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POLICY AND PRACTICE FRAMEWORK

From Evidence to Action: Helping Manufacturing SMEs Go Digital and Green in the West Midlands

IRC Report No: 067

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Policy and Practice Framework

Supporting digital and green adoption among West Midlands manufacturing SMEs

1. Project background

This Action to Impact project builds directly on the earlier IRC-funded study FFTwo0012, which examined why manufacturing SMEs in the West Midlands were not fully embracing the “Triple Transition” of digitalisation, including AI adoption, net zero practices and productivity improvement.

The earlier study drew on analysis of the Longitudinal Small Business Survey, interviews with manufacturing SME leaders and focus groups with regional stakeholders (Mahmood, Asghar and Kousha, 2026). This Action to Impact project has translated that evidence into a practical Policy and Practice Framework showing what needs to change, how support could work in practice and which organisations could contribute to delivery.

2. About this framework

This Policy and Practice Framework translates evidence from West Midlands manufacturing SMEs and regional stakeholders into practical guidance for policy, programme and delivery organisations. It was refined through regional stakeholder feedback to reflect delivery context, policy fit and practical implementation issues.

It contains three connected elements:

1. **Seven priorities for policy and practice**, linking the evidence to recommendations for improving digital and green adoption.
2. **A practical SME support pathway**, showing how firms can move from diagnosis and prioritisation to trial, implementation, scaling and shared learning.
3. **A stakeholder implementation matrix**, outlining the potential contributions of national, regional and local organisations, education providers, manufacturing SMEs and employees.

Together, these elements show what needs to change, how support could work in practice and who could help deliver it.

3. Evidence base

This framework draws on descriptive analysis of the Longitudinal Small Business Survey (2022 to 2023), interviews with manufacturing SME leaders and focus groups with regional stakeholders, summarised in the accompanying West Midlands Manufacturing SMEs: Digital and Net Zero Adoption Dashboard.

The dashboard places digital and net zero adoption within the wider productivity and manufacturing context of the West Midlands. Regional productivity stood at 86% of the UK average in 2025, while manufacturing remains important to output and employment. Manufacturing labour productivity also increased by 5.8% between 2019 and 2024.

The SME evidence shows increased use of some digital tools between 2022 and 2023. The proportion of firms using technologies to sell online increased from 8.7% to 25.0%, while the use of web-based technologies to manage the business increased from 26.1% to 52.8%. However, advanced technology adoption remained more limited, with 24.1% reporting the use of AI, robotics or automation in 2022.

The evidence also shows substantial engagement with environmental improvement. In 2022, 65.5% of firms reported taking steps to reduce their environmental impact, and 54.4% reported new or improved production processes with environmental benefits. However, energy prices remained a significant constraint, with 80.6% identifying them as a major obstacle in 2023.

The proportion reporting that rising costs affected plans to reduce carbon emissions declined from 58.8% in 2022 to 44.4% in 2023. This suggests some improvement, but cost pressures continued to affect a substantial proportion of firms. The dashboard therefore highlights uneven digital maturity and continuing energy-cost pressures.

West Midlands Manufacturing SMEs: Digital and Net Zero Adoption Dashboard



Regional Productivity Context (Why this matters)

The Productivity Gap: West Midlands productivity stands at 86% of the UK average, ranking ninth among UK regions (2025).

Manufacturing Economic Impact: The sector contributes 9.9% of UK GVA and accounts for 7.2% of total employment, making its success vital to regional and national economic health.

High Productivity Growth: Manufacturing labour productivity grew by 5.8% between 2019 and 2024, placing the sector 2nd in the five-year productivity-growth ranking.



Energy price obstacle

Businesses identifying energy prices as a major obstacle to success (2023)



Reducing Environmental Impact

Firms took steps to reduce their environmental impact (2022)



Green Process Innovation

Firms introduced new or improved production processes with environmental benefits (2022)



Advanced technology adoption

AI, robotics or automation adoption (2022)

Digital Process and Economic Pressure

Technologies used to sell online



Web-based technologies used to manage the business



Rising costs affected plans to reduce carbon emission



Uneven digital maturity

Use of online tools increased, but advanced technology adoption remained limited.



Energy costs constrain action

Energy prices and wider cost pressures continued to affect firms' environmental plans.



Sequenced support is required

Support should be staged and tailored to each firm's readiness, needs and capacity.

Source: LSBS 2022-2023 analysis of manufacturing SMEs reported in IRC Report No: 044 (FFTWO012). Percentages use valid responses.

Regional productivity context: TPI West Midlands Productivity Scorecard (2025). **UK manufacturing context:** TPI Manufacturing Productivity Scorecard (2025).

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Figure 1: West Midlands Manufacturing SMEs: Digital and Net Zero Adoption Dashboard

4. Framework priorities at a glance

The framework identifies seven connected priorities for strengthening digital and green adoption among West Midlands manufacturing SMEs:

1. Building SME absorptive capacity and the regional skills pipeline
2. Creating staged adoption pathways
3. Building confidence and reducing perceived risk
4. Framing adoption around business value and regional growth
5. Strengthening place-based digital and energy infrastructure
6. Funding the right level of support
7. Aligning regulation with practical retrofit support

The following matrix outlines why these stakeholder groups may be interested, what they can influence and their potential contributions to delivery.

5. Stakeholder implementation function

Implementation will require input from national, regional and local organisations, alongside manufacturing SMEs and their employees. The 3i matrix outlines why each stakeholder group may be interested, what it can influence and its potential practical function in supporting delivery.

The matrix is adapted from the 3i framework of interest, influence and impact (Reed *et al.*, 2025). In this application, impact is used to describe each stakeholder group's potential practical contribution to implementing the framework. The 3i matrix is intended to clarify how existing regional actors can contribute to delivery, rather than propose a new delivery structure.

The functions below are proposed based on stakeholder remit, project engagement and alignment with the framework. They do not represent formal organisational commitments unless explicitly confirmed.

Implementation and coordination note: The matrix identifies potential stakeholder contributions to implementation. SME interviews and stakeholder feedback highlighted fragmented support, limited awareness of available programmes and uncertainty about where firms should go for advice. This reinforces the need for a visible entry point, clearer referral routes, coordinated diagnosis and follow-up arrangements so that firms are not left to navigate support alone. Coordinating, delivery and supporting roles should therefore be clarified within future programme design and delivery arrangements.

Table 1: 3i stakeholder implementation matrix

Stakeholder group ¹	Interest: why they care	Influence: what they can change	Impact: potential practical contribution to implementing the framework	Relevant framework themes
Innovate UK	Innovation, SME capability, productivity, advanced manufacturing, digitalisation and business resilience	National innovation funding, programme design, knowledge-transfer support and links between businesses, universities and innovation organisations	Support firm-level adoption pathways, fund innovation and implementation, strengthen university–business collaboration and help test scalable support models	SME absorptive capacity; staged adoption pathways; funding the right level of support; business value and regional growth
National policy and advisory bodies	Industrial strategy, advanced manufacturing, productivity, digital skills, net zero and regional growth	Shape national policy advice, evidence priorities, sector analysis and recommendations	Use the evidence to identify policy gaps, strengthen the case for place-sensitive support and improve understanding of skills, adoption pathways and firm-level barriers	SME absorptive capacity; staged adoption pathways; place-based delivery; business value and regional growth
West Midlands Combined Authority and regional delivery partners	Regional productivity, business growth, digital adoption, energy efficiency and decarbonisation	Regional programme design, funding coordination, adviser delivery, referral routes and partnerships	Coordinate digital, energy, skills and finance support; provide tailored advice through programmes such as Business Energy Advice Service (BEAS) and Made Smarter; connect firms to suitable support through clear referral routes, including Business Growth West Midlands, local authority provision, business representative organisations, chambers of commerce, specialist collaborations and sector-based support; support follow-up and benefits tracking; and improve visibility of available skills, leadership and business-support offers so advisers can make appropriate referrals.	Staged adoption pathways; place-based infrastructure; funding the right level of support; business value and regional growth

¹ Regional feedback suggested that relevant contributors could include the West Midlands College Group, universities, leadership and management specialist independent training providers, and high-growth, innovating and established SMEs.

Stakeholder group ¹	Interest: why they care	Influence: what they can change	Impact: potential practical contribution to implementing the framework	Relevant framework themes
Local councils	Local economic development, SME resilience, employment, property improvement and net zero	Local business-support programmes, planning and property links, local partnerships and SME outreach	Engage local firms, identify local needs, connect SMEs to support, help coordinate retrofit activity, contribute to place-based delivery and support localised business support through programmes such as the Local Enterprise Support Programme.	Place-based infrastructure; regulation and retrofit support; staged adoption pathways; business value and regional growth
Universities, colleges and training providers	Skills development, knowledge exchange, graduate employment, innovation and regional growth	Training, research, technical expertise, placements, demonstrations and business collaboration	Support leadership and management capability, workforce engagement, technology-selection advice, graduate placements, knowledge exchange and practical training linked to SME adoption needs. Help firms access specialist manufacturing expertise, such as Warwick Manufacturing Group (WMG), the Manufacturing Technology Centre (MTC) and the wider High Value Manufacturing Catapult network, where relevant.	SME absorptive capacity; staged adoption pathways; confidence and risk reduction
Manufacturing SMEs and their employees	Lower costs, productivity, resilience, competitiveness, skills and job quality	Adoption decisions, staff engagement, technology use and operational change	Take part in diagnosis, prioritise investments, test solutions, involve employees, implement change, track benefits and share learning with peers	All seven framework themes and all stages of the practical support pathway

6. Proposed practical support pathway²

The seven framework priorities have been translated into a proposed practical support pathway showing how support could be applied at firm level. The pathway moves from understanding the SME's starting point to prioritising, trialling, implementing and scaling suitable solutions, with shared learning informing future diagnosis and support.

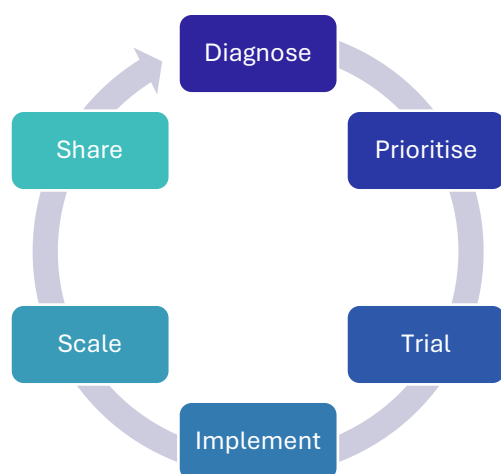


Figure 2: Proposed practical support pathway

The pathway is an applied synthesis of the evidence rather than a sequence stated directly by participants. The circular format shows that shared learning can inform future diagnosis and support. The pathway should therefore be read as a flexible support cycle rather than a fixed linear process, recognising that firms may enter at different points or return to earlier stages as needs, capacity and readiness change.

Regional feedback indicated that programme delivery partners already have a remit to refer businesses to other support where appropriate. The pathway is therefore intended to organise and strengthen existing referral and implementation activity, rather than propose a separate delivery structure.

Table 2 is relevant to national and regional policymakers, programme designers and delivery partners because it shows how support can be organised across six stages, from diagnosis and prioritisation to trial, implementation, scaling and shared learning. It also identifies the purpose of each stage, the practical support required, the related framework priorities and the expected outcomes for firms.

² The proposed pathway is an evidence-informed synthesis developed from the study findings. Its staged approach is consistent with Rogers' innovation-decision process, which conceptualises adoption through knowledge, persuasion, decision, implementation and confirmation (Rogers, 1983). The pathway adapts this logic to the practical needs of manufacturing SMEs by adding firm-level diagnosis, prioritisation, trialling, scaling and shared learning.

Table 2: Proposed practical support pathway

Stage	Purpose	What happens in practice	Relevant framework themes	Expected outcome
1. Diagnose	Understand the firm's starting point and main problems.	Assess the firm's production processes, machinery, internet and factory connectivity, existing digital systems, data practices, workforce skills, energy use, property conditions and management capacity. Identify whether different systems can work together and whether rented premises or other constraints limit action.	Building SME absorptive capacity; Create staged adoption pathways; Place-based infrastructure; Regulation and retrofit support	A clear assessment of the firm's needs, readiness, barriers and opportunities
2. Prioritise	Decide what the firm should address first.	Identify the actions that are most practical, affordable and valuable to the business. Consider process improvement, staff training, basic digital systems, energy efficiency and building improvements before advanced automation, AI, renewable energy or other major investments. Develop a clear commercial case covering costs, savings, productivity, resource use and emissions.	Create staged adoption pathways; Build confidence and reduce perceived risk; Frame adoption around business value; Funding the right level of support	A firm-specific action plan with agreed priorities
3. Trial	Reduce risk before the firm makes a major commitment.	Use practical demonstrations, peer examples, small pilots or limited trials to test whether a digital or net zero solution fits the firm's processes. Provide confidential one-to-one advice where the firm cannot discuss commercially sensitive needs in a group setting.	Build confidence and reduce perceived risk; Building SME absorptive capacity; Funding the right level of support	Evidence that the proposed solution is suitable, affordable and likely to deliver value
4. Implement	Put the selected solution into practice.	Provide technical advice, finance, trusted specialist support, staff training and change-management help. Involve employees, communicate changes clearly and plan the transition from existing systems and practices. Address infrastructure, property or regulatory issues that may affect implementation.	Building SME absorptive capacity; Funding the right level of support; Place-based infrastructure; Regulation and retrofit support	A digital, energy or low-carbon solution that is introduced and used effectively
5. Scale	Extend successful adoption and support continued improvement.	Track costs, savings, productivity, energy use, resource efficiency and emissions. Review whether the investment has delivered the expected benefits. Extend successful solutions, address remaining barriers and identify the next appropriate investment or improvement.	Frame adoption around business value and regional growth; Funding the right level of support; Create staged adoption pathways	Wider adoption, continued improvement and stronger business benefits
6. Share	Spread practical learning to other SMEs and improve future support.	Capture lessons, results and practical examples from supported firms. Share them through peer networks, advisers, colleges, universities, sector organisations and suitable case studies, while protecting commercially sensitive information. Use this learning to improve future diagnostics, programme design and support delivery.	Build confidence and reduce perceived risk; Building SME absorptive capacity; Frame adoption around business value and regional growth	Wider awareness, stronger peer confidence, better programme design and faster diffusion of effective digital and net zero practices

7. Detailed policy and practice framework

The evidence has been translated into seven priorities for policy and practice. Each priority links a data-based finding to practical recommendations for improving digital and net zero adoption among manufacturing SMEs. Recommendations are grouped into immediate and longer-term priorities. Immediate priorities are actions that could be introduced or strengthened through existing programmes and delivery arrangements, although some may still require additional capacity, coordination or funding to operate at scale. Longer-term priorities require sustained investment, coordination or wider system change. Relevant stakeholder contributions are set out separately in the 3i stakeholder implementation matrix; these indicate potential delivery functions rather than formal organisational commitments.

Table 3: Main policy and practice framework table³

Framework point	Data-based finding	Recommendation
1) Building SME absorptive capacity and the regional skills pipeline	SMEs face barriers to digital and net zero adoption, including limited skills, technical capability, awareness and access to trusted advice. Successful transformation depends on leadership, workforce engagement and effective change management, while one-size-fits-all solutions may not meet the needs of service-based, low-volume and bespoke firms. Participants also identified weak links between SMEs, apprenticeships, colleges, universities and the technologies being adopted. Main evidence sources: SME interviews P1, P2, P6, P7, P8, P9 and P10; stakeholder focus groups FG1.2, FG1.4, FG1.6, FG2.2, FG3.2, FG3.3, FG3.4 and FG4	Immediate priorities • Provide tailored diagnostic and implementation support to help SMEs identify and address operational, productivity, energy and digitalisation priorities. • Strengthen manufacturing-specific advisory services by expanding access to trusted, independent support and building on relevant programmes, including Made Smarter and Skills Bootcamps. • Combine technical training with leadership and change management support to improve workforce engagement and successful technology adoption. • Promote problem-led innovation by encouraging SMEs to define business challenges before selecting digital technologies or suppliers. Longer-term priorities • Enhance collaboration between SMEs and education providers through graduate placements, knowledge exchange and partnerships focused on digitalisation, automation and energy efficiency. • Invest in regional skills ecosystems to develop the digital, engineering and net zero capabilities needed for long-term SME competitiveness.
2) Create staged adoption pathways	Firms begin from different levels of readiness and may require process improvement, ERP systems, workforce training, energy efficiency measures, or basic infrastructure upgrades before adopting advanced technologies. However, support is often fragmented, difficult to navigate, and poorly sequenced. Readiness is shaped by core foundations including machinery, connectivity, existing systems, data quality, and system interoperability. Main evidence sources: SME interviews P6, P7, P8, P10 and P11; stakeholder focus groups FG1.3, FG2.1, FG3.1 and FG3.3	Immediate priorities • Start with a readiness assessment covering digital, operational and energy capabilities. • Target support based on readiness, prioritising process improvement and efficiency before advanced technology adoption. • Use a blended engagement model, combining group awareness sessions with one-to-one diagnostic and implementation support. Longer-term priorities • Develop integrated, staged support pathways that connect programmes and guide SMEs from awareness to implementation. • Track outcomes over time (productivity, cost and energy) to inform ongoing improvement and next steps.

³ Table 3 findings are qualitative, based on manufacturing SME interviews (P) and stakeholder focus groups (FG), and reflect the direct experience of SME owners and regional stakeholders. Recommendations also reflect a review of relevant policy and support programmes.

Framework point	Data-based finding	Recommendation
3) Build confidence and reduce perceived risk	Owner-managers see themselves as capable but lack technology expertise “at their shoulder”, SMEs are often sceptical of ROI claims and may be risk averse. Other barriers included generational differences in technology confidence, workforce fear of AI-related job displacement, leadership uncertainty about the pace and scale of adoption, and outreach that does not reflect manufacturers’ language, priorities or established sector networks. Main evidence sources: Stakeholder focus groups FG3.1, FG3.2, FG3.3 and FG3.4	Immediate priorities • Use trusted evidence, demonstrations and peer examples to show SME manufacturers the costs, benefits and returns of digital and net zero technologies. • Strengthen advisory support through manufacturing-trusted networks, building on programmes such as Digital Boost and Be the Business, to address behavioural and confidence barriers. • Adopt peer-led, segmented engagement approaches to build trust across different types of decision-makers. • Deliver support through local and regional channels to improve accessibility and responsiveness. Longer-term priorities • Embed workforce transition planning including communication, reskilling and role redesign for AI and automation. • Build leadership capability to assess AI adoption, including timing, scale and readiness.
4) Frame adoption around business value and regional growth	SMEs are more likely to adopt digital and net zero practices when clear commercial benefits are evident, including cost reduction, productivity gains, efficiency, competitiveness and market opportunity. Regional, supply chain and environmental benefits are often less immediate in decision-making. Customer and supply chain requirements are a key adoption driver, while cumulative cost pressures also shape business survival and employment decisions. Although digital and net zero objectives can be mutually reinforcing, this alignment is not automatic, and not all digital investments deliver environmental improvements. Main evidence sources: SME interviews P5, P8, P9 and P12; stakeholder focus groups FG1.3, FG1.4, FG2.2, FG3.1, FG3.3 and FG3.4	Immediate priorities • Frame policy around the direct commercial case, emphasising lower costs, higher productivity, greater efficiency, competitiveness and market opportunities. • Reflect cumulative cost pressures on SMEs when designing the timing, sequencing and intensity of support. • Integrate digital and net zero support where they address shared operational challenges, rather than treating them as separate agendas. Longer-term priorities • Measure and report financial, productivity and emissions impacts separately for each intervention, rather than assuming automatic co-benefits. • Position regional and environmental benefits as secondary outcomes, not the primary justification for adoption.
5) Strengthen place-based digital and energy infrastructure	The West Midlands has fewer large-scale clean energy generation opportunities, making demand management increasingly important. However, slow smart meter rollout constrains firms’ ability to access energy flexibility. SME energy use and decarbonisation potential also vary significantly by size, location, industrial activity, premises condition and infrastructure access.	Immediate priorities • Tailor energy and decarbonisation support to sub-regional and firm-level differences, recognising variation in industrial structure, infrastructure access and business needs rather than applying a uniform regional approach. • Identify firms and areas where gaps in smart meter, connectivity or energy infrastructure are restricting adoption. Longer-term priorities

Framework point	Data-based finding	Recommendation
	Main evidence sources: Stakeholder focus groups FG1.3 and FG3.1	• Accelerate and better target rollout of smart meter and smart energy systems for manufacturing SMEs, reflecting the importance of demand-side management in the region and limited large-scale clean energy generation capacity. • Strengthen place-based infrastructure planning around regional demand management and different sub-regional manufacturing needs.
6) Funding the right level of support	Constraints include time, staff capacity and finance. Tailored advisory support is costly, while generic provision may not meet higher-need firms. Fragmented funding, complex applications and short funding and programme cycles can limit access for smaller or early-stage SMEs. Some programme metrics are misaligned with purpose, particularly job-creation targets in productivity or automation-focused interventions. Many SMEs also do not identify their improvements as “innovation”, reducing engagement with support. Main evidence sources: SME interviews P3, P10 and P11; stakeholder focus groups FG1.2, FG1.3, FG1.4, FG2.1, FG2.2, FG3.2, FG3.3 and FG3.4	Immediate priorities • Ensure proportionate application and reporting requirements relative to funding value. • Provide clear entry routes for early-stage or less mature firms. • Clarify innovation definitions in manufacturing terms, covering product, process, digital and net zero improvements. • Use blended finance tools, including grants, matched funding, loans and pilot diagnostic or productivity vouchers. Longer-term priorities • Build on relevant national and regional initiatives to reduce fragmentation in SME funding and support, while developing staged, place-sensitive funding that combines investment with specialist advice. • Empower regional partners to coordinate finance, skills and advice around local needs. • Align success metrics with programme purpose and outcome timing, recognising that benefits from automation, digitalisation and energy-efficiency support may emerge after the funding period.
7) Align regulation with practical retrofit support	Poor quality commercial property can constrain SME energy efficiency and net zero adoption. While stronger requirements may drive improvement, SMEs, particularly tenants, often lack the financial capacity or control over premises to implement necessary upgrades. Main evidence sources: Stakeholder focus groups FG1.6, FG3.2 and FG3.4	Immediate priorities • Combine proportionate building and energy efficiency standards with practical local support, including audits, advisory services and capital grants. • Address landlord-tenant barriers, recognising that many SMEs lack control over building improvements. Longer-term priorities • Ensure regulatory design reflects SME financial and operational constraints, particularly for firms in rented or lower-quality premises. • Combine proportionate building and energy-efficiency requirements with sustained retrofit support.

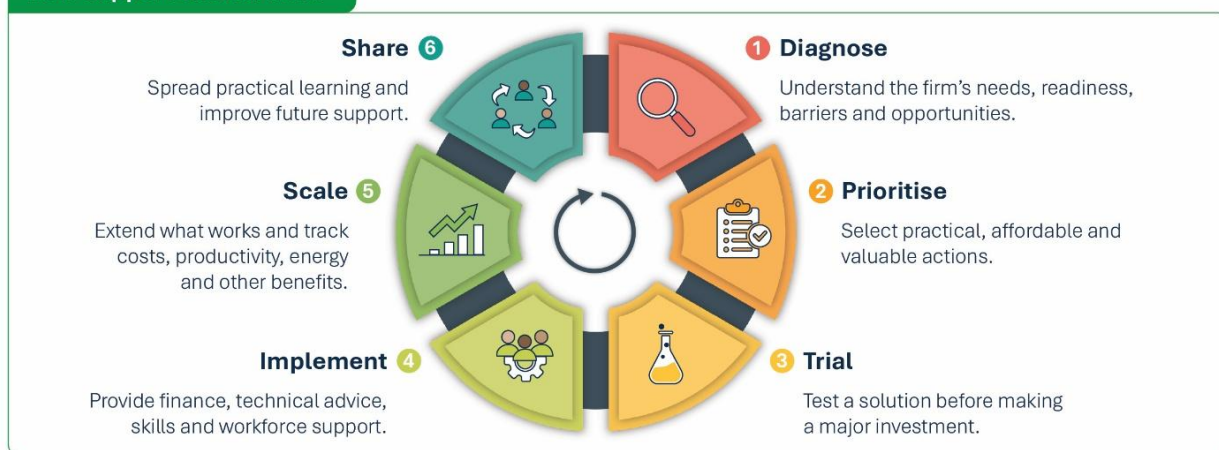
Figure 3: Policy and Practice Framework for Supporting Digital and Green Adoption in Manufacturing SMEs

Action to Impact

From Evidence to Action

Helping Manufacturing SMEs Go Digital and Green in the West Midlands

How support should work



Priorities for effective support



Who can help deliver the framework?



Delivery principles



Clear evidence. Practical pathways. Coordinated action. Stronger manufacturing SMEs.

Source: Policy and Practice Framework developed through the Action to Impact project (IRC Project FFthree0014). The framework draws on IRC Project FFTwo012 primary data. **Principal Investigator:** Dr Samia Mahmood, University of Wolverhampton. **Contact:** samiamahmood@wlv.ac.uk

8. Policy fit and delivery considerations

The framework was refined following feedback from regional and national policy, business-support, innovation and skills stakeholders, particularly on accuracy, delivery context, practical implementation and policy fit for digital and green adoption. Feedback suggested that several recommendations are already reflected in BEAS, Made Smarter, wider WMCA activity or partner delivery. However, delivery is not uniform across all programmes. For example, blended group and one-to-one support is present in some provision, but not consistently across all support routes. This reinforces the importance of clearer referral routes, greater visibility of available support and flexible staging according to firm readiness.

Stakeholder feedback also highlighted that multi-year funding creates more scope to monitor outcomes over time and respond to the lag between intervention, implementation and measurable business impact. Regional energy-efficiency support combines diagnostic audits with grant support, enabling firms to apply for funding to implement recommended measures. Digital and energy-efficiency programmes are also being linked in practice, for example where a Made Smarter roadmap can support a grant application if the proposed digital technology also reduces energy use or costs.

Three practical delivery issues were also emphasised: the recognised implementation gap between receiving recommendations and acting on them; the need to help SMEs identify suppliers, obtain quotes and assess technical feasibility; and the constraints created by rented premises and landlord arrangements where building-level energy measures are required.

Stakeholder feedback also highlighted that coordinated local support, diagnostics, tailored interventions and long-term engagement are resource intensive. Delivery of the seven priorities will therefore depend on fiscal capacity, programme design and the ability to prioritise support where it is likely to generate the greatest business and regional value.

The framework should also be read alongside lessons from previous and current manufacturing-support interventions, including Manufacturing Advisory Service (MAS), the Advanced Manufacturing Supply Chain Initiative (AMSCI) and Made Smarter

Adoption, particularly around scalability, cost, adviser capacity and the challenge of moving firms from advice to implementation.

The Local Innovation Partnerships Fund may also provide relevant context for future delivery levers, particularly through Future Oriented Regional Growth in Engineering (FORGE), which supports West Midlands manufacturing businesses with practical innovation support to develop, test and scale growth opportunities, alongside funding pathways and tailored project planning. This aligns with the framework's emphasis on business-led support, de-risking technology and clean-growth implementation, connecting firms to specialist expertise and helping SMEs move from opportunity identification to growth and scaling.

Overall, regional stakeholder feedback suggested that the framework should be positioned as complementary to existing and planned West Midlands provision, including the emerging business-support model and the West Midlands Growth Plan. The value of the framework is not in proposing a parallel delivery structure, but in organising evidence on SME readiness, staged adoption, referral routes, implementation barriers and outcome tracking so that existing and planned provision can be made easier to navigate, better connected and more responsive to firm-level needs.

9. Closing message

Effective digital and net zero adoption requires both coordinated support and firm-level tailoring. Regional and national partners should develop an integrated support ecosystem that is easier to navigate, better connected and sustained over time, while ensuring interventions are based on each SME's needs and readiness rather than predetermined technologies or programmes.

In practice, the priorities could be implemented progressively, beginning with lower-cost improvements such as clearer referral routes, better signposting between existing programmes, common diagnostic tools and improved outcome tracking, before moving toward higher-cost interventions such as intensive one-to-one support, capital grants or long-term retrofit programmes.

Although developed from evidence on manufacturing SMEs in the West Midlands, the framework's core principles, including firm-specific diagnosis, staged adoption, trusted advice, proportionate finance, workforce engagement and outcomes monitoring, are likely to be transferable to other regions. However, implementation should be adapted to local industrial structures, infrastructure, property conditions and existing support ecosystems.

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