



## GHA at Ecobuild 2008: “Low Carbon Homes – a reality check”

27<sup>th</sup> February 2008,  
15.45 – 16.45

Event Kindly Sponsored by:



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## Background

The GHA is in a celebratory mood after a successful first year and we are now well placed to help deliver real change. However, we are concerned whether the UK house-building industry really can deliver low carbon homes and whether they have the right tools and standards to support them. And beyond this, will current policies deliver the change we really need - for the climate, or society and our health?

We support the Government's Code for Sustainable Homes (CSH) but flaws in the energy sections mean that it may not deliver low carbon homes. Instead, there is a real risk it will deliver homes that are carbon intensive, expensive to run and that could in fact be more poorly performing than those built to Building Regulations 2006.

In addition, the results from monitoring programmes such as Stamford Brook, the BRE/EST survey and the zero carbon homes at BRE Offsite, tell us that we are not actually delivering the buildings we design. Monitoring and proof of performance are therefore absolutely critical, both in terms of actual CO<sub>2</sub> emission savings and consumer confidence in the product.

Furthermore, low carbon homes may have significant health implications if they are not appropriately designed. It is also clear to the GHA that optimising carbon savings means building good homes within safe and sustainable, low carbon neighbourhoods. Social and community aspects are therefore critical aspects of the Good Home agenda.

We have set out our concerns on these points to Communities and Local Government. This seminar challenges us to examine the solutions we currently have for house building in the UK, highlights the problems and our recommendations – and examines the solutions the industry needs.

## Who should attend?

**This is a free GHA event, in association with the Sustainable Development Foundation.**

It is of interest to everyone involved in new residential delivery and is open to all. We especially welcome developers and their associates. Book your attendance at this event at [info@goodhomes.org.uk](mailto:info@goodhomes.org.uk)

**Please note that you also will need to register for tickets to Ecobuild**  
<http://www.ecobuild.co.uk>



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## Event Programme:

**“Question Time” style debate! 15.45-16:45**

### **Speakers:**

**Neil May**, Chair of the GHA  
**Bob Lowe**, Prof of Energy and Building Science, Bartlett School of Graduate Studies, University College London  
**Pooran Desai**, Sustainability Director, BioRegional Quintain  
**Tony Woodward**, Kingierlee Homes  
**GHA Developer** (tbc)

*To be hosted by a special guest compere*

### Discussion Topics:

#### **Mind the gap: Closing the gap between aspiration and reality:**

Reports by BRE and others show that there is a significant problem with actual, as-built performance of many new homes in the UK. Additionally, the prototype zero carbon homes at BRE took several months of testing and sealing to get down to the projected air tightness levels proposed in design.

#### **Current problems and concerns with CSH: the GHA’s CSH3++**

Fundamental flaws in our current common language for more sustainable residential development, the Code for Sustainable Homes are explored. If left unchanged, its application could result in a significant increase in CO<sub>2</sub> emissions from our new homes.

The GHA has responded by supplying a position paper to CLG setting out the problems with CSH and SAP, along with our recommendations. The GHA solution is to adopt a standard of CSH 3++:

Code for Sustainable Homes Level 3  
+ real carbon reductions: 70% CO<sub>2</sub>/m<sup>2</sup> from a 2003 baseline  
+ 2 years post completion and post occupation monitoring.

This approach provides a permanent feedback loop and aids with fuller understanding of design and quality and customer satisfaction and could usefully be adopted across the whole industry.

#### **Real Life Performance: Lessons from Stamford Brook**

The lessons from 6 years of monitoring at Stamford Brook, in partnership with the National Trust and the developers, are now available. What lessons can we learn from Stamford Brook?

#### **Low carbon and healthy: possible health implications of low carbon design**

Increased levels of air tightness bring a range of air quality issues. If we don't design correctly, increased humidity and condensation will lead to mould growth, with significant negative health effects. What are the health implications of poor low carbon design?

#### **Thinking out of the house and into a low carbon community**

A reminder of where all our CO<sub>2</sub> emissions come from and an examination of the zero carbon approach: Is it the most cost effective method of reducing total direct and indirect carbon emissions from residents?

How do emissions from low carbon homes, compare to that resident's total carbon footprint? Are emissions from lifestyle impacts, such as food consumption habits, flying and transport, greater by a significant magnitude? Would other methods such as green transport plans and resident engagement by employing green lifestyle officers, offer a better £/kg CO<sub>2</sub> return for the UK? Should the focus of government policy be to enable low carbon lifestyles in a low carbon neighbourhood?

#### **Low and zero carbon definitions**

The government's current definition for zero carbon homes is flawed. With the Merton rule position clearer and softened, to allow accredited offsite renewables, and general industry agreement on this approach, how will accredited offsite renewables work in practice, to assist in low impact, low carbon communities?

**Please join us for refreshments**

**To book a place at this event please email Lijia:**  
[info@goodhomes.org.uk](mailto:info@goodhomes.org.uk)