

Cynulliad Cenedlaethol Cymru Pwyllgor Amgylchedd a Chynaliadwyedd	National Assembly for Wales Environment and Sustainability Committee
Dyfodol Ynni Craffach i Gymru?	Smarter energy future for Wales?
Ymateb gan Bwrdd Hyfforddi'r Diwydiant Adeiladu Cymru (Saesneg yn unig)	Response from Construction Industry Training Board Wales
SEFW 27	SEFW 27



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Alun Ffred Jones AM
Chair, Environment and Sustainability Committee
National Assembly for Wales
Cardiff Bay
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Dear Alun

RE: A Smarter Energy Future for Wales?

CITB Cymru Wales is pleased to respond to the Environment and Sustainability Committee's inquiry into a smarter energy future for Wales. This inquiry overlaps to a large extent with many of the issues identified in the current Welsh Government consultation on a draft energy efficiency strategy for Wales. CITB Cymru Wales has therefore attached a copy of our response to that consultation for the benefit of the committee's inquiry.

The key areas of interest for CITB Cymru Wales in relation to the committee's inquiry are the projected growth from energy projects such as Wylfa Newydd and the Swansea Bay Tidal Lagoon and areas of policy around retrofitting and Part L building regulations.

Our recent Construction Skills Network report suggests that between 2015-19 average annual growth in output in the construction sector will be around 5.8 per cent. This presents a number of significant challenges to the domestic construction sector in finding and retaining skilled employees that can maximise the economic and social benefit of such growth.

A significant proportion of this growth relates to large infrastructure projects such as Wylfa Newydd. For instance, excluding Wylfa Newydd the projected output growth for Wales reduces from 5.8 per cent to 4.2 per cent. It is therefore crucial that work begins now on delivering the appropriate skills environment for projects such as Wylfa Newydd to allow domestic construction firms to capitalise on the growth opportunities.

With this in mind, Welsh Government should work closely with Horizon and its partners to ascertain the likely demand from Wylfa Newydd and to provide this information in good time so that CITB Cymru Wales and other providers can work with local companies to shape provision and plan their investment in training and skills to be part of the supply chain. Crucially, this will require more in depth knowledge of existing capacity within the sector in North Wales.

CITB Cymru Wales is already undertaking similar work in partnership with the Welsh Government to inform the Swansea Bay Tidal Lagoon.

In terms of retrofitting schemes such as Arbed and Nest, under the right conditions, and with the right incentives, the energy efficiency sector will continue to present a fantastic opportunity for business growth, market diversification and innovation for SMEs in Wales, while promoting sustainable development, addressing fuel poverty, energy security and climate change action.

Research by the Zero Carbon Hub suggests that a lack of knowledge and skills on energy performance across the house-building industry is a major contributor to the performance gap between intervention design and performance. This is an issue that needs to be addressed if we are to maximise the social and economic impact of retrofitting schemes.

CITB Cymru Wales believes that knowledge and awareness around issues such as energy efficiency should be mainstreamed within existing apprenticeship provision. This should include knowledge on the performance of traditional pre-1919 buildings in Wales, to ensure that our existing stock can be improved effectively.

Finally, in relation to building regulations for both domestic and non-domestic new build properties it is vital that the industry is aware of any proposed changes in sufficient time and can plan its workforce development in order to accommodate energy efficiency standards.

CITB Cymru Wales is happy to provide any additional information that may be required by the committee, including providing oral evidence.

Yours sincerely

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Strategic Partnerships Director
CITB Cymru Wales

Energy Efficiency for Wales CITB Cymru Wales Response

Introduction

CITB Cymru Wales is pleased to respond to the Welsh Government's draft Energy Efficiency Strategy for Wales. There is little doubt that energy efficiency and carbon reduction policies will drive significant change in the construction industry and in doing so generate substantial opportunities and challenges.

As Green Skills Alliance research demonstrates, in order to overcome these challenges and capitalise on the opportunities presented it will be vital to create a construction skills environment that allows the industry to deploy the right skills, in the right place, at the right time¹. In practical terms, this must include widespread training to upskill the existing construction workforce and a renewed emphasis on making current qualifications and apprenticeships responsive to changing needs.

The Welsh Government has previously set out its aspirations through the environmental goals in the Wellbeing of Future Generations Act 2015 and through energy efficiency schemes such as Arbed and Nest.² The current proposals for an energy efficiency strategy for Wales come at a time of significant change in the qualification system, with the ongoing review into apprenticeships being of particular importance. This provides an opportunity to strengthen Welsh energy efficiency measures by underpinning them with an appropriately skilled construction workforce.

Executive Summary

Overcoming Barriers

- **Research suggests that a significant proportion of the current workforce involved in advice and assessment around energy efficiency measures do not have the required level of skill and knowledge, and that widespread upskilling is required.**
- **The principal criteria for success is a long term commitment to energy efficiency policy from the Welsh Government and the establishment of incentives to support initial market growth and provide a framework for a more self-determining, free-standing energy efficiency sector, free from the boom and bust cycles of recent times.**
- **Welsh Government should recognise the potential of SMEs to drive demand for energy efficiency retrofit and low energy buildings through established customer networks.**
- **We would recommend a strategic review of verification and certification for energy efficiency in a domestic and non-domestic retrofit context.**

¹ Pye Tait *A Green Deal Competency Framework*

² Wellbeing of Future Generations (Wales) Act 2015 [Online]. Available at: <http://www.legislation.gov.uk/anaw/2015/2/contents/enacted> & Arbed – Strategy Energy Performance Investment Programme [Online]. Available at: <http://gov.wales/topics/environmentcountryside/energy/efficiency/arbed/?lang=en> & NEST [Online]. Available at: <http://www.nestwales.org.uk/> (accessed 7th September 2015).

- CITB Cymru Wales looks forward to the consultation on reviewing Part L in 2016. Thorough consultation with the sector will be a prerequisite to success in achieving the Welsh Government's obligation for nearly zero carbon homes as set out in European legislation.

Developing the Supply Chain

- The Welsh Government should secure a ring fenced amount for skills investment on all large public sector contracts.
- CITB Cymru Wales notes the inclusion of Construction Futures Wales in the Energy Efficiency Strategy and agrees that such collaborative approaches are essential for the success of supply chain development.

Skills and Education

- CITB Cymru Wales recommends that Welsh Government consider the skills requirements of all energy efficiency proposals early on and commits resources, guided by Labour Market Intelligence (LMI), to areas of skills deficiency.
- CITB Cymru Wales believes that knowledge and awareness around issues such as energy efficiency should be mainstreamed within Wales' construction apprenticeship provision. This should include knowledge on the performance of traditional pre-1919 buildings in Wales, to ensure that our existing stock can be improved effectively.
- CITB Cymru Wales has well-established engagement mechanisms through the CITB Cymru Wales Committee and three regional fora, as well as other professional services groups. The Welsh Government should use this as a means for disseminating information and engaging with the construction sector.

Finance

- The range and quality of data captured in the WIIP could be increased, so that the industry has more nuanced data to work with.
- In order to improve WIIP further, Welsh Government should examine the inclusion of retrofitting and maintenance and repair schemes where they are of sufficient size and scope.
- It is vital that clarity around apprenticeship funding is provided

Overcoming barriers

Energy efficiency assessments

The Green Skills Alliance (GSA) is a group of organisations, including CITB, who represent employers and workers on a national basis and are working together to provide advice and guidance across the wider green sector. A series of research projects carried out by the GSA and corroborated by the Department for Energy and Climate Change suggests that the efficacy of energy efficiency assessments is dependent on the skills of the assessors involved. **The research suggests that a significant proportion of the current workforce involved in advice and assessment around energy efficiency measures do not have the required level of skill and knowledge, and that widespread upskilling is required.** For instance, 19.4% of the workforce does not have skills around ascertaining the hierarchy

of energy efficiency measures, with a further 11.5% lacking knowledge of advantages and drawbacks of installing energy efficient measures for buildings constructed pre and post 1919.³

Innovation and Growth

Under the right conditions, and with the right incentives, the energy efficiency sector will continue to present a fantastic opportunity for business growth, market diversification and innovation for SMEs in Wales, while promoting sustainable development, addressing fuel poverty, energy security and climate change action. Maintaining the interest and levels of investment in training and skills from construction companies, and in particular SMEs, is essential.

The principal criteria for success is a long term commitment to energy efficiency policy from the Welsh Government and the establishment of incentives to support initial market growth and provide a framework for a more self-determining, free-standing energy efficiency sector, free from the boom and bust cycles of recent times. This should be seen within the context of wider changes to the energy landscape through UK Government policy around feed-in tariffs.

This will create the conditions within which the sector can innovate. Our labour market intelligence continues to demonstrate that industry innovation is most abundant with the SME workforce. **Welsh Government should recognise the potential of SMEs to drive demand for energy efficiency retrofit and low energy buildings through established customer networks.** Evidence suggests only 1 in 10 consumers consider energy only renovations and tend rather to carry out energy efficiency work at the same time amenity renovations.⁴

To an extent, reforms to Part L that include retrofitting in case of house extension or the building of conservatories reflects this.⁵ Welsh Government needs to invest in industry innovation to give it the tools to unlock this potential further. **This could include, for example, a focus on support for 'trusted actors' or 'intermediaries' who exercise a significant influence over the decision-making of consumers at the point of sale.**

CITB Cymru Wales is also developing an innovative Wales Training Model in partnership with the University of Wales Trinity St David. This will provide an opportunity to train the next generation of construction workers across Wales in innovative techniques, including energy efficiency measures.

Trust in the Sector/Quality Assurance

Sector and trade body opinion gathered in May and June 2015 is especially strong in respect of the need for an improved, clear set of verification and certification processes that will ensure compliant, quality assured workmanship in the energy efficiency sector.⁶ Whilst

³ CITB Cymru Wales/Pye Tait Consulting. 2015. *A 'Material' Issue: Understanding and Responding to the Traditional Building Skills Challenge in Wales*. P.37

⁴ UK ERC. 2013. *Understanding Homeowners Renovation Decisions: Findings of the VERD Project* [Online]. Available at: http://tyndall.ac.uk/sites/default/files/verd_summary_report_oct13.pdf P.8. (accessed 7th September 2015).

⁵ Welsh Government. 2013. *Written Statement – Proposed Changes to Part L of the Building Regulations* [Online]. Available at: <http://gov.wales/about/cabinet/cabinetstatements/2013/partlbuildingregs/?lang=en> (accessed 7th September 2015).

⁶ Supply Chain Insight Group, forthcoming 2015. *Trust and Certainty: Energy Efficiency Market Viability and Supply Chain Deliverability*.

evidence available from consumers that have had energy efficiency measures assessed or installed suggests their satisfaction levels are generally high, there have also been studies (mystery shopping exercises) and objective measures (quality checks) that suggest not all work is consistently delivered to the standard it should be. For instance, some stakeholders in our recent report into traditional building skills highlighted Arbed as a scheme that has suffered from inconsistent standards in the past.⁷ This can negatively impact industry reputation and consumer confidence.

Examples include the high number of rejected installations in the Energy Company Obligation and evidence from the new build sector of a 'Performance Gap' between designed and as-built energy performance. Recent research has identified a number of challenges with the range of schemes currently used to verify competence with a range of suggestions put forward, including an industry competency scheme to demonstrate energy awareness.⁸ There is however a need to balance the need for quality assurance with the need to reduce the proliferation of bureaucracy that can present barriers to market growth. **We would recommend a strategic review of verification and certification for energy efficiency in a domestic and non-domestic retrofit context.**

Reviewing Part L Building Regulations

Since the devolution of building regulations to the National Assembly for Wales in 2011, a number of changes have been made in relation to energy efficiency, including an 8% reduction in the carbon emissions of new build properties and a 20% reduction for non-domestic properties in relation to the 2010 regulations⁹.

Part L is often seen as an area of regulation that creates barriers to house building as has been evidenced by the varied nature of responses to the Welsh Government's 2013 consultation on 40% and 25% carbon reductions on the 2010 regulations in the house building sector.¹⁰

CITB Cymru Wales also notes the changes proposed in England in relation to Part L as part of the UK Government's Productivity Plan.¹¹

CITB Cymru Wales looks forward to the consultation on reviewing Part L in 2016 and believes that thorough consultation with the sector will be a prerequisite to success in achieving the Welsh Government's obligation for Nearly Zero Energy Buildings as set out in European legislation. In particular, it is vital that the industry is aware of any proposed changes in sufficient time and can plan its workforce development in order to accommodate energy efficiency standards. The Welsh Government should engage with the

⁷ CITB Cymru Wales/Pye Tait Consulting. 2015. *A 'Material' Issue: Understanding and Responding to the Traditional Building Skills Challenge in Wales*.

⁸ Zero Carbon Hub, 2014. Performance Gap End of Term Report. [Online]. Available at: http://www.zerocarbonhub.org/sites/default/files/resources/reports/Design_vs_As_Built_Performance_Gap_End_of_Term_Report_0.pdf (accessed 7th September 2015).

⁹ Welsh Government. 2013. *Written Statement – Proposed Changes to Part L of the Building Regulations* [Online]. Available at: <http://gov.wales/about/cabinet/cabinetstatements/2013/partlbuildingregs/?lang=en> (accessed 7th September 2015).

¹⁰ Welsh Government. 2012. *2012 consultation on changes to the Building Regulations in Wales Part L (Conservation of fuel and power)* [Online]. Available at: <http://gov.wales/docs/desh/consultation/120924buildingregspartlpart1en.pdf> (accessed 7th September 2015).

¹¹ UK Government. 2015. *Fixing the foundations: Creating a more prosperous nation* [Online]. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/443898/Productivity_Plan_web.pdf para 9.17, P.46. (accessed 7th September 2015).

CITB Cymru Wales Committee and our three regional fora on this issue and should consider its proposals in the context of the UK Government's productivity plan.

Welsh Housing Quality Standard

The Welsh Housing Quality Standards (WHQS) have allowed for an approach to drive up standards on a much wider scale than previous approaches. CITB Cymru Wales welcomes this and believes the drive to improve quality has been helped by clear expectations and timescales in this area. The WHQS has also engaged the wider public in a positive way. The Welsh Government should learn from this approach in designing future interventions.

Developing the supply chain

Procurement

Government low carbon initiatives can have a significant impact on skills needs, from the creation of new roles, to the need for existing trades to learn new skills or the rapid growth of existing sectors.

The Welsh Government's Wales Procurement Policy Statement focuses on the social, economic and environmental impact of Wales' public sector spend. The Minister for Finance's recent statement on public sector procurement highlighted increasing devolution of this area, following the General Designation on Procurement.¹² This provides an opportunity to use public spending to achieve energy efficiency goals, similar to the insistence of Building Research Establishment Environmental Assessment Method (BREEAM) standards on certain public buildings. It also provides an opportunity for further supply chain development by providing construction firms and SMEs in particular, with a degree of confidence in upcoming work by which to plan recruitment and training provision to deliver energy efficiency related work. In this respect, it is also important to provide a long time-scale in terms of funding for local authorities and other bodies delivering energy efficiency schemes.

CITB Cymru Wales believes that in developing community benefits policies further, **the Welsh Government should secure a ring fenced amount for skills investment on all large public sector contracts.** This was set out in our recent report with the Cross-Party Group on Construction entitled *The impact of procurement policy in Wales*¹³. Where appropriate, this policy lever could be used to increase the skill levels of the construction sector to deliver energy efficiency interventions, through schemes such as Arbed.

Construction Futures Wales

Construction Futures Wales (CFW) is jointly funded by the Welsh Government and the Construction Industry Training Board (CITB) through the Joint Investment Strategy (JIS) for the construction industry in Wales. CITB manages the programme on behalf of the partners.

¹² Welsh Government. 2015. *Wales Procurement Policy Statement* [Online]. Available at: <http://gov.wales/docs/prp/toolkit/june15walesprocurementpolicystatement2015v1.pdf> (accessed 7th September 2015).

¹³ Cross Party Group on Construction. 2015. *The impact of procurement policy in Wales – a summary of consultation responses* [Online]. Available at: <http://www.citb.co.uk/documents/the%20impact%20of%20procurement%20policy%20in%20wales%20-%20a%20summary%20of%20consultation%20responses.pdf> (accessed 7th September 2015).

Over recent years, we have seen a growing realisation that construction activity can significantly contribute to the growth and social impact on the Welsh economy by developing both people skills and businesses. This has resulted in construction related contracts moving to longer term framework/collaborative agreements and increased demands along the whole supply chain.

The Construction Futures Wales programme aims to equip the industry to better understand the challenges it faces moving forward, and equip the workforce to better meet those challenges. This will be done through delivery of support on live projects. It will demonstrate opportunities for real savings, growth and skills development, through improvement activities and training.

CITB Cymru Wales notes the inclusion of Construction Futures Wales in the Energy Efficiency Strategy and agrees that such collaborative approaches are essential for the success of supply chain development.

Skills and education

Delivering skills that respond to local need

The Welsh Government's Policy Statement on Skills and the emerging Regional Skills Partnerships are vital to ensuring the appropriate labour market intelligence in terms of the construction sector is properly fed in to the decision making process. CITB's Construction Skills Network identifies a number of key skills needs for Wales over the coming years. For instance, Wales is set to grow at a rate of 5.8 per cent per annum between 2015-19, which is the highest growth rate of any UK country.¹⁴ This is driven by large scale infrastructure investment such as Wylfa Newydd, the Swansea Bay Tidal Lagoon and improvements to the A465 as well as a significant body of retrofitting work through schemes such as Arbed and Nest.

In order to maximise the social and economic impact of this growth it is vital that the sector in Wales is able to attract and maintain an appropriately skilled workforce. Detailed Labour Market Intelligence (LMI) is necessary to help ascertain the needs of the sector. **CITB Cymru Wales therefore recommends that Welsh Government consider the skills requirements of all energy efficiency proposals early on and commits resources, guided by LMI, to areas of skills deficiency.**

Mainstreaming energy efficiency in work-based learning

Research by the Zero Carbon Hub suggests that a lack of knowledge and skills on energy performance across the house-building industry is a major contributor to the performance gap between intervention design and performance¹⁵. Our own research states that these knowledge gaps seriously jeopardise our ability to achieve the EU 2020 climate change targets.¹⁶ **In order to rectify this situation, CITB Cymru Wales believes that knowledge and awareness around issues such as energy efficiency should be mainstreamed within Wales' construction apprenticeship provision. This should include knowledge**

¹⁴ Construction Skills Network. 2015. *Industry Insights: Wales 2015-19* [Online]. Available at: <http://www.citb.co.uk/documents/research/csn%20reports%202015-2019/construction-skills-network-wales-2015-2019.pdf> (accessed 7th September 2015).

¹⁵ Zero Carbon Hub. 2014. *CLOSING THE GAP BETWEEN DESIGN & AS-BUILT PERFORMANCE END OF TERM REPORT* [Online]. Available at: http://www.zerocarbonhub.org/sites/default/files/resources/reports/Design_vs_As_Built_Performance_Gap_End_of_Term_Report_0.pdf P.20. (accessed 7th September 2015).

¹⁶ Build Up Skills UK, 2013, Status Quo Report.

on the performance of traditional pre-1919 buildings in Wales, to ensure that our existing stock can be improved effectively. This should be a key consideration of ongoing apprenticeship reforms in Wales.

There is also a need to promote energy efficiency awareness as part of continuing professional development. Existing workforces need the time and incentive to embark on training to improve skills in this area. Welsh Government should therefore examine ways of increasing the emphasis on training and skills as part of its energy efficiency projects.

Employer Engagement

Employer engagement is vital to the success of policies around education and skills, with both the individual and the employer being the beneficiaries of training and development. CITB Cymru Wales is well placed to facilitate this engagement from a construction perspective and has well established governance mechanisms that allow this to take place through the CITB Cymru Wales Committee and the three regional fora. CITB Cymru Wales is also involved in the Construction Sector Qualification Advisory Panel that is seeking to ensure appropriate employer dialogue in the creation and development of qualifications in Wales. This is a vital consideration in any apprenticeship reforms.

CITB Cymru Wales has well-established engagement mechanisms through the CITB Cymru Wales Committee and three regional fora, as well as other professional services groups. The Welsh Government should use this as a means for disseminating information and engaging with the construction sector. CITB Cymru Wales is keen to facilitate this engagement on the consultation on the draft energy efficiency scheme and any of its associated policy interventions.

Finance

Wales Infrastructure Investment Plan

While the Wales Infrastructure Investment Plan (WIIP) is an innovative development from Welsh Government, providing a clear statement of intent around a number of capital projects, there is room for improvement.

The WIIP should provide a more detailed pipeline of opportunities to allow Welsh companies to plan their recruitment and training in good time. The pipeline and forward work programme should be more visible and user friendly to the sector to enable better business planning.

The range and quality of data captured in the WIIP could be increased, so that the industry has more nuanced data to work with. This could be modelled using the example of the UK Government's National Infrastructure Plan and pipeline to ensure labour flows and skills requirements can be forecast/planned¹⁷.

This could also help remedy one of the key problems for many construction companies, namely initiative churn. A large number of energy efficiency initiatives have come and gone over time and this creates uncertainty for companies.

In order to improve WIIP further, Welsh Government should examine the inclusion of retrofitting and maintenance and repair schemes where they are of sufficient size and scope. This would aid in the planning training effort and help to ensure firms that wish to

¹⁷ UK Government. 2013. *National Infrastructure Plan* [Online]. Available at: <https://www.gov.uk/government/collections/national-infrastructure-plan> (accessed 7th September 2015).

deliver energy efficiency measures have the time to develop the skilled workforce they need. This is crucial if the performance gap identified by the Zero Carbon Hub is to be remedied.¹⁸

Apprenticeship funding

If, as suggested above, energy efficiency skills and a wider knowledge of the performance of pre-1919 buildings becomes mainstreamed in the apprenticeship programme then the funding mechanism employed by Welsh Government will become crucial to the success of energy efficiency interventions. While CITB Cymru Wales recognises that apprenticeship reform is ongoing in Wales, and the Framework for Co-investment in Skills is only at the beginning of the implementation process, **it is vital that clarity around apprenticeship funding is provided.** This is particularly pertinent in response to reforms in England following the announcement of an apprenticeship levy that could have a significant impact on Wales' funding settlement.

About CITB Cymru Wales

CITB Cymru Wales is the largest representative body of construction employers in Wales, representing over 10,000 construction companies through the CITB Cymru Wales Committee and three regional fora. We work in partnership with government, industry, and education providers to maximise opportunities for skills, training and development within the Welsh construction sector, and to provide the right skills, in the right place, at the right time to support economic growth.

¹⁸ Zero Carbon Hub. 2014. *CLOSING THE GAP BETWEEN DESIGN & AS-BUILT PERFORMANCE END OF TERM REPORT* [Online]. Available at: http://www.zerocarbonhub.org/sites/default/files/resources/reports/Design_vs_As_Built_Performance_Gap_End_of_Term_Report_0.pdf P.20. (accessed 7th September 2015).