

Official Opening

Derek Mackay MSP, Cabinet Secretary for Finance, Economy and Fair Work, Scottish Government

Thank you Jim for your kind introduction and for the invitation to open this conference. I would also like to thank Professor Horvat for bringing the conference here. It's a great pleasure to welcome you to Glasgow and Scotland, and it's a privilege to host so many distinguished members of the academic community from across Europe in this magnificent building - the Technology and Innovation Centre, or TIC.

The TIC captures what I think this event is about. Home to centres of research excellence, like Fraunhofer, the Weir Advanced Research Centre and the Energy Technology Partnership, which work closely with industry - it is an innovation ecosystem in its own right.

The Scottish Government's purpose is to create a more successful country with opportunities for everyone to flourish. Innovation is central to achieving that purpose and universities like those here today play a central role in turning science and ideas into economic opportunities and growth – in translating research in to economic and social value.

Our aspiration, as the First Minister has made clear, is for Scotland “to be the inventor and the manufacturer of the digital, high-tech and low-carbon innovations that will shape the future, and not just a consumer of those innovations”. Universities are critical to meeting that aspiration.

Our aim is for Scotland to be one of the most innovative and entrepreneurial nations in the world. This is an aim we share with partners in the public, private and academic communities in Scotland under the banner ‘Scotland Can Do’. We have made some good progress in recent years:

- We continue to rank in the top quartile of higher education expenditure on R&D in the OECD;
- Business investment in R&D has increased by nearly 70% since 2007, three times faster than the UK rate of 22%, and topped £1 billion for the first time last year;
- Scotland continues to be the number one location for R&D inward investment in the UK; and
- According to the 2016 UK Innovation Survey, 46 per cent of businesses in Scotland were innovation active.

Our universities and centres of research and technology expertise have played their role in this.

But we want to go further so that Scotland's innovation performance matches the levels of the best performing countries in the OECD. That is why our Innovation Action Plan focuses on four key areas.

- Firstly, encouraging business innovation.
- Secondly, using public sector needs and spend to catalyse innovation.

- Thirdly, supporting innovation across sectors and places,
- And finally, and of particular relevance for today, making best use of University research knowledge and talent to drive growth and equip the people of Scotland with the tools and skills needed to innovate.

Let me say a little bit about each of those areas.

In terms of **business innovation**, we have set a clear target of doubling business expenditure on R&D by 2025, and are backing that up with a 70% increase in our financial support for business. We will be providing over £110m of support over the next 3 years and expect that to lever over £500m on R&D spend by businesses themselves.

We are determined to use **public sector needs and challenges to catalyse innovation** and are supporting that through our £9 million Public Sector Challenge Innovation Fund and our pioneering CivTech programme. This programme takes challenges we face in the public sector and uses the creativity of the private sector to provide digital and data solutions.

We are also making plans for a Scottish National Investment Bank which will take a mission-oriented approach to issues like low carbon and healthy ageing – using public and private investment to drive innovation.

We are also supporting **innovation across sectors and places**, by, for example, investing in the Oil and Gas Technology Centre in Aberdeen; supporting Data Driven Innovation across the Edinburgh City Region and investing in organisations like Fintech Scotland to galvanise action across our financial services, tech and data communities to put Scotland at the forefront of FinTech.

And finally, we are **making best use of University research knowledge and talent** to drive growth and equip people with the tools and skills needed to innovate.

Scotland's universities are at the forefront of research and technological innovation.

For example, a few weeks ago I visited Heriot Watt University where I saw first-hand the work of the wider Edinburgh Centre for Robotics where the ORCA Hub project is developing robotics technology for use in hostile environments. This will maximise safety for offshore workers and improve the efficiency and reliability of off-shore energy production.

And a recent report by Clarivate Analytics stated that the UK heads the world in terms of the most influential scientific research institutions in pharmaceuticals with the University of Dundee beating MIT for the top slot.

And, of course, the University of Strathclyde also has its strengths. It has the largest engineering faculty and only dedicated University manufacturing department in Scotland and a strong track record of working with companies like Rolls Royce, Boeing and The Weir Group.

It has expertise in manufacturing technologies and systems; engineering design; digital manufacturing; advanced materials; robotics and automation; modelling and simulation; and technologies for Industry 4.0. And it is also the only Scottish university, and one of only two in the UK, to host three Catapult Centres.

This is why the Scottish Government chose the University to be the anchor university for the National Manufacturing Institute for Scotland. The Institute, close to Glasgow Airport, will be an industry-led international centre of manufacturing expertise where research, industry and the public sector work together to transform skills, productivity and innovation to attract investment and make Scotland a global leader in advanced manufacturing.

I look forward to welcoming you to the Institute when it opens its doors in a couple of years' time.

Across our universities it is absolutely critical that academic and research strengths connect with, and respond to, the needs of business and industry – that's what an innovation ecosystem is about. It requires leadership from industry and academia and an infrastructure to support it. In Scotland, key elements of that infrastructure are our eight Innovation Centres and our support for the organisation 'Interface'.

Our Innovation Centres are sector or technology focused, hosted by universities and focused on helping Scotland's businesses increase their innovation performance.

Supported by a budget of around £80m over the next 5 years, they cover everything from sensors to stratified medicine, digital health and care to data, aquaculture to oil and gas, and biotechnology to construction.

Meanwhile, Interface is a sort of dating agency for business and universities. With the support of small scale Innovation Vouchers worth five to twenty thousand pounds, Interface matches businesses with technical challenges with academic partners who can help them solve those challenges.

But the most important part of our innovation infrastructure, and the thing that makes the ecosystem thrive, is the skilled and talented individuals that our universities nurture and support. The graduates, researchers and postgraduates pushing the boundaries of scientific and technological research and working with and in business and industry to translate that in to economic success. The sort of people who make places like the TIC, tick.

Let me conclude by highlighting the importance of European collaboration to our economic ambition and the role of innovation in delivering that ambition.

For decades, Scotland has welcomed people from across the EU and valued the role they play and diversity they bring to our economy and society. And our universities and businesses have valued the skills and talent of people who have chosen Scotland to study, live and work. We have also enjoyed the benefits of programmes like ERASMUS and Horizon 2020.

That is why we will continue to make the case to the UK Government for continued freedom of movement for EU students, researchers and supporting staff, crucial to our international collaborations and the excellence of our universities.

We welcome the guarantees provided by the UK Government to continue current and future UK participation in Horizon 2020 in case of a "no deal" Brexit. But it is absolutely clear this will not be enough to continue our European collaborations to the same extent and depth as now. A "no deal" Brexit would shut us out from key parts of Horizon 2020 including the European Innovation Council pilot. Reaching a Withdrawal Agreement is therefore essential to safeguard our valuable science and innovation collaborations across Europe.

Regardless of the outcome of the Brexit negotiations, Scotland will continue to be an outward-looking, open and welcoming country.

The Scottish Government will continue to encourage multilateral and bilateral collaborations with other countries, not just involving our universities but all relevant research and innovation organisations here. I strongly encourage you to take that message home to your institutions on my behalf. Scotland needs and wants to be part of and contribute to the European and international innovation ecosystem.

I wish you a great conference and a great time in Glasgow and Scotland. Thank you.