# Welcome to the Zero Carbon Hub

## Where we create confidence for the future in building low and zero carbon homes

The Zero Carbon Hub was established in 2008, as a non-profit organisation, to take day-to-day operational responsibility for achieving the government's target of delivering zero carbon homes in England from 2016. Since then we've worked with both government and industry with the focus on raising build standards and reducing the risk associated with implementing the Zero Carbon Homes policy.

## The Hub has three core areas of focus:



Developing the Zero Carbon Definition



Undertaking Associated Research



Disseminating Information to the Wider Industry

## A word from our MD

The Hub reports progress towards the Zero Carbon target to the 2016 Taskforce, a high level steering body jointly chaired by the Government and the Executive Chairman of the HBF. My team and I are therefore ideally placed to provide clarity and certainty to the changes and challenges ahead. If you want to find out more on our work towards achieving the Zero Carbon agenda; or have an interest in participating - we welcome you to contact us, either via the team or our website.

Rob Pannell

## The Board

Paul King Chairman
David Adams Director
Mike Freshney (HBF/RD Ltd)
Neil Jefferson Chief Executive Officer
Bob Ledsome (DCLG)

Ray Morgan (LGA)
Rob Pannell Managing Director
Mike Quinton (NHBC)
John Tebbit (CPA)

Get in touch to find out how we can assist you





Zero Carbon Hub, Layden House, 76-86 Turnmill Street. London ECIM 5L0

Visit our website and follow us on social media for the latest information





in /company/zero-carbon-hub



## ZERO CARBON HUB

Facilitating the mainstream delivery of low and zero carbon homes

Who we are, What we do

## Developing the Zero Carbon Definition

Since our formation in 2008, the Hub continues to work with government and industry to create a zero carbon definition that can be delivered by the mainstream house building industry.

There are three core requirements which must be met for a home to qualify as zero carbon:

### Requirement 1:

## **Fabric Energy Efficiency**

The fabric performance of the property must, at a minimum, comply with the Fabric Energy Efficiency Standard (FEES), which is measured in kWh/m²/year. This is the first step in achieving Carbon Compliance.

#### Requirement 2:

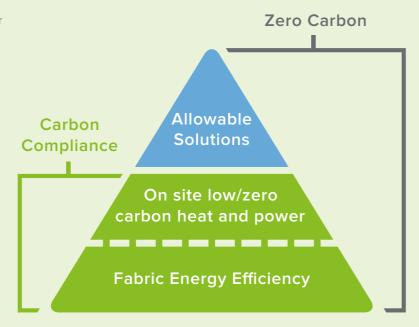
## On site low/zero carbon heat and Power

Any  $CO_2$  emissions that remain after consideration of fabric performance, heating, cooling, fixed lighting and ventilation, must be less than or equal to the Carbon Compliance limit established for zero carbon homes. This is measured in kg  $CO_2/m^2/year$ .

## Requirement 3:

## **Allowable Solutions**

Any remaining  $\mathrm{CO}_2$  emissions, from the use of regulated energy sources in the property, must be reduced to zero. Requirement 3 may be met by either deliberately 'over performing' on requirements 1 and 2 so that there are no remaining emissions, or by investing in off-site carbon reduction projects, known as Allowable Solutions. <sup>1</sup>



Through the mechanism of Allowable Solutions, the carbon emissions which can not be cost-effectively off-set on-site, after Carbon Compliance has been achieved, will be tackled though off-site measures. The Hub is currently undertaking further work with government and industry on this aspect of the Zero Carbon policy.

# Undertaking <u>Associated</u> Research

The Hub undertakes various strands or research critical to understanding the process of successfully delivering a zero carbon home.

We do this with various industry and government partners, bringing together both expertise and knowledge.

- O Analysing the gap between the designed and as-built energy performance of new homes
- O Understanding and tacklin overheating in buildings
- O Trialling various aspects of the Zero Carbon definition in practice
- O Assessing indoor air quality and occupant comfort in new homes
- O Finding and publicising best practice and exemplar projects
- O Understanding and addressing futur skills and knowledge requirements
- O Exploring approaches which raise awareness and interest in zero carbon homes among consumers

## Disseminating Information to the Wider Industry

The Hub engages with the industry through a number of channels:



#### Producing publications

All reports freely available on our website – www.zerocarbonhub.org



#### Creating guidance

Helping the delivery of zero carbon by providing 'Know How' documents and easy guide solutions



Hosting and presenting at conferences and other industry events



Advising industry on progress via exemplar projects and research



#### Newsletter

Updating readers on our work and related policy areas – sign up at www.zerocarbonhub.org



#### Twitter and LinkedIn

Sign up now for the latest information on policy announcements

 ${\it 1. Emissions resulting from\ cooking\ and\ 'plug-in'\ appliances\ (unregulated\ energy)\ are\ not\ being\ addressed\ as\ part\ of\ this\ policy.}$