

Evidence from Construction Industry Training Board Energy Efficiency Evidence Session

- **How can we achieve reductions in energy demand and to what extent is this linked to local community engagement?**

Evidence around the energy efficiency market suggests that there are numerous interconnected drivers that instigate reductions in demand allied to the imperative to meet climate change ambitions.¹ These are:

- Political
- Environmental
- Legal
- Economic
- Social
- Consumer
- Knowledge
- Technological

Consumer demand and preference can drive the pace at which energy efficiency activities are required and installed. The extent to which they value energy efficiency in their purchasing behaviours can create a demand for work that the industry is more likely to respond to. The main learning point within the literature is that there are 'trigger points' in consumers' lives that appear to present particular moments of opportunity where investment in energy efficiency measures is more likely to be attractive.

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 renovations². Welsh Government should recognise the potential of SMEs to drive demand for energy efficiency retrofit and low energy buildings through established customer networks.

- **What are the social and economic impacts of increases in building energy efficiency standards?**

The recent Trust and Certainty report commissioned by the Supply Chain Insight Group suggests that there is little evidence to suggest that the market can deliver energy efficiency solutions without intervention.³ Building regulations are therefore a key driver for energy efficiency improvements in this regard. That said, Part L building regulations are 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.

¹ 'Trust and Certainty' Energy Efficiency: Market Viability and Supply Chain Deliverability Full Technical Report. Commissioned by the Supply Chain Insight Group Final version 14th October 2015

² 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).

³ 'Trust and Certainty' Energy Efficiency: Market Viability and Supply Chain Deliverability Full Technical Report. Commissioned by the Supply Chain Insight Group Final version 14th October 2015

CITB Cymru Wales believes it is vital that Welsh Government engages early with the construction sector on its proposals for review of Part L in 2016. In particular, Welsh Government should be clear in its direction of travel in order to allow the sector to plan its workforce development to meet the skill needs for delivering energy efficiency measures. 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. This is particularly important in light of the performance gap identified by the Zero Carbon Hub which illustrates that the skills capacity of the construction workforce has a major bearing on the difference between the intended energy efficiency impact and the actual energy efficiency impacts of measures.⁴

- **What scale of housing refurbishment programme is needed and how could this realistically be managed/funded?**

The scale of housing refurbishment is subject to a number of factors including the level of resources available to Welsh Government to pursue programmes and the capacity of the sector to deliver the intended interventions. The recent WWF/Energy Saving Trust report on energy efficiency in the housing sector demonstrates that Welsh Government is likely to meet its carbon reduction targets but that the role of refurbishment programmes is having a minimal impact on the carbon reduction trends.

One of 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.

By providing a long-term vision and spending commitment for retrofitting programmes in Wales, construction companies will be able to plan their workforce development in order to deliver the interventions. Such a long-term scheme could be placed in the context of the Wales Infrastructure Investment Plan and be accompanied by a Skills Implementation Plan, as is the case with the UK Government National Infrastructure Plan for Skills.

- **What are the skills/training implications of a large-scale energy efficiency programme?**

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.

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.

⁴ 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).

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 . Our own research states that these knowledge gaps seriously jeopardise our ability to achieve the EU 2020 climate change targets. 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 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.

- **What are the real barriers to building low cost, energy smart homes given that they can be built as cheaply as 'normal' homes and then can make money by generating surplus energy?**

As far as CITB Cymru Wales is concerned the provision of an appropriately skilled workforce is the key barrier to success in building low cost, energy smart homes. In order to succeed in developing energy efficiency measure further, the drivers identified previously need to be articulated as part of a wider vision from Welsh Government. A key component of this vision should be a skills implementation plan that ensures energy efficiency measures can be delivered at a sufficient quality to meet the Welsh Government's aims and ambitions.