futures

Clean Futures has been led by Connected Places Catapult alongside partners: the Black Country Innovative Manufacturing Organisation (BCIMO), Coventry University and Coventry University Services Limited. Based at specialist hubs in Dudley and Coventry, the project has supported the development and diversification of transport manufacturing supply chains in the West Midlands. Clean Futures is supporting the West Midlands' transport sector as it transitions away from fossil fuels towards clean tech and driving economic growth in the region by accelerating the route to market for SMEs in the sector. The Clean Futures programme has focused on challenge-led areas including greener electric vehicle components, circular economy of transport, road freight alternatives, greener transport infrastructure and future fuels.

The Clean Futures Accelerator, led by Connected Places Catapult, is leveraging Coventry University ¹⁷ and the BCIMO's ¹⁸ world-class testing facilities and expertise. In November 2023, 20 SMEs were selected to join a 6-month, challenge-led accelerator under the first cohort, followed by the second cohort which started the journey in August 2024 and completed the programme in February 2025. Those with rail-based innovations were supported by BCIMO with rail development and test site and those with automotive technologies were supported by Coventry University to improve systems and products related to development of clean tech for transport.

SMEs supported on the Accelerator have had access to an extensive range of facilities and academic, industry as well as marketing expertise. The accelerator supported SMEs through funding programmes to develop, demonstrate and grow clean-tech solutions in partnership with OEMs, Tier 1s and the wider ecosystem. This has helped convening buyers and suppliers to tackle the challenges of clean transport.

Biochar CleanTech Accelerator

Aston University has been awarded funding for this Biochar CleanTech Accelerator project to bolster the region's innovation and R&D capability and capacity to spark commercial growth and investment.¹⁹ The 'Biochar CleanTech Accelerator' project received £1.8 million to expand research facilities at Aston University. Their innovative technology is to transform organic material such as sawdust or fallen trees into commercially valuable bioproducts, including Biochar, a sustainable form of charcoal which can be used as a soil and plant growth enhancer.

The Accelerator aims to commercialise the results of long-term university research for the benefit of the environment and regional economy by developing low carbon products produced by the regional industrial cluster. The aims include developing commercial orders worth £200 million of low carbon products and create hundreds of jobs and export opportunities for the West Midlands economy.

The West Midlands Health Tech Innovation Accelerator (WMHTIA)

The West Midlands Health Tech Innovation Accelerator (WMHTIA) aims to address the difficulties companies encounter while introducing new technologies to the market.

High levels of regulation and access to specialist expertise in these sectors, can make it slow and expensive for new companies to bring their technologies to the UK market, something that has hindered growth.

It brings together a collaborative network from industry, NHS, and universities to assist businesses through the crucial phases of medical translation moving from a concept into practical applications. The WMIA aims to bolster the region's innovation and R&D capacity to spark commercial growth - boosting inward investment and reinforcing the West Midlands' position at the frontier of the UK innovation revolution by enabling businesses to develop new products, processes, and services.²⁰

The WMHTIA project has brought together expertise from 20 partners representing academia, industry and NHS to deliver excellence and boost innovation in Healthtech within the West Midlands. It does so through a coherent programme of support across six dimensions i.e. *diagnosis* of need; *definition* of challenges to respond to; *development*/prototyping of products & services; *deployment* of innovation; *diversification* of cross-sectoral collaborations; and *demonstration* of economic benefits.²¹

Discussion – Challenge-driven Public Value Creation in Regional Innovation Ecosystems

The four accelerator projects under the West Midlands IA aimed to develop the West Midlands innovation ecosystem by helping to drive economic growth, increase industry engagement and accelerate the commercialisation of SMEs in the region. After two years, R&D projects under these accelerators have attracted significant private co-investment (£3.8 million), catalysing regional economic growth, and laying foundations for future technologies.

The core of these accelerators is tackling the key challenges faced in the region by using technologies and accelerating innovation. Innovative and entrepreneurial firms that have participated in the accelerator programmes are at the heart of value creation through the public-private partnership created and developed under the IA regional pilot.

For example, in July 2023, DIATOMIC Accelerators invited firms with “innovative approaches to collecting data, monitoring performance, sharing knowledge and engaging with members of the public” to tackle the identified challenges with Birmingham City Council.

The identified challenges are: ²²

- Data insights: How can technology transform the way Birmingham City Council connects, analyses and understands data about assets, resources and user behaviours to drive efficiencies and better serve citizens' needs?
- Performance: How can technology transform public service delivery through monitoring and evaluation that improves standards, compliance and efficiency, to meet the needs and expectations of citizens?

- Citizen engagement: How can technology transform how Birmingham City Council engages with citizens and enable meaningful dialogue to meet the environmental and service needs of the city and its residents?
- Knowledge sharing: How can technology transform training and knowledge sharing at Birmingham City Council to increase capability and confidence in regulation, decarbonisation and compliance, to better serve the needs of citizens?

Later cohorts of SMEs have been trialling their solutions in the areas such as Mobility, Building Optimisation, Renewable Energy and Planning in the two investments Zones (Birmingham Knowledge Quarter and Wolverhampton Green Innovation Corridor).

DIATOMIC has provided opportunities for innovators and SMEs to work with the City Councils to design new products and services aimed at “solving some of the real challenges right on their doorstep” which would support local businesses and growth.²³ One of the SMEs in the cohort in 2023, Novoville, following a successful demonstration and the positive feedback received, secured a major six-figure contract with Birmingham City Council in May 2025.²⁴

Another example of challenges are found with Clean Future. They have three challenges and an open challenge: ²⁵

- Challenge 1- Clean and Efficient Vehicle Manufacturing Assembly
- Challenge 2 – Design or Production of Cost-Effective Solutions for Clean Transportation Infrastructure
- Challenge 3- Future Fuels: Production, Transportation or Storage of Alternative Fuels such as Hydrogen or Biofuels
- Open Challenge – sustainable solutions that support collective vision for greener future

The Accelerator programme manager summarises ²⁶:

“....simply putting industry in the room isn’t enough; we need clear mechanisms to connect SMEs with the right partners and pathways to commercialisation. What we’ve done with BCIMO is a great example of this in action—convening industry as early as possible to articulate their needs while ensuring SMEs have the clarity and support to deliver. This collaborative approach is crucial, especially in rail, where innovation must align with investment and procurement to truly scale.”

Funded and supported by the national and regional governments, these challenge-driven accelerator models present how a region can create values through public-private partnership model of procuring and supplying innovation. The case of DIATOMIC shows Birmingham and Wolverhampton City Councils created opportunities for SMEs to respond to their innovation needs which then increased R&D and jobs. The case of Clean Future shows the development and diversification of transport manufacturing supply chains with SMEs in the West Midlands. The Accelerator has developed a unique model by bringing innovative SMEs, investors and industry partners together from an early stage.

Conclusion

The IA pilot, by clustering innovative customers and suppliers and facilitating the procurement of innovation, has created a dynamic effect on the regional innovation ecosystem and regional economies more broadly. As an exemplar of such transformative processes using public procurement as a policy tool, the West Midlands IA accelerators collectively illustrate how a region can take an ownership and develop its regional innovation ecosystem through procuring innovation.

In this short paper, we introduced the accelerators under the pilot: DIATOMIC Accelerator, featuring housing and waste management with digital twin solutions; and Clean Future Accelerator with rail innovation and transport technology solutions. The WMHTIA would highlight the challenges of health tech sector with regulatory requirements, and BioChar Clean Tech Accelerator would show different dynamics with commercialisation of environmental technologies into products and systems.

We need to continue to identify longer-term impact of these projects. Each place needs to build Capacity – the ability to understand their place and collect evidence; and Continuity and Maturity - of leadership, governance and inclusive growth approaches.

Recommendations for the regional leaders – both public and private sectors – to enable future growth include:

- To create a system that enables SME growth beyond the duration of the public grants.
- To continue to build place-based ecosystems with effective brokerage facilitating collaboration (e.g. Innovation Accelerators)
- To support innovation as part of the value chain – SMEs as part of supply chain – as part of a growth roadmap
- To help SME growth journey with public-private partnership and engage with innovators, industry and investors, particularly with scaleup investment
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References

1 <https://www.ipec.org.uk/publication/place-based-collaborative-opportunities-and-challenges-for-public-procurement-of-innovation/>

2 [Innovation Accelerator driving growth through regional pilot - Innovate UK Business Connect](#)

3 [Innovation Accelerator programme boosts growth across the UK – UKRI](#) 28 March 2025

4 For an overview of the three IAs, see [Innovation Accelerator driving growth through regional pilot - Innovate UK Business Connect](#) 27 March 2025

5 [West Midlands Local Industrial Strategy - GOV.UK](#)[Accessed 22.03.2024]

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

7 <https://www.wmca.org.uk/what-we-do/economy-and-innovation/west-midlands-innovation/west-midlands-innovation-board/>; The WMIB reports to, and is accountable to, the West Midlands Economic Growth Board.

8 <https://www.wmca.org.uk/what-we-do/economy-and-innovation/west-midlands-innovation/innovation-accelerator-governance/>

9 [West Midlands Innovation Accelerator](#)

10 [West Midlands Innovation Programme](#)

11 <https://www.ipec.org.uk/publication/place-based-collaborative-opportunities-and-challenges-for-public-procurement-of-innovation/>

12 Innovation Alliance for the West Midlands (undated) Digital Innovation in Public Services. Webpage: <https://innovationwm.co.uk/wmip/projects/digital-innovation-in-public-services/> [Accessed 22.03.2024]

13 It aims to develop three digital twins: traffic and air quality twin (BCU), energy systems and infrastructure (University of Birmingham), and hydrogen fuel cell electric vehicles (Aston University).

14 This initiative focuses on elevating the region's international profile and increasing both exports and imports. Key components include a global accelerator to help West Midlands SMEs access the Indian market, and Innovation Twins cross-sector collaboration between Birmingham (UK) and Ulsan (Republic of Korea). [Diatomic Projects - DIGITAL BIRMINGHAM](#)

15 <https://www.bcu.ac.uk/research/smart-sustainable-green-cities/diatomic>

16 [Diatomic Projects - DIGITAL BIRMINGHAM](#); <https://www.ipec.org.uk/news/diatomic-delivers-results-for-innovators-in-birmingham/>

17 R&D facilities found in the Institute for [Advanced Manufacturing and Engineering \(AME\)](#) and the [Centre for Advanced Low Carbon Propulsion Systems](#)

18 <https://bcimo.co.uk/programmes/clean-futures/clean-futures-accelerator/>

19 [West Midlands Innovation Accelerator](#)

20 <https://wmhtia.com/governance/>

21 <https://wmhtia.com/>

22 <https://cp.catapult.org.uk/news/tech-innovators-sought-to-supercharge-birminghams-public-services/>

23 <https://cp.catapult.org.uk/news/tech-innovators-sought-to-supercharge-birminghams-public-services/>

24 <https://cp.catapult.org.uk/article/birmingham-accelerator-leads-software-firm-to-contract-win/>

25 <https://bcimo.co.uk/programmes/clean-futures/clean-futures-accelerator/cf-accelerator-cohort-2-challenges/>

26 <https://bcimo.co.uk/clean-futures-accelerator-cohort-two-concludes-with-demo-day-at-bcimo/>

References

Bailey D, Pitelis C and Tomlinson P (2018) A place-based developmental regional industrial strategy for sustainable capture and co-created value. *Cambridge Journal of Economics*, 42(6): 1521–1542

European Commission: Joint Research Centre, Rissola, G. and Haberleithner, J., (2020) *Place-based innovation ecosystems – A case-study comparative analysis*, Publications Office, 2020, <https://data.europa.eu/doi/10.2760/492676>

Kitagawa, F (2025) Place-based collaborative opportunities and challenges for public procurement of innovation, IPEC Brief, <https://www.ipec.org.uk/publication/place-based-collaborative-opportunities-and-challenges-for-public-procurement-of-innovation/>



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