

Universities Wales response to the Economy, Infrastructure and Skills Committee inquiry into City Deals and the Regional Economies of Wales

1. About Universities Wales

- 1.1. Universities Wales represents the interests of universities in Wales and is a National Council of Universities UK (UUK). Universities Wales' Governing Council consists of the Vice-Chancellors of all the universities in Wales and the Director of the Open University in Wales.

2. Introduction

- 2.1. As the UK and Welsh Government develop their economic strategies, particularly considering the UK's future exit from the European Union (EU), the university sector can make an invaluable contribution to a prosperous, outward-facing and competitive Wales. Universities in Wales are committed to working with Welsh Government and others to navigate the best course for Wales' future economic growth.
- 2.2. Universities in Wales are internationally competitive and a major economic asset, bringing widespread benefits to individuals, communities, the nation as a whole and government in Wales. The total combined impact of Welsh universities and their students on Wales' GVA came to nearly £2.4 billion - equivalent to 4.6% of all Wales GVA in 2013. Welsh universities bring in a total of £413 million of export earnings¹ and income to Wales through knowledge exchange between universities and the public, private and third sectors was £201 million in 2013/14².
- 2.3. Universities can play a central role in driving inclusive economic growth locally, regionally and nationally; improving productivity as part of a new industrial strategy; and strengthening our trade relationships across the world.
- 2.4. This submission provides a brief, sector-wide response to the National Assembly for Wales' Economy, Infrastructure and Skills Committee' inquiry into City Deals and the Regional Economies of Wales. This response highlights our overarching views on regional development in Wales and how Welsh universities are and can play a central role, followed by some specific points on the City Deals and the current and proposed Growth Deals, as requested by the Committee.

3. Universities and regional development in Wales

- 3.1. In driving growth, high quality research and collaboration are the bedrocks of a growth economy, and can be significant levers in balancing growth across the country. For example, Swansea University's £250m Science and Innovation campus is a good of example of how universities can drive economic growth and regeneration in a region.
- 3.2. Furthermore, regional development is not just about economic growth, but also regeneration and development that creates a prosperous Wales and improves our social, cultural and environmental well-being. Our universities continue to be catalysts on both fronts – driving economic growth and being social and cultural anchors through their impact on individuals, businesses and communities across Wales.

¹ £218 million international revenue and £195 million off-campus expenditure of international students

² Higher Education Business and Communities Interaction (HE-BCI) survey

4. Universities impact all regions of Wales

- 4.1. Wales' eight universities are reasonably well distributed across its geography and they have been proven to impact on all regions of Wales, even where there is not a local university presence. All regions of Wales share in the economic impact of Welsh universities, with clear impacts on local employment, and with many local businesses dependent on the spending of the universities, their staff, and students across local authority boundaries and to areas which do not even host a university. In recent analysis³, nine centres of university activity were identified and used as the originating point of impact, which then spread across Wales in a ripple like effect. The results of the detailed analysis of impact across the 22 Local Authority areas of Wales show the economic impact was felt in some of the poorest regions in Wales:
- 4.2. Of the 46, 554 jobs generated by the universities in Wales:
 - 11,783 – over 25% - were in parts of Wales that did not have a university presence.
 - 24,318 – over 50% - were in the EU classified 'Convergence regions' i.e. regions with a GDP/capita of less than 75% of the average of the average GDP/capita of EU-25.
- 4.3. Of the £2.4 billion of Welsh GVA generated across Wales by Welsh universities and their students:
 - £597 million - nearly 25% - were in areas that did not have a university presence.
 - £1.3 billion – over 50% - were in the EU classified 'Convergence regions'
- 4.4. Students from every region in Wales are upskilling and reskilling through the opportunities provided by the Open University (OU) in Wales. For example, the OU in Wales has been supporting workforce transformation in Welsh public services. As part of this work, they have worked with all NHS Wales Health Boards and Trusts to deliver programmes for nursing-focused clinical Health Care Support Workers and all 22 Welsh local authorities to develop a new role of Social Work Practitioner.

5. Regional development and European Structural Funding

- 5.1. Wales has received over £2bn in European Structural and Investment Funds (ESIF) - the EU's main funding programme for supporting growth and jobs across the EU – since 2000. The majority of this (over £1.1bn) will be via European Regional and Development Funds (ERDF), which includes a budget of £310m to support research and innovation (R&I). In 2015 alone, almost £25 million of ERDF funding was approved for proposals led by universities in Wales to enhance R&I infrastructure and build capacity, namely through the Aberystwyth Innovation and Enterprise Campus and Cardiff University's Brain Research and Imaging Centre. See appendix A for further examples.
- 5.2. European Structural Funds and Horizon 2020 funding provide vital investment for projects and infrastructure that contributes towards economic and social growth in Wales. Targeted towards the poorest parts of the UK, which includes Wales, they have enabled universities to be key players in projects crucial to regional development.
- 5.3. They have also played an important role in innovation funding in Wales (see para 6), and private investment in research and development. High quality research and innovation are the bedrocks of a growth economy, and have knock-on benefits for all communities across

³ <http://www.uniswales.ac.uk/wp/media/The-Economic-Impact-of-Higher-Education-in-Wales.pdf>

Wales. The potential loss of these funds when the UK withdraws from the EU presents a potential barrier to business scale-up and growth.

- 5.4. It is crucial for regional development that this investment is sustained or replaced after the UK leaves the EU, and that replacement funds are devolved to Wales. It is also vital that the city deals are not considered as replacement investment for any shortfall in funding through the loss of structural funding when the UK leaves the EU.

6. Regional development and the Higher Education Innovation Fund

- 6.1. A key driver of innovation activity in England is the Higher Education Innovation Fund and, similarly, in Scotland the University Innovation Fund. There is no equivalent fund in Wales as Wales' Innovation and Engagement (IEF) fund was removed in 2014/15.
- 6.2. IEF was the mechanism used to incentivise and support the HE sector in activities that benefitted the social, cultural and economic development of Wales. It provided a dedicated source of core formula-driven funding that enabled a professional approach to economic development activity within universities, allowing them to recruit and retain highly specialised business engagement and commercialisation teams. It fostered pan-Wales collaboration in innovation and engagement activity ranging from commercialisation of research to support for enterprise and employability.
- 6.3. Two recent independent studies of the impact of the HEIF in England found that innovation funding has significant benefits for economic and regional development that are both monetary and non-monetary, including significant benefits for social and community groups and SMEs. These studies found that the HEIF presents a return of investment of £7.30 per £1 as well as an additional £2.40 of non-monetised benefits.
- 6.4. In order to maximise Welsh universities contribution to regional development, Universities Wales supports the Welsh Government's 'Independent review of higher education funding and student finance arrangements' recommendation that the 'Welsh Government should develop a further funding framework aimed at supporting knowledge transfer that reflects volume and industry engagement' and that the 'dual support system' of research funding is an essential component of a healthy Welsh higher education system; and a similar system should be put in place for innovation⁴.

7. Future regional policy

- 7.1. Universities Wales believes future regional policy should continue to support the progress of City and Regional Growth Deals for Wales. City Deals are linchpin initiatives, the key elements of which have the capacity to transform a region. They have the potential to improve productivity, drive innovation and support job growth throughout the region.
- 7.2. The Welsh Government's strategy should encompass the regional elements of the City and Regional Growth Deals within a more comprehensive nation-wide approach. A key feature of future policy should ensure sustained investment to support Welsh universities to collaborate with business, which will provide the innovation and jobs that Wales needs. The translation of research into economic benefits is a key aspect and the absorptive capacity of industry in

⁴ <http://gov.wales/docs/dcells/publications/160927-he-review-final-report-en.pdf>

Wales to innovate needs to be fostered and supported, as a capillary conduit for sustained growth.

8. Universities in key partnerships for growth

- 8.1. Universities in Wales have a long history of collaboration with both Government and industry. The City Deals provide examples of innovative partnerships that place universities at their centre and will enable them to be key levers for regional development. Whether through City and regional growth deals or national strategy, we would recommend that Welsh Government develop these tripartite models of Government/University/Industry collaboration to drive growth in Wales.

9. Cardiff Capital Region and Swansea Bay City Deals

- 9.1. Cardiff City Deal (£1.2bn) - The UK Government announced that it will provide £50m to help develop the compound semiconductor technology of the future as part of the UK Government's City Deal investment. Cardiff university and Cardiff-based compound semiconductor specialist IQE will spearhead the UK national 'catapult'. However, the university's involvement is expected to go much further. The City Deal foresees the potential for investment in other areas in which the university is able to offer expertise, such as software development and cyber security, energy and resources and health and wellbeing. The deal also includes support for the region's infrastructure including the delivery of the South-East Wales Metro and the Valley Lines Electrification programme.
- 9.2. The Swansea Bay City Deal (£1.3bn) - The Internet Coast, the Swansea Bay City Deal, aims to turn the whole of the region into a digital super hub to transform the regional economy, the future of energy and transform the way health and social care will be delivered in future. It aims to create 10,000 new jobs and increase the value of goods and services produced in the region by £1.8bn. There is potential available for the area, and wider Wales, to be lead in new technologies such as wireless 5G connectivity.
- 9.3. Swansea University has been heavily involved in all 11 Internet Coast projects, with particular leadership in the projects focused on:
- The Life Science and Well-being Campuses, and Life Science and Well-being Village projects, to support innovative growth of the life science sector
 - The unique ARCH (A Regional Collaboration for Health) project - already established to develop the region into a globally relevant ecosystem for integrated Open Innovation in Life Science and Well-Being
 - The Factory of the Future Initiative Growing Smart Manufacturing practice
 - The Steel Science Centre at Tata's Port Talbot Steel Works
 - Swansea University's SPECIFIC Innovation & Knowledge Centre

10. Growth Deal for North Wales

- 10.1. Bangor University is heavily involved in the development of a North Wales Growth Deal, working with the North Wales Economic Ambition Board, its members and partners across

the region, including the North Wales Business Council, Mersey Dee Alliance and other Universities and Colleges, to put together a strong proposal which will drive growth across the region.

- 10.2. Given its considerable strengths in teaching, its research expertise in sectors such as Science, Engineering and Sustainable Energy, and its strong collaborative network, Bangor University is a catalyst to ensure that investment under the Growth Deal delivers real growth in GVA not just in the north west but along the entire north Wales region.
- 10.3. The north Wales economy is closely connected to the major developments planned in the Northern Powerhouse, and Bangor University's involvement will assist the region in leveraging the benefits of that investment. Post Brexit, the opportunities to capitalise on the region's connectivity with Ireland will also be key, and the university also has a substantial amount of expertise which will assist the region in that respect.
- 10.4. Bangor University's expertise in developing high-level skills, R&D, Knowledge Transfer, Innovation and Commercialisation will be central to the success of the Growth Deal in North Wales. Bangor University is also ensuring that valuable research and knowledge assets created by HEIs are translated into real economic gains: high value jobs, increased exports and successful growth patterns by North Wales firms in priority sectors such as Energy, Environment and Advanced Manufacturing.
- 10.5. The effect of the North Wales Growth Deal could be to create real growth and momentum in high value business sectors. The University's expertise and involvement in the energy sector is a good example of how Bangor University will be a focus for innovation and development in this area. It is heavily engaged in a number of low carbon energy projects in the region, including the estimated £12bn investment in the new BWR nuclear reactor at nearby Wylfa, as well as a new biomass power station, a number projects involving marine renewable energy and a number of other projects.

11. Growth deal approach for Mid Wales

- 11.1. It is important to recognise that the above city and regional growth deals do not provide coverage of the entirety of Wales. Universities Wales would like to highlight successful regional partnerships for consideration in any future regional growth deals. There is scope to invest in ways which would connect these forms of Welsh infrastructure more effectively with institutions across the UK and internationally:
- 11.2. SPECIFIC, an academic and industrial consortium led by Swansea University with Cardiff University, BASF, Tata Steel, and NSG Pilkington as strategic partners. SPECIFIC develops functional coated steel and glass products that transforms the roofs and walls of buildings into surfaces that will generate, store and release energy.
- 11.3. ASTUTE 2020, which is designed to stimulate growth in West Wales & the Valleys by applying advanced engineering technologies to manufacturing challenges, driving cutting-edge research, development, and innovation. At the core of ASTUTE 2020 are four Welsh HEIs, Swansea University, Cardiff University, Aberystwyth University, and the University of Wales Trinity Saint David.

Appendix A – Examples of ESIF Projects through Welsh Universities

Please note this is not a comprehensive list of all ESIF projects

Aberystwyth University: Innovation and Enterprise Campus – (£20 million, 2015)

The project at the Gogerddan Campus, with an estimated value of more than £35m, will see the construction of a new state-of-the-art, internationally recognised facility to attract further research funding so that companies and researchers can undertake collaborative research projects to boost the bio-economy. The research is expected to generate innovative new products, services and spin-out companies in sustainable food, health, biotechnology and renewable energy sectors.

Cardiff University: Brain Research and Imaging Centre (CUBRIC II) – (£4 million, 2015)

Cardiff University Brain Research Imaging Centre (CUBRIC), is set to become one of Europe's top facilities for brain imaging. The new £44M CUBRIC opened on 7th March 2016 and brings together world-leading expertise in brain mapping with the very latest in brain imaging and brain stimulation. The centre plays a pivotal role in the global endeavour to better understand the causes of neurological and psychiatric conditions such as dementia, schizophrenia and multiple sclerosis, so as to yield vital clues for the development of better treatments.

Swansea University: Science and Innovation Campus (£40 million, 2012)

Swansea University's Science and Innovation campus was developed with extensive EU support. As well as EIB investment, £40 million was received in European Structural Funds. The development was amongst the top five knowledge economy projects in Europe and aims to generate around £3 billion of economic impact over a 10-year period through construction activity, research, and student and business investment.

BEACON (£10.6 million over 5 years)

BEACON is a Welsh Government & EU funded collaboration between Aberystwyth, Bangor and Swansea universities. Researchers work with industry, including small and medium sized enterprises, to develop renewable materials, fuels and chemicals as well as modified and new environmental and economically sustainable processes.

ASTUTE (14.7 million, 2010 - 2015)

ASTUTE has supported the stimulation of ideas in the Welsh manufacturing sector through provision of resources, facilities, advice and guidance exploiting the wealth of world class research in Welsh universities in close research collaborations with industry. The project supported more than 250 Welsh enterprises in West Wales and the Valleys, supporting them towards long term sustainability and competitiveness, the most evident improvements experienced by companies were improved processes, accelerated research and development, improved growth prospects and new product developments. The final evaluation of ASTUTE concluded that ASTUTE's work created economic impact of well in excess of £200m in West Wales and the Valleys showing that for each £1 invested an outstanding return of over £8 of economic impact was achieved.