

Yorkshire Universities' response to the Select Committee for Science, Innovation & Technology's Call for Evidence on Innovation, growth and the regions

January 2025

SUMMARY

This submission, by [Yorkshire Universities](#) (YU), in response to the Science, Innovation & Technology Select Committee's inquiry into Innovation, Growth and the Regions welcomes the government's commitment to kickstarting economic growth across the country. YU is a regional partnership with a clear mission to harness the diverse, but complementary, assets and capabilities of twelve higher education institutions within and across Yorkshire and the Humber. We acknowledge the vital role of government policy in driving research & innovation (R&I) activity in the UK. However, historical public and private underinvestment in R&I in places outside the Greater South East has gradually erected barriers to growth in many regions of the UK, thus stifling national prosperity. Publicly-funded initiatives (both historic and recent) that have attempted to tackle regional disparities are important, but more must be done to encourage opportunity and stimulate the growth potential of all the UK's regions and nations. It is essential that any future interventions designed to drive R&I, commercialisation and clusters should also include support for the development of strong, vibrant innovation ecosystems (including human capital, access to finance and networks) to ensure that investments in the UK's regions and nations lead to increased and sustained economic growth.

There are many positive examples of local – or regionally-led – R&I initiatives involving collaboration between stakeholders in the research base, industry, local government and community groups. However, these initiatives often face profound challenges in accessing resources. There is growing appetite within the HE sector to build upon diverse capabilities, and share more knowledge, expertise and insights on growth and development in different places, and how universities contribute directly and indirectly towards this. There is an opportunity to use devolution as a framework for long-term transformations to drive growth. Local and regional actors, especially democratically accountable institutions, should be responsible for setting the strategies and being equipped with the necessary tools to enable priorities for innovation to be delivered as part of a broader economic development agenda. Devolved innovation funding, such as that mooted in the recent Devolution White Paper, should be harnessed and combined with other funding and interventions as part of a single settlement designed to address specific local/regional priorities. Universities of all types could play a vital role in shaping these investments and enabling effective delivery through devolution.

There are numerous positive examples of universities coordinating efforts with one another, and with a range of business partners, to drive the translation and the commercialisation of research. Universities also make valuable contributions to business growth by providing skills, networks, incubators, access to specialist facilities and expertise. YU operates a tried and tested mechanism for HE institutions to come together to share best practice, collaborate and achieve economies of scale in commercialisation, facilitating dialogue

between research-intensive organisations, applied universities and small, specialist institutions. YU has coordinated region-wide participation in major place-based UKRI-funded initiatives, such as the Yorkshire and Humber Local Innovation Partnership ([Y-PIP](#)), and the Yorkshire and Humber Policy Engagement and Research Network ([Y-PERN](#)), to ensure that research benefits the regional economy and society. Sustained and broader investment in regional initiatives and partnerships, such as these, would help to harness the potential of the UK's world class research for the benefit of businesses, communities and citizens across the country.

ABOUT YORKSHIRE UNIVERSITIES (YU):

YU is a regional partnership that has a clear mission to harness the diverse, but complementary, assets and capabilities of twelve higher education institutions for the benefit of local and regional economic growth and development. YU provides an established infrastructure where networks exist to improve skills; to drive innovation; and to extend enterprise and business growth. The world-class research that takes place within Yorkshire's universities is also identifying practical solutions to tackle the complex challenges we face around sustainability, growth, health and inequality.

1. HOW DOES THE GOVERNMENT DRIVE RESEARCH AND INNOVATION IN OUR REGIONS?

How effective are the government's policies in supporting the innovation ecosystem across the UK's nations and regions, particularly through commercialisation initiatives?

The government's renewed commitment to R&I, as evidenced in the 2024 Autumn Statement, is welcome. There is now an opportunity to develop the UK's national R&I funding and support system in a more targeted way to drive economic growth across all the country's nations and regions.

Historic underinvestment in innovation ecosystems across the UK's nations and regions has led to a regional imbalance in innovation and commercialisation activity. Recent government initiatives – such as the British Business Bank, headquartered in Sheffield, and the new National Wealth Fund, headquartered in Leeds, with a strong regional mandate – are part of a wider strategy to improve access to finance for innovators based outside London and the Greater South East. Universities across the UK are driving commercialisation activities, with Beauhurst's 2023 Spotlight on Spinouts report¹ showing that five out of the top ten UK universities, in terms of the total number of spin-outs since 2011, are based outside South East England.

¹ Spotlight on UK academic spinout trends, Beauhurst, May 2023 (<https://www.beauhurst.com/research/spotlight-spinouts-2023/>)

However, ‘softer’ factors, such as access to networks, mentors and talent pipelines are also important, and have a major impact within regions where innovation ecosystems are less well developed². In its November 2023 report on Innovate UK Grants and R&D Returns³, the Innovation Caucus demonstrated that the rate of return to businesses of their investment in R&D varies across the UK. While businesses in London experience a 100% internal return on R&D investment, the figure for businesses in Yorkshire and the Humber is 63%. In a 2022 report for UKRI on R&I and Place⁴, SQW identified several factors that influence a place’s ability to harness and maximise the socio-economic value from R&I investment effectively, including networks, collaborations and local leadership. SQW also found evidence that simply having ‘strong R&I assets’ – including research-intensive universities – does not necessarily translate into positive socio-economic outcomes for a local area. Alongside increased direct investment in R&I, places therefore also need sustained additional investment in human capital, capacity-building and networks, particularly where innovation ecosystems are under-developed.

In a 2019 paper for UKRI⁵, Professor Philip McCann warned that a narrow focus on research excellence alone fails to provide a platform for addressing many of the UK’s systemic challenges. Instead, McCann urged that the focus of place-based R&I initiatives should be on ‘potential for improvement and the upgrading of the existing economic and institutional set-up’. Furthermore, a 2020 paper⁶ by WM-REDI, based at the University of Birmingham, to inform the development of a UK place-based R&D strategy, recommended a broader consideration of the socio-economic impacts of R&I investment in places, cautioning that a narrow focus on stimulating GVA uplift through highly-skilled, high-income employment ‘can work against rebalancing, levelling up or inclusivity’.

How should devolution be harnessed to support innovation across the regions and nations, and what role should local government play in supporting research and development?

Collaboration between Mayors, local authorities, and public, private and community actors, including universities, will be vital if devolution is to drive sustainability, and achieve more inclusive growth and improved productivity. Low productivity can result from a complex mix of social and economic factors. For example, Yorkshire is anchored firmly in the bottom

² Making R&I investments deliver broad and sustained returns for regional economies, Yorkshire Universities, January 2024 (<https://yorkshireuniversities.ac.uk/2024/01/22/making-ri-investments-deliver-broad-and-sustained-returns-for-regional-economies/>)

³ Innovate UK Grants and R&D Returns: Impact on Business & Economy, Innovation Caucus, November 2023 (https://innovationcaucus.co.uk/app/uploads/2023/11/Innovate-UK-Grants-and-RD-Returns-Impact-on-Business-and-Economy_FINAL.pdf)

⁴ Research and Innovation and Place: Final Report, SQW, June 2022 (<https://www.ukri.org/wp-content/uploads/2022/08/UKRI-050822-ResearchInnovationPlace-FinalReport.pdf>)

⁵ UK Research and Innovation: A Place-Based Shift?, Professor Philip McCann, University of Sheffield Management School, July 2019 (https://www.ifm.eng.cam.ac.uk/uploads/Research/CSTI/UKRI_Place/McCann_-_UK_Research_and_Innovation_-_A_Place-Based_Shift_vFinal.pdf)

⁶ Informing Development of the UK Place-based R&D Strategy: Research England/UKRI and WMREDI expert evidence forum, West Midlands Regional Economic Development Institute (WMREDI), November 2020 (<https://research.birmingham.ac.uk/en/publications/informing-development-of-the-uk-place-based-rampd-strategy-resear>)

three of regions for Gross Value Added per hour worked, low productivity reflected in the underperformance of the region's major cities, with a lack of investment identified as a key barrier. The region has the third-lowest percentage of the working-age population holding high-level qualifications, exacerbated by low investment in technology⁷.

There is an opportunity to use stronger devolution measures as part of a framework in which to drive growth. Devolution can be a catalyst for more effective policy coordination because it creates new spaces for experimentation, and it surfaces policies and interventions that are more effective when they are locally owned, and reflective of the places they are designed to support. Universities in Yorkshire have major contributions to make within different areas of the government's programmes. Health, for example requires a system-wide approach, with inequalities addressed at source, and the root causes of ill-health addressed⁸.

How do factors such as the tax system, regulatory frameworks and standards influence the success of start-ups, spin-outs, and other innovation-driven businesses?

The government should consider how novel regulatory reform could unlock increased innovation in growth sectors and/or clusters. For example, in the Healthtech sector, where Yorkshire has significant strengths, current regulatory demands act as a barrier to innovation, especially for SMEs which do not have the resource to continually file and modify regulatory submissions. The creation of a more effective fast-track system that would allow a test and learn philosophy would be greatly beneficial⁹.

What challenges do innovation-focused researchers and businesses face in spinning-out or scaling-up, such as accessing venture capital, infrastructure and intellectual property rights?

Access to finance is an issue for many Yorkshire & Humber researchers, with the latest UKRI data¹⁰ showing that, despite recent initiatives to address regional disparities in research funding, the majority of UKRI's R&I funding is invested in London and the Greater South East. There is also a need for facilities to retain local businesses in the regions, such as better access to high-speed internet and other types of infrastructure. According to 2023

⁷ How to tackle Yorkshire's persistent productivity problems: Sarah Tulip, Yorkshire Post, July 2024 (<https://www.yorkshirepost.co.uk/business/how-to-tackle-yorkshires-persistent-productivity-problems-sarah-tulip-4695418>)

⁸ Yorkshire's universities have the potential to be key engines of economic growth – Dave Petley, Yorkshire Universities, July 2024 (<https://yorkshireuniversities.ac.uk/2024/07/31/yorkshires-universities-have-the-potential-to-be-key-engines-of-economic-growth-dave-petley/>)

⁹ 'Invest 2035: The UK's Modern Industrial Strategy' Yorkshire Universities' response to the Green Paper, Yorkshire Universities, November 2024 (<https://yorkshireuniversities.ac.uk/wp-content/uploads/sites/137/2024/11/Industrial-Strategy-YU-Response-Nov-2024.pdf>)

¹⁰ Geographical distribution of UKRI investment, financial year 2021 to 2022, UKRI, May 2024 (<https://www.ukri.org/publications/2021-to-2022-geographical-distribution-of-funding/geographical-distribution-of-ukri-investment-financial-year-2021-to-2022/>)

HE-BCI statistics¹¹, universities in Yorkshire generated £44.4 million in income from Intellectual Property (IP) in 2021/22. This places the region third out of all twelve UK regions and devolved nations in terms of university income from intellectual property. Spin-outs and start-ups from universities in Yorkshire make a positive contribution to the regional economy, generating £160 million in turnover and securing £23 million in external investment in 2021/22. Spin-outs that retain some university ownership in Yorkshire perform well compared to national counterparts, with these firms having higher average turnover per firm and employing higher numbers of people compared to spin-outs in most other parts of the UK.

However, despite the region's considerable commercialisation strengths and successes, there is a major disparity in access to finance between spin-outs in Yorkshire, and those elsewhere in the UK. Yorkshire ranks 11th out of twelve regions and devolved nations in the UK for the overall value of external investment received by spin-outs, and 10th for the average value of external investment per spin-out. The solution to the problem is not just about increasing investment. The 2023 Independent Review of Spin-outs¹² found evidence of investors encouraging companies to move from their founding location, with the greatest number of relocating spin-outs moving to the 'Golden Triangle' of London, Oxford or Cambridge. So, not only are spin-outs in Yorkshire under-invested, those that do receive investment are at risk of being drawn away from the region as they scale and grow, further exacerbating the split between North and South¹³.

2. HOW DOES RESEARCH AND INNOVATION IN OUR REGIONS DRIVE GROWTH AND PROSPERITY IN THOSE REGIONS?

How effective are regional innovation hubs and clusters in supporting regional growth and prosperity for local communities?

Established and emerging clusters with high growth potential occur across the UK and make significant positive contributions to their local economies by creating jobs, strengthening local supply chains, stimulating innovation and attracting investment. South Yorkshire's Advanced Manufacturing cluster and West Yorkshire Healthtech cluster are tangible examples of established place-based clusters with a mix of private and public investment, including Investment Zone and Launchpad funding. The [Humber Freeport](#) builds on a regional renewable energy cluster, spanning the private sector, research base and local government. These clusters form a key part of local economic policy within their respective regions and are seen as powerful drivers of economic growth.

¹¹ Higher Education Provider Data: Business and Community Interaction, HESA, 2023 (<https://www.hesa.ac.uk/data-and-analysis/business-community>)

¹² Independent Review of University Spin-out Companies Final report and recommendations, November 2023 (https://assets.publishing.service.gov.uk/media/6549fcb23ff5770013a88131/independent_review_of_university_spin-out_companies.pdf)

¹³ How to build a successful spin-out ecosystem?, Yorkshire Universities, November 2023 (<https://yorkshireuniversities.ac.uk/2023/11/22/how-to-build-a-successful-spin-out-ecosystem/>)

However, the value of more diffuse sectors to regional economies should not be overlooked. The creative industries, for example, is a strength for the north of England as a whole. The recent establishment of [One Creative North](#) recognises the value of the sector across a broader geography. In addition, cross-sectoral innovation hubs play a vital role in driving growth, enabling knowledge exchange and helping businesses to scale regardless of whether they are part of a local cluster or not. For example, [3M Buckley Innovation Centre](#) at the University of Huddersfield, and [Nexus](#) based at the University of Leeds, are flagship innovation centres, facilitating business engagement with the research base and coordinating networks. The [Bradford-Renduchintala Enterprise Ecosystem](#) (BREE), at the University of Bradford, provides training and upskilling entrepreneurs. Within their respective local areas, these centres play a key role in their innovation ecosystems, enabling connectivity and de-risking innovation for the benefit of a wide range of local businesses. It is therefore important that central government R&I policy does not focus exclusively on clusters as this risks widening economic disparities in those areas that are not home to an established or emerging cluster.

The human dimension of innovation is also a key factor in ensuring innovation translates into regional growth and prosperity for local communities. Universities play a vital role in developing specialist skills needed to anticipate the future demands of growth industries. They also support the development of enterprise and leadership skills to enable start-ups, scale-ups and companies of all sizes to achieve their growth potential. Furthermore, universities can lead on civic and community engaged research projects (such as [Y-PIP](#) in Yorkshire) to ensure that innovative solutions work well for places because they have been co-designed with the people who live and work there.

The diverse range of higher education institutions working in partnership through YU – including large, research-intensive universities; applied universities; and small, specialist institutions – form a crucial element of the place-sensitive innovation eco-system in the region. The growing complexity of the societal, economic, technological and environmental challenges that regions of the UK face requires the cross-fertilisation of ideas both within and across different disciplines and institutions. YU, and other place-based HE partnerships in other parts of the UK, convene partners from across HE, government and industry to facilitate collaboration to develop solutions to their region's most pressing challenges.

It is important that the government considers the wider context that enables clusters to thrive. Constraints to the growth or dynamism of a cluster will often occur when the surrounding innovation and skills ecosystem is under-developed. Interventions should therefore focus not only on direct support for clusters, but also on addressing issues in the ecosystem, including softer factors such as skills, access to mentors or training, etc. Universities of all types play a role in the development of innovative clusters and can help to foster vibrant, inclusive innovation ecosystems. Regional partnerships, such as YU, and local innovation centres, such as BREE, play a valuable enabling role for clusters, but more government support is required to help maximise the impact of these regional and local initiatives. The Industrial Strategy should leverage university research and innovation infrastructure and capabilities to support the growth of key clusters and tackle pressing societal challenges, whilst contributing to new jobs and new business creation targets. Innovation clusters, particularly in emerging areas like climate technology, face complex, cross-cutting challenges that benefit from coordinated, mission-led approaches to

innovation. The government should consider incentivising interaction between clusters to enable regions of the UK with higher productivity to drive national prosperity by actively sharing best practice with developing clusters elsewhere in the country⁹.

Would unlocking investment at scale for innovative science and technology companies support regional growth, and how could this be done?

Overall, in the UK, there has been, for far too long, a short-term approach to business investment, which has hindered long-term, productive development. We need more patient finance and capital investment in innovation and intangible assets. Universities can help to build investor confidence and crowd in investment from a wide range of sources, and long-term funding settlements would help them do this effectively. Universities are ideally placed to lead and collaborate on competitive, grant-funded projects aligned to the Industrial Strategy, leveraging significant cash and in-kind co-investment from industry partners⁹.

Investment in large-scale R&I projects will not automatically become 'sticky' in terms of regional economic impacts, and there may be a requirement for some form of initial demonstrator or pilot. Without access to associated support for the broader innovation ecosystem, places with less-developed innovation infrastructure could struggle to reap the societal and economic benefits of large R&I projects¹⁴.

When considering how to grow investment in a region, it is important not to overlook the value of relatively small investments in research translation, such as KTPs, which stimulate engagement with companies. YU's internal analysis reveals that 65% of KTPs led by universities in Yorkshire involve business partners based in the region. Yorkshire-based universities have a strong track record in KTP, with four YU member institutions among the top 20 UK universities ranked by the size of their current KTP portfolio. Impact Acceleration Accounts are another key mechanism for initiating and building relationships between universities and local businesses, policy organisations and community groups. Larger scale investments are more likely to have impact where strong local R&I relationships already exist, building on a foundation of smaller scale research translation and collaboration activities.

Should there be region-specific innovation and growth policies, and what should local government's role be in this?

Local actors, especially democratically accountable institutions, should be responsible for setting the strategies and possess the tools to enable priorities for innovation in local areas, as part of a broader economic development agenda, to be delivered. These must be framed around interventions that address specific local needs and draw on local strengths. This requires, over the long-term, greater devolved / decentralised public R&I funding to address MCA strategic priorities. The government's announcement in the 2024 Autumn Statement

¹⁴ YU response to UKRI survey on Investments in Places, Yorkshire Universities, September 2024 (<https://yorkshireuniversities.ac.uk/wp-content/uploads/sites/137/2024/10/YU-input-to-UKRI-survey-on-Investments-in-Places.pdf>)

regarding the development of devolved innovation funds in the next phase of the Spending Review is welcome. At YU, we have previously made the case for more funding currently administered by Innovate UK to be devolved directly to those MCAs with the capacity and infrastructure to manage such funds, in collaboration with partners, including universities. This devolved innovation funding could be harnessed and combined with other place-based funding and interventions (in areas such as business support, enterprise, skills and capital investment), as part of a single 'pot' or settlement designed to address specific local/regional priorities. Other elements of national innovation funding can play an important role in promoting cross-regional knowledge flows and encourage collaboration between local areas. There is a need for funding and support that can be tailored to local need and aligned to local priorities, and which values and can achieve outcomes from a diverse range of higher education institutions and partners. Funding timeframes must be flexible so that they can be adjusted to suit local opportunities and challenges, and institutional capacity¹⁴.

The development and delivery of the Industrial Strategy and Local Growth Plans needs to happen in a coordinated and integrated fashion. Previous policies for regional economic development have adopted siloed approaches, thus encouraging or compelling different areas of the UK to bid competitively for regional funding. This has presented a disincentive to a realistic appraisal of the relative strengths of different regions, and it has prevented potentially valuable sharing of insight and expertise across and between different parts of the UK where specialisms are complimentary. It is vital that Local Growth Plans do not become de facto bidding documents, as this will reinforce unhelpful and inefficient inter-regional competition. Instead, the government should encourage collaboration across geographical areas (recognising that industrial clusters, supply chains and economic development activities do not always fit neatly within Local/MCA boundaries)⁹.

In Yorkshire, a ground-breaking memorandum of understanding (MOU) between Yorkshire Universities and Yorkshire and Humber Councils provides a framework for a long-term strategic partnership between local government and higher education in the region¹⁵. The MOU has enabled successful delivery of major collaborative programmes, such as [Y-PERN](#), a novel network-based approach to inclusive and place-based academic policy engagement and research. By enhancing the effectiveness of inclusive regional development policy and strategy, Y-PERN plays a critical role in enabling regional universities and Yorkshire and Humber Councils (YHC) to work together to identify actions and solutions to some of the major opportunities and challenges facing the region. Recent areas of policy focus for Y-PERN include a vision for a truly inclusive economy, supporting skills and good growth, identifying barriers for female entrepreneurs, and addressing poverty by collaborating with those affected by it. Y-PERN adopts a 'systems-of-systems' approach to contemporary socio-economic opportunities and challenges – recognising that issues like increasing productivity, attracting investment, the cost-of-living crisis, environmental challenges and regional inequality involve complex and systemic connections between people, systems and scales. This approach helps to ensure that innovation policies intended to drive local growth do not have unanticipated negative consequences for the region's communities, citizens and environment.

¹⁵ Yorkshire and Humber Councils and Yorkshire Universities agree new Memorandum of Understanding, Yorkshire Universities, July 2021 (<https://yorkshireuniversities.ac.uk/2021/07/20/yh-councils-and-yu-agree-new-memorandum-of-understanding/>)

3. HOW IS RESEARCH AND INNOVATION DIFFUSED OR SUPPORTED TO DRIVE PRODUCTIVITY AND GROWTH IN THE REGIONS, WHEREVER IT MAY COME FROM?

What more can be done to ensure that innovation investments deliver tangible outcomes for both local and national economies, in terms of productivity and growth, and how should this be assessed?

YU has coordinated region-wide participation in major UKRI-funded initiatives to ensure that research benefits the regional economy and society. These include the Yorkshire and Humber Policy Innovation Partnership ([Y-PIP](#)) – a £5m UKRI-funded project linking academics with communities to address climate change, expand enterprise opportunities in the creative industries, and create a new data portal giving the public access to data and information. Complementing this innovative project, which is the only one of its kind in England, is the £4m Research England-funded Yorkshire and Humber Policy Engagement and Research Network ([Y-PERN](#)), convened by YU, and which is harnessing world-class research within Yorkshire’s universities to help regional leaders, including Mayors, identify new solutions and implement measures to drive greater inclusive growth¹⁶. Sustained and broader investment in regional initiatives such as these would help to harness the potential of the UK’s world class research for the benefit of businesses, communities and citizens across the country. There is growing interest within the HE sector in sharing knowledge, expertise and insights on growth and development in different places, and how universities contribute towards this.

On a practical level, regional university groups, like YU, London Higher, Universities for North East England, and the N8 Research Partnership can use their convening power to deliver major changes. In Yorkshire and the Humber, a legacy of high-carbon emitting industry, threats from flooding, and a series of energy transitions that have affected communities inequitably across the region have generated a consensus on a need not only for decarbonisation, but a green energy agenda infused with social justice. The Yorkshire and Humber Climate Commission, the largest place-based climate commission in the UK acts as a vehicle to mobilise Yorkshire’s universities’ combined research and policy expertise to tackle climate, sustainability and environmental challenges¹⁷.

¹⁶ Professor Dave Petley to be the new Chair of Yorkshire Universities, Yorkshire Universities, July 2024 (<https://yorkshireuniversities.ac.uk/2024/07/30/professor-dave-petley-to-be-the-new-chair-of-yorkshire-universities/>)

¹⁷ Universities collaborating for the good of our regions is fast becoming a policy imperative, Dr Peter O’Brien, YU Executive Director & Diana Beech, Chief Executive of London Higher, October 2024 (<https://yorkshireuniversities.ac.uk/2024/10/21/universities-collaborating-for-the-good-of-our-regions-is-fast-becoming-a-policy-imperative/>)

To what extent do Catapults support technology diffusion, and drive both national and regional growth?

Catapults have a key role to play in supporting technology diffusion. To drive industry transformation through translational R&D, Catapults need to retain a strong link to the research base. For example, the Advanced Manufacturing Research Centre ([AMRC](#)), based at the University of Sheffield, and part of the High Value Manufacturing Catapult, benefits from the leadership commitment, and institutional backing, of the University, ensuring that research, technology innovation and skills flow in both directions between industry and the research base.

How well are universities and businesses coordinating efforts to develop and commercialise research, including the role of spin-outs and collaborative R&D projects?

Yorkshire is home to a wide range of leading R&D assets, such as the [AMRC](#) and the [Advanced Wellbeing Research Centre](#) in Sheffield, [3MBIC](#) in Huddersfield, [Nexus](#) in Leeds, [AURA Innovation Centre](#) in the Humber, the [Biorenewables Development Centre](#) in York, and the [Wolfson Centre for Applied Health Research](#) in Bradford. The region benefits from a well-established commercialisation ecosystem, with a wide range of specialist skills and effective systems for collaboration and knowledge sharing. YU operates an established mechanism for HE institutions to share best practice, collaborate and achieve economies of scale in commercialisation, facilitating dialogue between research-intensive organisations, applied universities and small, specialist institutions. This diversity is a strength for the region, bringing together a range of research and enterprise specialisms alongside a highly skilled professional services workforce.

The government should consider measures to incentivise stronger SME engagement with the HE sector. Universities can play a vital role in driving diffusion and encouraging technology adoption across SMEs. Universities support SMEs in a range of ways, including acting as an anchor to local, SME-led clusters; partnering to de-risk innovation; supporting the development of leadership skills; providing a workforce pipeline of talented students and graduates; and working in partnership with local/regional civic leaders, community groups, large companies, and other stakeholders to ensure the value of SMEs is recognised and their needs are met in local approaches to business support. However, the HE sector is facing significant financial challenges, while at the same time high costs are disproportionately impacting SMEs. This means the business model for HE-SME interaction needs to be re-thought. The government should invest in universities as a key delivery partner in the business support landscape, enabling them to provide consistent support to SMEs, through mechanisms such as innovation vouchers, KTPs and flexible knowledge exchange funding models. Success metrics would include relative productivity increases in those SMEs, which engage with HE; and the development of vibrant innovation clusters around universities, with evidence of talent mobility, collaboration and networks. In parallel, the Government should support SMEs through tax incentives and other funding mechanisms to incentivise engagement with the HE sector.

Recognising the strategic importance of strengthening relationships between business and universities YU has been coordinating a project with West Yorkshire Combined Authority to develop a joint messaging framework for engaging businesses with universities and to raise awareness among SMEs of the benefits of working with the HE sector. The framework covers themes, such as: Raising awareness and changing perceptions; Confronting the barriers; and Appealing to different needs. Early in 2025, YU will hold a workshop with policy-makers, HE business engagement leads and regional business support organisations to discuss how we can best make use of the related resources, share knowledge and experience and strengthen relationships to help more businesses grow¹⁸.

Another example of successful HE-business collaboration within Yorkshire is the [South Yorkshire Innovation Programme](#) (SYIP) led by Sheffield Hallam University in partnership with the University of Sheffield and Barnsley Metropolitan Borough Council. SYIP will provide opportunities for businesses to engage in and benefit from innovation-led growth, driving innovation led activities. It builds upon a successful track record of delivering innovation support to SMEs in the region. The programme provides access to high-quality and bespoke innovation support including academic consultancy, innovation audits, student projects and placements, access to university equipment and facilities, events and technical workshops. The project is one of several partnerships between Sheffield's universities, local authorities and SYMCA aimed at driving economic growth and inward investment into South Yorkshire.

Successful commercialisation of R&D requires a broad ecosystem of innovation, encompassing research organisations, entrepreneurs, policy makers, business support organisations, investors and innovative businesses at all scales. Commercialisation can be constrained by a lack of access to finance and physical infrastructure (including specialist R&D facilities and premises to enable businesses to scale). However, the government should be careful not to overlook the 'softer' aspects of innovation ecosystems that are equally important for successful commercialisation. These include skills programmes to make entrepreneurs and scaling businesses investment-ready; formal and informal networks to enable the sharing of ideas, skills and expertise; access to mentors with experience in scaling innovation-led businesses; and access to incubator and accelerator programmes. It has been recognised that some individuals and communities face greater barriers to commercialisation than others, and so it is important that innovation ecosystem interventions are designed with inclusivity as an underpinning principle.

¹⁸ Strengthening relationships between business and higher education, Yorkshire Universities, September 2024 (<https://yorkshireuniversities.ac.uk/2024/09/11/strengthening-relationships-between-business-and-higher-education/>)