

Carbon Compliance Task Group Terms of Reference

26th August 2010

Introduction

The Government's statement of 27 July 2010¹ made clear the Government's ongoing commitment to ensure that from 2016 new homes need not add extra carbon to the atmosphere. As part of this, the statement announced that the Government will set a national benchmark carbon compliance, standard in building regulations; a standard that would be realistic and would take account of costs. Recognising the challenges posed by the 70% figure previously proposed, the Government wishes to re-examine the case for this; and as such, has asked the Zero Carbon Hub to test what would be an appropriate level.

Consequently a task group has been established, under the management of the Zero Carbon Hub, to make recommendations on an appropriate minimum national Carbon Compliance standard and metric.²

Context of the Task Group's work

As with the Fabric Energy Efficiency Standard, Carbon Compliance will eventually need to be incorporated into Building Regulations and/or its associated Approved Documents in the form of minimum standards. Before being adopted into Building Regulations, it will need to be consulted upon (as part of a formal public consultation) and CLG will need to take advice from BRAC on the standard reflected in regulations.

The Carbon Compliance Task Group is asked to present its recommendations to the Minister before the end of 2010 recognising that formal regulatory processes will follow.

The Zero Carbon Homes policy aims to:

- Reduce the energy demand of new homes
- Support behaviour change through driving local/individual ownership and engagement with energy efficiency and carbon reduction.
- Remove barriers to delivery of new homes, by providing clear forward look on regulatory environment
- Support localism through an increased role for localities in low-carbon energy planning and delivery
- Help Government to meet renewable energy targets
- Support energy security via support for renewable and decentralised energy

¹ <http://www.communities.gov.uk/newsstories/newsroom/16527871>

² <http://www.communities.gov.uk/publications/planningandbuilding/zerocarbondefinition>

- Push forward innovation in construction and affected sectors by requiring high technical standards
- Future proof new homes, reducing need for retrofit later on
- Economic spill overs to retrofit of existing stock

Work to consider relative cost-effectiveness of carbon compliance

The Task Group should evaluate further the costs of different levels of carbon compliance in recommending options for what could be an appropriate, cost effective level for the national standard to be set. In doing so, the Hub should also consider:

- The Carbon Compliance standard will be a minimum standard that applies to every new home. It will therefore need to be technically achievable in the vast majority of situations where homes would be brought forward for development. However, that does not mean it needs to be the lowest common denominator across all dwelling types – to the extent practical, different levels of Carbon Compliance could apply to different types of dwelling, & variations of site characteristics.
- Innovation is an important objective of the policy. The Task Group should consider how innovation in housing construction, low and zero carbon technologies, and other relevant technologies, could be promoted through this approach. The standard should not be set at a level that is only achievable with a limited range of technologies and restricts innovation.
- Development of options should recognise that in line with the Government's localist agenda, and the Fallon Act, Ministers may wish to give Local Authorities some flexibility to implement different standards using the metric set.

Task Group Objectives

With respect to the policy objectives outlined above, the Task Group is required to:

1. Provide a clear definition of what a national benchmark for carbon compliance should consist of.
2. Present appropriate options on a level of a national benchmark for carbon compliance set above the minimum energy efficiency standard.
3. Options put forward should be drawn from an evidence base, which considers the range of dwelling and development types and technologies, and a range of possible carbon compliance levels between 44% to 100% of regulated emissions, (with the Task Group using their discretion, based on the emergent evidence, as to where to focus their attention) to cover:
 - Technical viability across a range of technologies
 - Average cost per tonne of carbon abatement measures for each option on a £/tCO₂e basis for traded and non-traded carbon, above the level of the minimum energy standard.

- Potential effects of learning rates for different technologies, & the possibility that costs will change as technologies are taken up on a wider scale; i.e., analysis should take account of how costs are expected to evolve prior to introduction in 2016.
- Developer cost on the basis of (a) pure capital cost and (b) net (whole-life) cost, inclusive of operating and maintenance costs (i) if value of future energy bill savings can be captured and (ii) if Feed-in Tariff and Renewable Heat Incentive payments are available (as currently for FIT, and as consulted on for RHI) and can be captured.
- Assess the impact Carbon Compliance levels on energy infrastructure design decisions for the site itself and the wider community.
- Where appropriate the interface between Carbon Compliance and Allowable Solutions should be considered. Any financial values for Allowable Solutions are to be taken from the Zero Carbon Homes: Impact Assessment (Dec 2009).³
- Have the potential to allow for viable assessment of 'design versus actual' performance as reported by the Carbon Compliance for Tomorrow's New Homes report⁴.
- Whilst not explicitly examining delivery, it would be helpful if the Task Group could highlight any notable implications for delivery options that may emerge from the analysis.

Task Group Considerations

Recommendations should be considered within the context of the following issues:-

- Prospects for housebuilders of different types to be able to **capitalise and capture** future energy bill savings and FIT and RHI were these to be available
- **Householder health and wellbeing**
E.g. assessment of potential unintended consequences associated with the different level of carbon compliance
- **Desirable homes for householders on a mass scale**
E.g. consideration of how the homes may be perceived by prospective householders
- **National energy infrastructure**
E.g. Implications for national and local energy infrastructure
- **National energy security / fuel selection**
E.g. consideration of the implications for national energy / fuel supply when adopted at a mass scale.

³ <http://www.communities.gov.uk/publications/planningandbuilding/zerocarbondoc09>

⁴ <http://www.zerocarbonhub.org/definition.aspx?page=8>

- **National renewable energy and carbon targets**
E.g. consideration of the extent to which the national renewable, carbon reduction and other targets are supported
- **Any further pertinent advice on likely trends in costs** – capital, whole-life

Task Group structure

In order to provide a robust and considered view the Task Group should include a suitable cross section of the wider house building industry as well as environmental and consumer interests.

Deliverables required

There are two deliverables to be produced by the Task Group:-

1. A report outlining options which meet the objectives above, with links to the relevant evidence base.
2. A presentation to the Housing Minister summarising the options and supporting evidence base.