apse membership resources

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Code for Sustainable Homes

To: All Housing, Construction and Building Maintenance contacts; Main Contacts.

key issues

A detailed set of points allocated depending on sustainability improvements
A voluntary code requiring assessment
Opportunity to incorporate the Code into a wider Decent Neighbourhoods Standard
Benefits highlighted for social housing providers, consumers, home builders and the environment

Introduction

The Department for Communities and Local Government has produced a report entitled *Code for Sustainable Homes: A step-change in sustainable home building practice*. The document, released in December 2006, stems from the recent Stern Report on global warming commissioned by the Chancellor of the Exchequer, Gordon Brown, and particularly the fact that, in 2004 alone, more than a quarter of the UK's carbon dioxide emissions were attributable to the energy we use in our homes. This has a direct impact on the way we plan and design homes in the future. Work on the report was carried out in conjunction with the Building Research Establishment and the Construction Industry Research and Information Association. The express purpose of the code has been defined as that of "driving continuous improvement, greater innovation, and exemplary achievement in sustainable home building."

So how does the code work?

The code functions through a sustainability rating system. This is based on a star rating system which traverses the 1-6 bracket. Stars are attributed dependent on the extent to which the houses have achieved emissions standards based on the code. Apart from a set of minimum standards the code is completely flexible. This allows developers to choose how many standards they implement in order to gain points under the higher sustainability rating.

Importantly, those local authorities and other public, private and voluntary agencies seeking to achieve a particular code level have to integrate the full set of minimum standards while additional points are available for additional design features.

What is the detail?

The new code is essentially a move towards a single national standard for sustainable homes that will be used by designers and developers as a guide that will help them when producing designs for new homes. The code is designed to build upon existing Building Regulations in relation to carbon emissions while allowing consumers to make environmentally aware choices. Crucially, it allows those buildings with the code to 'differentiate' themselves in relation to green consumer demand. The report states that by 2050 as much as one-third of the total housing stock will have been built between now and then. This is why, "current house building plans therefore offer an important opportunity to build high standards of sustainability into the homes we will use in the future."

The code operates a number of minimum standards which are contained within a number of categories and measured by code levels. Examples of the detail of the code are noted below:

Energy CO^2: Code levels 1 to 6 (stars) are measured on a sliding scale between 1 star reflecting a 10% improvement in emissions, up to 5 which represents a 100% improvement and 6 stars which is a zero emissions home covering all areas – heating, lighting, hot water and all energy uses.

Water: Operating on the same sliding scale basis internal water consumption (potable) is measures in terms of litres per day (l/p/d). The scale ranges from 1 star for 120 l/p/d to 6 stars for 80 l/p/d.

Surface Water Run-Off: There is just one star in this category awarded when authorities can "ensure that peak run-off rates and annual volumes of run-off will be no greater than the previous conditions for the development site. "

Waste: This category also functions in terms of one overall star rating. This is handed out for the following two categories:

Site waste management: Ensuring there is a site waste management plan that requires monitoring of waste and targets to promote efficiency.

Household waste storage: This relates to the adequate provision of waste storage for each dwelling. It is measured in terms of the following criteria: containers in local authority refuse collection/recycling schemes should be available to disabled people especially wheelchair users. The one star also requires that at least 0.8m^3 per dwelling is set aside for waste management.

There is a detailed scoring system which allocates points against individual issues and progress made in terms of how they are tackled. For example, 1.2 points are allocated where over 40% of fixed fittings are energy efficient fittings and 2.4 points where over 75% are energy efficient fittings. Another example is where at least 10% of total energy demand is supplied from local renewable or low carbon energy sources a score of 1.2 is allocated and a where this is at least 15% the score is 2.4 points.

Other topics covered by the detailed scoring system include security, considerate constructor's scheme, sound insulation, composting facilities, construction waste, cycle storage and lighting.

The sustainable design principles involved in the scheme included a series of categories which, taken as a whole, are designed to measure the 'whole home as complete package.' Design categories used in the scheme include the following: Energy/CO^2; water, materials, surface water run-off, waste, pollution, health and well-being, management and ecology.

The proposed standard is set to build upon existing systems that have already been developed using the Building Research Establishment's (BRE) EcoHomes System which has already had an impact on the social housing sector.

The code builds upon EcoHomes in the following ways:

- Minimum standards for energy and water efficiency at every level requiring high levels for sustainability.

- A simpler system of awarding points with more complex weighting removed.

- New areas of sustainability design such as Lifetime Homes and the inclusion of composting facilities.

The code is voluntary over the short-term

Importantly, the code is voluntary over the short-term although builders are encouraged to follow code principles as the government is considering making compliance with the code mandatory in future. The Minister for Local Government and Communities, Ruth Kelly, has said that there may be a set of targets set out and to be met by 2012. Ruth Kelly added, "the Challenge will spearhead the move towards zero-carbon development - as announced in December in a radical package of new measures for greener housebuilding, including the Code for Sustainable Homes and the first ever planning policy on climate change - and builds on the Chancellor's announcement in the Pre-Budget Report that in future most new zero carbon homes will be exempt from stamp duty."

Growth of the environmentally conscious public

A key element in the debate around sustainable construction has been the emergence of "environmentally-conscious public" who have a growing appetite for more sustainable products and services. The public want to be able to differentiate what they buy and this includes homes. The code offers "a tool for home builders to demonstrate the sustainability performance of their homes" and to "differentiate themselves from their competitors." Moreover the regulations are set

to represent the future direction of Building Regulations in relation to carbon emissions and energy.

Assessment of the code

Crucially, the code requires assessment – this will depend on a network of trained assessors working independently and who will also carry out a "post- completion check to verify the rating before a final code certificate of compliance is issued."

What are the benefits of the code?

Social housing providers

The code has been deemed advantageous for social housing providers because greater energy and water efficiency will result in lower running costs accruing to homes using the code. In turn this will help in reducing fuel poverty.

In terms of social housing the report also identifies improved comfort and satisfaction as a key benefit. In turn, this could help save costs in terms of reduced complaints as well as improving the 'well-being' of tenants.

Finally, social housing as a sector will benefit from raised sustainability credentials. This will allow social housing to demonstrate to the public, tenants and funding bodies that they have a 'green profile.'

Environmental benefits

Once there are minimum standards in place at each level of the code there will be a reduction in emissions to the environment. and this will have a positive impact *vis-à-vis* the Climate Change Bill due in June 2007.

The code is also designed to produce better adaptation to climate change. This works alongside the Building Regulations (Approved Document L – 2006) which already limit the impact of solar gains. Given that climate change is predicted to increase, better management of surface water run-off, for example, will mean that future housing stock will be better able to cope with phenomena like flooding.

The code will result in a reduced impact on the environment overall by including measures which promote the use of less polluting materials and encourage household recycling. It will also ensure that future housing stock taken as a whole will have fewer negative impacts on the environment.

Home builders

Crucially, the code is designed to benefit those involved in the construction of homes across all sectors of the economy. It can be used by home builders to demonstrate the sustainability performance of their homes, and to differentiate themselves from housing that does not apply the code then this would allow the public to exercise some choice in terms of homes that help them save energy thus contributing to energy efficiency as a whole.

Consumers

The last set of benefits identified are those that can be passed onto the consumer. These include information which assists consumers to make an informed choice. The code is seen as providing key information to homebuyers on the performance of different homes thereby assisting them in their choice of new home as well as helping with the task of reducing their own environmental footprint.

Consumers, as stressed, will also benefit from lower running costs in their homes through greater efficiency in water and energy in homes built to standard. In terms of health and improved well-being the new homes will provide lighter and healthier dwellings thereby ratcheting up the quality of life for the residents.

Regulatory certainty

The code is designed to bring about a degree of regulatory certainty and will act as a "guide to support effective business and investment planning."

Flexibility

As was pointed out earlier in this briefing the code is not yet statutory but instead "sets levels for sustainability performance against each element." The code is not prescriptive in terms of the voyage only in terms of the destination. Indeed it explicitly states that "home-builders can innovate to find cost-effective solutions to meet and exceed minimum requirements."

Conclusions

APSE welcomes the Code as another step towards tackling climate change, promoting sustainability and highlighting the Government's position. The involvement of and innovation from the construction industry is vital for a successful outcome.

APSE feels that there is a need to put in place a scheme which will build on the good work introduced as a result of the Decent Homes Standard but which addresses a wider agenda. The Code for Sustainable Homes attempts to promote issues which APSE feels should be included within such an enhanced standard or Decent Neighbourhood Standard. Topics such as climate change and CO2 emissions, energy efficiency and reducing fuel poverty, and the use of alternative or new power sources such as mini wind turbines or combined heat and power production should all be covered by a Decent Neighbourhood Standard. This code is an ideal vehicle for ensuring that a formal approach is taken to the promotion of sustainable products and methods and they could then be incorporated into a Decent Neighbourhood Standard as part of a package of measures.

The Code will provide guidance for those within local authorities with responsibility for building and maintaining housing and it will raise the sustainability credentials of the local government sector and add to the reputation it is rightly acquiring as the lead sector in the promotion and practical use of sustainable products and methods.

This document relates the issue of Sustainable Homes to wider issues of climate change emanating from Sir Nicholas Stern's recent report. The report has increased the stakes in terms of how the public sector and wider economy reacts. The code, in its favour, appears relatively easy to

use and apply which should help in enhancing take up. The star system allows consumers to differentiate buildings from one another in terms of their star rating and will therefore present new possibilities to the 'green' consumer. The new build programme will also address fuel poverty for families while, at the same time, helping local authorities with long-term costs in relation to their own buildings.

Building Regulations are the recognised process by which Government policy is brought to bear on the construction industry. Although this is a voluntary code at present, APSE feel it would be beneficial to use the initial period as a trial of the code with a view to building it into the Building Regulations. This would reflect the Government's commitment to addressing the topic of climate change and provide local government with the tools to promote sustainable construction on a local basis.

There is a requirement to have a set of assessors able to put the code into practice and their independence must be assured for the code to be effective. There is a need to ensure the assessment process is not too onerous so causing housing providers to avoid the scheme as a result of the disproportionate administration.

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