

West Midlands Innovation Accelerator Launch Event

supporting your business to grow

Locally-led Innovation Accelerators delivered in partnership with DSIT, Innovate UK and City Regions







Agenda

09:00 - 09:35	Pam Waddell, Director, Innovation Alliance for the West Midlands - Kick off welcome from
	Innovation Alliance for the West Midlands to this Innovation Policy & Practice Event
09:35 - 09:40	Joanna Birch, Director, Innovation Enterprise & Employability, BCU - Welcome to STEAMhouse
09:40 - 09:50	Mike Wright, West Midlands Innovation Board Chair - The regions innovation story
09:50 - 09:52	Andy Street, Mayor of the West Midlands - Congratulations to the final projects
09:52 – 10:10	Dean Cook, Director, Place & Levelling Up, Innovate UK - Innovation Accelerator development
10:10 – 11:00	Switch the Pitch - What's live and coming from all five Innovation Accelerator projects
11:00 – 12:00	Expo

Mike Wright West Midlands Innovation Board





West Midlands Innovation Welcome to the Innovation Revolution

July 2023



Welcome to the West Midlands

- Centrally located 90% of the UK is within four hours of the West Midlands. High Speed Rail 2 (under construction) will mean you can get from the West Midlands to London in under 38 minutes
- Globally connected One of the fastest growing airports in Europe to over 400 global destinations
- Three interconnected cities Birmingham, the UK's most investable city, as well as Coventry and Wolverhampton
- 4.7 million people, one of the UK's youngest and most diverse regions and including 60,000 graduates trained every year
- Fastest growing regional economy in the UK including a £3.3bn innovation economy
- Top 100 European location for innovative startups and scale-ups



THE UK'S LEADING INNOVATION LOCATION:



WHERE INNOVATIVE FIRMS SET UP & SCALE TO SUCCESS

- Regional business investment in R&D has doubled between 2009-2019
- High density of prime firms including Jaguar LandRover, Aston Martin,
 Goldman Sachs, Mondelez International, EON, BT and Amazon.
- **Eight universities**, part of a wider regional universities alliance that generate the UK's most inventions & patents per unit of research income and including two in the global top 100 University of Warwick & University of Birmingham
- Three UK Catapult Centres where you can access specialist R&D equipment,
 and market specific technical & commercial knowledge transfer
- 11 science parks focusing on green innovation, health innovation, and digital
 & data innovation
- 100+ innovation accelerator & incubator programmes
- 2 million square foot available high-quality office, lab & mixed use space

West Midlands R&D Economy

(expenditure per annum)



- Business R&D
- Government & universities R&D

ONE OF THE UK'S MOST EXCITING PLACES FOR INNOVATION TALENT





A young, diverse, and entrepreneurial talent base

Dedicated support for your skills and hiring needs

- 230,000 skilled workers within 45 minutes of West Midlands highest outside Greater London
- 33% of residents hold a technical or higher-level skills qualification amongst the highest in the UK
- Network of universities, business schools, and further education colleges able to meet bespoke training requirements
- Dedicated regional funding for skills & hiring bootcamps that can be designed around your business skills requirements

166,760 students

72,000 graduating from across **157 countries**

28,000 qualifying with postgraduate degrees

Strong talent retention trends

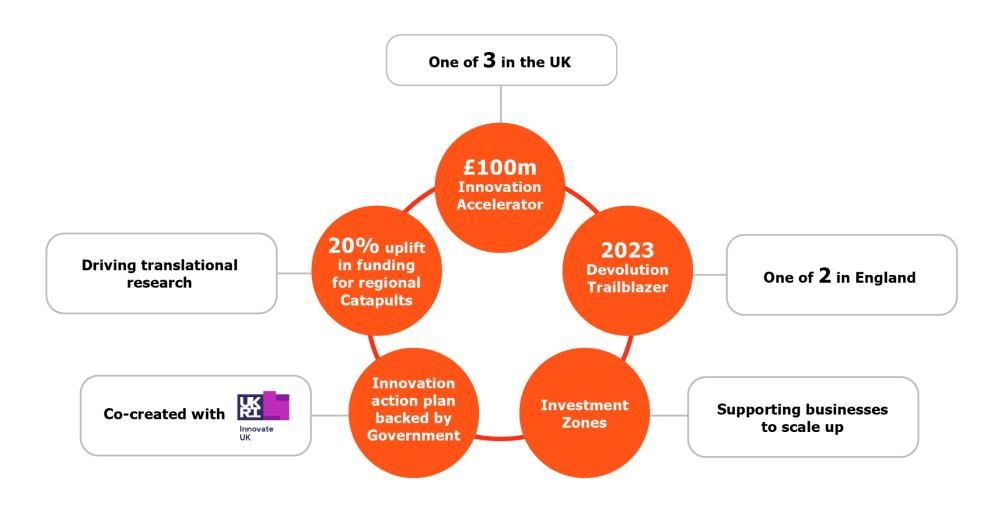
Over **500** graduate start-ups still active after 3 years

51% UK based graduates in employment are working in the West Midlands

76% are in high-skilled employment

UK GOVERNMENT BACKING TO GROW OUR INNOVATION ECONOMY





INDUSTRY CLUSTERS AT THE FRONTIER OF GLOBAL GROWTH









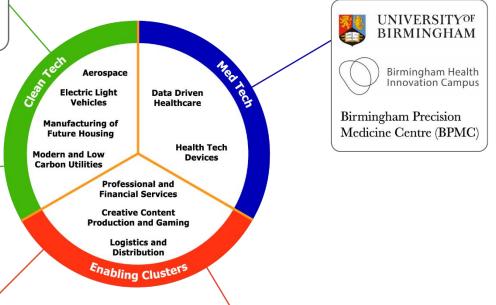


















WARWICK **ESPORTS**

8 Regional Business Schools including Warwick Business School - ranked #2 globally







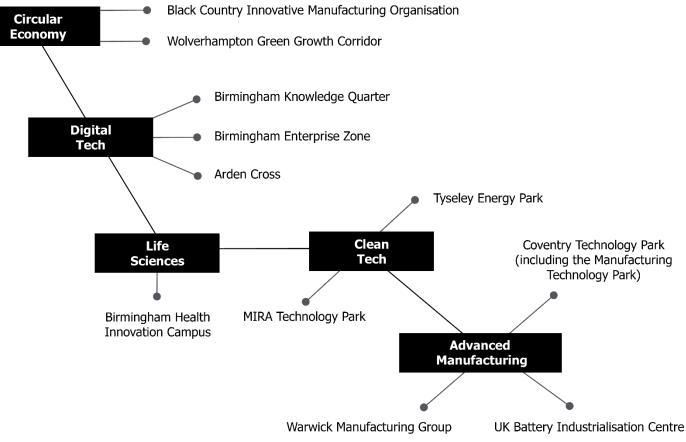


HIGH DENSITY OF WORLD CLASS INNOVATION DISTRICTS



- 11 science parks devoted to low carbon,
 tech and life sciences
- 129 IP-rich University spinouts since
 2000
- Top-quality flexible office space at less than half the cost of London





INNOVATION NETWORKS: CONNECT WITH LIKE-MINDED INNOVATORS

West Midlands
Combined Authority

- The West Midlands Innovation Programme provides free access to a range of demand led, cross-sector innovation support programmes available to support business growth and access to new markets
- Innovation networks regularly bringing together nearly 1,000
 regional businesses and wider stakeholders, as well as access
 to one-to-one targeted business support through an
 extensive portfolio of wider innovation support projects across
 the region
- The Innovation Alliance acts as the 'engine' for the programme and provides sector specific ecosystem access points through a team of partner innovation experts, as well as flagship Innovation Events including VentureFest























BENEFIT FROM BEST-IN-CLASS SOFT LANDING SUPPORT AND RELATIONSHIP MANAGEMENT



West Midlands Growth Company promotes inward investment into the West Midlands, with complimentary support through the Investor Catalyst programme



In-depth research, tailored insights and benchmarking against other locations



Consultative support throughout business case creation



Comprehensive, impartial property searches



Tailored launch communications and PR consultancy support



Facilitated access to world-leading universities, to explore R&D and graduate talent



Signposting & support when accessing public and private finance



Networking and intros to over 100+ WMGC partners (ranging from global MNCs to local service providers)



Bespoke familiarisation visit programmes.

FUNDED MARKET ENTRY SUPPORT ESTABLISH IN UK AND SCALE QUICKLY



Delivered in partnership with innovation and real estate experts

Global Growth Programme helps companies thrive at the heart of the UK's fastest growing tech cluster.

In addition to WMGC's investor support, successful firms will be based at Bruntwood SciTech's **Innovation Birmingham** – a next-generation city-center campus where innovative scale-ups thrive in an entrepreneurial, high-technology environment:



Nine month's funded, high-quality commercial workspace



Extensive calendar of industry integration and networking opportunities



UK company set-up, market entry & innovation services support



Tailored professional service offerings

Bruntwood SciTech

Over 500 cutting-edge, disruptive science and technology firms operate within Bruntwood SciTech's Innovation District network

In the last 5 years, Bruntwood SciTech have supported 407 companies who have raised £116m through 42 investment deals and £8.7m through 25 grant awards.

ACCESS TO INVESTMENT INCENTIVES



Midlands Engine Investment Fund

- Over £300m of investment for growth SMEs, with a further £400m to follow
- Proof of concept up to £750k, equity of between £50k and £2m, debt finance up to £1.5m, and small business loans up to £150k



West Midlands Investment Fund

 (£25m) flexible fund targeted at growth businesses



Midlands Mindforge

 Aims to raise up to £250m from strategic corporate partners, institutional investors and qualifying individuals.



Minerva Business Angels

- National network of investors, based out of University of Warwick Science Park. It provides access to both angel investment as well as investor expertise
- Network of established equity providers located in the region, focusing on regional investment opportunities

DEVOLVED SKILLS FUNDING FOR BESPOKE HIRING AND UPSKILLING SERVICES



- dedicated employer service to support employers in accessing hiring and training solutions
- accredited qualifications from entry level through to modularised Level 4 and 5
- sector based work academies working with industry to develop an entry level talent pipeline
- skills bootcamps programmes designed with employers to meet specific skills need. These
 include digital, green and sustainability, logistics, advanced manufacturing and engineering and
 retrofit
- dedicated employer services team to support employers in accessing training solutions

TO BEGIN YOUR WEST MIDLANDS JOURNEY

Click onto:

www.investwestmidlands.com

Andy Street Mayor of the West Midlands



Dean Cook Director, Place & Levelling Up, Innovate UK



Innovation Accelerator Programme - West Midlands

Dean Cook - Director of Place and Levelling up 12th July 2023







Levelling Up and R&D

 By 2030, domestic public investment in R&D outside the Greater South East will increase by at least 40%, and over the Spending Review period by at least one third. This additional government funding will seek to leverage at least twice as much private sector investment over the long term to stimulate innovation and productivity growth."





UKRI Councils



Arts and Humanities Research Council



Biotechnology and Biological Sciences Research Council



Economic and Social Research Council



Innovate UK



Medical Research Council



Natural Environment Research Council



Science and Technology



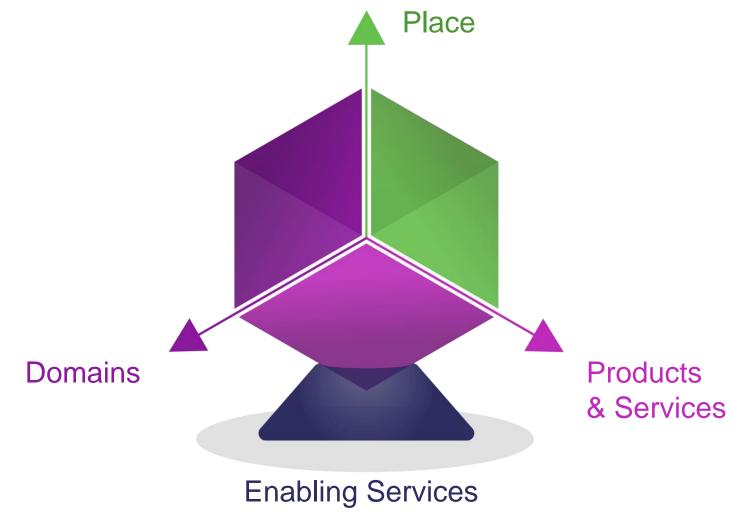
Engineering and Physical Sciences Research Council



Research England

- The largest public funder of R&I in the UK. We are 9 councils working together, covering all sectors and disciplines
- We are part of a system, working with academia, business, public sector, third sector, and international partners – we are the 'smart connector'
- We have a great opportunity to do R&I better, creating a system that gives everyone the opportunity to contribute and to benefit.
- UKRI a new organisational objective to "Deliver economic, social, and cultural benefits from research and innovation to all of our citizens, including by developing research and innovation strengths across the UK in support of levelling up"

Innovate UK | as a cube of activity

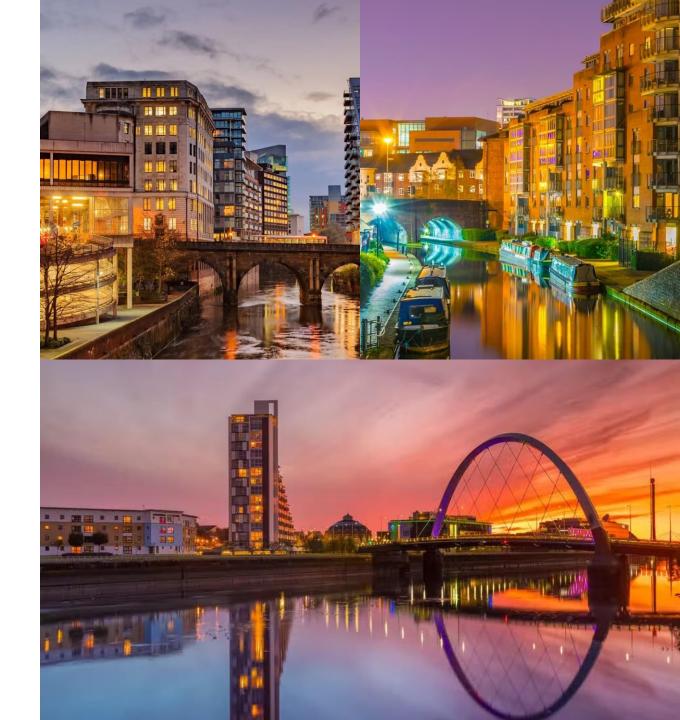




Innovation Accelerators

- "Innovation Accelerators will develop UK innovation clusters, boosting economic growth by investing in highquality projects to grow R&D strengths, attract private investment, boost innovation diffusion, and maximise the combined economic impact of R&D institutions.
- They will empower local areas by bringing together national and local government, industry and R&D institutions in a long-term partnership."

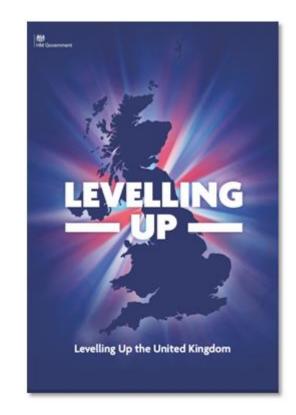


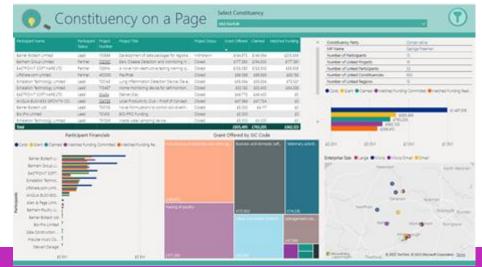


Aligned to wider support for Clusters

- Innovation Accelerators £100m new investment between 2022-25 to pilot three IAs (Greater Manchester, West Midlands & Glasgow City Region).
- Each Accelerator led locally each partnership has developed a strategic plan and identified transformational projects to grow their innovation ecosystem.
- Innovate UK working in co-creation to assess projects and support each partnership that is empowered to decide the final portfolio of projects.
- <u>Launchpads</u> new initiative of up to £46m (this SR) for regional investment to build SME innovation clusters and support levelling up.
- Each Launchpad to be co-designed in partnership with local leadership tailored to the local ecosystem.
 2 pilots in 22/23,
 10 this SR
- <u>Clusters mapping</u> research, and data visualization tools, working in partnership to map research and skills capability, business & finance.







Accelerated Programme Development in Co-creation

Spring 2022

- IA partnerships established
- Partnerships develop local plans

Summer 2022

- Local plans endorsed by IA programme board
- Partnerships begin to identify fundable projects

Autumn 2022

- Project proposals are submitted to IUK
- IUK draws up shortlist of projects which meet quality criteria

Winter 2022

- IA partnerships select projects to fund from shortlist.

Spring 2023

Funded projects due to begin





A pathfinder to doing things differently



....and now the exciting innovation begins

- 26 Projects funded across the programme 5 in the West Midlands
- The West Midlands Innovation Board has targeted investment on projects enabling new solutions around Medical and Clean Technologies:
 - West Midlands Health Tech Innovation Accelerator, led by the University of Birmingham (Health/Med Tech)
 - Clean Futures, led by Connected Places Catapult, in conjunction with Black Country Innovative Manufacturing Organisation and Coventry University (Clean Tech)
 - The West Midlands Innovation Programme, led by West Midlands Combined Authority (Clean Tech & Health Tech)
 - The Biochar Clean Tech Accelerator, led by Aston University (Clean Tech)
 - Digital Innovation Transformative Change (DIATOMIC), led by Connected Places Catapult, in conjunction with Aston University, Birmingham City Council, Birmingham City University, Greater Birmingham Chambers of Commerce, and University of Birmingham (Health & Clean Tech)



Switch the Pitch

West Midlands Innovation Programme

Iain Mansell, WMCA Yiannis Maos, Tech WM

About the Programme

- The West Midlands Innovation Programme provides free access to a range of demand led, cross-sector innovation support programmes available to support business growth and access to new markets.
- Innovation networks regularly bringing together nearly 1,000 regional businesses and wider stakeholders, as well as access to one-to-one targeted business support through an extensive portfolio of wider innovation support projects across the region
- The Innovation Alliance acts as the 'engine' for the programme and provides sector specific ecosystem access points through a team of partner innovation experts, as well as flagship Innovation Events including VentureFest

























Focus

- piloting and scaling cross-sector and demand-led innovation interventions we find the market opportunity then support you to respond
- engaging with public R&D assets in areas with a credible case for commercial success
- accessing funding to scale successful pilots
- catalysing projects that address net-zero and health inequalities, plus a range of wider multi-sector opportunities
- promoting the region's R&D&I strengths and networks globally to attract talent, partners and investment



Predicted Outputs

15 new demand-led business support programmes developed and delivered

250 new collaborations, many of them cross-sector

650 businesses assisted

80 new jobs

100 innovation network events for 6000 attendees

£20m private and public sector resource levered



18

INNOVATION ALLIANCE WORKING GROUPS & EVENTS



AI & FUTURE TECH FORUM



INNOVATIVE HEALTH WORKING GROUP



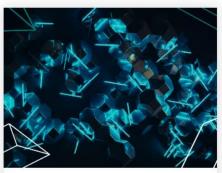
INNOVATIVE ZERO CARBON WORKING GROUP



INNOVATIVE MANUFACTURING WORKING GROUP



INNOVATIVE TRANSPORT WORKING GROUP



CYBER WORKING GROUP



VENTUREFEST WEST MIDLANDS



INNOVATION SUPPORT FORUM





THE FALSE TECHNISTER OF THE THE THE TECHNIST TORUM TOR

August 15, 2023 - 16:00 - 19:30

iCentrum, Birmingham

REGISTER



The AI & Future Tech Forum will bring together founders, entrepreneurs and business leaders from across the West Midlands. It will be a forum for sharing cutting-edge insight on emerging technologies such as artificial intelligence, quantum computing and augmented reality. Accredited technology experts; including professors, leading industry figures and technology execs will share unique and innovative thought leadership, and be on-hand to help startups and scaleups think about how they can incorporate innovative technologies into their businesses.

AI Strategy Working Group

Aim: Encourage collaboration, partnerships and opportunities across the ecosystem

The AI & Future Tech Forum

Aim: Give businesses the knowledge they need to innovate around AI and emerging technologies

West Midlands AI Strategy

Both the above groups will help form the region's AI strategy which will become part of the region's Digital Economy Strategy and supercharge the WM Plan for Growth









bruntwood SciTech

Locally-led Innovation Accelerators delivered in partnership with DSIT, Innovate UK and City Regions









www.techwm.com/ai



West Midlands Health Tech Innovation Accelerator

Liam Grover, University of Birmingham



West Midlands Health Tech Innovation Accelerator

Programme Lead:
Prof. Liam Grover
Director, HTI & WMHTIA
University of Birmingham





West Midlands Health Tech Innovation Accelerator

Project awarded to an 18-partner consortium led by the University of Birmingham for a single, unified regional Health Tech Innovation Accelerator.









































£100m R&D levelling up funding awarded to accelerate innovation



Subscribe to UKRI emails mail address

Subscribe to Innovate UK

The Innovation Accelerators programme is investing £100 million in 26 projects to accelerate the growth of three high-potential



Health Tech Innovation Support – Regional/National Challenges









Market access & alignment

- Early-stage clinical input
- Technical expertise and facilities
- 'Pivot' potential for established businesses in other sectors
- NHS and global market entry support

Product development & regulatory support

- Access to regulatory support
- IP expertise
- Manufacturing
- Clinical trial design support

Investor readiness & access to private investor funding

- Support to become 'investor-ready'
- Access to funding

Unmet health needs & innovation opportunity

- Large diverse population within the region
- Higher deprivation levels and health inequalities
- Capacity challenges within NHS
- Innovation gaps





Development & retention of talent

 Less 'serial entrepreneurs' capable/keen to grow/retain businesses in the region

Space for development

 Lack of access to growth stage-specific spaces (notably lab) for development, with aligned support to start-up/fastfail/scale-up businesses, in order to retain them regionally



Programme Workstreams

WS1: Diagnose

Lead: Medilink Midlands

Consortium-wide triage approach to diagnose company needs and development plan

WS2: Define

Leads: Aston & Warwick
Programmes of targeted training & support for innovators

WS3: Develop

Lead: UoB HTI
Innovation support for product
development & prototyping

WS4: Deploy

Lead: UHB

Testing & evaluation services with global market access support

WS5: Diversify

Lead: MTC & WMG

Leverage strengths in manufacturing innovation to upskill companies within the sector, and support non-health tech companies and supply chains to expand into it

WS6: Demonstrate

Lead: CityREDI

Ongoing evaluation and sustainability work to refine activities and create regional/national evidence base for 'what works' in Health Tech sectoral support



WMHTIA Workstreams

Providing a coordinated, end-to-end regional support system through six interlocking workstreams

All companies enter via the **Diagnosis**Front Door where their business needs are identified so they can be directed to the appropriate support workstream



2 Definition

Provides 'demand signals' from NHS and corporate clients for innovation needs, as well as supply-side development of new ideas from regional start-ups/innovators, defining a bespoke training and development programme for each client.

1 Diagnosis

Single point-of-entry
Understand business' specific
assets, opportunities,
challenges & near-term
priorities
Identify appropriate support and
pathway in the wider
programme to accelerate
business growth.

5 Deployment

Provides businesses with maturing products/processes with real-world NHS product usability testing and evaluation, plus support to access national/international markets.

Bringing existing expertise and assets from diverse Health Tech and non-sectoral specialists, with targeted investment to increase our collaborative capacity to support regional SMEs across TRLs 4-9.

Development

Access to cross-regional expert infrastructure providing specific advice on all aspects of product development aligned to the '4Ds' (devices/diagnostics/digital/data) including prototyping, regulation, clinical trials and evaluation.

4 Diversification

Leverages the region's globallyrecognised expertise in manufacturing to inform HealthTech development (e.g. miniaturisation, precision engineering) and bring new companies/supply chains into the Health Tech sector.

6 Demonstration

Ongoing evaluation and sustainability work to refine activities and create regional/national evidence base for 'what works' in Health Tech/Med Tech sectoral support and build long-term investment platforms

Grant Funding Scheme

Competition for SME companies engaging in the WMHTIA. It will support innovators in need of a small amount of funding to help address a specific challenge or to fund activity through the Accelerator Programme.



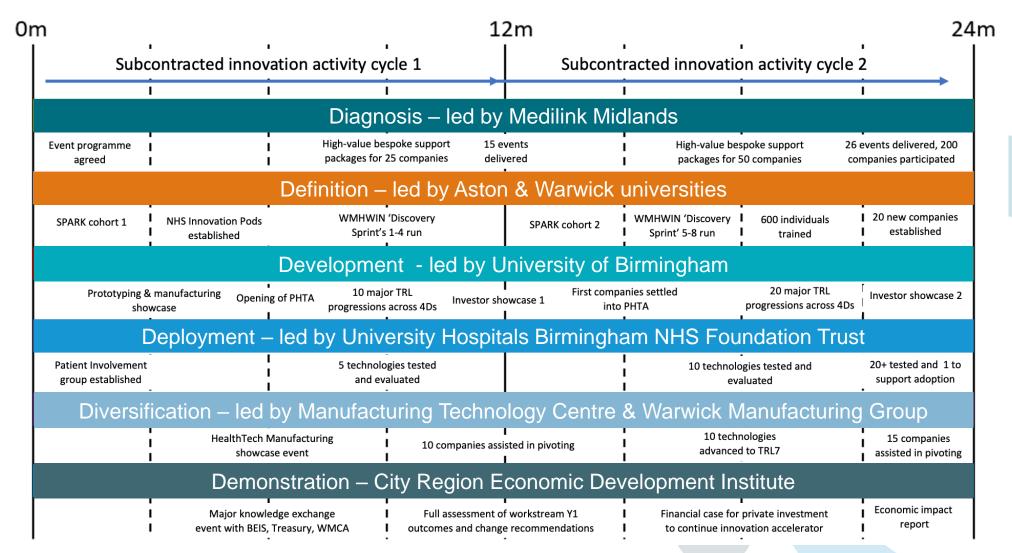
Planned Business Engagement

The programme will engage a minimum of 150 businesses with 40 to 50 of those businesses and innovators supported intensively

Intensive Support for WS2 new R&D and innovation All companies enter via the **Diagnosis Projects** WS3 Front Door where Minimum their business needs 40-50 Services are identified so they 150 companies can be directed to the Grants appropriate support WS4 workstream WS1 Grant **Funding** Scheme WS5 WS6 **Evaluation of Impact**



High-level Programme Outputs





Speak to the project team at our expo stand for more info!

If you're a high-growth potential innovator within the Health Tech sector we want to hear from you!

Get in touch via wmhtia@contacts.bham.ac.uk

Website – birmingham.ac.uk/wmhtia

Twitter - @WMHTIA

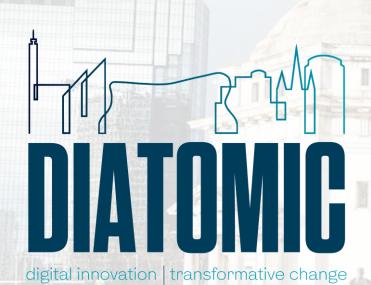
LinkedIn - West Midlands Health Tech Innovation Accelerator











Accelerating place-based innovation in the West Midlands

Catherine Hadfield

DIATOMIC Programme Lead Connected Places Catapult



DIATOMIC: DIGITAL INNOVATION TRANSFORMATIVE CHANGE



Programme Summary

The DIATOMIC Programme will build the innovation capability and capacity to drive growth locally, prosperity nationally and enhance the reputation of the West Midlands globally, by creating an interdisciplinary, cross-cutting framework that will become a model for other UK regions.

- Leverage the data economy
- Increase the spend with the social economy
- Embed entrepreneurialism into the fabric of society
- Create international trade
- Generate bilateral innovative solutions that respond to local and global challenges













PROGRAMME ELEMENTS





Digital Twin

Working towards ultimate ambition of a Digital Twin for the city.

Develop three use cases in energy systems, hydrogen fuel cells, and traffic air quality 02

Global Innovation

Support West Midlands international innovation agenda.

Build on existing international relationships.

Support WM SMEs in international market.

03

Accelerator

Run an accelerator that will solve a City Council key innovation challenge.

Support and coach SMEs on programme, opportunities for trials and testing.

-(04)

Inclusive Innovation

Develop first regional
Inclusive Innovation
Network, work with
diverse SMEs through
local innovation
challenge (BCC),
support work of CREME
(AU)

ACCELERATOR CHALLENGE AREAS



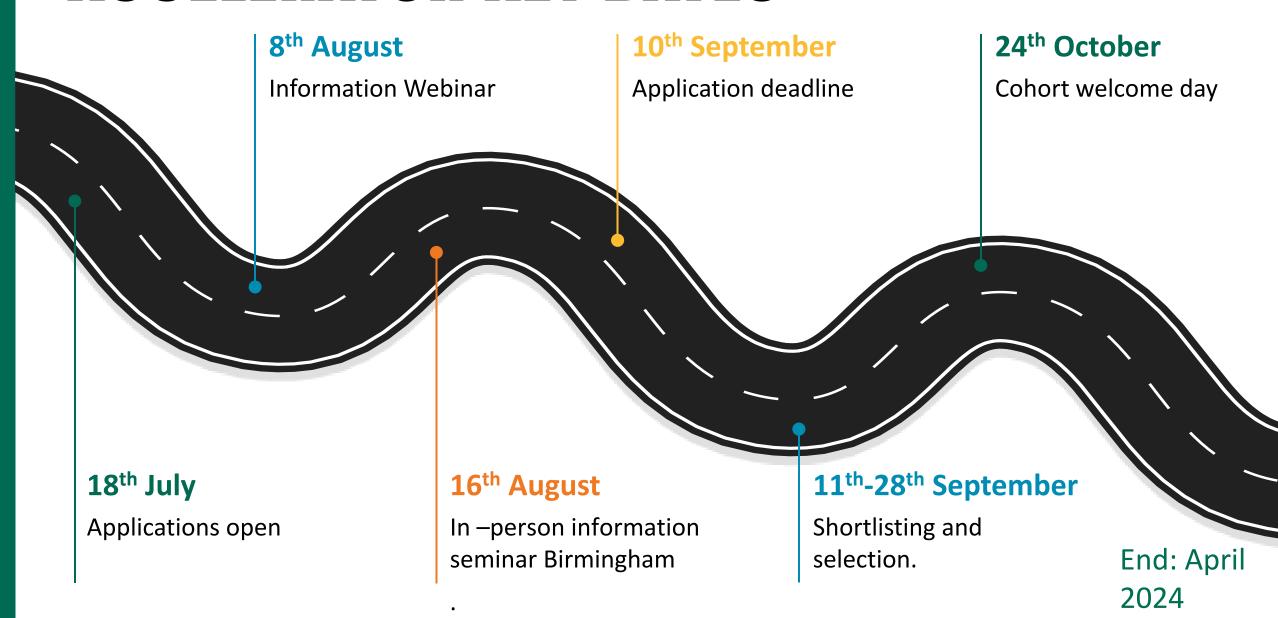
Applications open 18th July



- How can we use data collection & insights to better understand the council's assets and environment, including stock condition and how spaces are used?
- How can we **monitor and record performance** of **service delivery** such as waste collections and repairs and maintenance?
- How can we engage better with citizens and increase transparency ensuring clear communication channels between citizens and the council?
- How can we improve training and knowledge sharing for service teams?

ACCELERATOR KEY DATES





MORE OPPORTUNITIES...



Global accelerator programme

- We will be working with a number of West Midlands SMEs to support them to enter an international market
- More info coming soon...

Inclusive Innovation Network

- We will be running an 'impact entrepreneurship' programme
- Working with SMEs in East Birmingham to support them to access real market opportunities

Digital Twin

- Opportunities for SMEs to engage in data collection and development of the use cases
- More info coming soon...

PROJECTED PROGRAMME IMPACT







New models of innovative procurement developed



Building on existing strengths and partnerships



Leveraging data economy to promote place-based decision making



Coordination of SME engagement in region



Solutions for real world city challenges accelerated



Promoting the West Midlands as the place to invest for innovation activities



Inclusive innovation embedded across innovation economy



THANKYOU

Any Questions?

Catherine Hadfield

Catherine.Hadfield@cp.catapult.org.uk

Biochar Accelerator

Tim Miller, Aston University

Biochar CleanTech Accelerator

Energy & Bioproducts Research Institute (EBRI) and the Centre for the Circular Economy and Advanced Sustainability (CEAS)

Aston University and local industrial partners have developed an innovative pyrolysis technology able to transform organic material such as sawdust, fallen and diseased trees, dried chicken litter and agricultural straw, into commercially valuable bioproducts - biochar, gas and liquids.

We are looking for partners to commercialise biochar and related bioproducts
West Midlands companies are invited to join us to develop new low carbon products for
growing markets such as:

- Low carbon fuel for boilers and engines
- Soil conditioners and products for improved plant, tree and animal health
- Biochar for carbon capture and credits
- Biochar for water treatment and odour control
- Biochar for building and composite materials
- Bioliquids for low carbon weedkiller, fungicide and plant growth enhancer

www.bioenergy-for-business.org Email: biochar@aston.ac.uk









Clean Futures

Rebecca Goulding, Connected Places Catapult









Supporting the West Midlands to be at the heart of the Green Industrial Revolution

Rebecca Goulding

Accelerator Programme Team Lead Connected Places Catapult



CLEAN FUTURES ACCELERATOR



A pioneering initiative aimed at driving economic growth and innovation in the West Midlands by supporting SMEs developing clean and sustainable solutions.

Accelerator

40 SMEs

Testing and development

Commercial support

Catalyst

800 organisations

Building networks

Workshops, events & courses

Sustainability



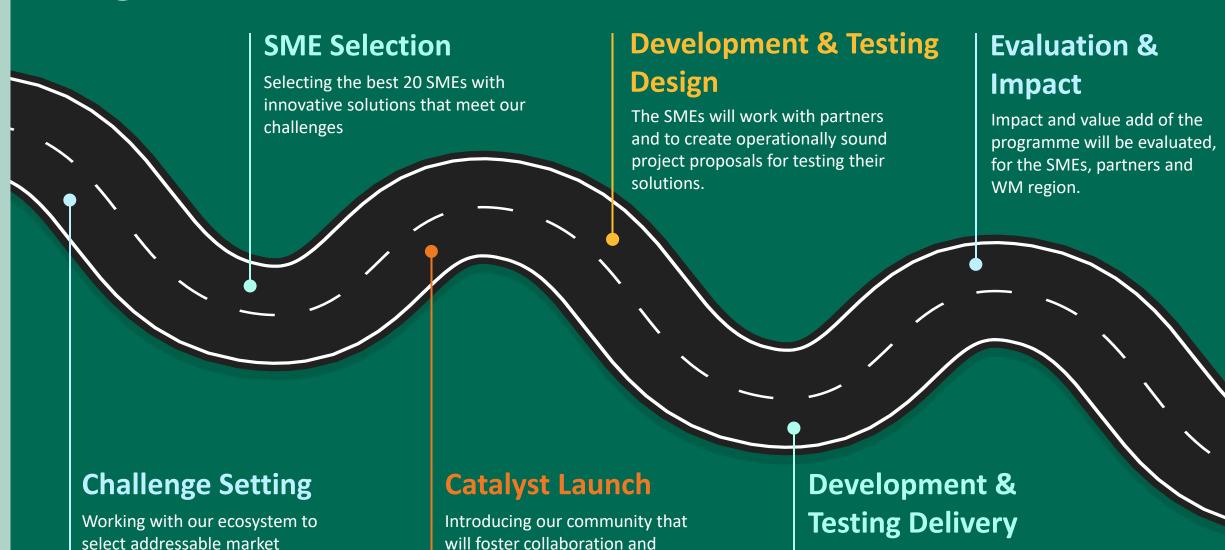




ROAD MAP

challenges that will achieve

maximum impact



unearth opportunities and create

our legacy.

SMEs will carry out their development and testing

projects in collaboration with partners. Commercial

support will be delivered.

BENEFITS

We're excited to work with you!

Gain access to front line innovation and industry insight that will accelerator your business

- Up to £50k cash contrition for development and testing
- Commercial support to help your business grow
- Insights from buyers and supply chain

- Use of world leading test facilities from BCIMO and Coventry University
- Opportunity to showcase solutions to key industry stakeholders
- Access to cutting edge research

- Join a community to forge new collaborations
- Increase investment readiness
- Respond to real world challenges from industry leaders



PROJECTED PROGRAMME IMPACT





40 SMEs to be Accelerated



≤£50k Per SME



£2m
In-kind
contribution
from SMEs





35+
Trials



66

Jobs will be created



£30m
Investment to be raised



£18.5m CR&D & Commercial revenue





ACCELERATOR CHALLENGES



The challenges in this accelerator have been developed around the Very Light Rail and automotive manufacturing sectors, along with related supply chains.



Greener EV components: Design or produce components which reduce embodied carbon across the vehicle lifecycle



Circular Economy of transport: Design or manufacture solutions to reuse or recycle batteries and other vehicle components



Road freight alternatives: Design or produce systems or sub-systems enabling alternatives to traditional road freight, including using existing infrastructure, facilitating multi-modal freight transportation and exploring shared transport solutions



Greener transport infrastructure: Design or produce cost-effective solutions for clean transportation infrastructure



Future Fuels: Produce, transport or store alternative fuels such as hydrogen, biofuels or synthetic fuels

TEST FACILITIES



BCIMO

- 2.2km rail test track
- 15m radius test loop
- 870m long tunnel with test track
- World first rail rapid charger, supporting up to 450kw
- Split level platform
- Mule vehicles
- Mobility hub



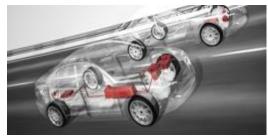






Coventry University

- E-mobility and clean growth
- Manufacturing and materials
- Design and human factors
- Advanced systems









CLEAN FUTURES CATALYST

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Creating a community, ensuring sustainability











THANKYOU

Any Questions?

Rebecca Goulding rebecca.goulding@cp.catapult.org.uk

