Driving growth through regional innovation clusters

Through collaboration and partnership, our universities are driving innovation clusters to deliver economic growth and transform their local communities.

Russell Group universities across the UK play a crucial role as anchor institutions, collaborating with businesses, education partners and local communities to build and drive regional innovation clusters. By harnessing these partnerships, our universities draw in vital external investment, deliver regional growth, reduce inequality, and transform their local areas for the better with new infrastructure, homes and high-value jobs. Our universities are located in major cities across the UK and we look forward to working with government to maximise the impact of regional innovation clusters centred around research-intensive universities as it implements the new Industrial Strategy.

How we work collaboratively to drive regional progress

Russell Group universities are committed to driving regional progress by:

- **Facilitating and supporting collaborations:** As international experts in their fields and local experts in their region's capabilities, research-intensive universities bring together the expertise needed to tackle complex global challenges - including academic leaders across disciplines, local businesses and domestic and international industry partners. They provide access to advanced research facilities and laboratories and facilitate the exchange of knowledge through conferences and collaborative networks, helping to catalyse innovation and technological breakthroughs.

  A partnership between the University of Glasgow, Scottish Enterprise and Glasgow City Council, the Glasgow Riverside Innovation District (GRID) aims to create a world-class innovation cluster to boost collaborations with industry. Supported by the university’s £1bn West End redevelopment programme, GRID is home to the world-leading Clinical Innovation Zone.

- **Supporting commercialisation:** Russell Group universities' technology transfer offices facilitate the commercialisation of research, driving innovation in new products and services, and the creation of new startups and spinouts. Universities foster entrepreneurial ecosystems, with many hosting incubators and accelerators that launch new businesses and support them to scale, offering mentorship, funding and resources. In 2021/22 businesses spun out of the 24 Russell Group universities alone supported over 80,000 jobs and generated £17.8bn in economic output.1

1 A partnership between the University of Glasgow, Scottish Enterprise and Glasgow City Council, the Glasgow Riverside Innovation District (GRID) aims to create a world-class innovation cluster to boost collaborations with industry. Supported by the university’s £1bn West End redevelopment programme, GRID is home to the world-leading Clinical Innovation Zone.
• Attracting private investment: The presence of leading research universities attracts national and international investment to their areas. Evidence shows that R&D-intensive businesses base themselves in regions near universities to access their R&D facilities and talent, such as AstraZeneca’s global headquarters in Cambridge. Russell Group universities work with businesses to attract significant private funding for research and innovation projects from the UK and overseas. In 2022/23, Russell Group universities attracted c.£0.9bn from businesses through contract research, IP income, consultancy and renting facilities.

• Training highly-skilled graduates who are crucial to the UK workforce. Russell Group universities are educating local students and attracting students from across the UK who stay after their studies. In 2021/22, 36% of Russell Group graduates in full-time employment were working and living in the university region where they studied 5 years after graduation. This includes 12% of graduates originally from areas outside their university region. Through professional development our universities also support the growth of future leaders and equip entrepreneurs with the skills they need to perform in high-tech, innovative industries.

Delivering economic, social and cultural impact

Research-intensive universities are at the heart of innovation clusters, driving economic growth, high-value jobs and delivering social and cultural benefits for local communities. Our universities:

• Create high-value jobs: Russell Group universities are major employers in their regions, providing jobs for academics, business leaders, researchers, administrative, technical, and support staff. R&D activities drive the creation of spin-out companies and startups, further contributing to local job markets. Research and commercialisation activities alone at Russell Group universities support more than a quarter of a million jobs spanning all regions of the UK: 125,000 in research, 80,000 in spin-outs, and 49,000 in wider knowledge exchange.

• Deliver local and national economic impact: The research and commercialisation activities at Russell Group universities, such as the creation of new spin-out companies, wider knowledge exchange and Intellectual Property licensing, contributes £37.6bn to the UK economy annually. 1.5 times the size of the motor manufacturing industry. For every £1 of public money invested in Russell Group university research, more than £8.50 is generated for the UK economy. This is felt in all regions across the UK – see Annex 1 for a regional breakdown of impact. The presence of a major research university also has indirect impacts, including improvements in local infrastructure, transportation, housing and digital connectivity, including as a result of university-led development projects to revitalise urban areas.

Newcastle University has been instrumental in the development of the Newcastle Helix, an innovation district that combines academia, business, and residential spaces. This project has revitalised a former industrial area into a vibrant hub for research and innovation and has improved public transport links, including new bus, cycling and pedestrian routes.

• Provide social and cultural benefits: Universities are embedded within the regions that they reside and provide benefits beyond economic uplifts to their communities. For example, universities run community-based research projects to address local issues, university medical schools and research hospitals collaborate with local healthcare providers to improve public health services and outcomes, and many universities run public health campaigns and provide health education to support their local populations.

Birmingham Health Partners (BHP) is a strategic alliance between the University of Birmingham, Birmingham Women’s and Children’s NHS Foundation Trust, and University Hospitals Birmingham NHS Foundation Trust which focuses on translating research findings into clinical practice to improve patient care.
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Realising the ambitions of the new Industrial Strategy

Our universities are already working to support the government’s Industrial Strategy missions across the UK, from the high-value manufacturing cluster in Sheffield to Cambridge’s life sciences technology cluster (see more examples in Annex 2). We urge the government to ensure that its welcome plans to boost private investment, invest in infrastructure and reform planning and procurement rules support universities to collaborate with businesses and public sector partners to grow and scale regional innovation clusters throughout the UK to rival international competitors.

Over the coming months, we plan to work with business experts to develop options for how we can help to deliver the ambitions set out in the Industrial Strategy and we would welcome further conversations about ways we can work together to increase impact and drive growth.

Annex 1: Russell Group universities create jobs and add value in every region through world-leading research and commercialisation activities

Note: Destination of impact shown. Monetary estimates are presented in 2021/22 prices, rounded to the nearest £1 million, and may not add up precisely to the totals indicated. Employment estimates are rounded to the nearest 5, and again may not add up precisely to the totals indicated.

Source: London Economics analysis of Russell Group universities’ data. © ONS Geography for the administrative boundaries.
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Annex 2: Russell Group universities are already supporting the government’s Industrial Strategy missions

Delivering clean power by 2030 – Making Net Zero Construction a Reality: Spun out in 2019 from Durham University, Low Carbon Materials (LCM) develops new solutions for the built environment, applying science-led product innovations to produce environmentally friendly building materials to make net-zero construction a reality. Set up by Durham University scientists with support from Northern Accelerator, a six-university partnership driving research commercialisation in the North East, the company is shaping the green construction sector with lower-carbon, new-age building materials. Its flagship product, OSTO, is a carbon-negative lightweight aggregate for concrete that makes traditional carbon-intensive blocks carbon-zero. The company was named as one of three international finalists in the Fix Our Climate category, in the world’s most prestigious environmental prize, The Earthshot Prize, 2022.

Harnessing data for the public good – Driving Cyber Security Innovation and Economic Growth: The Centre for Secure Information Technologies (CSIT) is the UK’s Innovation & Knowledge Centre for cyber security. Based at Queen’s University Belfast, it combines research excellence with translation and innovation driven by collaboration with industry, academia and the public sector. CSIT’s key role in the ecosystem has helped to create approximately 2,750 jobs in the sector with the ambition to grow this to 5,000. The CSIT commercial and engineering team has delivered more than 100 rapid response projects with a range of SMEs and startup businesses and delivered a range of programmes with global partners including BAE Systems, Cisco, Citi, IBM, Intel and Rolls Royce.

Caring for the future – Cambridge’s Life Sciences Technology Cluster: The University of Cambridge is at the heart of Europe’s largest technology cluster, with particular strengths in Life Sciences and Computing. The Cambridge Cluster is home to 5,000 knowledge intensive companies employing around 70,000 people from a regional population of 600,000. High-tech firms spun out of Cambridge research or linked to the university, generated £23.1bn of economic impact through research and knowledge exchange activities in 2020-21. Independent analysis from London Economics estimated Cambridge adds nearly £30bn to the UK economy annually and supports more than 86,000 jobs across the country. For every £1 the university spends, it creates £11.70 of economic impact.

Building a more resilient economy – Transforming Orgreave into a Global Manufacturing Hub: The University of Sheffield transformed the former Orgreave coking plant into a global hub for advanced manufacturing through the development of the Advanced Manufacturing Research Centre (AMRC). Since it opened in 2001, the clustering of High Value Manufacturing companies around these facilities has led to global companies such as Rolls-Royce, Boeing and McLaren choosing to co-locate in the region. A recent economic impact report found that some of the biggest private sector investments into UK advanced manufacturing over the last 15 years would not have happened without the AMRC, and it has brought more than £260m of private investment and more than 600 jobs to South Yorkshire. Looking to the future, the Sheffield Innovation Spine7 aims to link the university’s spinout pipeline with the growth of technology-rich startups in the city. Key existing incubation space at Sheffield Technology Parks and laboratory facilities will also be linked to the spine, driving economic growth and job creation.

1 The economic impact of research & commercialisation activities at Russell Group universities, London Economics (2024)
2 Backing Business R&D, page 26 (2024)
3 HE-BCI data (2024)
4 2021/22 Longitudinal Education Outcomes (LEO) data (2024)
5 The economic impact of research & commercialisation activities at Russell Group universities, London Economics (2024)
6 Ibid.
7 Sheffield Innovation Spine