

Senedd Cymru
Pwyllgor yr Economi, Masnach a Materion Gwledig
Economi Gwyrdd
GE19
Ymateb gan: Porth y Gorllewin

Welsh Parliament
Economy, Trade, and Rural Affairs Committee
Green Economy
GE19
Evidence from: Western Gateway



Welsh Assembly Economy, Trade and Rural Affairs Committee inquiry into the Green Economy - Western Gateway response

About the Western Gateway

We are the pan-regional partnership for South Wales and Western England. We are made up of Local Authorities, a Combined Authority, City Regions, Local Enterprise Partnerships and National Governments in Wales and Westminster. Our powerhouse is working to power the UK's efforts to reach net zero whilst also providing opportunities to those at risk of being left behind. Our primary focus is to bring together private and public sector to create sustainable economic growth for our combined area.

Key messages

- Wales has significant existing strengths in the Net Zero economy, with huge potential to grow the green economy.
- However, it also has weaknesses, particularly in terms of digital and public transport connectivity.
- Increased cross-border as well as intra-country partnership working is essential for growing the green economy both within Wales and the wider UK.
- As the pan-regional partnership for South Wales and Western England, the Western Gateway partnership has a proven track record of helping to deliver on projects that have significant implications for the green economy.
- To help realise the full potential of the green economy in Wales and beyond, the Welsh Government should continue to support and work collaboratively with the Western Gateway.

Consultation response

- 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?

As a pan-regional partnership, the Western Gateway exists to ensure collaboration across the region, and ensure that individual geographies within our wider region can achieve their fullest potential by working together.

Together our area has an economy worth £128bn – larger than Morocco. With 4.6 million people and 2.1million jobs we have huge potential to add growth to the UK Economy through



collaboration and better connecting our shared strengths. As a region, we are greater together than the sum of our parts.

Given this unique pan-regional perspective on the area, the Western Gateway suggests two areas that the Welsh Government should focus on that could be potential barriers to delivering green growth and propose how to best overcome them.

i. Making the most of Wales' neighbouring geography to grow the green economy.

The Western Gateway has significant natural assets in solar, tidal, marine, and wind and leading capabilities in hydrogen, nuclear and industrial decarbonisation. The South West has one of the highest concentrations of businesses in the Net Zero economy in the UK, and the Net Zero economy in Wales is over three times more productive than the regional average¹.

However, despite Wales' strength in the Net Zero economy, it would be remiss to ignore the symbiotic nature of the country's neighbouring geography when looking at the potential to grow the green economy. For example, world-beating superconductor research being undertaken at the University of Bristol² would doubtless contribute to, and benefit from, the growth and innovations being undertaken at the nearby Newport semiconductor cluster³.

These are green industries which in some cases, despite being well placed to benefit the Welsh Economy, are facing barriers to doing so. The Accxel Construction School in Cinderford are looking to train the next generation of green construction workers. Despite being right next to the border, the campus is only open to students in England as the school cannot access funding for students based in Wales due to differences in apprenticeship funding between the two countries.

Many key green initiatives require expertise, materials and input from both sides of the Severn Estuary making cross-border co-operation vital for the growth of Wales green economy. By ensuring that considerations take in Wales' neighbouring geography, the Welsh Government would be able to tap into a greater pool of resources and innovations to grow the green economy both in Wales and the wider UK.

ii. Lack of connectivity

There are significant issues in full connectivity both physically and digitally across Wales which bar people from participating fully in the green economy and will, in turn, prevent the growth of the green economy. In Pembrokeshire, a key area for renewable energy with the freeport, hydrogen projects and Floating Offshore Wind (Flow), just 26% of business premises can access Gigabit-capable broadband compared to 72% in the wider UK.

Improving this connectivity through increased concentration on decarbonised road and enhanced rail transportation, and ensuring digital and energy connections are improved for those sites of highest potential in the green economy is vital for its continued growth and to keep the majority of the supply chain in, or approximate to, Wales.

The Western Gateway is developing a 'Rail Deal' with partners in Transport for Wales that expands upon our [Rail Vision 2050](#) and presents an opportunity to deliver 28,000 tCO₂e emissions savings per year from reduced use of train diesel whilst generating at least £17bn

¹ ["Mapping the net zero economy: Net zero impacts in national, regional and local economies", Energy & Climate Intelligence Unit, January 2023, p.28](#)

² ["Research Environment: Physics", University of Bristol](#)

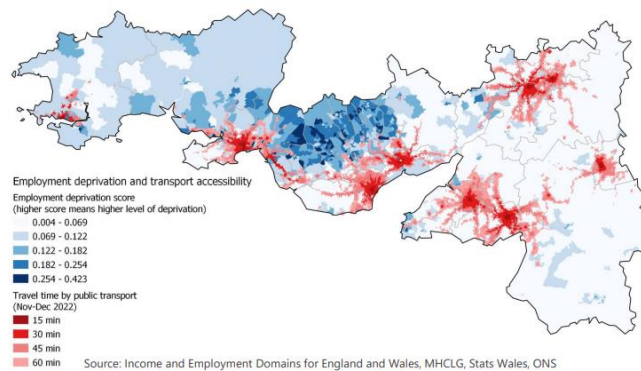
³ ["Welsh Government to expand Newport's compound semiconductor cluster", Semiconductor Today, 29 March 2023](#)

of socio-economic benefit to the pan-regional geography. At the heart of this is an electrification programme for 118 route km including Cardiff to Swansea, plus the delivery of the five new Burns' stations between Cardiff and Severn Tunnel.

Not only would improved connectivity help to grow the green economy, it will also help to ensure that the green economy is grown in a way that can deliver on a just transition. As the map below shows, there is a significant link between employment deprivation and poor public transport links. Investing in transport links where they are most needed will also help ensure that the green jobs of the future are spread to areas where skilled and sustainable employment is greatly needed.

Areas of employment deprivation tend to be less well connected by public transport

- What should we take of supply green



actions the Welsh Government support development Wales-based chains in economy sectors?

Through our work with local partners the Western Gateway Partnership

two key areas that would make a significant contribution to the green economy, as well as help to develop Wales-based supply chains in these sectors.

engagement stakeholders, Gateway has identified

i. Tidal Energy in the Severn Estuary

The Western Gateway Partnership understands the significant potential of the Severn Estuary in delivering clean renewable energy. The Severn Estuary has the highest tidal range in Europe, and it is estimated that tidal energy projects in the estuary could generate up to an estimated 7% of the UK's electricity needs. However, we recognise its international environmental importance, and the central role it plays in the local, regional, and national economy.

The Western Gateway have established the Severn Estuary Commission with the support of local leaders, business, and universities across South Wales and Western England. The Commission will provide impartial, expert advice and develop a final recommendation on whether there are options for sustainably harnessing renewable energy in the Severn Estuary. It is Chaired by Dr Andrew Garrad CBE⁴, and is comprised of a diverse group of leading experts from scientific, engineering, environmental, financial and stakeholder backgrounds⁵.

⁴ Cat Hage "New chair at Severn tidal energy commission", *Punchline Gloucestershire*, 25 January 2024

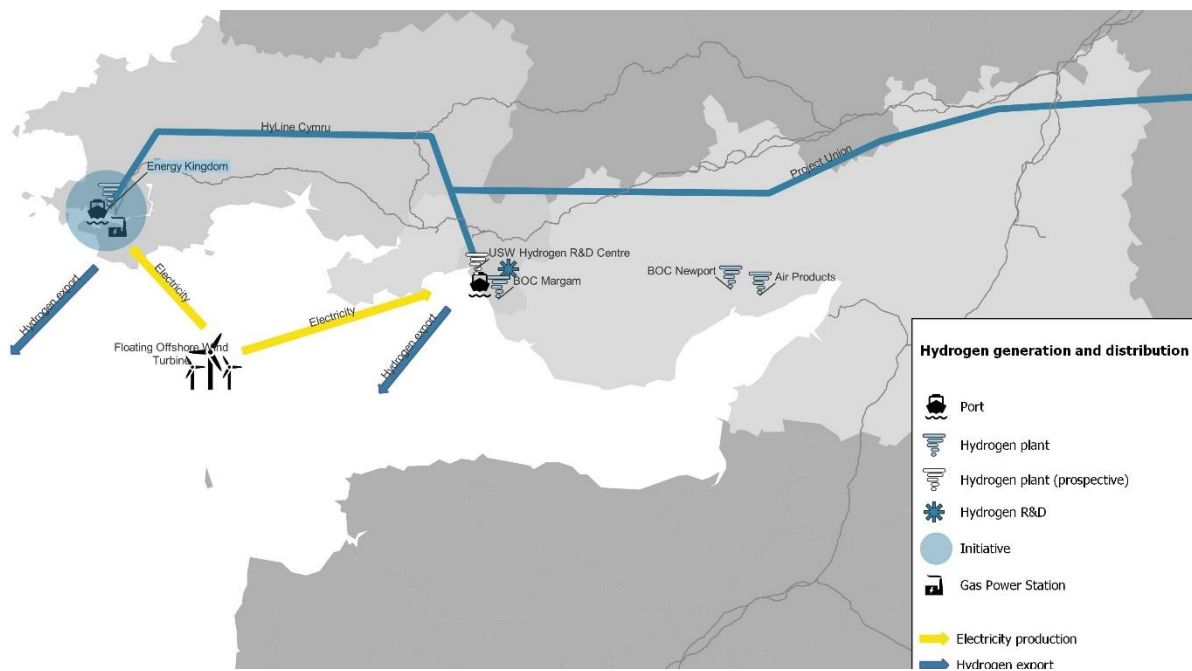
⁵ Sion Barry, "Independent commission launched to look into Severn tidal barrage", *WalesOnline*, 26 January 2024



The Commission recognises that other projects are already being developed in this field. They include the Welsh Government’s Tidal Lagoon Research Challenge, of which the Western Gateway is already collaborating with many of the submitted projects.

ii. Hydrogen Power

The hydrogen ecosystem has the potential to assist in the growth of the green economy overall and also to solve some of the barriers referred to above. Projects across the south coast of Wales connect together with projects and infrastructure in Western England to create transportation opportunities as well as energy generation. Hydrogen could see around 12,500 direct jobs with a potential for 27,000 jobs in the wider supply chain. Added to the renewables market there is potential for £3.5bn investment and an additional £900 million added to GVA by 2030.



- 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?

We are pleased that the Welsh Government and the Economy, Trade and Rural Affairs Committee has recognised the importance of partnership working to deliver on growing the green economy.

Pan-regional partnerships such as the Western Gateway work in partnership between the public and private sector to bring additionality to an area’s existing strategies and structures. We lead when our collective size will achieve more, collaborate on partner-led opportunities, convene talent and expertise to give the best possible evidence and advocate and amplify the work of others.

As discussed above, the Western Gateway has worked proactively to establish the new Independent Commission for the Severn Estuary. While we acknowledge that there has been previous work in this area, by working to ensure a broad range of expertise amongst

Committee members, and gaining buy-in from Ministers in both Cardiff and Westminster, we believe that we have equipped the Commission with the best chance of success.

Following the Western Gateway's work to set up the UK's first cross-border Hydrogen Ecosystem detailed above, a new supercluster has been announced which looks to deliver on the opportunities highlighted by the partnership.

The Great Western Supercluster of Hydrogen Impact for Future Technologies (GW-SHIFT) Project aims to enable cross-sectoral partnerships to drive development of hydrogen infrastructure and technology and provide the necessary skills training to develop a skilled workforce for a green hydrogen future.

The project has secured £2.5 million from the Engineering and Physical Sciences Research Council (EPSRC) as part of their Place Based Impact Acceleration Account Awards (PBIAA).

Researchers from across the GW4 Alliance of Bath, Bristol, Cardiff and Exeter universities will work alongside the Universities of Swansea, South Wales and Plymouth, as well as 25 civic and industry partners, which will contribute over £1.5m in additional funds and support⁶⁷. Civic partners include the Great South West and West of England Combined Authority, Cornwall and Isle of Scilly LEP, Swindon and Wiltshire LEP, and the Welsh Government alongside the Western Gateway. Industrial partners include Hydrogen South West and 18 key hydrogen companies including Airbus, digiLab Solutions, Ecomar, GKN, HydroStar, NCC, Johnson Matthey, Net Zero Industry Wales, ORE Catapult, PEP, SSQ, TFP Hydrogen Products, TNO Netherlands, Tower Group, Undercover Zero, Wales and West Utilities, and Zero Avia.

The Western Gateway also has a strategic partnership agreement with the GW4 Alliance – a consortium comprising of the universities of Bath, Bristol, Cardiff and Exeter. Our Memorandum of Understanding seeks to increase collaborative activities that will drive green and economic regional growth, supporting projects with the aim to level up communities and help the world achieve a net-zero carbon economy faster⁸.

Conclusions and Recommendations

The Western Gateway's geography benefits from being a global gateway (with international ports and airports), an innovative region (world leading tech and digital pioneers) and an area of significant natural assets in solar, tidal, marine, and wind and leading capabilities in hydrogen, nuclear and industrial decarbonisation.

By capitalising on these strengths, we have an opportunity to lead globally on delivering new clean and renewable energy solutions to help decarbonise our economy, opening up new opportunities for local people in the process.

In order to fully capitalise on the potential of this pan-regional partnership to deliver for the green economy in Wales, we would ask the Committee to make the following recommendations:

⁶ [Poppy Clements, "£2.5 million funding announced for hydrogen supercluster project", *Global Hydrogen Review*, 18 October 2023](#)

⁷ [Charlie Currie, "Academia and industry team up to develop hydrogen supercluster in UK south-west", *H2 View*, 9 October 2023](#)

⁸ [Peter Davidson, "New strategic partnership launched between GW4 Alliance of universities and the Western Gateway", *The Business Magazine*, 9 March 2022](#)



1. To recognise the importance of pan-regional partnerships in delivering on Net Zero and growing the green economy in Wales.
2. To continue to support the Western Gateway's activities and initiatives to convene stakeholders, build and maintain partnerships, and attract investment into the green economy.
3. To engage with the Independent Commission on the Severn Estuary and consider their recommendations for tidal power.

As mentioned above, the Western Gateway has a strategic partnership with GW4. We understand that GW4 will also be submitting evidence to this inquiry, and we would urge the Committee to give consideration to the evidence they have submitted, and any recommendations that they have made.