

WSBF & BBA roundtable 'Each Home Counts & the Building Performance Network' – 29 January 2018

Summary and recommendations

Recommendations:

- Government should back new regulations for the energy efficiency industry and provide a holistic framework to link these with existing regulations for related trades, such as plumbing, gas and electricity.
- Government should clarify the direction of travel and introduce incremental increases to standards over a long time period, so industry can prepare for compliance with these improvements.
- Public procurement should mandate performance-linked outcomes of energy efficiency improvement projects or even introduce regulation to this effect.
- Upcoming revisions of Building Regulations (Part L) should move away from being purely SAP-based (Standard Assessment Procedure), and include a clause to enable future improved technologies that can assess building performance better to be implemented.
- Government and industry should support the Building Performance Network to enable better decision-making on policy, regulation and funding for improving building performance.

On 29 January, the British Board of Agrément (BBA) and the Westminster Sustainable Business Forum (WSBF) convened a roundtable to review progress since the publication of the 'Each Home Counts' report and discuss its key recommendations. In this context, attendees discussed building performance as well as the role of advice, information and consumer protection for promoting domestic and commercial energy efficiency in the UK. The discussion was chaired by **Dr Alan Whitehead MP**, Shadow Minister for Energy and Climate Change.

► **Discussion Summary**

The building performance gap

The roundtable highlighted that buildings rarely perform as well in practice as their designers predicted. The difference between anticipated and actual performance is known as the performance gap, with actual energy consumption in buildings found to be between twice and ten times higher than originally predicted. The Standard Assessment Procedure (SAP) is the methodology currently used to assess, predict and compare the energy and environmental performance of new build dwellings, RdSAP is used

to retrofit existing buildings. The method presents a number of challenges, for example, relating to storage technologies and behavioural assumptions. Roundtable attendees agreed that revisions of Part L of the Building Regulations should move away from being purely SAP-based and include a clause to enable the implementation of future improved technologies that can assess building performance in use better than SAP. Attendees also pointed out the unintended consequences to the health of occupants if energy efficiency is considered on its own and it was agreed that revisions to Part L should not be undertaken in isolation to Part F of the Building Regulations.

However, the roundtable pointed out that within the retrofit market, the UK Government's current supplier obligation scheme, the Energy Company Obligation (ECO), does not provide any incentive for investment in research and development. Overall, it was further agreed that ECO requires quantitative and qualitative improvement to make the contribution needed for the UK to significantly improve the energy efficiency of its building stock. Further, at present the Government does not provide a horizon for the improvement of standards. Government should therefore clarify the direction of travel and introduce incremental increases to standards over a long time period so industry can prepare for compliance with these improvements. Further, roundtable attendees proposed an inclusion of performance-linked clauses in all contracts for energy efficiency retrofits and new build that required projects to demonstrate compliance to performance specifications. This could either be done through procurement processes or through the introduction of appropriate regulation.

The co-heating test is currently used to measure building performance by assessing the amount of heat lost through the thermal envelope of completed buildings. This provides an evaluation of the as-built performance of whole buildings and their heat loss coefficient (HLC). The test is carried out after the completion of a new-build or retrofit project, but before it is occupied. The roundtable discussed that testing every single dwelling would be intrusive, time-consuming and unnecessary, but there are now new formats of the test which reduce the time and complexity considerably. The group agreed there should be a requirement on developers to test and report on the performance of 5 per cent of homes. These should be conducted by bodies with a high degree of independence from the sector and reports should be publicly accessible. Against the backdrop of the construction sector's propensity to drive down cost, such tests and failure to meet standards should involve a reputational and cost risk for developers and thereby create the necessary pressure for buildings to be tested more stringently and building performance to improve as a consequence.

The Bonfield Review

Roundtable attendees lauded the generally positive ambitions set out as a result of the Bonfield Review in the report 'Each Home Counts' but were concerned that the recommendations made by it might end up being toothless. This concern was based on the observation that individual committees for the different workstreams of the Review had not met recently or frequently since the publication. The Review as a whole also only concerned itself with retrofit and did not consider standards for new build properties. Attendees further highlighted that the proposed establishment of a quality mark for all energy efficiency and renewable energy measures was only to be made mandatory for public sector-funded projects. Non-membership of the quality mark would therefore not preclude installers from jobs for privately funded projects, which still leaves householders potentially exposed and further contributes to the prevalent lack of consumer confidence.

However, the main problems with the outcomes of the Bonfield Review identified by the roundtable was a lack of Government backing as well as the fact that other professions closely linked with home

improvements – such as plumbers, gas engineers and electricians – were already highly regulated. There is no holistic framework to link regulation for these sectors to new regulations for energy efficiency installers, which is likely to reduce the overall efficiency and effectiveness of these regulations.

Current understanding of building performance and policy environment

Roundtable attendees lamented a currently prevalent lack of understanding of building performance-related data as well as a focus on capital cost rather than whole-life costs of buildings. The roundtable further raised concerns regarding the Government's current energy efficiency ambitions, detailed in the Clean Growth Strategy, which are made dependent on whether measures are 'practical, cost-effective and affordable'. Attendees thought that created the risk that energy efficiency improvements would simply not be made, with landlords, for instance, being able to argue that there are no affordable measures for them to make improvements to their properties. Beyond this, attendees discussed that the definition of building performance should be made as simple as possible and be reduced to mean fabric efficiency, with individual building components to be measured separately. Further, greater understanding is needed of how occupant health and well-being is linked to whole-house performance.

The Building Performance Network

The roundtable highlighted that, in the absence of Government backing, the industry has recently started to form a 'coalition of the willing' in the form of the Building Performance Network (BPN). This is an independent not-for-profit organisation, operating in all related building sectors. Initially the BPN is focussed on energy efficiency of buildings, but in the future will look at other areas of building physics.

The energy efficiency market is highly fragmented and the sectors concerned with building performance evaluation are dis-jointed, which means that data often tends to be inaccessible and study methods unclear. The BPN advocates that performance has to include thermal comfort, indoor air quality, lighting and acoustics, in addition to energy efficiency and carbon, in order to take into account the health of occupants and the health of the building. Therefore, the value of the BPN was seen in its aim of bringing together all organisations and individuals with an interest in improving building performance and operation to:

- improve the understanding of building performance monitoring and evaluation to make better decision about policy, regulation and funding;
- support the harmonisation and sharing of building performance monitoring and evaluation standards to improve consistency regarding implementation across the sector;
- enable collective leadership on building performance monitoring and evaluation in the UK through a credible independent body.

More information about the Building Performance Network can be found at www.building-performance.network

► **The WSBF**

The Westminster Sustainable Business Forum (WSBF) is a high-level coalition of key UK businesses, Parliamentarians, Civil Servants and other organisations, seeking to promote effective sustainability policy in the UK.

The WSBF brings together leading UK businesses who want to maximise business opportunities in the transition to a low-carbon economy and share a belief in the need to operate in an environmentally, socially and economically sustainable way. We publish authoritative research reports; impact on government policy through in-depth round table policy discussions and outputs; and inform the wider sustainability debate by convening Parliamentarians, senior civil servants, business experts and other stakeholders at larger policy events and seminars.

For further information please visit: www.policyconnect.org.uk/wsbf or alternatively please contact the Forum directly at jim.clark@policyconnect.org.uk or on 020 7202 8570.



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