



# ZERO CARBON HOMES - PROGRAMME DELIVERY TIMELINE

2016 Taskforce – 6 June 2011

## Overview

The Zero Carbon Hub maintains a series of timelines and convenes a cross-industry 'Timeline Group' on a regular basis to review and report progress.

Since the last update of the time line some progress is being made towards the objective of zero carbon new homes from 2016, but the general picture remains one of urgent action in some areas to realise the ambition in the timescales set. Despite very difficult market conditions for house building, leaders from across the broader house building, supply chain, professional and client sectors are continuing to engage with the agenda. The required underpinning work on definition, policy and regulation is coming together and providing a clearer picture to industry. However, there are a number of areas where progress is too slow and this is causing some significant concern.

The overall status has not been downgraded as the Carbon Compliance level is less stringent than that assumed at the last review. A copy of the summary timeline is attached at Appendix A.

**Overall programme status – Amber**, some aspects require substantial attention, some good.

## Key Points



### **Scaling up examples of low carbon and zero carbon homes (Amber)**

- Other than in London (where requirements are set by the Mayor's London Plan), the withdrawal of the HCA requirements for CfSH / FEES significantly reduces the predictability of scale up. Left to local decisions, the risk is that scale up is inefficient and makes inconsistent demands, leads to a lack of critical mass and little consolidation of feedback (technical and consumer reaction). Many organisations, including the Zero Carbon Hub, are not resourced to be able to engage with 350 individual Local Authorities. Local requirements should be encouraged to support a national scale up trajectory.
- As at December 2010, slightly more than 2,000 homes have been built to 44% or better than 2006 Building Regulations. This compares positively with the timeline with regards to the minimum numbers considered necessary at this stage.
- Consistent scale up and dissemination of learning prior to regulations being introduced is an important element of safely and efficiently delivering this ZC Homes policy.

### **Minimum Fabric Energy Efficiency Standard (FEES) (Green)**

- The minimum FEES for new homes from 2016 has been confirmed by the Minister.
- The Part L 2013 process is utilising the FEES methodology and considering the appropriate level on the path to zero carbon from 2016.
- The FEES standard is being tested via an HCA initiative on 7 sites.

### **Carbon compliance (Green)**

- The Carbon Compliance Task group completed its considerations and recommended a metric and level based on 'as built' performance, which has been endorsed by the Minister.
- The Carbon Compliance level will be formally consulted on as part of the usual building regulations consultation process.
- The carbon compliance level determined for 2013 must provide a pathway for industry towards zero carbon in 2016.
- Additional work is required to: model additional small dwellings, determine the level for high rise buildings, determine the weather assumption to be used, determine the pathway and supporting 2013 regulations for delivering 'as built performance'.
- Part L 2013 needs to provide an appropriate basis for the introduction of an 'as built' performance mechanism in 2016 including gathering evidence on actual performance and provide a smooth trajectory through to the proposed 2016 standards.
- The methodology developed by *Carbon Compliance for Tomorrow's New Homes* Task Group for grid carbon intensity methodology is necessary to provide stability and predictability to industry and urgently needs to be confirmed by Government.



### **Allowable solutions (Red)**

- The Budget 2011 'Plan for Growth' report announced that the zero carbon homes policy for 2016 would cover regulated energy only and also indicated that the carbon price would be at the carbon market price. The subsequent Zero Carbon Homes impact assessment used £46/tCO<sub>2</sub>. This clarification is helpful but still falls short of the detail industry needs.
- Zero Carbon Hub facilitated industry engagement in the design of a framework for Allowable Solutions which needs to rapidly lead to the development of fully detailed mechanism.
- Some local authorities are creating their own Allowable Solutions schemes. This reinforces the need for a national framework to ensure a level of consistency and avoid ineffective use of development capital for CO<sub>2</sub> abatement.
- With large schemes now in planning, clarity is urgently required regarding an agreed mechanism for Allowable Solutions and the costs to development.



### **National compliance methodology - SAP (Red)**

- SAP needs to be developed to ensure it is fit for use with low energy homes as outlined within the *Carbon Compliance for Tomorrow's New Homes* report. This development is on the critical path and is urgent for both 2013 regulations and 2016. The intention for all major changes to SAP to be undertaken as part of 2013 regulation changes providing consistency to industry in advance of the introduction of the zero carbon in 2016 has already been missed.

- The evidence base is patchy and anecdotal, but there is a growing concern that overheating is a risk for homes built to higher energy efficiency standards (including those built to 2006 regulations). However, there is not currently an adequate tool for guiding designers and the approach to address this could fundamentally alter the development of SAP.
- Changes to SAP will require resource and time and this does not appear to be underway.
- Changes as a consequence of the move to 'as built' performance need to be integrated into the SAP tool providing a better prediction of performance and providing a structure which rewards continuous improvement / disadvantages bad practice.



### **Knowledge and Skills (Amber)**

- 2011 is considered to be a critical year for ensuring that the knowledge base, initially focusing on industry professionals, is developing fast enough to meet the necessary timeline. This does not appear to be happening at the speed and intensity desired.
- With the current poor health of the industry there is little R&D capital and therefore concern that knowledge and skills are leaving the industry as opposed to being enhanced.

### **Community energy and infrastructure enabling actions (Amber)**

- Whilst the definition of Carbon Compliance does not in itself result in increased reliance on community and district energy solutions, there is a need to have a suite of 'off the shelf' legal and administrative frameworks to speed deployment and reduce costs where this is stipulated locally or where such a solution would be more cost effective.
- The emerging national/local policy landscape does not appear to sufficiently encourage deployment of appropriate decentralised community energy solutions.

### **2013 Building Regulations**

- From the ZC policy perspective 'success' of the Part L 2013 regulations process will be judged by delivery of a continuum through to Zero Carbon in 2016. For specifics see sections on energy efficiency and carbon compliance.

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4 June 2011



Status degraded since last review

