



From Malaysia to the UK: Growth Opportunities in the UK's leading manufacturing cluster

Federation of Malaysian Manufacturers (FMM)

Tuesday 14 February 2023

Tuesday 14 February 2023 – Federation of Malaysian Manufacturers (FMM)

FMM Seminar Programme – 10:00am to 12:00pm

10:00 - 10:05am Welcome: WMGC

10:05 - 10:10am Welcome: Mr Richard Colley, Country Director, Department for International Trade (DIT) in Malaysia

10:10 - 11:00am Presentation: Ms Grace Kneafsey, Sector Lead - Low Carbon, WMGC

11:00 - 11:15am Q&A

11:15 - 12:00pm Networking & Coffee



Richard Colley

Malaysia - Country Director

Department for International Trade (DIT)



Grace Kneafsey

Sector Lead – Low Carbon

West Midlands Growth Company



ONE REGION
MANY WORLDS
The West Midlands





WHY THE UK?

The West Midlands
One region, many worlds

WHY THE UK?

As the **5th largest economy in the world** and home to **67.1 million people**, the UK offers investors a significant, globally connected market.

Its unique mix of world-class expertise and talent, flexible and liberal labour laws, and streamlined corporate governance systems make the UK one of the easiest places in the world to set up and conduct business.



1st most attractive investment destination in Europe.



1st in G20 as a globally connected economy.



1st in Europe and 3rd globally for growing and scaling-up business.



4th in the global innovation index.



1st in G7 for research, impact and reach.



5th largest economy with a market of 67.1 million potential customers.



1st quality of green financial products in world's financial centres.

A GLOBALLY COMPETITIVE TAX OFFER

The UK's tax regime compares well with other countries in its transparency and competitive rates, offering some of the most advantageous capital allowances in the world.

Investing in the UK means a global business can benefit from:

- The lowest corporation tax rate in the G7.
- A stable tax regime.
- Competitive research and innovation-based incentives.
- Investor friendly environment.
- Tax relief using venture capital schemes.



A GLOBALLY COMPETITIVE TAX OFFER

Corporation Tax

19%

Tax Rate

- Payable 9 months after year end.
- Losses carry forward without limit, or back one year for a refund.
- No tax on dividends received unless from a tax haven.
- No withholding tax on dividends paid.
- Capital allowances and super deduction.
- A rate of 25% will apply on profits >£50k from April 2023.

VAT

20%

Unless Exempt

- Register if turnover exceeds GBP85k in any 12 months.
- 20% on most things.
- Pay every 3 months.
- Mistakes under GBP10k – just correct next time.
- First late payment in any 12 months – no penalty.

Shares

NO
TAX

On issue of new shares

- 0.5% Stamp Duty on transfer of shares. Exempt if GBP5 or less.

INCENTIVES TO PROMOTE R&D

From April 1st 2023, the two mechanisms available to businesses under the UK's generous R&D tax regime are:

For SMEs: An additional deduction of 86% of R&D costs from taxable profits (so a total deduction of 186% of cost). Where this creates or furthers taxable losses, a cash payment of 10% of the relevant losses may be available.

For larger companies (or certain SMEs): The Research & Development Expenditure Credit ("RDEC") gives a credit of up to 20% of qualifying R&D expenditure to companies as cash or reduced tax or duties (it will increase taxable profits or reduce losses as relevant).

The definition of claimable R&D costs is broad and generous, including:

- 1) Expenditure incurred as a direct result of R&D, including subcontractors; software & licences, storage & web-hosting; consumables (including stationery & sundry goods).**
- 2) UK Employee and directors' wages, UK employers NI, employers pension contributions, based on percentage of time individual spends on R&D.**
- 3) 'Reimbursed' travelling expenses relating to R&D work.**

TAX RELIEF TO PROMOTE INVESTMENT

Both the Enterprise Investment Scheme (EIS) and the Seed Enterprise Investment Scheme (SEIS) give tax relief to investors.

Income Tax – For EIS up to 30% of the amount invested can be set against Income Tax on investments up to GBP 1 million. For SEIS this is 50% on investments up to GBP 100k.

Capital Gains Tax – For both EIS and SEIS the investor will not pay any tax on their profit when the shares are sold if the investment has been held for at least 3 years.

Loss on sale of the shares – For both EIS and SEIS if the shares are sold at a loss the amount of the loss can be offset against the investors Income Tax for that year or the previous year.

This is clearly very attractive, but there are a lot of quite complicated rules to prevent misuse. Always take specialist advice.



UK'S BUSINESS-FRIENDLY ENVIRONMENT

The UK has an established position as a leader in global law, corporate governance, regulation and market infrastructure.

27% of global legal systems are rooted in UK Law, providing a strong platform for global business dealings.

Five of the 15 largest global law firms HQ'd in the UK. All of the top 50 law firms have a UK office.

The UK's independent financial regulatory body, the Financial Conduct Authority (FCA), is one of the world's most innovative regulators. FCA Innovation enables start-ups and corporate innovation units to test their products in the real market through its 'regulatory sandbox'.

Business advice and services are amongst the best in the world – the UK is second only to the USA in terms of service exports and services account for over 70% of the UK's GDP.



ESTABLISHING A UK COMPANY IS EASY

Each UK Limited company only needs:



A Company Name



1 Shareholder



Shareholders can be a person or another company



1 Director







Directors can be of any nationality and can live in any country

Identify the Directors and any person ultimately controlling 25% or more

ESTABLISHING A UK COMPANY IS EASY



A company can...

-  Be formed in 2 days
-  Trade on the day it is formed
-  Govern itself totally on paper – no physical meetings
-  No other registrations needed unless undertaking a regulated trade



A company does not need to...

-  Visit the UK
-  Specify the trade in the Constitution ('Articles')

UK TECH & SERVICES OPPORTUNITIES

Services	Manufacturing & Industrial	Consumer
<p>Disruptive business models and technologies drive the UK's world-leading financial and business services infrastructure.</p>	<p>Technology is central to UK productivity targets, while a shift to the low carbon economy is stimulating demand for green technologies.</p>	<p>Consumer lifestyles are increasingly based about goods and services that are personalised, instant, connected and environmentally positive.</p>
<p>Opportunities: FinTech, InsurTech RegTech SaaS Software Development Satellite Applications Cybersecurity</p>	<p>Opportunities: 5G and Industrial IoT Supply Chain Connectivity Robotics & Automation AI & Data Analytics CleanTech</p>	<p>Opportunities: eCommerce Connected Devices Smart Homes New Service Models Smart Mobility</p>
<p>Largest data analytics market in Europe (£2.1bn, MYR10.9bn).</p>	<p>Big Data and IoT are worth £322bn (MYR1681bn) to the UK economy.</p>	<p>The most advanced eCommerce market in Europe, spending MYR767bn in 2021.</p>
<p>UK Fintech to grow by 7.2% per year up to 2025.</p>	<p>87% of UK manufacturers agree there is a need to invest in digital technology.</p>	<p>UK spends £10bn+ pa (MYR52bn) on smart home devices.</p>
<p>Monthly UK tech job listings 259% of the EU average.</p>	<p>The low carbon and renewable energy (LCRE) sector is estimated to increase five-fold by 2030.</p>	<p>£1.7bn (MYR8.9bn) UK government funding to transform and digitise cities.</p>



THE WEST
MIDLANDS:
ECONOMIC
OVERVIEW

AN INTERNATIONALLY SIGNIFICANT ECONOMY



A **MYR612bn**, fast-growing economy



UK's second biggest city-region economy
Equivalent to Hungary



GVA increased
every year
2009-2019



UK's top Foreign Direct Investment (FDI)
location outside London & South East 2017-21



Birmingham - UK's **highest rate** of for **start-ups** outside of London for last five years



UK's **biggest** region for **manufacturing output**



185,000 students
Nine world-class higher education establishments



2.9m workforce
4.7m population
190 countries



Full-service economy
200,000 businesses



100+ R&D assets
Commercial testbeds & accelerators

FIVE KEY SECTORS

Reflecting the world-class industry and innovation strengths of the West Midlands region:



**Future
Mobility &
Advanced
Manufacturing**



**Creative &
Digital
Technologies**



**Modern
Business
Services**



**Data Driven
Healthcare
& Life
Sciences**



**Low
Carbon**

UNRIVALLED CONNECTIVITY AT THE HEART OF THE UK

Rail:

- Tripling the West Midlands Metro with a £1.3 billion (MYR6.8bn) investment, adding 50 additional trams by 2026 and increasing passengers from 7.2 million to 30 million.
- £1.2billion (MYR6.3bn) of infrastructure investment within the region by 2028.
- Potential to add £14 billion (MYR73.2bn) to the West Midlands economy - already 350 firms in HS2 supply chain across the region.
- 1 hour 20 minutes from London, with HS2 to reduce West Midlands to London journey to 38 minutes.

Car:

- 90% of the UK's population being within a four-hour drive.
- Excellent road connectivity via UK motorways.
- Central London is only a 2-hours, 30-minute drive.

Air:

- Birmingham Airport - UK's most accessible airport by road and rail
- Birmingham Airport - UK's third largest regional airport.
- 133 direct flights (including US & Asia), and 424 further onward connections.
- Birmingham Airport is undergoing a £500million (MYR2.6bn) upgrade to boost capacity.



WORLD LEADING TALENT & UNIVERSITIES

The **West Midlands thriving tech sector** is underpinned by a **workforce of 76,000 highly-talented professionals**, playing an integral role in the growth of corporate, SME and start-up businesses. This talent pool is supplemented by **87,480 students studying Science, Maths, Engineering, Tech and Computing**.



9 world-leading universities producing over **60,000 graduates every year**. Over 50% remain in-region.



Companies can access an **additional 127,000 graduates** from **20 universities** within one hours drive of the West Midlands.



Regional strengths in **Software Development, Data Science Analytics and SAP Consultancy**



More **software developers and computer science graduates** than **any City-Region** outside of London.



A MAGNET FOR GLOBAL RELOCATIONS AND EXPANSIONS

Attracting the world's biggest names across a wide range of sectors:-



ASTON MARTIN



TATA

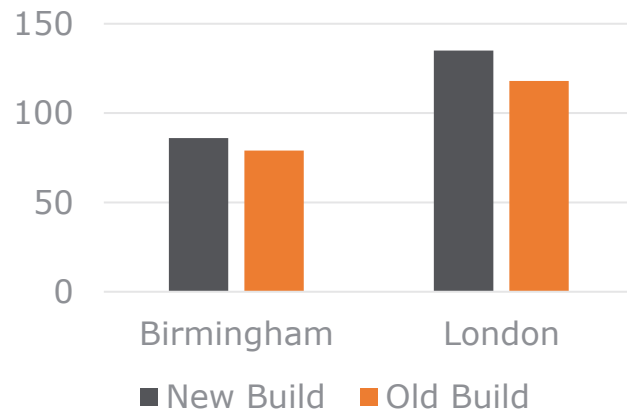


A HIGH-QUALITY AND COMPETITIVE LOCATION

Maximise your ROI. We offer **30% – 40% savings** on the cost of skills and property when compared to London yet we're **less than 1.5 hours away by train.**

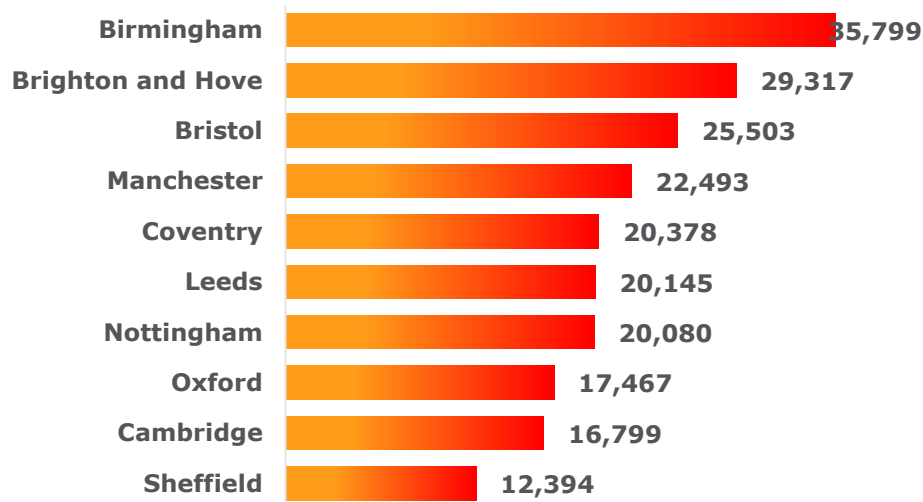
- UK Government has named the West Midlands the **fastest-growing tech sector in the UK** with regional growth outpacing London.
- There is clear appetite from capital investors, with a record **£410m (MYR2141m) investment into West Midlands startups in 2021.**
- 35% of tech unicorns are now headquartered outside of London, with the region home to unicorns such as Gymshark.
- The WMCA continues to pioneer specialist skills and talent routes, offering further diversity of talent available.

Price per square foot office space

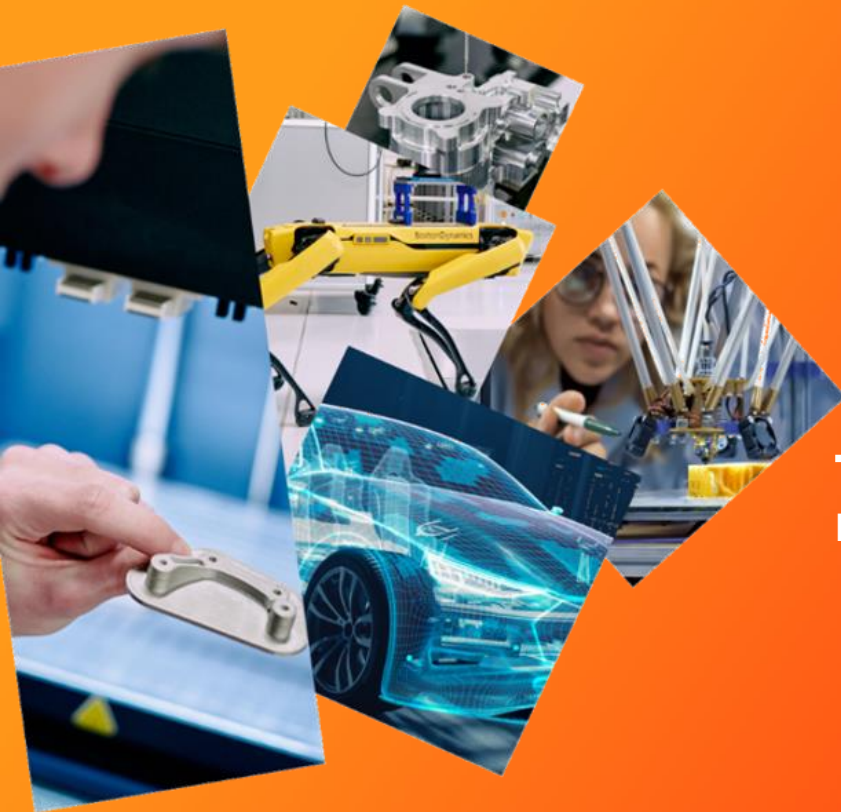


IT'S NOT JUST COMPANIES RELOCATING HERE

INTERNAL UK MIGRATION FROM LONDON, 2015-2020



	LONDON	BIRMINGHAM
Average House Price <small>(Zoopla, 2022)</small>	£704,136 (MYR3,683,222)	£235,681 (MYR1,232,827)
Affordability Index <small>(Zoopla, 2022)</small>	18.8	8.1
Average Monthly Rent - 1 bed flat <small>(Valuation Office Agency, 2022)</small>	£1,390 (central) £1,095 (outer) MYR7271 MYR5721	£650 (MYR3400)
Disposable Income p.a. <small>(Yahoo Finance, 2019)</small>	£1,078 (MYR5639)	£9,692 (MYR50,698)



THE WEST MIDLANDS: RESHAPING THE GREEN INDUSTRIAL REVOLUTION

The West Midlands
One region, many worlds

The West Midlands: A Rich Manufacturing Heritage



The West Midlands
One region, many worlds

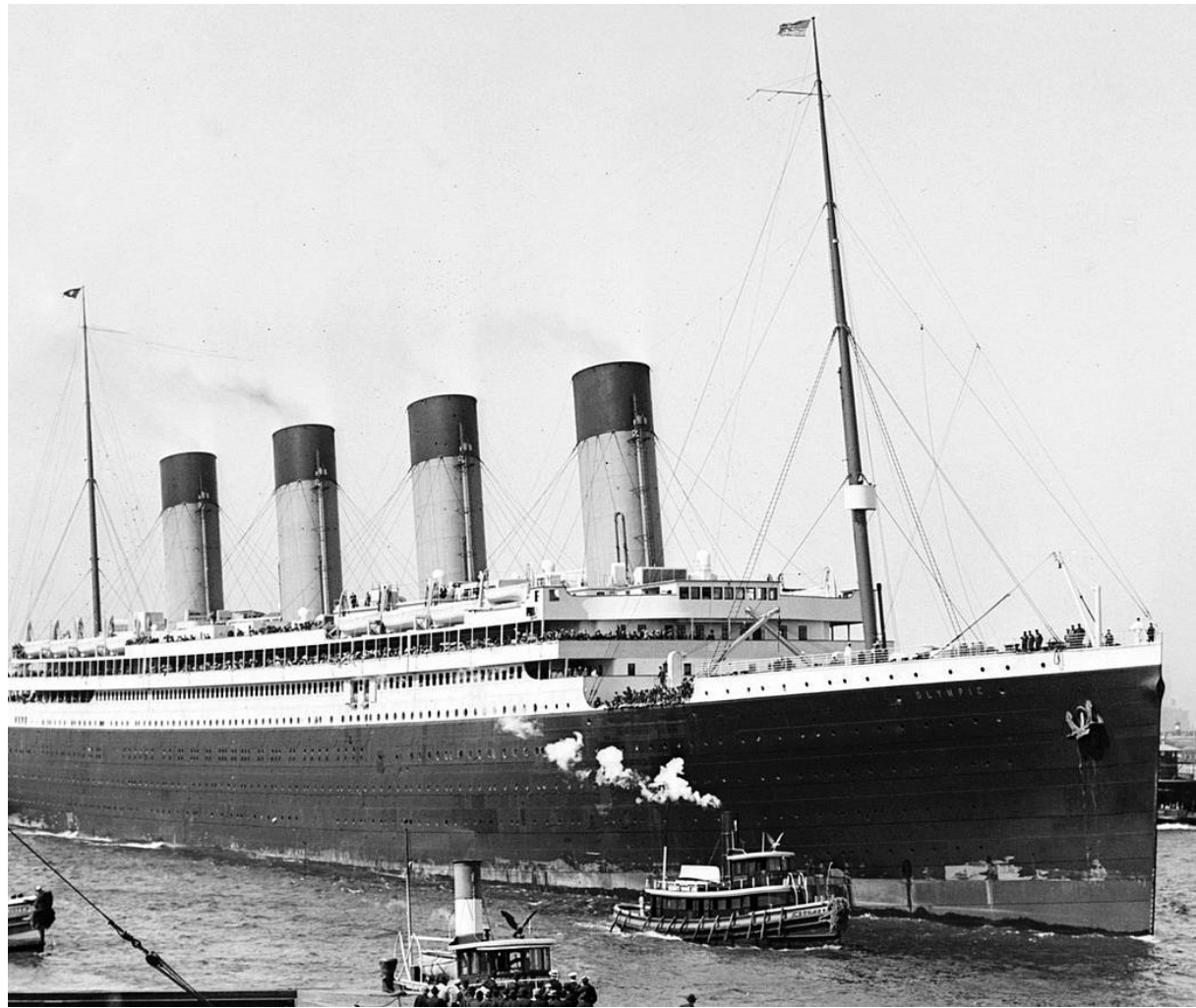


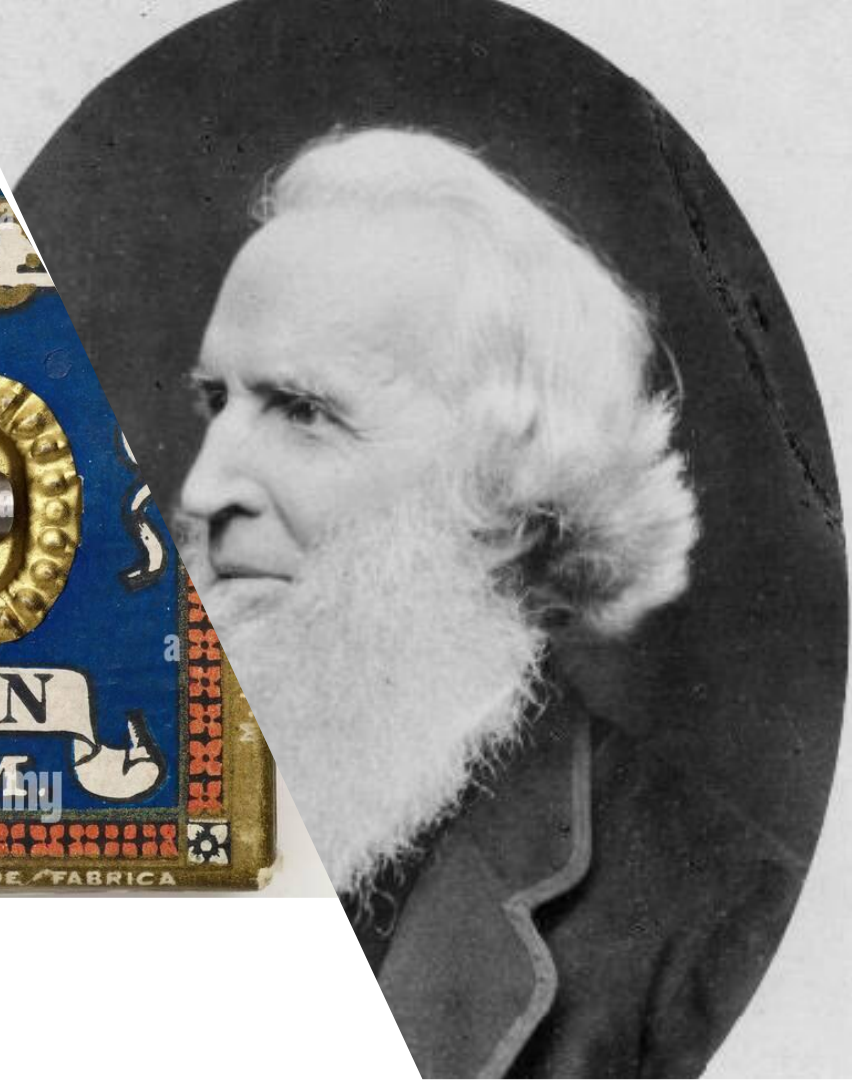
THE WEST MIDLANDS: A RICH MANUFACTURING HERITAGE





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ADVANCED MANUFACTURING

At the centre of the **UK's largest automotive, rail and aerospace clusters**, the West Midlands is at the vanguard of solving many of the key global future mobility challenges.

60%

UK's automotive R&D

46.5k

automotive employees –
biggest talent pool in UK

Our Strengths

Scale, breadth & talent:

UK's leading automotive cluster.
30% of UK cars. UK's largest cluster employing **211,000**; 32,500 **STEM** students



UK's Electrification Heartland

Home to **UK Battery Industrialisation Centre** Gigafactory, Coventry UK.

Manufacturing 4.0:

5G test-bed. Enabling IoT and private networks. Manufacturing Tech/Automation cluster.

Mobility Innovation

WMG, MTC, HORIBA MIRA



Rail/Light Rail/Very Light Rail/ DIGI-RAIL expertise
Home to **HS2**

Our Opportunities

Future Mobility

- Automotive
- Future Rail
- Aerospace
- OEM Supply Chain



Tech

- Electrification – Power Electronics, Machines & Drives
- Alternative Propulsion & Hydrogen Power
- Lightweighting and Advanced Materials

Industry 4.0

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长安汽车
CHANGAN



Collins Aerospace



HS2



THE WEST MIDLANDS FUTURE MOBILITY



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OUR COMPANIES

The West Midlands is home to an innovative ecosystem of **leading global brands** **pioneering exciting, next-generation technologies.**

KUKA



SIEMENS

HS2

FANUC



MOOG

MEGGITT



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THE UK'S LARGEST MANUFACTURING CLUSTER

Establishing **a legacy for invention at the height of the first Industrial Revolution**, today **the region remains a powerhouse of productivity and innovation.**



The UK's largest manufacturing cluster generating £10.4bn GVA (MYR54.4bn) per annum.



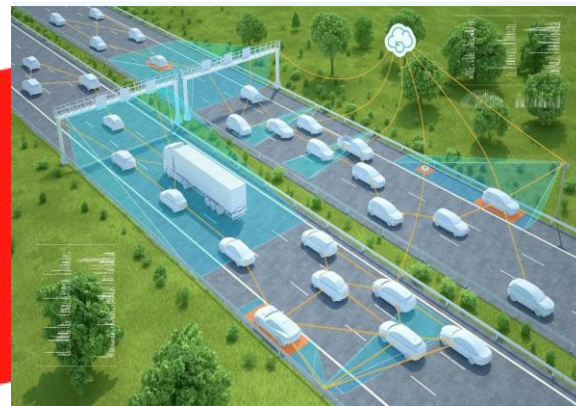
A 211,000-strong manufacturing workforce accounts for 10.6% of all local employment – above the national average of 7.8%.



At the centre of the UK's largest automotive, rail and aerospace clusters, the West Midlands is at the vanguard of solving many of the key global future mobility challenges.



A network of global heavyweights call the West Midlands home, with Jaguar Land Rover (JLR), Aston Martin, Rolls-Royce Control Systems and Collins Aerospace among the leading local players.



THE UK'S LARGEST MANUFACTURING CLUSTER

A young and diverse region, the West Midlands continues to build a strong pipeline of talent, providing the skills and expertise for the future of the manufacturing sector, cementing its continued position as the sector's leading cluster.



An established local employment base is fueled by over 32,500 STEM students at the region's nine universities each year.



On-the-job training provisions, with a network of further education and technology colleges offering apprenticeships in partnership with esteemed manufacturing firms such as The Manufacturing Technology Centre and MAKE UK's apprenticeship centre in the local area.



The West Midlands is recognised as the UK's fastest growing tech sector and was recently valued at £15.3bn (MYR78.4bn) – an increase of £3.8bn (MYR19.9bn) since 2021. Considered a UK leader in emerging technologies, the West Midlands has the highest number of companies operating in emerging tech sectors (2,946) outside of London.



The West Midlands: Automotive



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THE ENGINE OF THE UK'S AUTOMOTIVE SECTOR

A third of all British-made cars and one in four UK engines roll off the West Midlands production lines, powered by a 46,500-strong workforce - almost 5 times higher than the proportion for England as a whole.



Jaguar Land Rover, BMW, Aston Martin Lagonda, Geely (LEVC and Polestar) and Changan all have major operations in the region.



The significant cluster of Original Equipment Manufacturers (OEMs) has established a deep-rooted Tier 1 supply chain which includes **Lear, ZF, AVL, Unipart and Gestamp**, and enhanced a base of Tier 2, 3 & 4 engineering and tech suppliers.



Over 14.5% of all the UK's automotive parts and accessories manufacturers are situated in the West Midlands – the most of any UK region.



60% of UK automotive R&D in Great Britain is in the West Midlands. University and industry collaboration is driving the speed of research and innovation at our nationally acclaimed facilities including **HORIBA MIRA, Warwick Manufacturing Group (WGM)** and the **Manufacturing Technology Centre (MTC)**.



THE UK'S FIRST FUTURE MOBILITY ZONE

The UK's leading centre for automotive innovation, the West Midlands is at the vanguard of next generation vehicle technologies, delivering transformational innovation in Connected and Autonomous Vehicles (CAV).



Home to the UK's first 5G multi-city testbed and with **200 miles of viable, 5G-connected road for CAM technology,** the West Midlands is an ideal location for exciting collaborations between tech companies and automotive manufacturers.



The Centre for Connected & Autonomous Automotive Research (CCAAR), jointly run by Coventry University and Horiba MIRA, provides unrivalled access to design, build, test and validate CAV solutions for end-to-end connectivity solutions such as vehicle-to-vehicle (V2V) or vehicle-to-everything (V2X).



Locally based companies are developing autonomous systems. RDM's Aurigo 'AUTO-POD®' is a four-seat autonomous pod designed for first and last mile transportation in urban areas.



CAV trials have already taken place locally. A self-driving Jaguar Land Rover Sport successfully maneuvered the busy Coventry Ring Road, changing lanes and merging with traffic.



CHAMPIONING THE UK'S ELECTRIFICATION AMBITIONS

With 1.7 million electric vehicles (EV) estimated in the Midlands by 2030 (or one in four cars), the West Midlands is leading next-generation developments across EV supply chains to meet demand.



Home to the UK Battery Industrialisation Centre (UKBIC) in Coventry; the UK's leading open-research facility for battery development from prototype scale to mass production.



The University of Birmingham's Energy Institute's research project with Bentley Motors will deliver a sustainable source of rare earth magnets for electric and hybrid vehicles.



Ola Electric Mobility is investing £100m (MYR523m) into its Futurefoundry design and engineering centre in Coventry, partnering the regions universities and research institutions for research into battery cell technologies for the India 2-wheeler market.



The West Midlands: Rail



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ON TRACK WITH **DIGITALISATION AND DECARBONISATION**

A world-renowned collaborative ecosystem of commercial testbeds, accelerators and collaboration facilities, the West Midlands is unlocking new opportunities across Light Rail (LR), Very Light Rail (VLR), DIGI-RAIL, 5G-Connected trams and hydrogen fueled trains **for the wider transport network.**



40,000+ rail professionals - the highest of any other regional authority area, and home to HS2, Siemens Mobility, Wabtec CAF, AM Rail Group, Vivarail and Porterbrook.



The West Midlands' 5G testbed is offering businesses **exclusive access to trial and test applications** of connected devices, operations, infrastructure and passenger services.



Home to Birmingham Centre for Railway Research and Education (BCRRE), Europe's largest school of rail engineering and UK Rail Research and Innovation Network (UKRRIN), providing a network of Centres of Excellence in Digital Systems, Rolling Stock, Infrastructure and Testing.



The UK's first hydrogen fuel train, HydroFLEX, was developed in the West Midlands by BCRRE with rolling stock owner and asset manager Porterbrook.



EUROPE'S LARGEST INFRASTRUCTURE PROJECT

Signaling change in the UK's rail network, **the West Midlands is the centre point of the country's new High-Speed 2 line (HS2) - enabling access to Central London within a 38-minute travel time.**



Rail supply and systems are the region's largest sub-sectors, which **HS2 has catalysed further investment in, establishing a 350-strong dedicated supply chain of businesses engaged in project works.**



£1.2 billion (MYR6.3bn) HS2 transport connectivity investment to be delivered by 2028, which will improve the wider transport network, expand the economic area and increase productivity.



Groundworks construction is already underway at Curzon Street Station, the first new rail terminus to be built in the UK since the Victorian era.



The West Midlands: Aerospace



The West Midlands
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A NATIONALLY SIGNIFICANT AEROSPACE CLUSTER

With leading expertise and innovation in control systems, the region's aerospace cluster features global names such as Rolls-Royce Control Systems, Moog, Collins Aerospace and Meggitt.



The Midlands Aerospace Alliance represents the largest aerospace cluster in Europe, covering 25% of the UK industry, with over 300 members.



A diverse supplier network of specialist metals, castings, tools and precision manufacturers can serve a vast spectrum of highly regulated industries, such as Defence, Marine and Nuclear.



The High Temperature Research Centre, a joint collaboration between the University of Birmingham and Rolls-Royce, provides a unique casting, design, simulation and advanced manufacturing research facility.



The West Midlands: Industrial Automation and Industry 4.0



KICKSTARTING A **DIGITAL REVOLUTION** IN **MANUFACTURING**

The West Midlands industrial heritage presents a market opportunity for modernisation, by fostering a robust landing ground for businesses exploring industrial automation and industry 4.0.



The Manufacturing Technology Centre, alongside WM5G and other partners, offers a purpose-built private 5G network testbed enabling manufacturers to explore the benefits of multi-edge computing and wireless connectivity in digital manufacturing and robotics.



The presence of KUKA Systems, FANUC and Wolf Automation has grown the regional portfolio of systems specialisms from sensors, SCADA and telemetry to predictive maintenance and embedded systems, offering a cross-cutting spectrum of local expertise.



Warwick Manufacturing Group's Shadow Robot Dexterous Hand research project has size, shape, and movement capabilities similar to those of a human hand using artificial intelligence algorithms - making it ideal for applications in hazardous environments.



The West Midlands: Research and Development



The West Midlands
One region, many worlds



RESEARCH & DEVELOPMENT: WARWICK MANUFACTURING GROUP (WMG)

WMG hosts the National Automotive Innovation Centre – the largest automotive research facility in Europe, driven by a partnership between WMG, Jaguar Land Rover and Tata Motors European Technical Centre.



A High Value Manufacturing (HVM) Catapult member pioneering research across industries including automotive, rail, aerospace and defence industries in energy, materials & manufacturing, digital technologies and intelligent vehicles markets.



The Energy Innovation Centre, The Automotive Composites Research Centre and The Lightweight Technologies Centre of Excellence offer **Battery technology and lightweighting research facilities.**

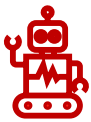


High-Dynamic-Range (HDR) technology available to enable the creation of complex virtual environments including visual, aural, smell, touch and even taste to achieve a level of perceptual realism.



RESEARCH & DEVELOPMENT: THE MANUFACTURING TECHNOLOGY CENTRE (MTC)

The MTC was established to prove innovative manufacturing processes and technologies in an agile environment in partnership with industry, academia and other institutions. Employing over 700 people, the MTC houses some of the most advanced manufacturing equipment in the world.



In early 2021, **MTC's robotics experts developed an industrial robot with the decision-making capability of a human operator.** Using machine learning and visual recognition, the robot was taught to make assembly decisions based on the components put in front of it.



The MTC has joined forces with hydrogen technology pioneer Adelan in a project aiming at significantly ramping up fuel cell manufacturing capacity in the UK for the automotive sector - helping the UK drive to net zero.



The MTC is working on a significant project, Daedalus, funded by UK Research & Innovation **to transform the use of additive manufacturing in highly regulated industries such as aerospace, space and medical devices** by developing standards for part quality, reliability, traceability and process repeatability.

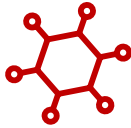


RESEARCH & DEVELOPMENT: THE UK BATTERY INDUSTRIALISATION CENTRE (UKBIC)

The £130m (MYR680m) facility in Coventry is the UK's leading facility for battery development from **prototype scale to mass production**. The open access facility supports academia and industry collaborations, as well as company-specific research projects.



Part of the Faraday Battery Challenge, a UK Government programme, to fast track the development of cost-effective, high-performance, durable, safe, low-weight and recyclable batteries.



The 200,000 sq. ft facility will help companies bring battery technologies to large scale production through new materials, cell formats, module structures and pack structures.



The facility has a Module and Pack assembly line to enable customers to test and produce low volumes of Cylindrical and Pouch cell batteries and provides cutting-edge processes that would be found in a high throughput battery assembly plant.



RESEARCH & DEVELOPMENT: HORIBA MIRA AND MIRA TECHNOLOGY PARK

HORIBA MIRA, headquartered in Nuneaton, is a transport systems integrator, providing a wide range of services and expertise; from individual product tests to turnkey engineering design, software engineering, development and build programmes.



Focused on supporting and collaborating with industry to develop the most efficient electric and hybrid vehicles, powertrain and battery systems - the site provides 40 major test facilities and 100km of specialised proving ground used by Polestar, Tevva, REE Automotive amongst others.



State-of-the-art facilities includes a new £1.5m (MYR7.8m) battery development facility, featuring a large climatic vibration laboratory and the UK's first battery abuse facility. This is the UK's first facility to offer electrical cycling – enabling battery charging and discharging whilst in use.



The Centre for Connected & Autonomous Automotive Research (CCAAR) is a partnership between HORIBA MIRA and Coventry University, dedicated to developing intelligent, connected vehicles and to nurture a pipeline of future talent to bridge the skills gaps in the industry.



The West Midlands: The Future of Manufacturing



The West Midlands
One region, many worlds



THE WEST MIDLANDS: ADAPTING TO THE FUTURE

The sheer scale of the region's manufacturing sector, including the agility of its SME-led supply chain, means it holds an unrivalled position in its ability to transition, diversify and serve new, innovative sub-sectors.



In 2020/21, low-carbon goods were the fastest growing sub-sector in the West Midlands employing nearly **100,000 people across 5,000 companies** - a greater concentration of expertise than any other UK location.



Strong, ambitious policy on net-zero and industrial decarbonisation is supporting business transition and creating significant market opportunity in the West Midlands.



With significant investment in modernisation and digitisation, initiatives such as the UK's Made Smarter programme will help to grow manufacturing through digital technologies, innovation and skills.



THE WEST MIDLANDS: DRIVING THE LOW CARBON ECONOMY

Supported by vast skills and R&D infrastructure, the West Midlands manufacturing sector is exploring opportunities across the low carbon sector:



Future Mobility - Unrivalled as the automotive capital of the UK, harnessing its transport heritage for new cutting-edge technologies across EV, CAV and 5G-enabled mobility.



Future of Energy - The geographic and strategic centre of the UK's energy market, leading in the development of next-generation smart grids, static energy storage and smart, local energy systems.



The Built Environment - Home to Europe's largest built environment campus, becoming the national centre for sustainable construction and leading in the manufacture of modular housing.



Circular Economy & Resource Management - Renowned for a strong history in the recycling and metals industry, the region is leading in innovation across reuse, remanufacturing and new, sustainable products and materials.



CASE STUDY: DECARBONISATION OF HEAT

It is estimated that 29 million existing homes in the UK will need to be upgraded to low carbon heating systems by 2050 to meet net-zero goals. The UK has a target to deliver 600,000 heat pumps a year by 2028, which poses significant commercial challenges.

Proposed by the University of Birmingham & other partners, the West Midlands-based National Centre for Decarbonisation of Heat will enable the rapid scaling up of manufacturing, skills and deployment of heat solutions - all necessary to meet carbon reduction targets.

The MTC and Energy Research Accelerator have developed a rapidly deployable, Industry 4.0 manufacturing process operated by robots and controlled remotely - **making it possible to produce components efficiently and close to market.**

This has been demonstrated through the flexible production of pipe assemblies, which are ubiquitous in heating systems and have been designed around thermal storage systems.



THE WEST MIDLANDS: THE BLACK CONTRY INDUSTRIAL CLUSTER

The Black Country Industrial Cluster **is one of only seven UK Industrial Clusters** funded through BEIS and UK Research & Innovation's Industrial Cluster Decarbonisation Programme. **It is the only inland cluster and is focused on zero carbon manufacturing and strategic UK supply chains.**



The 'cluster' status provides access to ongoing funding and supportive local powers. Investors have access to dedicated, specialist local engineering and planning support.



Established local networks of suppliers and business institutions are focused on decarbonised manufacturing: the products, skills and services are there to support investors.



The cluster has explored specific 'net-zero manufacturing hubs' with clean energy infrastructure for occupiers.





THE WEST MIDLANDS INVESTOR SUPPORT

THE WEST MIDLANDS GROWTH COMPANY

The **strategic economic development vehicle** for the West Midlands.

Remit: Inward Investment, Capital Investment, Visitor Attraction (Business & Tourism); Internationalisation; Business Intelligence and Regional Business Engagement.

Shareholders: West Midlands Combined Authority (WMCA), seven West Midlands Metropolitan Councils and six of the region's major universities.

WMGC Partners: c.100 paying private sector partners. From IHG to HSBC.

CWG 2022: Delivering Business and Tourism Programme (BATP) for 2022 Commonwealth Games.

Birmingham Tech Week: Proud to be Headline Partner for Birmingham Tech Week 2022.



WEST MIDLANDS GROWTH COMPANY INVESTOR SUPPORT

The **West Midlands Growth Company** promotes inward investment into the West Midlands, driving business growth, new job creation and exciting opportunities across the region.

WMGC delivers complimentary support to prospective and new investors through its **Investor Catalyst** programme:



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



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



Consultative support throughout business case creation



Signposting & support when accessing public and private finance



Comprehensive, impartial property searches



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



Tailored launch communications and PR consultancy support



Bespoke familiarisation and visit programmes.

PARTNERS AND SPONSORS



bruntwood



FUNDED MARKET ENTRY SUPPORT TO HELP ESTABLISH AND SCALE QUICKLY

Designed to overcome barriers new international investors face when setting up in the UK, the Global Growth Programme is designed to help companies thrive at the heart of the UK's fastest growing technology cluster.

In addition to WMGC's **investor support**, successful applicants will benefit from:



Nine month's funded, high-quality commercial **workspace**



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



Extensive **calendar of industry integration** and **networking opportunities**



Tailored professional service offerings

The West Midlands
One region, many worlds





THE WEST MIDLANDS GLOBAL GROWTH PROGRAMME

The West Midlands
One region, many worlds



THANK YOU

Contact:

Grace Kneafsey, Sector Lead for
Low Carbon

grace.kneafsey@wmgrowth.com
www.investwestmidlands.com

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