Senedd Cymru Pwyllgor yr Economi, Masnach a Materion Gwledig Economi Gwyrdd GE14

Ymateb gan: Canolfan Arloesi ac Adfywio Rhanbarthol, Ysgol Reoli Caerdydd, Prifysgol Metropolitan Caerdydd

Welsh Parliament Economy, Trade, and Rural Affairs Committee Green Economy GE14

Evidence from: Regional Innovation and Regeneration Centre, Cardiff School of Management, Cardiff Metropolitan University



Economy, Trade and Rural Affairs Committee - Green economy consultation

<u>Response from the Regional Innovation and Regeneration Centre, Cardiff School of Management, Cardiff Metropolitan University.</u>

Overview

To support the transition to a Circular Economy (CE) in Wales public and private sector organisations should be supported to develop their understanding of the CE and their ability to implement CE principles, recent research for Innovate UK suggests (Clifton and Walpole, 2023).

Research based on impact from the Circular Economy Innovation Community (CEIC) programme (Liu et al, 2022) suggests that organisations are more likely to adopt circular economy practices if supported, within a formal community of practice programme that supports the creation of a CE eco-system. For example, in terms of organisations being asked to separate food waste (within new code) it's likely that organisations would produce less food waste if they were aware of services/organisations like 'Too Good to Go'. The CEIC programme introduced participants to the 'Too Good to Go' app through a webinar featuring Jamie Crummie within the context of a CE development programme. Organisations that use the app are likely to realise small revenue streams from food purchased by consumers and reduce their food waste. This example, and research suggests (Walpole et al, 2022) practitioners are more likely to adopt CE principles if they are supported to understand the fundamentals of CE and given support to develop innovation capabilities within formal programmes, informed by social learning theory (Smith et al, 2019).

Research (Sinek, 2009) suggests that people and organisations are more likely to engage fully with policy if they understand the rationale (the 'why') and theory behind new regulations/policy. The Circular Economy Innovation Community (CEIC) and Cardiff CE Network has developed and published resources, including practitioner orientated case studies, a CE Capability Development Matrix a Map of circular economy providers in Wales and video presentations of practitioners developing new CE processes. The published resources explain the concept, it's practical applications, importance of transitioning to a CE and enable practitioners develop CE knowledge and skills. The theoretical underpinnings are detailed in a recently completed report that presents empirical evidence, commissioned by Innovate UK (Clifton & Walpole, 2023).

In conclusion, we highlight four key findings (F) and four resultant recommendations (R) for future research and policy with respect to the Circular / Green economy innovation ecosystem.

These are summarised below:

F1: CE is a misunderstood term: it should be defined as the movement from linear to circular economy and yet it is often applied reductively to narrow activities such as recycling.

R1: Awareness of CE tools and techniques needs to be increased, with cross-sectoral or transversal knowledge exchange encouraged, incentivised and facilitated.

F2: There are three levels of analysis (firm, network/value chain, system) required for a comprehensive understanding and implementing CE innovation ecosystem interventions.

R2: Drivers (and barriers) at each level need to be identified and addressed, within an integrated innovation ecosystems 3.0 / Circular Business Model (CBM) framework.

F3: Augmented (public and private sector) Circular Economy Innovation Communities (functioning as Communities of Practice) can be a key mechanism for raising CE awareness, sharing knowledge, and ultimately driving transformational change.

R3: These augmented CEICs should go beyond a narrow remit of facilitating innovation in CE niche firms to one of driving CE innovation across all firms—i.e. cross-sectoral (horizontally) and through whole value chains (vertically).

F4: Institutional 'Directionality' potentially plays a key role in leading transformational innovation system change for the CE: Wales can potentially serve as a 'lab' for CE innovation, yet this hitherto has not fully translated into practice.

R4: Further research should investigate how best to achieve this and discern the lessons applicable to policy interventions in places with different governance structures / devolution arrangements will be crucial for realising the true transformative potential of Circular Economy practices.

Dr Gary Walpole GWalpole@cardiffmet.ac.uk, Prof Nick Clifton nclifton@cardiffmet.ac.uk,

In relation to further specific points within the consultation:

- Within its devolved powers, what should be the Welsh Government's key
 priorities to maximise the potential economic opportunities from green
 economy sectors? To what extent does its current approach reflect these?
 - Beyond Recycling (WG, 2021)
 - Develop small number of robust measures and make explicit for each sector & region
 - Do so by developing a logic model i.e. a graphic depiction (road map) that presents the shared relationships among the resources, activities, outputs, outcomes, of an intervention.
 - Develop from this intermediate 'direction of travel' indicators, review these regularly.
 - Learn from promising practices across the world (Basque Mondragon example etc). Inter-regional learning is vital within innovation systems
- What are the key barriers to Wales making the most of opportunities in the green economy, and what steps should be taken to overcome these?
 - Develop an ecosystem of public, private & third sector actors (<u>Clifton & Walpole</u>, 2023)
 - Innovation Skills of both public, third and private sectors are lacking, particularly in relation to Circular Economy Innovation and require coordinated development (Clifton et al, 2024)
- What actions should the Welsh Government take to support development of Wales-based supply chains in green economy sectors?
 - Develop funds for a range of interventions for organisations that enable understanding of CE and more immersive programmes. WG SFIS could be more flexible.
 - Develop supply chains within regions & sectors: MEECE, MASI, SPECIFIC etc

- What skills challenges exist in relation to transitioning to a green economy?
 What actions should be taken, and by whom, to ensure the skills are there to meet the growing demands of a green economy?
 - Innovation Capabilities, only 45% of businesses are innovation active (BEIS, 2021), which hinders introduction of new processes and practices
 - Support Firms to develop CE knowledge: <u>CEIC</u> type programmes can play a vital role here (<u>Walpole et al, 2022</u>) and support all actors (FE, HE, PSOs and businesses) to collaborate within a triple helix (<u>Liu et 2023</u>) and regional ecosystem (<u>Clifton & Walpole, 2023</u>).
- What will workers and employers need for a just transition to a Net Zero economy to be achieved, and what actions should the Welsh Government take to deliver the elements of this that lie within its devolved powers?
 - Innovation Skills (BEIS, 2021)
 - Funding: develop national coherent offering (a more flexible WG Smart FIS)
 - Peer support mechanisms (supply chain & regional) <u>Clifton & Walpole</u> (2023), (Smith et al, 2019).
- How will the Welsh Government need to work in partnership with others to realise the potential of the green economy and deliver a just transition? To what extent is the partnership working that is needed being undertaken?
 - Closer HEI (Triple Helix) mechanisms, (Liu et 2023)
 - Schools, FE & HE linked programmes: Curriculum synergy (systematic map of processes?)
- The Welsh Government says it will face considerable budgetary constraints in the short term. How should it prioritise investment to support development of the green economy over the shorter and longer-term? What innovative approaches to financing could be considered to maximise potential investment and benefits?
 - Support existing actors & networks (encourage CJC, Local Authorities, PSBs & RPB and Future Generations office to engage with WG and coordinate activity and funds)
 - Develop a shared language (terms) and shared understanding of CE/Sustainability/Green
 - Map & gap and develop Logic Model to address major issues (Pareto) to support operationalisation of the Beyond Recycling strategy.
 - Engage with UKRI and other funders of CE and SD to encourage funding calls that will leverage existing promising practices and projects as well as calls that could address. Build on work of Wales Innovation Network (WIN) CE implementation study, SWIC/SWITCH.