

Robert Hoyle, Welsh Government

Diolch yn fawr, Thank you

Croeso I Gymru, Welcome to Wales

My name is Robert Hoyle, I work within the CSA for Wales' Division of the Welsh Government. Originally our First Minister was asked to give this opening address but unfortunately he could not make it. As an alternative, normally our Chief Scientific Advisor would give the address and I am delighted that our new CSA was announced earlier this week, Professor Peter Halligan; he will start in March.

The Welsh Government recognises that the research and innovation landscape in Wales and across the UK is undergoing major changes. We foresee that these changes will bring many opportunities as well as significant challenges. In Wales, these changes will occur against a back drop of major reforms about to be introduced due to our own activities and plans.

These changes in the Research and Innovation landscape are happening because of several factors:

At the UK level we have seen:

- The Higher Education and Research Act last year which will bring into being the new UK Research and Innovation body, UKRI in April this year. This will encompass all the Research Councils, Innovate UK and a new organisation – Research England. Thus, one body will have a UK wide remit and an England only remit. This is a new development and we see this as presenting challenges for Wales, not least, that of getting the voice of Wales heard within this new UK body.
- The Industrial Strategy Challenge Fund. The huge increase in funding as a result of the Industrial Strategy Challenge Fund will bring about a very welcome 2.4 billion a year increase by 2020 to the R&I agenda. As far as we are aware, the great majority of this additional funding will be competitively awarded across the UK based on the excellence and relevance of the applications. There is unlikely to be significant devolved consequences for Wales. Furthermore, as we are being told, the main focus will be on the words 'industrial' and 'challenge' which represents a significant move towards 'challenge-led' research and innovation to complement the historical 'curiosity-driven' research and innovation agenda as undertaken by the Research Councils. It is quite clear to us that this additional funding is designed to encourage industry and the private sector to make far bigger investments of their own in R&I. this additional funding represents a big opportunity for Wales but we need to be able to compete far more effectively than previously in order to win our fair share.
- Another major influence will be the loss of European Structural Funds from WEFO as a result of Brexit. This funding will phase out between now and about 2022 or so and it is not obvious to us whether it will be replaced by anything. The Welsh Governments' position on this is that all the EU structural funds should be replaced by UK Government funding on similar, devolved lines as the existing WEFO arrangements. However, we see little sign of this happening at the moment, but perhaps the UK Government's "Shared Prosperity Fund" may replace some of this – we just don't know.

At a Welsh level we have had:

- Sir Ian Diamond's review of student financing and his recommendations on the introduction of a means-tested maintenance grant for students but with the corresponding introduction of full university tuition fees so that students will be in a similar position as those in England. Students will be compensated by having a very good living expenses support package especially for those from disadvantaged backgrounds. As a result of this, these reforms promise to provide additional funds for the HE sector's research and innovation activities which, I'm sure, would be a very welcome development.
- The implementation of the Hazelkorn Report reforms of post compulsory education and training and the proposed creation of the Tertiary Education and Research Commission for Wales (TERCW) will bring together all post compulsory education and training into one body. That is FE, HE, life-long learning, work-based learning, apprenticeships and 6th forms as well as research and innovation. We see this as a huge opportunity to align education and skills development provision with the research, innovation and industrial capacity agenda. Within this TERCW body we propose the creation of Research and innovation Wales as a statutory committee, which will be the strategic funder of research and innovation in Wales.
- And, not forgetting our Government's new Economic Action Plan which is part of the Prosperity for All, the Programme for Government which are all set against the backdrop of the Well-being of Future Generations Act.

So, we are coming to terms with major structural influences which are likely to change the research and innovation landscape considerably and which will bring major opportunities as well as challenges.

Furthermore there are other huge potential opportunities in Wales around major infrastructure projects. Two obvious ones are the Wylfa Newydd new nuclear power station on Anglesey, North Wales and, locally to Swansea, the proposed Swansea Bay tidal lagoon. There are things which we are very keen to exploit as much as possible for the benefit of Wales, as an example, we have been supporting Bangor University with new nuclear research capability, in order to exploit the new nuclear opportunity of Wylfa Newydd and the UK Government's nuclear research programme.

With all of these changes in the research and innovation landscape we are very grateful to have had the guidance and insights of Professor Graeme Reid of UCL who has just completed his Review of Government Funded Research and Innovation in Wales. This was presented to Ministers last week and I think it is fair to say that it was very well received.

This review looked at all aspects of the research and innovation agenda and in particular focussed on the funding from all sources for research and innovation in Wales. Thus, he considered Welsh Government and HEFCW funding, UK Government, Research Councils and Innovate UK funding, EU funding through WEFO and Horizon 2020 as well as other funding streams such as those from charities and industry.

Although his report will not be published for a little while yet, it has highlighted significant structural funding issues within our research and innovation landscape in Wales and he has given recommendations on how we, as a Government, might address these. Without giving too much away before the reports publication what Professor Reid recommends resonates very closely with

much of the Welsh Government's Economic Action Plan – for which the Cabinet Secretary for Economy and Transport is the principle architect.

The Welsh Government's Prosperity for All strategy and its Economic Action Plan calls for all Welsh Government research funding to be brought together in one place, that being the new body mentioned earlier known as the Tertiary Education and Research Commission for Wales. Using this body and following the Reid Review recommendations call for the creation of innovation hubs, the Welsh Government is very keen to develop research and innovation capability in key science and technology areas, expertise and capability which will stand out across Wales, the UK and internationally. We are looking to grow industrial and academic research clusters for example through our Ser Cymru programme, grow themes research facilities and centres, and science and technology parks in areas in which Wales has research and innovation strengths and industrial capacity; these will be key components of our Economic Action Plan in the future.

For example, the Welsh Government has made, or is making major investments in such things as the Automotive Technology Park in the South Wales valleys, the Compounds Semiconductor Cluster in South East Wales, the "Buildings as Power Stations" facility at SPECIFIC at Swansea, the Innovation and Enterprise Campus at Aberystwyth, the Advanced Manufacturing Research Institute in Deeside and of course Wales' first science park – the Menai Science Park on Anglesey.

I have been very fortunate in being able to play a small part in the Reid Review, the development of the research and innovation component of the TERCW reforms and such things as the proposed BEIS and Welsh Government funded UK National Nuclear Thermal Hydraulics Facility which is earmarked for the Menai Science Park, It is a very exciting time to be in the Chief Scientific Advisors Division in the Welsh Government especially with the new CSA joining us shortly. There are huge opportunities for research an innovation to deliver major benefits for the economy, environment, health and well-being of the people of Wales and rest assured that Welsh Ministers are working very hard to exploit these opportunities as far as possible.

We see the Menai Science Park, or M-SParc, as a major demonstration of the research, innovation and industrial component of our research and innovation landscape in the future. M-SParc is visionary, timely and chimes very closely with the Economic Action Plan. It is a wonderful development and we have every confidence in the people who brought it thus far – Ieuan Wyn Jones, Professors Joh Hughes and Sian Hope and other colleagues at Bangor University, the local authority and the people of Anglesey; we look forward to its opening in the near future. On behalf of the First Minister and the Welsh Government may I wish the Menai Science Park and the UK Science Parks Association every success in the future.

Diolch yn fawr, Thank you