## Midlands Engine Partnership Industrial Strategy (Invest 2035) Response

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#### Sector Methodology

### 1. How should the UK government identify the most important subsectors for delivering our objectives?

Government should focus on key subsectors by assessing existing strengths that can be maintained and enhanced, identifying areas where the UK has or could develop a global competitive advantage, and targeting opportunities where investment and development can drive economic growth nationally while also delivering regional and local benefits for places and people. Additionally, priority should be given to subsectors where threats to the UK's domestic security (for example, energy, food, water and defence), or economic and social stability exist.

To refine this process, it is essential to begin with a thorough analysis of the UK's current global competitiveness. This includes identifying sectors that are high-growth, performing well in export markets, monitoring where venture capital (VC) investment is flowing (as a proxy for sectors offering compelling value propositions to investors), and evaluating areas attracting inward investment. Building on the principle that "governments intervene when markets fail," the strategy should focus on sectors where the UK could become competitive but currently is not, identifying the barriers to success and addressing them.

The recognition of local and regional input in shaping national strategies is a welcome step forward, as is the emphasis on engaging directly with industry to better understand its needs and opportunities. By aligning national objectives with regional strengths and addressing market failures, the UK can target subsectors that not only drive growth but also build resilience and security.

Indeed, the Midlands Engine Partnership in 2023 worked with the former Local Enterprise Partnerships, 17 upper tier local authorities and combined authorities in the Midlands to identify established and emerging industries in the Midlands, mapping specific cluster locations. The *Exploring the Investment Potential of Midlands Clusters report* [https://midlandsengine.org/wpcontent/uploads/2023/05/Exploring-the-Investment-Potential-of-Midlands-Clusters-Digital.pdf] and subsequent 30 cluster snapshots (including the 5 critical technologies) [https://midlandsengineobservatory.org/clusters-in-the-midlands/] was produced in partnership with CBI Economics, Beauhurst, The Data City, and Wavteq, and began by consulting on all Local Industrial Strategies and Strategic Economic Plans before analysing proposed areas of strength and opportunity, validating real strengths with data. The identified clusters are below:

- Major Regional Industries: Advanced Manufacturing; Energy & Materials; Transport Technologies; Digital Technologies & Services; Health & Life Sciences; Agri-Food
- With Established Clusters: Advanced Manufacturing in Aerospace; Advanced Manufacturing in Automotive; Advanced Manufacturing in Rail; Logistics; Textiles; Advanced Manufacturing in Ceramics, Materials & Metals; Extractive Industries; Brownfield Regeneration; Nuclear; Health & Life Sciences; Medical Technologies; Advanced Manufacturing in Food & Drink
- With 'New Economy' (emerging technology clusters) in: Agricultural Technology; Education Technology; Circular Economy; Offshore Wind; Data-driven Healthcare Innovation; Disruptive technologies for professional and financial services; Digital creative & video games; Cyber; Connected Device Technology; Space technologies; Net zero transport technologies; Modern & low carbon utilities

### 2. How should the UK government account for emerging sectors and technologies for which conventional data sources are less appropriate?

Government should account for emerging sectors and technologies by utilising fast growing 'alternative' business data platforms like The Data City which are very valuable and utilise AI web scraping as an alternative to SIC codes (which were last updated in 2007). However, using these platforms must also rely on local knowledge to review and validate the data. It is thus crucial to listen

to business and local partners, such as the Midlands Engine, Combined Authorities, and Universities, to identify growing and existing strengths.

Government should also obtain insights into emerging technologies development both from a technology 'push' and 'pull' perspective to understand which technologies are most likely to progress to large scale commercial application and, which therefore offer the greatest prospects for growth (acting as further catalysts for the development of the UK economy and its sectors).

The Midlands Engine Observatory, the first regional economic observatory in the UK, is a great asset for this and equivalent intelligence units for other regions (that cover entire regions, not just Combined Authority areas) are critical for the 'goldilocks' zone of useful scale and local insight.

Engaging directly with national and regional industry bodies is also important to verify any national data analysis – the qualitative insight is critical to validate the quantitative leads. In this regard, government should support processes which bring together data across industry, local authorities, catapults and innovation hubs so a picture can begin to emerge of which sectors are emerging, where we can see a critical mass of companies emerging that have the potential to form into a cluster, and what support is needed to support regional cluster development.

### 3. How should the UK government incorporate foundational sectors and value chains into this analysis?

The industrial strategy should recognise the majority of the economy, including jobs and 'scale ups' are in foundational sectors like retail and professional services. It should ensure that the conditions for 'success', i.e. access to SME finance, business support (through growth hubs or other), and good infrastructure (both digital and physical) remains available to this industry – including ensuring support through local growth hubs covers every part of the UK – particularly sub-nationally in England where in the short to medium term many areas are not covered by Combined Authorities and risk becoming 'forgotten', especially since the close of Local Enterprise Partnerships.

The Government should consider the interlinked nature of the economy and the importance of foundational sectors and value chains to our growth-driving sectors – including energy, food and health. The Midlands Engine Partnership's Energy Security White Paper

[https://midlandsengine.org/powering-energy-security/] (due to be published on the 17<sup>th</sup> December) highlights the importance of energy security to economic growth in the Midlands and the UK as a whole. The Midlands Engine Partnership's Food White Paper

[https://midlandsengine.org/home/midlands-food-and-agri-tech/] highlights that the UK food chain is the UK's largest manufacturing and service sector and the significance of the food system growth opportunity – estimated at £6bn GVA growth by 2030 and £18bn by 2040 in the Midlands alone.

The importance of SMEs and supply chains as the backbone of the UK economy should not be overlooked and the government should engage with key sector bodies to understand their role and the challenges they face, techUK, Rail Forum, Midlands Aerospace Alliance, Society of Motor Manufacturers and Traders, Galvanizer's Association, UK Metals Council, MakeUK etc. Alternatively, existing Chambers of Commerce could be an avenue to provide support to these foundational sectors. One working model of this is German Chamber of Commerce and Industry (DIHK).

Moreover, in seeking to attract additional foreign direct and domestic investment, it is worth noting that the 'everyday economy' accounts for the vast majority of inward investment - SMEs, employing between 1-100 employees rather than mega investments of the scale. This focus ensures that policies are grounded in the realities of the broader economy, which plays a critical role in sustaining growth.

The case for intervention in emerging sectors must centre on their interaction with labour demand and supply. Do these sectors support other activities, and how do they contribute to wider agendas, such as the road to net zero? Many of these sectors have high transport costs, which means supporting them locally reduces the carbon footprint associated with importing goods while also strengthening local supply chains. Additionally, their ability to create employment at a local level is critical. By fostering such sectors, the government can ensure alignment with both economic growth and social priorities, reinforcing their role as foundational drivers of the UK economy.

Subsequently, foundational industries like metal and chemical production are vital to the success of the eight priority sectors serving as enablers but are important to the UK for other reasons – including national security and realising the full domestic value of supply chains. Practically, there are three ways to incorporate and relate them to decision-making:

- Ensure each sector plan identifies its dependence on foundational sectors and gives genuine signals about priorities for supply chains e.g. the need to decarbonise the life sciences supply chain, or the importance of resilience and security of metal production.
- The business environment is particularly important for foundational sector firms things like energy costs and the skills base. Local Growth Plans are a vital way to give a credible explanation to firms about how their business environment will improve, anchored in current economic conditions.
- Highlight the innovative work examining how private investment is influenced by perceived risk, drawing on Professor Philip McCann's research on investment premia across the UK, Europe, the US, and Japan. This work suggests that investor behaviours have worsened spatial inequalities. Since monetary policy alone cannot address these effects, fiscal and local economic policies must tackle the underlying causes and consequences. While there are positive signs in the West Midlands, such as increased inward investment, it remains uncertain whether this will lead to improved productivity and living standards due to the quality of foreign direct investment.

#### Sectors

### 4. What are the most important subsectors and technologies that the UK government should focus on and why?

Long term consistency is key to driving growth, which should be based on the broad objective of regeneration and growing UK manufacturing, avoiding preoccupations with definitions of what is advanced and what isn't. The previous administrations 'five critical technologies' are a good technology focus, although could be evolved slightly – e.g. engineering biology & life sciences.

Key subsectors in the Midlands are listed in Q1.

One technology which government should focus on is green energy potential. Wind turbine manufacturing holds the highest green potential for the UK, building on existing skills and infrastructure. It is important to recognise that these are a critical enabler of the UK's economic growth prospects and that a mix of clean energy technologies is required for the clean energy transition and energy security. The North West and West Midlands are well-positioned to expand green manufacturing, especially in wind and green transport sectors, with some areas already connected to heat pump production.

While the UK doesn't yet have a comparative advantage in wind manufacturing, it can easily develop capacity in this area, as well as in heat pumps, both of which are expected to face global shortages. The UK can also leverage its strengths to grow green transport industries, including electric cars and zero-emissions aviation. Additionally, the UK is at the forefront of fusion energy research, with initiatives like the STEP (Spherical Tokamak for Energy Production) project in Nottinghamshire. As

fusion energy advances, the UK has the potential to lead in the commercialisation of this transformative, clean energy source, enhancing its role in the global green energy landscape.

The UK can also play a pivotal role in advancing clean heat solutions, particularly within industry and through heat networks (including domestic applications), alongside the growth of hydrogen and electrification technologies. These innovations are crucial for decarbonising heavy industries and transportation. The net benefit of flexible energy resources cannot be underestimated. As we move closer to the Government's net zero targets by 2030, these resources will increasingly provide invaluable balancing services to the grid, reducing the need for extensive electricity infrastructure development and maintenance.

Alongside efforts to develop renewable energy industries, the Midlands is well-positioned to capitalise on enabling technologies to support industrial growth. Advanced logistics, powered by Internet of Things (IoT), AI-driven route optimisation, and automated warehousing, enhance the region's role as a logistics hub. Hyperscale AI data centres, supported by strong power infrastructure, are key for AI processing and big data management. Additionally, Internet Exchange Points (IXPs) will localise data traffic, reduce latency, and ensure secure data transfers, critical for AI applications and data-driven sectors. These technologies are vital for driving innovation and supporting future industries

The agri-food sector is not included in the list of 8 growth driving sectors identified by the Government. The Midlands Engine Partnership's Food White Paper [https://midlandsengine.org/home/midlands-food-and-agri-tech/] highlights the significance of the food chain is the UK's largest manufacturing and service sector and the major economic growth potential in the UK food system – estimated at £6bn additional GVA growth by 2030 and £18bn by 2040 in the Midlands alone. The White Paper highlights that accelerating the commercialisation of regionally developed agri-food innovation can lead to substantial export potential, as the technologies needed in the UK are in growing demand globally. Furthermore, food system transformation offers potential for multiple benefits. These include carbon and sustainability savings from shorter domestic food chains, and healthier foods achieved via reformulation and growing the supply of naturally healthy foods e.g. fresh produce. The global climate change agreement at COP28 included food system transformation for the first time and with the Food System being the greatest contributor to Greenhouse Gas Emissions, a focus on the impacts a transformed Food System can have on Net Zero aspirations will be substantial.

Both the space and cyber sub-sectors were largely overlooked in the strategy, despite being major clusters in the Midlands. Data City estimates suggest that the region accounts for 20.9% of the UK space sector businesses, with key assets like Malvern Hill Science and Space Park Leicester, contributing an estimated £13.8bn to the UK economy. Space Park Leicester, a nationally significant hub, generated £89m in its first year, houses 25 businesses, and has been designated a High Potential Opportunity zone by the Department for International Trade (DIT), with the University of Leicester promoting it globally. Similarly, the Midlands' cyber and defence cluster makes up 18.3% of the UK sector businesses, anchored by hubs such as Cyber Valley, Midlands Cyber, and Skylon Park, contributing an estimated £22.8bn to the economy. Both clusters receive significant funding, including Innovate UK grants, and are home to strategic businesses (+£100m turnover) and high-growth firms (+20% annual growth).

#### 5. What are the UK's strengths and capabilities in these sub sectors?

The Midlands has nationally and internationally significant universities, R&D and demonstrator facilities, leading in design, development, engineering, and specialist manufacturing across these sub-sectors. While we are strong in these areas, challenges remain in developing a supportive financial environment and providing optimal physical locations. Vocational skills also play a key role in supporting sector growth.

The Midlands Engine Partnership's analysis of clusters, agri-food, energy security and its Observatory highlights the wider region's strengths in advanced manufacturing and its sub-sectors, which local authority plans provide local focus.

The Midlands Engine Partnership's Food White Paper [https://midlandsengine.org/home/midlandsfood-and-agri-tech/] highlights that the UK has a leading cluster for food chain automation and digitalisation in the Midlands which is the UK and European leader for Agri-robotics and automation, supported by industry and government, to develop world-leading, long-term solutions to labour supply constraints. Industrial application of these technologies presents significant growth opportunities for investing businesses. There is significant demand for Industry 4.0 technology solutions required by the food chain, from transport and logistics such as 5G, blockchain and automated loading systems to driving modernisation of storage and cool chain technology.

### 6. What are the key enablers and barriers to growth in these sub sectors and how could the UK government address them?

The main focus needs to be on creating the environment suitable for existing (and new) businesses to grow and not losing sight of those businesses that create the most value to the economy.

Key enablers to growth in these sub-sectors include policy alignment, cross-sector expertise (such as specialist advisors and ambassadors), research collaborations, access to finance, and suitable physical locations and infrastructure. Barriers arise when these are lacking. The government should simplify the complex landscape of incentives for sites like Freeports and Investment Zones and focus on business needs with growth-focused incentives across the UK.

Sector-specific reforms, such as the creation of Great British Railways and a Rolling Stock Strategy, are crucial to stabilise procurement, reduce reliance on imports, and support the rail sector.

Furthermore, addressing skills shortages by developing talent pipelines, working with local education providers, and aligning skills with local needs through devolved funding will be critical. Broader enablers, like planning reform, clean energy access (grid infrastructure connectivity and capacity; with more information to be available in the *Midlands Engine Energy Security White Paper* [https://midlandsengine.org/powering-energy-security/] (due to be published 17<sup>th</sup> December), and digital connectivity, are essential for cross-sector growth.

In addition to the key enablers and barriers to growth in these sub-sectors, there is potential in introducing initiatives like Skills Tax Credits, which could offer a high incentive across all businesses, regardless of size. This approach has strong support among UK Metals Council members.

Likewise, simply renaming the Apprenticeship Levy to a Growth and Skills Levy does not address the fundamental issues with the current model. A more effective approach could involve directing a portion of the levy funds—such as 50%—towards apprenticeship alternatives. One possible solution is to allow funding for structured in-house training, particularly for companies whose skill needs are not adequately met by standardised opportunities provided by existing education providers or further education colleges. This approach could be a crucial component in closing the skills gap and fostering growth across various sectors.

For further subsector specific growth opportunities and addressable barriers, the Midlands Engine is conducting a series of industry-led roundtables in the below subsectors/clusters in the Midlands, specifically to identify growth opportunities and barriers from an investment perspective – these findings will be published in mini whitepapers following each event:

• Nuclear Deep Dive – 9th December 2024, in partnership with Midlands Nuclear, Energy Research Accelerator and University of Derby

- Aerospace Deep Dive 8th January 2025, in partnership with Midlands Aerospace Alliance and University of Nottingham
- Space Technologies Deep Dive 22nd January 2025, in partnership with Space Park Leicester, Midlands Space Cluster and Midlands Aerospace Alliance
- Cyber & Defence Deep Dive 30th January 2025, in partnership with MIRA Technology Park, West Midlands Combined Authority, Midlands Cyber and University of Wolverhampton
- MedTech & Digital Health Deep Dive 2nd April 2025, in partnership with Medilink Midlands, Health Innovation Network, Midlands Innovation Health, University of Birmingham and ABHI
- Agri-Tech Deep Dive Date TBC in partnership with SmartParc and UK Food Valley
- Hydrogen Deep Dive Date TBC in partnership with Energy Research Accelerator, East Midlands Hydrogen

Government is invited and welcome to join these events. Likewise, The Midlands Engine Partnership's *Food White Paper* [https://midlandsengine.org/home/midlands-food-and-agri-tech/] and an *Energy Security White Paper* [https://midlandsengine.org/powering-energy-security/] (due to be published 17th December) each provide a clear roadmap for how these barriers can be addressed in those specific areas.

#### **Business Environment**

### 7. What are the most significant barriers to investment? Do they vary across the growth-driving sectors? What evidence can you share to illustrate this?

The most significant barriers to investment are below:

- As highlighted be the Productivity Institute, the biggest barrier over the past decade has been persistent policy uncertainty and not just surrounding Brexit, but also regarding a long-term industrial and economic strategy. Stability is critical.
- High energy prices remain a significant challenge, particularly for energy-intensive sectors like metals and materials. European competitors benefit from subsidies, gaining a strategic advantage over the UK.
- The UK workforce faces skills shortages driven by high living costs, limited upskilling opportunities, and reliance on migration to fill vacancies which is not supported by the inflexible Apprenticeship Levy. The ability to recruit and retain talent is crucial, particularly in aligning high-value business ambitions with the local skills demographic.
- Poor infrastructure is another major barrier to SME technology adoption, affecting 350,000 businesses and limiting competitiveness. City centres outside London need significant expansion of office space and improved public transport to attract investment and ensure prosperity. Transport infrastructure in many industrial clusters is also inadequate, making recruitment difficult and increasing carbon footprints. Poor infrastructure is also a particularly acute barrier in rural areas where poor digital connectivity holds businesses back from investment in technology.
- There is a mismatch (particularly in rural areas) between skills and available jobs. A reliance on certain sectors such as agriculture and tourism may not align with the aspirations of skilled workers which leads to a skills drain as these workers seek opportunities elsewhere.
- A lack of affordable housing limits labour mobility, forcing workers to spend a disproportionate share of income on housing and restricting economic growth.
- Late-stage funding for innovation has dropped, especially in tech, with the UK struggling compared to global peers, impacting commercialisation of innovation. Global competition is the UK's biggest barrier to investment, with simpler incentives in Europe and the US outcompeting the UK's complex landscape.

- In addition to issues with late-stage funding, SMEs face limited access to finance and struggle to secure funding for high-tech equipment, renewable energy systems, and digital transformation initiatives to limited venture capital, high interest rates, and stringent lending requirements.
- Construction productivity in the UK is low, leading to higher costs, lower wages, and barriers to attracting workers into the industry.
- Water resources are critically strained in the Midlands and across Eastern England due to limited rainfall, climate change impacts, and economic growth. The increasing demand for water, largely from industry, agriculture, and urban growth, necessitates urgent action to avoid severe future water shortages and constraints on economic productivity. Advanced manufacturing, energy, and transport sectors drive regional economic growth, with highvalue industries such as food and drink manufacturing and chemicals accounting for significant water use, alongside agriculture and food. East Midlands faces higher water demand for agriculture and food processing, while the West Midlands demand is driven by power generation and heavy industry. Efforts to meet industrial water needs are crucial for supporting economic output. Approximately 21% of water is lost due to leakage. Industrial efficiency improvements, alongside innovation in water reuse and supply flexibility, will be critical for mitigating stress on non-domestic water supplies. Two Water Resource Planning groups are in operation across the Midlands Engine, Water Resources West (WRW), and Water Resources East (WRE). Both WRW and WRE are creating comprehensive WRMPs aligned with the Environment Agency's national framework to reduce water demand, increase supply through new infrastructure, and prioritise environmental sustainability. These plans will enhance resilience by addressing the unique challenges of each region.
- Inflation, rising interest rates, and increased costs of materials, labour, and energy all influence investment decisions.
- Regulatory constraints, including lengthy approval processes and stringent requirements, particularly in healthcare and green energy, which create barriers for companies. Digital health solutions also face additional challenges related to data protection and compliance.
- Additionally, industry states that corporation tax is too high reducing UK competitiveness.
- Slow planning approvals, under-resourced planning teams, and complex site ownership delay business development and investment decisions.
- There is a shortage of providers and funding for relevant and niche standards, particularly for metals-sector-related skills at Level 2 and Level 3. Similarly, on the other end of the spectrum, there is need to further develop STEM subject provision and the continued development of the UK's postgraduate provision (MSc and PHD).
- There are also sector-specific challenges, such as exporting too much British Steel increases costs for UK manufacturers. In West Midlands' metals and materials sectors struggle with energy pricing and site availability, with European competitors gaining a strategic advantage through subsidies.

#### **Business Environment – People and Skills**

8. Where you identified barriers in response to Question 7 which relate to people and skills (including issues such as delivery of employment support, careers, and skills provision), what UK government policy solutions could best address these?

To address the barriers related to people and skills, the UK government could implement the following policy solutions:

• Establish local, accessible hubs that integrate employment support, skills training, and careers guidance under one roof. These hubs streamline services, making it easier for individuals to access tailored advice, upskilling programs, and job placements, with Walsall as an example.

- Develop a robust online platform that consolidates job vacancies, skills assessments, online courses, career advice, and mentorship resources. This platform could allow job seekers to track their skills development and connect directly with employers.
- Long-term, consistent policy with cross-party backing and support is essential to ensure stability and effective delivery of skills and employment initiatives.
- Provide tax relief to employers investing in skills development and retraining, especially in sectors experiencing labour shortages such as healthcare, digital tech, and green industries.
- Introduce a government-subsidised individual learning account system, where individuals can finance their education and training regardless of employment status.
- Empower regional bodies to allocate skills funding flexibly, allowing them to address local labour market needs and swiftly respond to economic changes.
- Recognise employability and life skills in schools through Ofsted assessments, alongside exam results.
- Offer incentives for apprenticeships and for employers to sponsor university students, ensuring future workforces meet industry demands. This is particularly important in high-demand areas outlined in Local Skills Improvement Plans (LSIPs), with the Midlands Engine providing insight into regional sectors and skills gaps for the region (available on their website).
- Undertake a comprehensive review of the Apprenticeship Levy (and correlated Apprenticeship budget) to reverse the decline of level 2 and 3 apprenticeships. Address the lack of available delivery for apprenticeship standards & pathways with dispersed demand.
- Ensure that Skills England adopts a joined-up approach to identifying, understanding and funding skills priorities across vertical industries, supply chains and Government departments.
- Strengthen industry-led courses and partner them with accreditation bodies so businesses get the skills they need while individuals can record their achievements.
- Build talent pathways through schools, further education, higher education, and employers, matching current and future needs, particularly in key sectors like engineering, technology, and green industries.
- Link skills strategies with broader industrial and social reforms to ensure those unable to attain high-value jobs can still participate in the economy, improving social mobility and addressing inequalities across the UK.

By aligning skills demand and supply, integrating support for businesses with Further Education provision, and leveraging regional collaboration through Mayoral Combined Authorities and innovation zones, the government can create a dynamic and responsive skills ecosystem. This will not only address labour shortages but also build a compelling case for investment, ensuring regions can attract businesses while supporting inclusive economic growth. By embedding skills delivery into a region's investment narrative the UK can attract further investment and talent.

### 9. What more could be done to achieve a step change in employer investment in training in the growth-driving sectors?

To achieve a step change in employer investment in training in growth-driving sectors, the following policy solutions could be implemented:

- Provide tax credits specifically for training in sectors with high growth potential, such as green energy, digital technology, and life sciences.
- Encourage micro-credential programmes that allow employees to gain critical skills through short, intensive courses, validated by sector-wide accreditation, enabling employers to target specific skills needs while employees gradually build advanced skills.

- Offer targeted grants and subsidised training to SMEs and wider innovation support, helping them participate more fully in workforce development despite resource constraints.
- Encourage training providers to offer flexible course options, such as evening, weekend, and online learning, to accommodate workers' schedules, particularly in sectors with irregular hours.
- Establish Regional Sector Councils in key regions, such as manufacturing in the Midlands, to identify common skills gaps and deliver targeted training solutions.
- The UK needs a revitalised skills plan, particularly focused on sector and technology specific skills, such as green skills, as the pace of technical developments has accelerated since the 2021 Green Skills Strategy.
- Establish sector-specific training hubs aligned with each key area's growth sectors collaborating with Higher Education (HE) and Further Education (FE) providers to produce a pipeline of skilled works. Universities and colleges can be utilised to lead employer-driven training programs by providing sector-specific knowledge, facilities and resources for hand-on learning.
- Strengthen links between employers and local education providers, enabling employers to help shape curricula and ensure talent pathways, such as placements, internships, and T-levels, provide students with valuable workplace experience.
- On top of strengthening links between employers and local education providers, there is a need to build capacity for schools' outreach and careers engagement. This could perhaps be delivered by allowing employers to use some Levy funding to support careers awareness and work experience.
- One of the problems facing industry is that the funding offered by the Institute for Apprenticeships and Technical Education (IfATE) for Trailblazer-developed standards is too low to attract providers, resulting in lost opportunities and even the retirement of standards. To address this, funding bands should be adjusted to reflect realistic delivery costs to ensure the system remains viable.
- Encourage companies to adopt initiatives similar to Rolls-Royce's Nuclear Skills Academy, which creates a dedicated pipeline of talent for critical industries by offering apprenticeships and training in collaboration with educational institutions and industry experts.
- Apply this industry-education partnership model to other key sectors, enabling targeted training solutions to address skills shortages and build a sustainable workforce in growth-driving industries.

#### **Business Environment - Innovation**

### 10. Where you identified barriers in response to Question 7 which relate to RDI and technology adoption and diffusion, what policy solutions could best address these?

To address barriers to RDI and technology adoption and diffusion, the following policy solutions can be implemented to address issues:

- Expand and simplify the existing R&D tax credits to encourage greater private sector investment in research and development. This will lower the financial risk for businesses, particularly SMEs, while incentivising innovation across a broader range of sectors.
- Provide greater government support for Enterprise Investment Scheme (EIS) and Seed Enterprise Investment Scheme (SEIS), reducing investment risk and encouraging later-stage venture capital funding in high-growth sectors like green energy, digital technology, and life sciences.
- Explore alternative ways of attracting funding, such as through Local Government Pension Schemes (LGPS), Green Bonds, and asset-backed vehicles. Government endorsement and support for these funding avenues would accelerate their adoption, enabling businesses to access the capital they need for innovation.

- While the UK excels in research, it often lags in turning research into commercial products. More targeted funding for commercialisation, particularly through UKRI Challenge Fund thematic areas, would help bridge this gap and unlock the potential of academic research.
- Streamline access to Innovate UK funding, particularly for smaller businesses with innovative ideas. Simplify application processes and introduce faster approval times to reduce barriers to entry for SMEs.
- There needs to be a closer alignment between educational outputs and the needs of emerging industries, particularly in STEM. Investing in subsidised skills training for employers to upskill the existing workforce in high-demand fields like green tech and digital innovation would help fill these critical skills gaps.
- Establish innovation hubs in key sectors (such as agri-tech, hydrogen, and advanced manufacturing) where businesses can access shared research facilities, business support, and funding networks. These hubs should be tailored to regional strengths and address local economic priorities.
- Create and support regional innovation clusters to foster knowledge and innovation spillovers. These clusters, driven by coalitions of local government, universities, and industry partners, could accelerate regional development and innovation in emerging sectors.
- Establish "sandboxes" where businesses can experiment with new technologies in a controlled environment. These testbeds would allow for product-testing with lower risk, helping businesses refine their innovations before full-scale commercialisation. This could incentivise pushes towards more advanced, yet riskier technologies, like Solid Oxide Fuel Cells (SOFC). Universities and science parks could support these sandboxes via the provision of expertise and specialised infrastructure.
- Universities should work more closely with local government, businesses, and industry associations to foster regional innovation ecosystems. A more integrated approach to foreign direct investment in R&D, leveraging academic expertise, could attract international funding and investment into the UK's research landscape.
- Ensure a level playing field in regional innovation funding by addressing geographical disparities in access to resources. Regions outside Mayoral Combined Authorities (MCAs), such as Leicestershire, should have equal access to innovation funding and support through initiatives like the Innovate UK Launchpad programme.
- Encourage universities to increase the rate of spinouts, commercialising their research outputs. Locating R&D-focused government departments in regions with high university activity could help drive more localised innovation and attract high-productivity businesses.
- Universities and higher education institutions (HEIs) should work together to deliver efficient services to the innovation ecosystem. This could include access to shared technology, skills development, and research infrastructure, driving innovation across the region and nationally.
- Provide grants for industry-university collaborations focused on key growth areas to address technical challenges and foster innovation. Part of this could include dedicated RDI grants to facilitate research projects.
- Expansion of Innovate UK's Catapult Network to address the specific R&D needs of the energy transition, fostering innovation across sectors such as renewable energy, energy storage, and smart grid technologies. This would support the development of cutting-edge solutions and accelerate the commercialisation of innovations critical to achieving net-zero targets and ensuring the UK's long-term energy security.

### 11. What are the barriers to R&D commercialisation that the UK government should be considering?

When looking at barriers to R&D commercialisation, government should consider the following:

- The UK produces world-class research but lacks the skilled workforce needed to commercialise it, particularly in technical fields and high-growth sectors.
- Investment is needed in both physical infrastructure (e.g., transport links between clusters) and digital infrastructure (e.g., high-speed broadband in rural areas) to enable innovation diffusion and knowledge exchange. Moreover, there is a shortage of suitable spaces for start-ups to scale. Government should support scale-up sites outside Harwell, providing head leases for flexible, R&D-ready properties.
- Increased funding support is required for the later stages of R&D commercialisation, including scaling businesses and taking products to market. R&D commercialisation is expensive, with SMEs and Spinouts often struggling with the associated high costs to bridge the 'valley of death' in scaling up from a prototype to a market-ready product. These costs include advanced testing, regulatory compliance and production scaling.
- The discontinuation of ERDF and uncertainty around UKSPF creates confusion. A clearer, unified funding system is needed across UKRI, Innovate UK, and other sources.
- There is a need for investment outside of London, particularly through initiatives like Midlands Mindforge, the patient capital company established by the Universities of Aston, Birmingham, Coventry, Keele, Leicester, Loughborough, Nottingham, and Warwick in the Midlands, is currently fundraising and seeking to address this challenge. However, it has struggled to raise funds overseas without being able to demonstrate sufficient domestic support. Government (through National Wealth Fund or other Treasury mechanisms) should seek to provide a level of seed funding support to such initiatives (each university has seeded several million each), as a potential £3bn fund in the future supporting hundreds of spinouts to grow in the Midlands, driving quality job creation and growth.
- Strengthen local business support services (e.g., Growth Hubs) with highly skilled staff specialising in areas like IP and innovation security to help businesses grow, which is beyond current capabilities.
- Government should fund the creation of Cluster Development Companies to provide focused, devolved support for local clusters, as seen in the Midlands Space Cluster pilot. These organisations help attract investment, foster knowledge spillovers, and advocate for better policies.
- R&D tax credit should be adjusted to incentivise innovation that is applied in the UK, creates jobs, and drives economic growth domestically, rather than subsidising job creation abroad.
- Long commercialisation timelines as the process from initial R&D to market can be lengthy, particularly in regulated sectors like digital health and green technology. These extended timelines increase the financial risks for companies, making it difficult for businesses to remain competitive and achieve returns on investment.
- Securing and managing Intellectual Property (IP) rights, such as patents, trademarks, and copyrights is complex and costly. Many SMEs lack the resource and expertise to navigate the IP landscape, limiting their ability to protect and profit from their innovations.

#### **Business Environment - Data**

#### 12. How can the UK government best use data to support the delivery of the Industrial Strategy?

Government can best use data to support successful delivery of the industrial strategy by establishing a national programme, analysis and insight that includes the development of a toolkit and open-access data set for local organisations to aid better policymaking (including both quantitative and qualitative data). This could be delivered by the creation of an open data platform with clear metrics on inclusive growth beyond GVA and productivity including metrics such as life expectancy, disposable income, and deprivation.

A lot of key useful data tools are not publicly available to local partners (particularly datasets associated with measuring innovation) and do not account for regional spillover effects. The

Government should seek to establish a UK-wide dataset and toolkit that is accessible for local and regional decision-makers.

Moreover, the government should enhance the quality and accessibility of cluster data to ensure it is easily understood and effectively communicated by policymakers.

The complexity of England's sub-national geographical units of analysis also complicates any assessment of clusters, which do not neatly fit into existing administrative boundaries. Clusters need to be considered beyond sectors as they can span multiple industries and geographic areas, fostering cross-disciplinary innovation, enhancing regional economic resilience, and creating diverse ecosystems that drive growth and attract investment.

The scale and complexity of research required can only be met by a serious programme of national research and analysis. We welcome recent developments led by the Department for Science, Innovation and Technology (DSIT) to develop this programme and, the Government should seek to establish a UK-wide dataset and toolkit that is accessible for local and regional decision-makers, and ideally benefitting from 'goldilocks' regional insight such as through the Midlands Engine Observatory in the Midlands.

Government should also utilise predictive analytics for economic planning to provide sectoral forecasts to help industries anticipate and prepare for market shifts. By analysing these trends such as logistics optimisation, health outcomes, and energy consumption, the government can project future needs and align industrial policies with evolving demands. The Midlands has some of the most globally competitive and research-intensive universities which can support this by leveraging their data science expertise, which the Midlands Engine could further leverage via existing networks.

### **13.** What challenges or barriers to sharing or accessing data could the UK government remove to help improve business operations and decision making?

To improve business operations and decision making, the UK government should create an open data platform that is transparent about its performance against key metrics. This would encourage businesses to share their data more freely. Additionally, trade should be a UK-wide focus, aligning regional assets rather than having them compete with one another.

Currently, data is not standardised or easily accessible across government departments. The outdated Standard Industrial Classification (SIC) system further complicates this issue, hindering effective data sharing and access. Additionally, the inconsistency in publishing formats and release schedules exacerbates challenges in using this data effectively.

Privacy regulations, while essential for protecting sensitive information, can create barriers to sharing valuable data. Data-sharing agreements must comply with strict security standards, and these concerns can restrict data flow, limiting collaboration between key stakeholders (such as industry, government, and academia) and slowing innovation. One such example of this is accessing data from commercial organisations, where it would be helpful to explore whether there's a role for government in the facilitation of sharing this data with public sector organisations.

Furthermore, the UK's statistical system has not kept pace with devolution. While work by Government (MHCLG) and ONS to improve the local data system is welcome, it has come at a time when local resources are constrained. It is not easy to access data at a local or subregional level, meaning businesses and support organisations lack up-to-date, localised data to make informed decisions on regional economic performance, demand, supply, or labour markets. Challenges seen in recent years around the sampling for the Labour Force Survey are symptoms of this wider issue.

It would also be beneficial to increase funding the Department for Business and Trades' (DBT's) Key Account Management programme. This is a critical service connecting growing businesses with new locations and other support, important for encouraging their growth in regions where it is most beneficial. However, the service is massively overstretched – there is a single KAM person for the entirety of the East Midlands Combined County Authority, for example.

#### **Business Environment - Infrastructure**

14. Where you identified barriers in response to Question 7 which relate to planning, infrastructure and transport, what UK government policy solutions could best address these in addition to existing reforms? How can this best support regional growth?

Demos (in partnership with SEGRO) identified six key issues identified that need to be resolved to turn the UK into a technology superpower: Power, buildings, transport, planning, skills and partnership with government. The report highlights six policies to tackle the most pressing challenges:

- Ensure that the Department for Science, Innovation and Technology's (DSIT's) cross-government action plan addresses our industrial infrastructure needs.
- Merge the National Infrastructure Commission with the UK National Infrastructure Bank to create a 'Super Agency' the National Infrastructure Delivery Authority (NIDA) to advise, plan and finance major infrastructure projects across the UK.
- Create a presumption in favour of development of industrial infrastructure within the National Planning Policy Framework (NPPF).
- Increase and ring-fence spending on local authority planning teams with central government investment over ten years.
- The Department for Energy Security and Net Zero should work with Ofgem and National Grid ESO to create a "Priority Power Access Plan" which puts industrial infrastructure projects at the front of the queue for grid access.
- Extend 'Investment Zone' Structures and Buildings Allowance rules to cover the whole of the UK.

#### Transport

- Currently, the UK lacks a comprehensive national transport strategy, which creates challenges for strategic planning and investment. In light of this, it is crucial to advance the delivery of the Midlands Connect Transport Strategy and secure full funding for a comprehensive rail, road, and smart connectivity investment package. This comes at a critical juncture, as the decision to cancel the northern sections of HS2 leaves a significant gap in the UK's rail strategy, disrupting economic growth plans for several cities that had relied on this infrastructure.
- The Midlands is well-positioned to be the UK's transport innovation testbed, building on its existing strengths in smart transport solutions, autonomous vehicles, and sustainable mobility. By leveraging its central location and robust infrastructure, the region can drive innovation while boosting local economic growth.
- Maximising the potential of the Midlands' two international airports—Birmingham and East Midlands—through capacity expansion, enhanced logistics, and sustainable tech will strengthen the region's role as a key transport hub, boosting connectivity and global competitiveness.

#### Infrastructure

#### The Midlands Engine Partnership's Energy Security White Paper

[https://midlandsengine.org/powering-energy-security/] (due to be published 17th December) highlights the need for significant upgrades to the electricity grid – both transmission and distribution networks – to support a much larger number of generators, with complexities from additional storage and intermittency of generation. The White Paper notes that reform must be implemented at pace to ensure no further delays to critical grid and generation development - and that a range of solutions is required including:

- Transmission level: Reinforcement of high-voltage infrastructure to manage long-distance electricity transport, ensuring it can handle increasing capacity from renewable generation sites (e.g., offshore wind farms). Key levers include investment in new high-capacity lines, accelerating the approval process for Nationally Significant Infrastructure Projects (NSIP), and enhancing inter-regional coordination through the National Energy Systems Operator (NESO) to manage load balancing and prevent bottlenecks.
- Distribution level: At the distribution network level, integration of decentralised energy
  resources, such as small-scale renewables and storage systems, while maintaining local grid
  stability by focusing on deploying smart grid technologies, enhancing the flexibility of local
  grids, and facilitating faster connection processes for smaller energy generators. It is noted that
  the use of Local Area Energy Plans (LAEPs) and the involvement of Regional Energy Strategic
  Plans (RESPs) is critical in aligning local energy generation with grid capacity, and that a more
  flexible demand-side approach can also play a vital role in helping to balance local grids in a costeffective way and minimise the amount of grid reinforcement required to alleviate congestion on
  the network.

The White Paper highlights the need for investment in repurposing pipeline infrastructure as fossil fuel power plants are phased out, particularly for hydrogen and clean fuels. It also stresses the importance of aligning water and energy infrastructure planning to ensure a secure water supply for clean energy projects, such as hydrogen production and nuclear energy.

In addition to these policies, it is critical to address specific barriers in planning and infrastructure:

- Planning challenges often stem from statutory consultees like Highways England. Enterprise Zones and Science Park locations should be viewed as strategic sites with growth potential, and planning should reflect this priority.
- Energy demand must be addressed across the country with clear targets prioritising infrastructure where it is needed to create high-value employment opportunities.
- Combined Authorities should receive the resources necessary to implement regional transport plans that support local growth and coordinate with partners to optimise existing transport infrastructure. Long-term funding for transport infrastructure is crucial, as previous local ambitions have been halted when costs rise, and projects exceed budgets or timelines.
- Planning teams across the country are under-resourced, and reforms are needed to streamline
  decision-making and focus efforts on unlocking sites and assets within local plans. Providing the
  Combined Authority with resources to draw on planning and legal expertise across the region
  will help address complex issues related to shared ownership, Compulsory Purchase Orders
  (CPO), and heritage concerns, ensuring local governments can tackle strategic assets effectively.
- Rural infrastructure underinvestment must be addressed, including roads, broadband, 5G networks, and power infrastructure to boost connectivity and enable rural businesses to access essential services. By connecting rural areas government can encourage business growth and job creation.

## **15.** How can investment into infrastructure support the Industrial Strategy? What can the UK government do to better support this and facilitate co-investment? How does this differ across infrastructure classes?

Investment in public infrastructure is key to the health of UK industry, particularly within sectors such as construction and metals-related industries. It is essential that Government invests significantly into public infrastructure projects, with domestic businesses having sufficient opportunity to supply these projects as part of a clear investment in infrastructure programme. Improved communications, energy distribution and transport infrastructure will support improvements in productivity and competitiveness and will for instance more ably allow:

- Personnel and goods / services to move more efficiently and more affordably, improving productivity.
- Supply chains take advantage of AI, IoT and data-led, real-time decision-making improving efficiency and sustainability.
- Industrial sites take up new technological solutions and develop innovations knowing renewable energy is available in both place and at a capacity to fit both existing and future needs.

Transport infrastructure, in particular, plays a crucial role in determining where local industries and businesses are located. Towns and cities with effective intra-city and inter-city transport networks host more productive businesses, underscoring the importance of significant investment in this area to unlock regional potential and support industrial growth.

Moreover, energy infrastructure needs to be strategically approached but locally delivered, with the Government playing a convening role in bringing supply and demand together and understanding how to overcome barriers. The funding that underpins the delivery of the Strategy should be aligned with its long-term goals and devolved to the appropriate regional level.

For long-term success, the Industrial Strategy and its funding mechanisms must have cross-party support to avoid a stop-start approach, allowing businesses and local areas to plan and execute projects with confidence. Regeneration and investment require long-term commitment, and public sector investment should be leveraged to attract private sector funding. One example of this is Derby in the East Midlands which has a successful public-private partnership model to regeneration and inward investment. It is hoped that greater devolution will only strengthen this model as part of its Local Growth Plan.

#### The Midlands Engine Partnership's Energy Security White Paper

[https://midlandsengine.org/powering-energy-security/] (due to be published 17th December) supports the Industrial Strategy by identifying the need for a fundamentally different approach to financing the clean energy transition, that invests ahead of need with confidence to de-risk and crowd in private investment and does not ask consumers to bear the cost. The White Paper identifies the ambition of the Midlands Engine Partnership to support Great British Energy and the National Wealth Fund by bringing forward a pipeline of investible propositions in mature and newer energy technologies as part of the proposed partnership – and to work with the Government to accelerate further financing mechanisms and innovative new energy business models by:

- Leveraging regional scale and confirmed project pipeline to develop new investment vehicles, including a Midlands Green Bond to encourage public sector investment, and spatial incentives and mechanisms such as those currently part of the Investment Zone and Freeports programmes to secure private sector finance.
- Developing a Midlands public-private investment consortia of private sector energy infrastructure providers and investors to invest in behind-the-meter solutions at scale, with regional and local government identifying and facilitating viable sites.

#### Similarly, the Midlands Engine Partnership's Food White Paper

[https://midlandsengine.org/home/midlands-food-and-agri-tech/] recommends the use of devolved regional challenge funds to deliver infrastructure investment, for faster, lower cost progress.

The Midlands Engine Partnership is also developing a Water Security White Paper which will identify the water supply and quality challenges in the Midlands and their impact on key economic sectors, including energy and food, and their implications for the region's economic growth prospects and contribution to UK energy and food security.

#### **Business Environment - Energy**

# 16. What are the barriers to competitive industrial activity and increased electrification, beyond those set out in response to the UK government's recent Call for Evidence on industrial electrification?

Many of the UK's advantages are slowed and hindered because of power capacity challenges and the time it takes to connect to the grid. On the supply side, the renewable energy sector is experiencing similar delays in its ability to feed the UK's rapidly expanding demand for power. These challenges must be overcome to transform the UK's economy. Low carbon, low cost and a secure supply of electricity is central to a sustainable and productive economy. One of the primary challenges facing the transition to renewable energy is the existing infrastructure. The current grid was designed to accommodate a small number of large fossil fuel generators. These power stations were broadly free to locate where they liked – subject to access to coal, gas and planning – ideally close to demand. Also, the regulatory framework governing grid build out and development has not kept pace with this changing landscape. There has been increasing misalignment between infrastructure design and future energy need and this is posing a significant barrier to progress.

In many cases the business objectives of one party in the energy sector cannot be satisfied without the data, levers of control and customer relationships held by other parties. The consequences are unnecessarily high costs for domestic, industrial and commercial consumers and very-high barriers to securing sustainable energy supplies. This is partly a product of regulation and partly a product of the energy sector being behind other sectors in exploiting advanced information infrastructures. Market efficiency can drive up consumer satisfaction and drive down cost. But the private sector alone cannot unlock this. There are fundamental market failures to overcome. New industrial energy demonstrators focused on low cost; clean energy can stimulate new markets for energy supply. We have identified a pipeline of projects for investment which will see the Midlands developing precommercial stage innovation capabilities and stimulate early-stage technology innovation, building on our strengths in battery technologies, housing, and construction.

#### **Energy planning**

Positive steps have been taken towards a more robust and planned whole-systems approach to the UK's energy transition, such as the creation of a National Energy Systems Operator and the Regional Energy Strategic Plans. To resolve the uncertainty that has prevented an at-scale market response to date, these functions must be rapidly implemented and tasked with creating a detailed route map for individual vectors and the overall energy system. An example, particularly relevant to the Midlands, relates to fossil fuel transition, where the target decommissioning date is yet to be accompanied with plant-level planning support to change use and new plants are still being approved. Delays caused by the planning system and lack of licensing have also been longstanding barriers to progress on energy security and are holding back the private sector's willingness to invest in local clean power alternatives. The Government's commitments to the planning framework and NSIP reform are a cause for optimism in this context.

#### **Grid infrastructure**

The energy transition will require significant upgrades to the electricity grid – both transmission and distribution networks – to support a much larger number of generators, with complexities from additional storage and intermittency of generation. These upgrades will take time to fully implement and result in a suboptimal grid in enabling energy security and transition until they are in place. Furthermore, the 2023 Skidmore Review found that potential investors are deterred from investing in renewables projects due to constraints connecting to both transmission and distribution networks. Challenges with grid infrastructure at the transmission and distribution levels may require a range of solutions. As with energy planning, reform must be implemented at pace to ensure no further delays to critical grid and generation development.

- **Transmission level**: Upgrading transmission networks involves reinforcing high-voltage infrastructure to manage long-distance electricity transport, ensuring it can handle increasing capacity from renewable generation sites (e.g., offshore wind farms). Key levers include investment in new high-capacity lines, accelerating the approval process for Nationally Significant Infrastructure Projects (NSIP), and enhancing inter-regional coordination through the National Energy Systems Operator (NESO) to manage load balancing and prevent bottlenecks.
- Distribution level: At the distribution network level, the challenges lie in integrating decentralised energy resources, such as small-scale renewables and storage systems, while maintaining local grid stability. The solutions here focus on deploying smart grid technologies, enhancing the flexibility of local grids, and facilitating faster connection processes for smaller energy generators. The use of Local Area Energy Plans (LAEPs) and the involvement of Regional Energy Strategic Plans (RESPs) are critical in aligning local energy generation with grid capacity. A more flexible demand-side approach can also play a vital role in helping to balance local grids in a cost-effective way and minimise the amount of grid reinforcement required to alleviate congestion on the network.

#### **Pipeline infrastructure**

In addition to electricity grid constraints, the region's pipeline infrastructure presents its own set of challenges for energy security during the transition to a low-carbon economy. As unabated fossil fuel power plants are phased out, the existing natural gas pipeline networks – many of which currently serve these plants – may become underutilised. Repurposing these assets for hydrogen or other clean fuels introduces complexities that need to be addressed, such as ensuring compatibility with new energy vectors and identifying the areas where infrastructure upgrades or replacements will be required. The role of pipelines in transporting clean fuels, such as hydrogen, will be critical for the Midlands' energy security and decarbonisation efforts, but their integration into regional and national infrastructure plans remains a significant barrier. Ensuring that pipeline infrastructure can support the transition, while managing the decommissioning or repurposing of natural gas networks, is a strategic challenge that must be resolved in parallel with electricity grid upgrades.

#### Water supply

Water supply and wider water security is a critical factor, particularly for clean hydrogen production and future nuclear energy projects. We recognise the importance of aligning water and energy infrastructure planning to support the region's long-term energy security goals.

#### Finance

It is well understood that the energy transition will require the mobilisation of extensive amounts of capital, public and private. DESNZ estimates that since 2010, the UK has seen £300 billion of public and private low carbon investment, and that a further £100 billion of private investment is expected for the UK's energy transition by 2030. Other estimates suggest that as much as £900bn of capital investment will be needed by 2050 to enable the energy transition. Early Government signals such as the new National Wealth Fund are an encouraging contribution to crowding in private investment, and further action on grid infrastructure and energy system planning will be required quickly to unlock the finance barrier.

#### Skills

The Midlands is projected to create 196,000 new jobs by 2041 in green growth sectors, accounting for 4.3% of current regional employment. This represents a significant opportunity and challenge as businesses need to recruit and train workers for the long-term energy transition. According to the National Grid, 54,000 new roles, including clean gas experts and carbon capture scientists, are required in the Midlands to help the UK achieve net zero by 2050. There is a variation in skill levels

required across different energy technologies and 30-40% of current skills in the national energy sector are expected to become obsolete over the next decade due to the shift from fossil fuels to renewables. Despite an increase in engineering graduates, the sector still relies on overseas talent due to a domestic skills shortage. These insights paint a complex picture of the skills requirements for energy security. The recently announced Skills England is a positive step in creating a more responsive skills system, but more will be required locally to ensure skills supply meets demand from the clean energy sector. Apprenticeships in particular will play a vital role in helping to grow the region's skills capability to help deliver the energy transition.

#### Engagement

Challenges around community and industry engagement also pose barriers to delivering energy security. Discussions for this White Paper have illustrated concerns about deep opposition from communities and politicians for new large-scale development, such as onshore wind. Stakeholders report frustration amongst businesses with uncertainty and delays in the current transition approach. Furthermore, to make energy efficiency improvements to support energy security in the shorter term will require community and business consensus, and explicit resolution of the tangible, local barriers to change, for example digital connectivity. Community energy projects can help improve engagement through people having a greater stake in the energy transition, which could in turn help to reduce opposition to local and national energy projects.

#### **Energy efficiency**

The industrial core of the Midlands economy requires a more efficient use of energy to achieve energy security and ensure higher productivity and competitiveness. Currently, there is no policy or programme in place to support this, at a national or regional level. The opportunity exists to improve business processes in energy-intensive firms, using tried and tested technology. Some areas in the Midlands, such as the Black Country Industrial Cluster, have made good progress towards this with initiatives like advisory services and capital grants. However, more substantial policy measures and investments are needed.

#### Midlands Engine Energy Security White Paper

#### The Midlands Engine Partnership's Energy Security White Paper

[https://midlandsengine.org/powering-energy-security/] (due to be published 17th December) highlights that energy security is increasingly core to economic growth, with high cost imported energy posing an existential threat to many industrial firms and national ambitions for growth in advanced manufacturing, and the potential to rapidly scale domestic clean energy and technology providing new high value jobs.

The White Paper highlights the ambition and commitment of industrial clusters in the Midlands to decarbonisation as demonstrated by examples such as the Black Country Industrial Clusters 'Repowering the Black Country' initiative, the Humber 2030 vision and the Midlands Aerospace Cluster Decarbonisation programme. However, the White Paper also highlights the barriers to industrial decarbonisation and electrification including grid capacity (as detailed in the responses to the questions above). White Paper recommendations are made concerning grid upgrades (as detailed above), development of behind-the-meter solutions and adoption of smart grid solutions, as well as the need for policies and programmes to encourage industrial energy efficiency.

### 17. What examples of international best practice to support businesses on energy, for example Purchase Power Agreements, would you recommend to increase investment and growth?

Demos (in partnership with SEGRO) call for The Department for Energy Security and Net Zero to work with Ofgem and National Grid ESO to create a "Priority Power Access Plan" which puts industrial infrastructure projects at the front of the queue for grid access.

Midlands Engine are asking Government to support the creation and expansion of energy demonstrators across the Midlands, supported by programmes such as the Energy Research Accelerator and partnerships such as Energy Capital, and the development of Energy Innovation Zones to go beyond demonstration, to market-making and large-scale commercialisation of integrated energy systems, in support of UK Industrial Strategy.

Innovation and expertise in the Midlands could also be leveraged to integrate the ample supply of food waste held by local authorities in the region into bioenergy and anaerobic digestion. Waste heat produced by industry and commerce could also provide a vital fuel source for future low carbon heat networks.

The Midlands has a large cohort of industrial actors committed to the goal of energy independence, willing to test and scale up new sustainable fuels and industrial energy efficiency solutions. These clusters have untapped potential in increasing UK content in clean energy supply chains, building on the region's historical track record of supporting supply chain adaptation to new markets. With large and small firms in manufacturing, engineering, digital and logistics, enabled by a nationally critical transport network, no other region has the same level of industrial activity as in the Midlands. The dispersed nature of these firms means that large infrastructure projects currently prioritised in national policy, such as carbon capture and storage, cannot economically decarbonise this cluster. There is a need for more local solutions for which the Midlands can be a UK testbed. The region's industrial clusters are therefore mission critical to the national industrial strategy and energy strategy. The Humber 2030 Vision for Industrial Decarbonisation, the 'Repowering the Black Country' initiative, the Black Country Industrial Cluster's energy efficiency pilot with DESNZ and the Midlands Aerospace Alliance's 'Decarbonising the Midlands Aerospace Cluster' initiatives are other examples that demonstrate the ambition and commitment of Midlands industrial clusters to decarbonise.

The Midlands Engine's *Energy Security White Paper* [https://midlandsengine.org/powering-energy-security/] (due to be published on the 17<sup>th</sup> December 2024) outlines further evidence and examples of how investment in energy security measures will benefit both the Midlands and wider UK economy.

Moreover, a strategy on each key area from decarbonised heat to green gas and a focus on community energy following models in Scandinavia and parts of the Scottish Highlands would be welcome. Similarly, adopting successful international practices, such as Germany's Energiewende for renewable energy incentives, Denmark's community-owned energy systems, and South Korea's smart grid technology for efficient energy management, could drive innovation in the Midlands. These approaches would help lower costs and support the development of a green economy aligned with the UK's Industrial Strategy.

#### **Business Environment - Competition**

### 18. Where you identified barriers in response to Question 7 which relate to competition, what evidence can you share to illustrate their impact and what solutions could best address them?

To address barriers relating to competition we need to focus on the UK's global competitiveness and encourage cross-regional working. Currently as it stands the UK has many strengths, with specific Midlands clusters outlined in Q1, however it faces both internal and external competition. Internally, UK regions often operate in silos and compete against one another, limiting their ability to leverage strengths and resource as shown by competitive funding models. Externally, the UK faces global competition with Europe and the US who offer simpler and better economic incentives such as tax.

Evidence from the Midlands Engine suggests that collaboration between government, academia and industry can drive significant growth. In partnership, these bodies allow for the sharing of expertise,

resource (including pooled funding) and networks to compete on a global scale. Policy alignment and further devolution allow to reduce fragmentation and boost competitiveness.

In addition, oligopolies in sectors such as telecommunications, energy supply and distribution, and logistics and transport can inhibit competition. With a limited number of dominant players, these markets often restrict choice, inflate prices, and hinder efficiency and innovation for. To enhance the UK's global competitiveness and foster more inclusive economic growth, addressing these market structures is crucial. Potential solutions include regulatory reforms to facilitate SME market entry, incentives for smaller businesses, and robust monitoring and enforcement of fair competition practices by government bodies like Ofcom and the Department for Energy Security and Net Zero (DESNZ). These measures would help create a more competitive and dynamic environment.

### **19.** How can regulatory and competition institutions best drive market dynamism to boost economic activity and growth?

Clear and positive regulatory frameworks, such as those for fusion energy and hydrogen, will instil confidence in investors, driving growth in the Midlands and the wider UK. Following Nottinghamshire's example, regulatory innovation should focus on cutting through red tape to promote faster business growth. Priorities for regulatory bodies should include enabling SME participation, encouraging green practices, and ensuring digital connectivity—all key to fostering a competitive, dynamic market. Expanding infrastructure access for all providers, including alternative networks, will boost choice, reduce costs, and encourage innovation.

Incentives for sustainable practices, such as tax breaks for businesses adopting low-carbon technologies, will support the region's net zero and green growth ambitions. Streamlining support for SMEs in high-demand sectors, like telecommunications and green energy, by simplifying compliance and lowering entry barriers, will drive innovation and foster healthy competition. Strengthening competition in key sectors, through policies like infrastructure-sharing for alternative networks and access to renewables for smaller energy firms, will promote fair pricing and sustainability.

#### **Business Environment - Regulation**

### **20.** Do you have suggestions on where regulation can be reformed or introduced to encourage growth and innovation, including addressing any barriers you identified in Question 7?

Public contract regulations: Public contracts and procurement regulations are not allowed to stipulate that contractors of services, materials or products must be local companies or SMEs, therefore missing out on benefitting local companies and the local economy. This is seen in the case of Trams, where none of the components or systems are manufactured in the UK. This is stifling innovation in UK regions where Trams and alternative transport methods are needed for smaller urban areas. There are too many missed opportunities for the UK.

Circular Economy: Looking at the opportunities to recycle materials being produced in manufacturing operations, more specifically to foundry work and part machining. What is becoming clear is that there are, amongst things, two aspects of manufacturing operations that are hindering the ability of companies to recycle materials externally to their business operations. These are firstly for permitted operations, where the permit for them to operate does not include the ability to reclassify a material from waste to a potential raw material for a third party to make use of. This stops them selling it/ giving it away for someone else to use. As to do so it outside their permit to operate and they would be prosecuted for doing so. One example here is sand from a foundry operation that the foundry can no longer use but may well be viable for inclusion in tarmac or building products. The other is the classification of metal swarf, bar ends or other metallic dross; once this is deemed to be waste, it is strictly controlled over who can carry and transport it, where it can be taken or again may be

contrary to the companies permit to work if it is a permitted process. If these materials are to be recovered by novel or new techniques, without going through the complete recycling process back to molten metal and recast into bar stock, ingot or plate, then the companies need to be able to sell it on as a "product" without being constrained by the waste legislation. Both of these are areas that need to be reviewed to allow freedom to recycle this type of product.

In addition, regulation needs to move more rapidly to meet current industry demands and the pace of technological change as it often lags behind, where there is a need for reduced levels of bureaucracy. There is a need to seek a reduction in the levels of administrative burden and costs on UK businesses where possible. Regulation should also be reformed to allow for a more UK-centric approach to procurement and planning that recognises the reality of international competition and increased trade barriers. For example, the Small Modular Reactor (SMR) competition has involved the British taxpayer subsidising foreign competitors against a UK incumbent.

#### **Business Environment – Crowding in Investment**

21. What are the main factors that influence businesses' investment decisions? Do these differ for the growth-driving sectors and based on the nature of the investment (e.g. buildings, machinery & equipment, vehicles, software, RDI, workforce skills) and types of firms (large, small, domestic, international, across different regions)?

Whilst every investment and its requirements are unique, there are general factors (i.e., political and economic stability; inflation; interest rates; construction materials; labour; energy availability and cost, etc. as defined in the Harrington Review) which are part of a business/investor's consideration and can be addressed as part of a proactive targeted investment strategy to create favourable conditions. However, a distinction needs to be made between large firms and SMEs, where SMEs are more likely to consider factors like access to finance, skills and certainty over labour costs.

Experience shows that there are almost always elements of rational and emotional factors behind every investment decision. Investors welcome local intelligence and support, a sense of a place's momentum and its narrative, connections with the local ecosystem and clusters (which are not necessarily sector or site-specific but give a sense of community that can't be met at regional or national level). FDI investors often welcome connections with others at a local level from their home country or have a strong sense of civic partnership and want to connect with local communities. Some have personal connections with a place, through family, sport, alma mater, etc.

Institutional investors, of course, look for opportunity, return on investment, yield, and established markets to manage risk, often seeking the public sector to help absorb some of that investment risk.

Global competitiveness is the biggest influencer of foreign direct investment decisions. We need to ensure we are an environment that accelerates growth and provides stability by showing a pathway of support and investment across locations. Incentives and subsidies are key to conversion, especially if competing intra-UK or internationally. However, the ultimate business decisions are driven by market access, talent, and supply chain proximity.

Within this context, the United States' Inflation Reduction Act (IRA) has been discussed as a model to follow. The act is based largely around tax credits for investment in new facilities and subsequent production, the size of the credits available is in part determined by factors such as domestic content (for example, steel), location of the projects in "energy communities" (brownfield sites impacted by the transition away from fossil fuels), or in "low-income communities". Significantly, the IRA links credits with wage and apprenticeship requirements, an attempt to ensure not just jobs, but good jobs, are enabled by the transition. The longevity of the credit, extending a decade after the IRA's implementation, provides incentives for both the start-up and production phase of a project. This sends a strong signal to potential investors, offering stability and certainty.

#### **Business Environment – Mobilising Capital**

22. What are the main barriers faced by companies who are seeking finance to scale up in the UK or by investors who are seeking to deploy capital, and do those barriers vary for the growth-driving sectors? How can addressing these barriers enable more global players in the UK?

The main barriers faced by companies seeking finance to scale up in the UK, particularly those in innovation-rich sectors like university spinouts and startups, include several key challenges:

- Multiple growth stages dilute liquid equity, deterring major/corporate investors at later growth stages, especially if the company is a university spinout and thus a substantial (up to 50%) of equity is held by the university.
- Spinouts and scale ups in emerging technology sectors and life sciences require long-term, deep investment, often upfront, so are seen as riskier compared to other sectors. Thus, there is a shortage of patient capital as many investors are after quick returns which limits the availability of patient capital, which is essential for sustainable growth.
- Many SMEs rely on traditional bank loans, which may not be sufficient for scaling. Limited access to alternative funding sources, like venture capital or grants, restricts growth opportunities.
- Traditional lenders often require significant collateral and strong credit histories, which can be challenging for newer businesses, hindering their ability to secure loans for scaling.
- A lack of commercial acumen among academic founders, who largely focused on the technical side of their product, is leading to imbalanced deals and a lack of understanding of venture capitalists and what funds are looking for.
- Similarly, many businesses struggle with financial planning, budgeting, and cash flow management, which can weaken their ability to make a compelling case for investment.
- Proper training and mentorship are needed more broadly across the ecosystem (including direct mentorship within accelerators), covering business growth planning and thus returns on investment (ROI) and development milestones that can be articulated to investors. Often businesses approach investors but do not meet the fund criteria and so are turned down. Equally, founders 'don't know what they don't know,' and don't have the resources to explore multiple risky avenues, thus missing opportunities.
  - This can also be helped by properly mapping out the ecosystem and different investors/roles at each stage of growth, i.e. as you scale you will want to approach x, and then y.
- A perception of easier access to finance and higher valuations in the US, but lack of realisation of the capital required to access the US market, such as for regulatory approvals. Many businesses that try to access the US market thus fail.
- High-growth sectors, such as digital tech and green industries, often lack tailored financing options, leaving companies without the necessary capital to scale effectively.
- Regulatory complexities and compliance requirements can create additional costs and slow access to capital, diverting resources away from growth initiatives.
- Not all businesses are appropriate for venture capital funding.

Additionally, one of the key barriers to scaling up in the UK, particularly outside of London, is the lack of connectivity in the ecosystem for deploying capital into scale-up businesses, especially in hardware and software sectors. There is a pressing need to create a more connected ecosystem that links public investment with private capital in a way that focuses on a clear return on investment for all stakeholders. Addressing these barriers—by fostering a stronger link between public and private investment, increasing support for mentorship, and improving access to appropriate funding sources—would help create more competitive, globally active companies in the UK.

## 23. The UK government currently seeks to support growth through a range of financial instruments including grants, loans, guarantees and equity. Are there additional instruments of which you have experience in other jurisdictions, which could encourage strategic investment?

One potential instrument to support strategic investment is offering head leases on property to help scale-up businesses, rather than focusing on funding the construction of buildings like at Harwell. By becoming an anchor tenant, the Government can help make properties available on flexible terms for high-growth companies. Additionally, expanding incentives such as National Insurance relief to all target businesses across the UK, rather than limiting them to Investment Zones or Freeports, could encourage broader investment.

Another would be following a similar approach to Switzerland's investment promotion agency model, the 'Basel Area Business & Innovation' – a non-profit investment promotion agency dedicated to supporting its startups, institutions, and companies to find success (including business expansion into Switzerland). The agencies success lies in its ability to connect organisations and entrepreneurs with the right collaboration partners, providing tailored support, including office space, site visits, business setup assistance, and opportunities for networking and collaboration. This model is underpinned by the decentralised Swiss canton system, where each canton has the flexibility to set its own investment policies and tax rates, offering competitive corporate tax rates and R&D deductions. By adopting a more localised, flexible approach to investment promotion, the UK could foster a more connected and supportive ecosystem for high-growth sectors, encouraging both domestic and international investment.

Green Bonds could be another financial instrument to encourage strategic investment. Green bonds are debt instruments issued to finance environmentally friendly projects, such as renewable energy and sustainable infrastructure. The Midlands Engine is working on a green bond initiative that will support local businesses and public sector projects focused on decarbonisation. By combining public sector backing with private investment, this initiative aims to provide long-term, affordable capital, driving sustainable growth and green innovation across the region.

For the tech sector, unlocking investment for high-growth SMEs can be achieved by advancing initiatives like the Mansion House Reforms, which aim to optimise private pensions and channel more institutional investment into innovative businesses. Targeted programmes, such as the Venture Capital Fellowship, should be expanded to foster greater diversity within the scale-up ecosystem, ensuring that more entrepreneurs, particularly from underrepresented groups, have access to capital and support. Additionally, restoring confidence in the UK's R&D tax relief scheme is crucial, with a focus on long-term policy stability, efficient administration, and enhanced support for SMEs. Streamlining access to public funding, such as Innovate UK grants, and increasing funding options for commercialising innovative technologies will help accelerate the growth of the UK's tech sector, making it more competitive on the global stage.

#### **Business Environment – Trade and International Partnerships**

### 24. How can international partnerships (government-to-government or government-to-business) support the Industrial Strategy?

International partnerships can simplify the inward investment landscape while increasing support for 'product development' and 'concierge services' to attract investment into clusters.

The inward investment landscape in the Midlands (and across England) is highly complex, with multiple agencies and organisations operating with overlapping remits and geographies. This complexity creates uncertainty for investors seeking clarity and stability in decision-making. The Government should increase long-term, consistent support to local partners for 'product development' and 'concierge services' aimed at attracting investment into clusters.

For example, in the Midlands (10.6 million people, 27,000 km<sup>2</sup>), there are more than 25 organisations responsible for attracting inward investment, yet only 35 staff dedicated to key account management and investor engagement. In comparison, regions like Invest Northern Ireland employ 500 staff and have an expansive budget, making their inward investment efforts more streamlined and efficient. Similarly, the Department for Business and Trade (DBT) has been and is currently facing resource constraints that impact its ability to fully carry out its responsibilities.

In another example, France's model of linking national and regional civic partnerships with commercial opportunities, such as Lyon's work in the hydrogen sector, also highlights the importance of political engagement at the right level. Political dignitaries are needed to help secure large investment opportunities, and the focus should not just be on the capital deployed in immediate deals but also on the long-term potential of these relationships.

Further examples, such as Marketing Derby's international partnerships, such as those with Toyota City (Japan) and Hefei/Anhui (China), also show the value of going beyond just civic relationships. Successful partnerships involve businesses, education providers, sporting organisations, and tourism partners, creating a broader ecosystem that can be leveraged for ongoing investment and growth.

Multilateral relationships like Horizon Europe should also not be forgotten.

### 25. Which international markets do you see as the greatest opportunity for the growth-driving sectors and how does it differ by sector?

The key international markets for innovation-driven growth in the Midlands include Europe, (particularly Germany, France, Italy, and Spain; with the European Union being our richest market), as well as the USA, Australia, Singapore, South Korea, and Japan. These markets are being targeted by the £3m Invest in UK University R&D Midlands Campaign, which involves 17 Midlands universities and aims to attract greenfield investments, contract research, product development, and other opportunities.

The Midlands Engine plays a crucial role in delivering this programme, providing vital regional coordination and support. By focusing on these countries, the campaign seeks to leverage the Midlands' strengths in science, research, and technology to boost foreign direct investment (FDI) in priority sectors like the Creative & Digital Industries, Health and Life Sciences, Transport Technologies, and Zero Carbon Energy.

The initiative includes outbound missions and inbound R&D engagement, capitalising on universities' existing global networks with research partners, industry players, and alumni. This strategic focus on key international markets positions the Midlands as a leading destination for innovation and investment.

#### Place

## 26. Do you agree with this characterisation of clusters? Are there any additional characteristics of dimensions of cluster definition and strength we should consider, such as the difference between services clusters and manufacturing clusters?

As detailed in Q1, the Midlands Engine has worked with organisations including The Data City to map clusters by their investment potential in the Midlands. While a quantitative analysis of similarities in product and service of businesses can help indicate a concentration and possible clustering, the real value is understanding and articulating connectivity – the ecosystem.

Connectivity through individuals and supply chain leads to innovation and growth through trade. Clusters are particularly strong when there is an entity playing a proactive connection role (such as networking for a for SMEs). This could be site-based, such as HOBIRA MIRA Technology Park's cluster lead and activity for tenants, or through industry bodies like the Midlands Aerospace Alliance.

As such, mapping and understanding clusters through their business, talent, innovation and investment 'ecosystems' is important, but should be complemented by understanding who those connecting entities are – and where they could be.

Clusters should be viewed as ecosystems, and understanding this ecosystem (from business specialisations and workforce pipeline to innovation assets and market share) allows you to use the concept of clusters as a marketing tool – i.e. clusters can be articulated in response to an opportunity, such as from a major international energy company, then here is the energy ecosystem in x y and z locations.

When looking at additional characteristics, it should be considered than clusters often cross political and administrative lines. For example, and again, MIRA Technology Park attracts global companies, benefiting multiple local areas across the Midlands. These clusters are also not limited to a single sector or location, where for example in Derby the combination of industrial expertise, professional services, and educational institutions fosters interdisciplinary collaboration and innovation.

The role of towns and cities, such as Derby's city centre plays an important role in supporting diverse business sectors and building their economic identity alongside investment in the public realm and community access critical for retaining business and talent. While sector-based approaches are useful, the strategy must clarify how different places and sectors will interact to ensure holistic regional development.

Lastly, on the point of looking at cluster strengths, manufacturing remains stronger in the North and Midlands compared to London, where tradeable services dominate. Regions with a historical manufacturing base continue to have higher shares of manufacturing jobs, but overall, those jobs have declined. This shift has increased reliance on lower-wage, low-productivity service industries like hospitality, reducing economic opportunities for people with practical skills but without university education.

#### 27. What public and private sector interventions are needed to make strategic industrial sites 'investment-ready'? How should we determine which sites across the UK are most critical for unlocking this investment?

Government should consider extending Enterprise Zone status and benefits. There are 48 enterprise zones across the UK with well-established business communities and ambitious growth plans. These are thriving business parks not starting from scratch but able to build on extant success.

To make strategic industrial sites 'investment-ready,' several public and private sector interventions are crucial. Grid connectivity is a top priority for growth, followed by transport infrastructure. The forthcoming Midlands Engine *Energy Security White Paper* [https://midlandsengine.org/powering-energy-security/] (due to be published 17th December) highlights these issues, particularly as many large industrial sites are located outside city regions or on their periphery. In the Midlands alone, there are over 105,000 hectares of such sites in the Midlands Investment Portfolio alone, ripe for B2 industrial use and above.

Government needs to act as an enabler, offering ambassadorial power and stability beyond Whitehall, engaging with high-potential opportunities, even if the initial investment is smaller than typical standards. Supporting businesses with high growth potential, such as 500-person firms, is key to unlocking investment. While large-scale projects like Investment Zones (IZs) and Freeports are important, we should prioritise sites ready for immediate development to build momentum and create demand for these longer-term initiatives. Devolving decision-making and funding for strategic sites to Combined Authorities, based on local plans and linked to Local Growth Plans, would better unlock a pipeline of regional sites. This phased pipeline would benefit from local/regional leadership, clear return-on-investment goals, and support for feasibility studies, land assembly, planning, and design.

Public investment is essential to unlock these sites and attract private investment. Additionally, linking sites to local skills and infrastructure plans will ensure a holistic approach. Devolution to a regional level offers a more coordinated and effective solution.

### 28. How should the Industrial Strategy accelerate growth in city regions and clusters of growth sectors across the UK through Local Growth Plans and other policy mechanisms?

To accelerate growth in city regions and clusters across the UK, it's vital to provide funding to local industry bodies and Chambers of Commerce as 'cluster development organisations,' as the sector experts to connect and promote their local capabilities, and organisations working to accelerate region-wide growth such as the Midlands Engine. This can ensure 'conditions for success' across all regions, not just those with Combined Authorities (79% of the Midlands geography and 52% of its economy currently fall outside CA areas). The current focus on mayoral-driven Local Growth Plans is problematic for areas without a mayor, creating instability and uncertainty in regions without devolution - and necessitating the continued existence of the Midlands Engine which is the only organisation actively working to connect all local authority areas to attract inward investment and drive growth.

The Industrial Strategy must be long-term, supported by sustained funding commitments, and flexible enough to accommodate the unique needs of regions and clusters. This would enable proper planning and minimise bureaucracy, particularly by reducing reliance on burdensome competitive bidding processes. Agreeing funding settlements quickly, based on Local Growth Plans, would allow regional, local and sectoral partners to focus on delivery and drive growth in key areas across the UK.

The added value of collaborative partnerships, including the Midlands Engine, in facilitating a strategic view across local geographies should be considered as part of this approach.

### 29. How should the Industrial Strategy align with devolved government economic strategies and support the sectoral strengths of Scotland, Wales, and Northern Ireland?

The Industrial Strategy should ensure that Combined Authorities (CAs) and regions in England are granted equivalent powers, particularly in terms of incentives and subsidies, to those available to the Devolved Governments in Scotland, Wales, and Northern Ireland. This is crucial for fostering fair competition across the UK.

In addition, the strategy must encourage collaboration across regions to align strengths, rather than promoting internal competition. Midlands Engine is an established and respected structure with the remit to connect across the region and therefore could play an important role in this. Key sectors like hydrogen and battery development offer clear opportunities for a joined-up approach. Wales and the South West hold potential for lithium extraction and raw material supply, while the Midlands excels in innovation, R&D, and supply chain capabilities, and the North East could lead in large-scale manufacturing. By coordinating these regional strengths, the UK can present a unified value proposition to investors rather than forcing them to choose between individual sites.

Historically, devolved administrations have been able to offer higher levels of financial incentives to attract inward investors, putting English locations at a disadvantage. To ensure a level playing field within the UK, financial powers and incentives need to be harmonised across all regions before even considering international competition for Foreign Direct Investment (FDI).

#### **Partnerships and Institutions**

### **30.** How can the Industrial Strategy Council best support the UK government to deliver and monitor the Industrial Strategy?

The Industrial Strategy Council should engage with areas not covered by devolution and focus on the scale-up potential of growth clusters, not just the needs of large businesses. The Midlands Engine can play a key role in this, acting as an effective conduit for engaging diverse regions and ensuring a balanced, collaborative approach. For instance, 79% of the Midlands geography, 51% of its population and 52% of its economy fall outside a Combined Authority. The Council should ensure sufficient funding is devolved to regions and local authorities to enable effective implementation of the Strategy, allowing for tailored approaches that reflect local opportunities and challenges.

Additionally, responsibility for the delivery of the Strategy should be shared across government departments to promote a joined-up, multi-disciplinary approach. The development and execution of the Strategy must be a genuine partnership between the public and private sectors, with an emphasis on achieving outcomes that include both social and environmental impacts. The relationship between place-based support and sectoral development should be explored and understood to ensure the Strategy's effectiveness across all regions.

As per the logistics of delivery and monitoring, it should focus on independent evaluation with datadriven insights and key performance indicators, tracking metrics like investment, job creation, and sustainability, while benchmarking against international standards. The ISC should provide biannual or annual policy reviews with recommendations based on outcomes, ensuring adaptability and continuous improvement. Feedback loops with government should also be established to enable real-time policy adjustments. Sector working groups, regional forums, and the Midlands Engine can foster collaboration and alignment with local economic priorities, supporting ongoing policy adaptation to emerging challenges.

The council must also ensure that it has adequate representation from universities and SME-based businesses across various industries – including manufacturing, construction and metals – these are the key 'horizontal' sectors which support growth industries.

### **31.** How should the Industrial Strategy Council interact with key non-government institutions and organisations?

The Industrial Strategy Council should establish an Advisory Board with regional – place-based - representation to ensure a balanced approach across all areas of the UK. This should include Combined Authorities (CAs) and regions grouped by the North, Midlands, and South, but must also engage areas not covered by devolution to capture the growth potential of smaller businesses and emerging clusters, not just large, established firms.

The Midlands Engine can serve as a key conduit to support this representation, offering established apolitical networks, especially given that many CAs are still in their early stages and may not yet be able to take on additional roles.

In addition, the Council should engage directly with sites of strategic interest, maintaining regular contact as the Industrial Strategy is delivered and monitored (such as through virtual seminars and enewsletters). It is essential that cluster bodies are allowed to be commercially led and cross-regional, rather than driven solely by local authorities. Furthermore, the Council should leverage existing sector bodies, trade unions, and business organisations such as Chambers of Commerce, FSB, and CBI to engage a broad spectrum of businesses. There is no need to reinvent the wheel when well-established policy infrastructure already exists across the UK – especially with for example, the Midlands Engine who has already formed many of these networks.

### **32.** How can we improve the interface between the Industrial Strategy Council and government, business, local leaders and trade unions?

To improve the interface between the Industrial Strategy Council and government, business, local leaders, and trade unions, businesses need clarity on how they can engage with the Council and influence policies that impact growth in their areas. Existing structures, such as tenant steering groups in Enterprise Zones and Science Park sites, can facilitate this engagement, ensuring that businesses have a direct channel to shape policy. For example, the Midlands has 8 Enterprise Zones which are well established clusters of often OP rich businesses, many with growth plans. Government should not overlook this thriving network of zoning in future policy and look to reempower them with renewal of tax and rates powers.

The Midlands Engine, which has established networks and the ability to forge new connections, plays a crucial role in linking businesses with key stakeholders and promoting broad-based engagement. This is demonstrated by the Midlands Engine Partnership's *Food White Paper* [https://midlandsengine.org/home/midlands-food-and-agri-tech/] and an *Energy Security White Paper* [https://midlandsengine.org/powering-energy-security/] (due to be published 17th December) which have been developed with the involvement of over 160 organisations from industry, local government and the wider public and private sectors, academia and the third sector.

It is also crucial to consult those on the frontline with hands-on experience of delivery, not just those involved in policy writing. The strategy must be underpinned by tangible delivery plans, which are adequately funded at local, regional, and national levels to ensure effective implementation.

#### **Theory of Change**

### **33.** How could the analytical framework (e.g. identifying intermediate outcomes) for the Industrial Strategy be strengthened?

Be explicit between the link between investment, outputs, and how these contribute to outcomes and long-term impact. Ensure transparency by sharing assumptions around multipliers, additionality, deadweight, and leakage (amongst other factors) to establish a consistent methodological approach. This would allow stakeholders to better assess the relationship between outputs, outcomes, and impacts without relying on costly consultancy to produce Treasury Green Book business cases.

Incorporating Green Book principles into the strategy's implementation could strengthen its analytical framework. Lessons from the Midlands Engine-supported conference on Green Book best practices provide valuable insights, where key recommendations include returning to basics to ensure the strategy is clear, measurable, and focused; allowing sufficient time for reflection to refine approaches; seeking an external perspective for objectivity; leveraging devolution to its full potential; and avoiding an overreliance on the Benefit-Cost Ratio (BCR) as the dominant metric. These steps would ensure a more robust, flexible, and inclusive implementation process for the Industrial Strategy.

It is also essential to balance long-term planning with actionable short-term steps to avoid pitfalls, such as those seen with the Zero Emission Vehicle (ZEV) mandate, which created short-term hype but lacked sustained focus. Intermediate outcomes should be clear, deliverable building blocks that establish momentum and drive immediate results. For instance, addressing the pressing issue of power availability is crucial for enabling sites to come online in the next five years. Government must avoid wasting resources on political positioning and instead focus on strategic co-investment with the private sector while developing a deeper understanding of the global competitive landscape.

### 34. What are the key risks and assumptions we should embed in the logical model underpinning the Theory of Change?

The risk assessment should incorporate megatrends, ensuring that these long-term global shifts are embedded into the business-as-usual approach. This requires regularly monitoring and adapting to trends such as technological advancements, demographic changes, and shifts in global markets to future-proof the strategy. One recent report which outlines relevant and up-to-date megatrends is Midlands Engine's *Megatrends in the Midlands report* [https://midlandsengine.org/wp-content/uploads/2023/11/Megatrends-Full-report-with-Cover.pdf] highlighting and detail the following megatrends: Technology and Digitisation; Climate Change and Net Zero; Rising Geopolitical Tensions; and Demographic Trends.

Additionally, every aspect of the logical model must be evaluated through the lens of the UK's global positioning. This means considering the country's competitive advantages, international relationships, and evolving geopolitical dynamics to ensure the strategy aligns with global opportunities and challenges. Without this global perspective, there is a significant risk of misalignment with market realities and missed opportunities for international collaboration and investment.

#### 35. How would you monitor and evaluate the Industrial Strategy, including metrics?

To effectively monitor and evaluate the Industrial Strategy, a clear performance management framework should be established at the outset, defining what success looks like with measurable baselines. Metrics should be tracked at the Local Authority level and updated annually, with results published in a transparent and accessible open data platform. Evaluation needs to carry significant weight, ensuring it goes beyond tokenistic process evaluations. Monitoring and evaluation frameworks must be designed alongside the project setup to be fit for purpose, avoiding tokenistic approaches like those seen in gainshare monitoring and evaluations.

Where possible, metrics should focus on inclusive growth, incorporating indicators such as household disposable income, life expectancy, health inequality, and social impact alongside traditional measures like GVA and productivity. Case studies could be used to add context, highlight best practices, and showcase successful initiatives. Rewarding regions or sectors that demonstrate measurable improvements in these key metrics could incentivise progress. Lastly, there must be a shared agreement on what constitutes success and over what timeframes, allowing for both accountability and flexibility in achieving long-term goals.

#### **Additional Information**

#### 36. Is there any additional information you would like to provide?

To ensure a comprehensive and collaborative approach, the Midlands Engine has engaged with a wide range of partners to inform this consultation, bringing diverse perspectives and expertise.

This includes key stakeholders from academia, industry, local government, and business, all of whom contribute to shaping an inclusive and strategic vision for the region.

Partners engaged in this process include the University of Warwick, The Productivity Institute, HORIBA MIRA & Mira Technology Park, Marketing Derby Ltd, techUK, Galvanizers Association, UK Metals Council, The Data City, University of Leicester, David Nieper Ltd, West Midlands Combined Authority, Nottinghamshire County Council, University of Nottingham, Midlands Connect, and E.ON. UK.