

Code for Sustainable Homes

too little too late or just the next stage?

Despite having been anticipated as a significant step towards mainstreaming sustainable buildings, the new Code, as being delivered, is a bitter disappointment to those working in the sustainable development sector. Some suspect it has been devised so that the government can declare vast swathes of new housing in the south east (in particular the Thames Gateway) as being sustainable communities.

Jon Broome reports ...

Regrettably, the long awaited Code for Sustainable Homes (CSH), formerly known as the Code for Sustainable Buildings, may not make the significant contribution towards reducing the environmental impacts of buildings that many had hoped for. Prior to its launch it was expected that the Code would cover all publicly funded buildings, including hospitals, schools and other public buildings. This is now promised for some unspecified date in the future. Regrettably the current document covers new housing only.

However, publicly funded new homes are already going to be built to the highest standards of environmental performance of any sector of the building industry. English Partnerships, and from April 2006 the Housing Corporation, require all new homes that they fund or provide

site for to be built to the Building Research Establishment's EcoHomes Very Good standard. This equates to Level 3 of the proposed Code.

So do we need it?

One might wonder, therefore, why we need a new code. In the short term the only difference will be that 'higher levels of the CSH' will apply to homes developed with direct funding support from any of the ODPM's growth areas. The real significance lies in the aim of seeing the voluntary application of the Code to all new housing. The expectation is for local government to provide encouragement in this area.

The minimum standards, Level 1 of the Code, have been set so that house builders can meet the Code at minimum cost. The Code introduces voluntary standards of water efficiency, construction waste management and the use of materials. The minimum standards are modest; producing and implementing a Site Waste Management Plan, to record which materials are used in the construction and to reduce water consumption by an average of 18%.

However, the other 3 of the 6 minimum standards are already controlled by the Building Regulations and the Code does not raise standards in any real way above that of minimum compliance with current standards of energy efficiency, surface water disposal or household waste management. Meanwhile, the government has responded to the overwhelmingly adverse comment to the consultation by proposing to raise the threshold standards above the minimum mandatory level required by the building regulations.

One can argue that introducing new areas of standards, even if on

a purely voluntary basis, has the effect of broadening the house building industry's awareness of environmental issues and there is an expectation that in time they will opt to implement measures to improve performance in these areas. However, there seems to be no point in reproducing minimum compliance standards; this merely increases bureaucracy without raising performance and increases costs without benefits.

Meanwhile, one part of local government is taking a much more pro-active role. The Supplementary Planning Guidance to the London Plan on Sustainable Design and Construction is due to be adopted shortly. This will require developers of major residential and commercial developments to adopt much more far reaching standards. These include providing 10% of energy requirements from on-site renewable sources and 50% of timber to be from sustainably managed forests, for example. The guidance goes further and includes higher preferred standards which suggest, for example, that all major developments should have zero carbon emissions and that all insulation materials should be from natural rather than man-made sources. These are radical standards and it remains to be seen how effective the planning system will be in implementing them. However, early signs are that developers are becoming much more aware of energy and emissions and are considering the implications from the inception of a project.

The CSH relies on the market and developers to push for sustainable homes but there are limitations to this approach. Firstly, the housing market

is controlled far more by supply, rather than demand and the suppliers, the house builders, are also notoriously resistant to change. Secondly, whilst there may be interest in solar power and other visible add-ons, it is not clear that there is substantial demand for truly sustainable building which is a complex subject involving the detailed appreciation of waste and water and the environmental impacts of materials and so on.

Introducing new standards at a relatively low level, with the expectation that they will be raised in subsequent years, has proved a successful strategy for raising standards in the medium term. It has been used to increase the standards of energy efficiency demanded by the building regulations Part L, and by the Housing Corporation to increase standards of sustainability to EcoHomes 'Very Good'. However, the suggestion is that the implementation of the Code will rely on the market to drive up standards. It is not clear how effective this may be.

Benefits of the CSH

The new CSH has two significant advances over EcoHomes. Firstly, a number of elements are essential for compliance whereas it is possible (although difficult) to obtain an EcoHomes assessment without addressing the fundamental issues of energy or water efficiency for example. However, the converse of this is that external private space, security and guidance on using your home in a sustainable manner are not considered essential features of a sustainable home. There is no commitment to make issues such as these essential elements of a sustainable home in the future.

The second feature of the CSH which is good is that it is assessed after completion, unlike EcoHomes which only includes an option for a post completion assessment and

which is generally awarded on a design which may or may not be amended during design development and construction.

Nevertheless, introducing the Code has not addressed the question of broadening an understanding of the features of sustainable homes to include what many would regard as essential features such as adaptability to enable homes to respond to changing needs and expectations without becoming obsolete. Measures to provide adaptability might include easy access to change and upgrade services, increased space, the use of frame structures and lightweight construction such as timber for example.

Also fundamental to any sustainable housing system is the concept of resident consultation and involvement in the design and management of buildings. In Britain mass housing built by volume housebuilders does not have a proper role for residents. This is in contrast to Japan for instance, where the prefabricated house industry offers residents a wide range of choices. Other issues which are not considered include potential health impacts, indoor air quality, durability, ease of maintenance and the sustainable treatment of ground contamination.

EcoHomes ignores the social and economic aspects of sustainability and is limited to indicators that can be easily measured and there is no suggestion that the CSH will be broadened out to embrace these fundamental issues in the future.

The Code for Sustainable Homes is to be read in conjunction with the forthcoming Sustainability Checklist published by the South East of England Development Agency, SEEDA. This deals with the more strategic planning issues including the transport and ecological implications of development. This tool will be available on the internet soon.

To summarise, the new Code is a lost opportunity at a number of levels. In the short term it does not extend a commitment to sustainable building beyond the housing sector. In the medium term the minimum standards do little to improve performance within the housing sector and merely impose additional costs for marginal benefits. In the longer term the new Code ignores many of the fundamental aspects of sustainable building.

Jon Broome

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Sustainability Works

Another important tool for sustainable housing is 'Sustainability Works'. It is an online application developed by the Housing Corporation in co-operation with BRE, NHF, WWF and housing associations. It aims to bring sustainable development into the mainstream of social housing. Whilst it embodies EcoHomes and will incorporate the Code for Sustainable Homes when it is finalised, Sustainability Works covers the full breadth of issues essential to a truly sustainable approach to housing. As such it is of interest to anyone committed to the development of properly sustainable homes.

Sustainability Works incorporates an extensive reference library, bringing together current research and best practice. It is written by experienced practitioners, easy to understand and reviewed by independent experts in each field. It includes an indication of costs and benefits as well as case studies and hundreds of links to further information. Unlike the Code and the Checklist, it does not just set overarching targets for CO₂ emissions for example, it provides the background information and recommendations for achieving them.

The Sustainability Works team also provides training for users. It is a comprehensive tool packed with the information necessary to implement sustainable housing projects with full back up and as such a useful tool to effectively implement the Code for Sustainable Homes and the Sustainability Checklist.

Further information

www.breeam.org/ecohomes

www.odpm.gov.uk/index.asp?id=1162094

www.sustainabilityworks.org.uk