

The Future of Innovation Policy and Practice in Wales

The Innovation Advisory Council for Wales (IACW) was formed by the Welsh Government to advise on all matters related to innovation policy and practice in Wales.

The Council has a diverse membership drawn from the private sector, public sector, third sector, business, industry, and academia. The purpose of the Council is to advise the Welsh Government on a broad range of innovation related issues, including monitoring progress against the delivery of the Welsh Government's Economic Action Plan: [Prosperity for All](#).

More detailed information can be found on our Terms of Reference at the [IACW Website](#).

Background

IACW was invited by the Welsh Government, in December 2020, to begin a process of reviewing the innovation landscape in Wales and informing plans to develop a refreshed innovation policy for Wales, taking full account of the impact in Wales of leaving the EU, of the challenges of climate change and the commitment to net zero, the great technological disruptors, and the immediate impact of the Covid pandemic on Wales.

IACW commissioned The Centre for Innovation Policy Research at Cardiff University and Cardiff based research organisation, Amplyfi, to investigate the current state of innovation in Wales and consider and benchmark Wales against Global best practice in this space. These reports represent a starting point and were intended to give a "helicopter" view. More work is required.

Cardiff University and Amplyfi submitted their reports to IACW on 31 March 2021.

We would like to thank and congratulate both organisations for producing such excellent and thought provoking, evidence-based research in a relatively short time frame.

The terms of reference for each report were intentionally focused on different but complementary areas of research. Amplyfi were asked to focus on the status of Global innovation policy and practice, while Cardiff University were to consider and comment on the status of innovation policy and practice in Wales, highlighting areas for development and improvement.

These reports provide the foundation in a process. The Welsh Government must now, with some urgency, build on these to develop a robust innovation programme which is far more focused and accessible, and wholly engaged with the business community, the research community and public and community services. Business as usual is not an option. Innovation is not simply about government funding; nevertheless, purposeful funding streams are *a sine qua non*. IACW looks forward to engaging further in the next steps.

Conclusions and Recommendations

We strongly commend both reports, which are rich in insights and understanding that should inform future discussion with organisations from both the public and private sector and local communities, and in turn enable the Welsh Government to develop a far-reaching innovation policy for Wales, which could transform both the economy and public services for the wellbeing of Wales, its people and environment.

Innovation is a broad spectrum of activity and is not solely about science, technology and research; nor should it exist in a small number of places and institutions. Innovation is the most powerful tools at the disposal of Government in tackling the Grand Challenges in Wales, including reducing poverty, improving public services, sustainably growing the economy, raising productivity, addressing wellbeing and meaningfully impacting Wales' carbon reduction and environmental responsibilities and targets. These are long term challenges, but there is urgency in the need for action. All sectors must play their part, winning investment, harnessing imagination and creativity, as well as developing and applying knowledge.

Wales needs fundamental research and science and technology led innovation; it also needs market and demand led continuous improvement. As Cardiff University emphasised, this is as much about developing robust "innovation commons" as it is about supporting research. To have a direct positive impact on people's lives we need incremental innovation and continuous improvement to embed research and adopt and adapt game changing innovation. Thus the need for collaborative ecosystems, nurturing and mentoring culture, behaviour, curiosity and imagination, and supportive funding. IACW is convinced that raising the innovation bar in Wales is not about government funding alone. Appropriate funding is nonetheless needed, both public and private, and has to be accessible and focused, and designed to leverage systemic changes.

Of the many important findings in the reports, we would highlight the following:

Internationally

- While many technological innovations begin in the private sector, with sectors such as Fintech attracting global finance, these very effectively spin out into public services, sometimes quickly, to help transform these services for the public good. Wales must build better ecosystems to nurture that.
- Nations with successful innovation ecosystems exploit their beacon technologies or research areas to attract investment and inspire ambition and skills development. They become both "launchpads" of indigenous innovation and "landing pads" for innovation from all over the World. Israel and Cyber Security is a prime example.
- There is an important and growing emphasis in all innovation-led countries on social innovation and the importance of public services. Innovation in these sectors is recognised as central to the development of all the nations and territories looked at.
- Streamlining and transparency of support are essential for interconnectedness of innovation, for attracting investment, and for wider participation in innovation change. All examples internationally demonstrated the strength of single innovation bodies and focused, widely recognised and understood, interventions. Wales has no recognised innovation organization that can be held accountable for progress.
- The United Nations' Sustainable Development Goals are important drivers of innovation and are reflected throughout these studies. In Wales, the Wellbeing of Future Generations Act reflects, and in many ways captures for Wales the sustainable development goals and should be at the heart of innovation policy.

Innovation in Wales

- There are many examples of very good practice in Wales across the whole spectrum of innovation. But these are too often isolated and small scale.
- Current Innovation policy set out in the Welsh Government's 2014 strategy document "Innovation Wales" remains relevant and important, especially to the Wellbeing of Future Generations, but there are significant challenges in the realisation of the strategy. There has been profound change since 2014, including technological disruptors, leaving the EU, the fuller understanding of the challenges of climate change and the commitment to net zero, but also the immediate and profound impact of the Covid pandemic.
- Challenges have grown in the deployment and delivery of the Welsh innovation policies. A major inhibitor to investment and participation in innovation is the fragmentation of the innovation ecosystem, the relative opacity of Welsh delivery channels and decision-making processes, and the failure to give wide recognition to the exciting work going on in Wales.
- There are many levers at the disposal of the government, not least procurement policies, the work of the Development Bank of Wales and the excellence in its universities and other institutions. These should be honed and focused and recognised far more both within Wales and internationally.
- Innovation policy and practice needs to be far more coordinated and a single innovation strategy that encompasses all key stakeholders would be sensible and achievable. This would invest in and build on regional approach to Wales development. Moreover, Wales must connect its innovation policy and practice to that of the UK in order to optimize impact and leverage funding opportunities.

Bringing together the findings of the two reports, the potential for Wales is considerable.

Recommendations

A single strategy

The Welsh Government needs to simplify and streamline its systems of support for the innovation ecosystem through the development of a single innovation policy for Wales embracing all aspects of the ecosystem. An area for future research and reports is to consider whether Wales needs to consolidate its innovation leadership in a single organization that can be held accountable for progress against defined Objectives and Key Results (OKRs) for Wales

Effectively communicated

Communications and focus should be given priority. What is not known cannot attract finance or spur ambition. Wales should be able to work easily with its neighbours, including Ireland and Scotland, and attract global investment, in many sectors. The International report shows how other nations find it far too difficult to navigate the complex structures within Wales. Businesses and communities within Wales and internationally will find it similarly challenging.

Stronger and more focused public and private funding streams

We urgently need greater private and public sector investment and partnering in innovation programmes, skills and talent throughout Wales. Of the many public funding streams, Wales needs to engage more actively and purposefully in accessing UK-wide available funding as well as ensuring that the complexity of funding streams needs to be simplified for the end users. Wales' international strategy must focus strongly on inward investment for innovation and growth. The reports demonstrate the importance in innovation policy and funding of the creation of "innovation commons", that can provide the scaffolding of support and guidance around the injection of funding to help create the absorptive capacity within businesses and the public delivery services.

Exploiting Beacon research and technologies

Wales' beacon technologies and research areas should be more effectively exploited to attract greater investment.

A holistic approach to grand challenges

We need a radical shift in the Welsh Government from the siloed approach to Health or Climate Change to a fusion policy development, which similarly embraces the co-dependence of public and private, research, adoption and absorption. A single innovation strategy for Wales needs to embrace all aspects of government if it is to meet the future needs of Wales.

Strong leadership from Government

Wales needs leadership from Government as a need creator and as an early adopter of innovation in all its forms. The Government needs to provide a single, strong, recognisable voice for innovation, creating focus and simpler navigation for sectors and communities. There are good examples globally that show it can be done, from the Republic of Ireland to Singapore and Taiwan.

Immediate next steps: Consultation

Together, these reports should form the basis for a broad consultation with the public, private and third sectors, local authorities and communities throughout Wales, with the clear intention of taking important, agreed recommendations forward. Policy is nugatory if it is not turned into practice. To overcome the policy implementation gap there has to be high profile engagement of the public, private and third sectors, and effective communication internationally.

We hope that these two reports will form the basis for the development of a radical, far reaching Innovation Strategy for Wales. We are keen to support the next phase in meeting the challenges and opportunities in developing and delivering such a strategy. As we see from many international examples, from Estonia to Ireland, Ontario and Manchester, innovation is not size or geographically dependent nor is it purely a technology, academic or private sector domain. Wales can and should be open to global alliances, and should have the self-confidence to show leadership in radical innovation approaches for the wellbeing of Wales.

David Notley and Claire Durkin

Co-Chairs, Innovation Advisory Council for Wales - May 2021