

CONSULTATION RESPONSE

Scottish Government Innovation Strategy – Call for Evidence

Rachel Hewitt, Chief Executive

17 June 2022

Theme 1 – World Leading Excellence and Expertise

QUESTION 1.1 WHAT SECTORS AND SUB-SECTORS SHOULD SCOTLAND AIM TO BE A WORLD LEADER IN?

Areas to consider:

- What are the innovation-rich sectors and sub-sectors where Scotland has existing or emerging competitive strength?
- How can we support these sectors to compete, collaborate and seek out global opportunities? What are our most exciting and promising areas of research and innovation where we have an opportunity to grow a significant industrial base in Scotland?
- What are the disruptive global megatrends that we want to harness and capture in Scotland? What steps will we need to take to support our businesses, universities and citizens to be able to engage with those opportunities?
- Should we prioritise our support for early-stage research to create the discoveries and innovations of the future, or shift the balance of our support towards research translation and commercialisation of today's new ideas?
- To what extent should we align our support for early-stage research with our economic and societal ambitions?
- International comparators

1. In order to highlight the areas most relevant to modern universities in relation to the Innovation Strategy, we have focused our response on theme one. Modern universities have a core role to play in supporting Scotland to become a world-leading innovation nation and indeed, are already an innovation-rich group of institutions. The recent Research Excellence Framework (REF) results have demonstrated this, with particularly strong results seen among Scottish modern universities, who operate at the forefront of innovation across a number of areas, in a way that has a direct impact on their local region, as described in a recent MillionPlus report ([https://www.millionplus.ac.uk/documents/Research_report - Staying local to go far - modern universities as placemakers.pdf](https://www.millionplus.ac.uk/documents/Research_report_-_Staying_local_to_go_far_-_modern_universities_as_placemakers.pdf) pg 21 - 25).
2. MillionPlus believes there are three key areas which need to be considered in the role of modern universities in supporting Scotland's innovation ecosystem: core funding, alignment with/acting on existing strategies and existing infrastructure or assets.

Core funding

3. Scottish Government capital budget for research and innovation – For 2022-23, the Scottish government announced a 1.6% (£4.7m) increase on the previous year, applied across SFC's three core research and innovation grants (REG, RPG, UIF). This is a real term cut to research and innovation, and will have significant detrimental impact to long-term outcomes.

4. UIF – University Innovation Fund is the core support from SFC to HEIs, to underpin knowledge exchange and innovation capacity and activities. Significantly more knowledge exchange funding is available in England for institutions to carry out this strategic work. In 2021/22 Research England awarded £230m of HEIF funding across 106 eligible institutions working out at approx. £2.1m per institution and in Scotland UIF is £15.1m across 19 institutions, working out at less than £0.8m per HEI. Strategic KE&I in Scotland is significantly underfunded when compared to similar investments in England with more than a 2.5 fold difference. The Scottish government will need to consider how this funding will allow for the Scottish sector to compete in a UK and global context to leverage in further funding and opportunities to Scotland.
5. REF/REG – MillionPlus Scottish members have seen positive outcomes in the recent REF2021 results and improved on their REF2014 results. This has been accompanied by an increase in the Research Excellence Grant (REG) across all MillionPlus members in Scotland, albeit in with limited changes in the distribution of funding for this year. Support for fundamental research is a critical underpinning to innovation and KE activities in Higher Education. Limited investment in Research will result in poorer performance in REF and in international rankings, less innovation, fewer spinouts and startups, and negatively impact ability to attract and retain talent.

Alignment with/acting on existing strategies

6. Scotland's Inward Investment Plan – Scotland's IIP was published in 2020, with primary stakeholders identified in nine opportunity areas. Scotland is leading the UK on Foreign Direct Investment, with digital technology the leading sector (as of 2021). There is an unmet opportunity for HEIs to act as anchor institutions to engage with regional and/or sector-specific stakeholders, and work pan-Scotland across Skills, Research, and Enterprise, to deliver within the opportunity areas of the IIP. Our universities, specialist institutions, and colleges are critical to provide the skilled workforce to underpin these growth sectors, and to establish more innovative startups and spinouts. Coherent engagement from the university sector with the IIP should be facilitated through dedicated resource from the Scottish government.
7. Scotland's Technology Ecosystem Review – Scotland's Technology Ecosystem Review (STER), published in 2020, states that we need significant early-stage intervention to create a sustainable funnel of entrepreneurial activity, from pre-start up all the way to the esteemed unicorn. This ethos should not be limited to the technology sector, but applied to all industries. A focus on early-stage interventions in our university and college settings will increase the number of new businesses being formed from these settings, and the enhanced culture around enterprise and entrepreneurial thinking will have spillover benefits for skills, graduate outcomes, and influence the next generation of innovative employees in our local and global industries.
8. Entrepreneurial Campus Strategy – in response to Scotland's Technology Ecosystem Review (STER), SFC have initiated the development of an Entrepreneurial Campus Strategy, to generate a larger, more diverse, pool of entrepreneurially minded students and academics, and increase the rate of startups being generated from university and college settings. This strategy is being co-designed with the sector, where every HEI in Scotland is participating as development and delivery partners for the strategy. It needs to be resourced appropriately to realise the ambition of STER, in line with the Programme of Action within National Strategy for Economic Transformation: 1. Embed first rate entrepreneurial learning across the education and skills system; 2. Create a world-class entrepreneurial infrastructure of institutions and programmes providing a high intensity pathway for high-growth companies; 3. Attract and retain the very best entrepreneurial talent from at home and abroad; 4. Build an entrepreneurial mindset in every sector of our economy.

Existing infrastructure and assets

9. Enterprise Support Group – Modern universities already collaborate and share best practice around our entrepreneurial activity, through the Enterprise Support Group (a subgroup of the Universities Scotland Research Commercialisation Directors’ Group). To deliver on the ambitions of the National Strategy for Economic Transformation, as part of the Entrepreneurial Campus Strategy, new resource is needed to enable a coherent provision of entrepreneurial training and development in each university, to ensure that every student, graduate and staff member in every HEI can benefit from entrepreneurial learning and opportunity. In partnership with SFC, Scottish HEIs have identified areas where resource should be focused for transformative effect, through initiatives such as: Entrepreneur in Residence Scheme; micro-financing; student interns/ambassadors; train-the-trainer for educators.

1.2 HOW DO WE ENSURE THAT OUR UNIVERSITIES, AND OTHER RESEARCH AND INNOVATION PERFORMING INSTITUTIONS, ACT AS ANCHORS FOR THE ECONOMY, PLAYING THEIR FULLEST ROLE IN HELPING GROW BUSINESSES AT THE CUTTING EDGE OF INNOVATION?

10. Connecting Capability Fund - Scotland does not have an equivalent to England’s Connecting Capabilities Fund (CCF). Research England has invested more than £100m in CCF in the three years up to AY 20/21, to complement HEIF (England equivalent of UIF), to strengthen the English HEIs contribution to productivity and economic growth and to delivery of the objectives of the UK government’s Industrial Strategy. Funding for CCF is expected to increase in coming years. CCF enables coherent collaboration across industry and academia, in core sectors, priming networks to evolve and create new opportunities and growth. Examples of success off CCF investment includes universities spinning out their first enterprises, and the creation of investment funds. SFC have limited capacity to fund Scottish HEIs to participate in CCF programmes. The recent (March 2022) Policy Connect paper on Empowering Innovation: The role of universities in boosting regional economies recommends the UK increase collaboration and achieve a more joined-up innovation system between the UK’s nations by making the Connecting Capability Fund a UK-wide programme - <https://www.policyconnect.org.uk/research/empowering-innovation-role-universities-boosting-regional-economies>
11. Scottish HEIs work locally, nationally and globally. Therefore we need to act coherently with the UK Research, KE and Innovation ecosystem to remain competitive and relevant and maximise opportunities.

1.3 HOW DO WE SUPPORT AND GROW CLUSTERS OF EXCELLENCE TO DELIVER ON OUR VISION FOR INNOVATION?

12. It is critical that the Scottish government Innovation Strategy considers the potential for innovation from all parts of society in every region in Scotland. Modern universities should be championed as anchor institutions for innovation across all regions and demographics in Scotland. MillionPlus’s recent report ‘Staying local to go far: modern universities as placemakers’ highlights the core role that modern universities play in their local area (https://www.millionplus.ac.uk/documents/Research_report_-_Staying_local_to_go_far_-_modern_universities_as_placemakers.pdf).
13. Our higher education system is diverse, in terms of place, size of institution, and sectors served. The type of spinouts and startups emerging from the university base will be equally diverse, ranging from micro-enterprises to high-growth businesses, with a small number of enterprises going on to enter a tech-scaler programme. Our graduates will take on a diverse range of roles in industries in Scotland and internationally. We expect the Scottish government’s Innovation Strategy to recognise and encourage this diversity and the key role of modern universities in supporting innovation.