

Leading lights

As the Government's expert provider of affordable housing, the Housing Corporation is funding around 35,000 new homes per year for those in housing need in England alone. And as housing accounts for nearly one-third of the UK's carbon dioxide output, how do we reconcile the provision of essential new homes with the goal of protecting the planet?

The answer lies in the Corporation's Scheme Development Standards (SDS), a minimum requirement of all organisations receiving our funding, as a result of which the environmental standards of newly built, affordable housing are higher than 90% of all private sector homes.

And as our recently announced programme for 2006-08 is, at £3.9bn, our largest ever and open directly to private sector developers for the first time, it is even more imperative that we lead by example and maintain the pace of innovation.

Central to the Corporation's SDS is EcoHomes, an environmental rating system for homes whereby the lower the environmental footprint, the higher the 'score'. There are four categories of score: pass (36%), good (48%), very good (60%) and excellent (70%). The scheme was set up by the Building Research Establishment (BRE) in 2000 and awards 'points' to new build homes across 27 categories, ranging from the number of wildlife species lost through the development to the projected amount of domestic water usage.

While we have been the central supporter of EcoHomes for three years now, as of April next year, we will deliver yet another step change in environmental standards when we will start to require that the housing associations and private developers who receive our funding build to the 'very good' EcoHomes level.

Our new standards will have a significant impact on the national housing market. Currently, less than 2% of homes built every year meet the 'very good' standard. Following this requirement, it is expected that at least 16% of homes built each year will be 'very good' EcoHomes.

But how will EcoHomes reduce the environmental damage? One of the 27 categories in an EcoHomes assessment, carbon dioxide emissions, offers an example. In meeting our requirements, housing associations and developers will be forced to think carefully about their fuel choices – opting for gas rather than fossil fuel-based electricity, for example – or considering



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Oakridge Village, Basingstoke, by Sentinel Housing Group. Winner of the 'Richard Feilden Award for Affordable Housing' category of the 2005 Housing Design Awards

how to encourage energy-efficiency by installing A-rated products and low energy light bulbs.

As a result, it is estimated that the Corporation's 'very good' requirement will reduce an average home's CO₂ emissions by a tonne a year. Multiply that by the total number of all new homes built and we are talking big numbers – as much as 180,000 tonnes less of CO₂ emissions, each and every year – and that, in turn, makes a significant contribution to the UK's commitments under the Kyoto agreement.

More importantly to residents on a tangible level, perhaps, is that a move to EcoHomes 'very good' will save the average household £138 per year in utility bills.

But cutting CO₂ emissions is not the only aim of the Housing Corporation's Scheme Development Standards. As part of a wider strategy published in 2003, we have identified sustainable development as both a challenge and an opportunity. The challenges, centering around perceived cost and cultural shifts, are perhaps obvious – incorporating permeable paving to reduce flooding risks or recycling facilities to encourage behaviour change aren't always second nature to house building organisations.

Are our affordable housing providers really leading the way for the private sector when it comes to sustainable building? Andrew Eagles, Sustainability Manager at the Housing Corporation, explains why the answer is a resounding 'yes'...

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But there are also compelling reasons why housing associations and private sector developers should adopt sustainable development as a core business aim – not least because we and the Government require it, but because it makes good sense for the homes built and managed, the communities and residents served, and business viability with reduced waste usually leading to longer-term cost savings.

In addition, the sector needs to prepare for the new Energy Performance in Buildings Directive, which will be implemented in the UK in 2006. This requires minimum standards to be set on the energy performance of buildings, and the certification of all buildings at the point of sale or rental.

All worthy developments, of course, but doesn't sustainability cost? Well, not necessarily.

Firstly, a significant amount of work can be done at near zero costs. Our research shows that sustainable timber, well insulated walls and roofs, non-ozone depleting insulation (alternatives to polyurethane foams such as fibre glass or recycled newspaper), and low flush toilets do not cost more to buy.

Secondly, features that involve initial investment, such as low energy external lighting and energy-efficient boilers, provide financial returns in the long-term anyway. All in all, it has been calculated by BRE and cost consultants Cyrilsweet that an additional 1.7% on the building costs of an average home in a typical location is all it takes to build to 'very good' standards. Recent research from Halifax and British Gas reveals that over 80% of consumers are in fact willing to pay over 2% more for a 'green' home.

To provide a live example, a housing development of 86 homes in Poole, by Western Challenge Housing Association, has achieved an EcoHomes 'very good' rating at a total cost of £84,884 per unit. Due to its central location, the development scored highly on access to local amenities and public transport links, whilst maximum points were scored for installing low NO_x boilers and zero ozone depleting insulation.

There are also a range of funding programmes in existence to help organisations incorporate renewable energy technology into their developments. Clear Skies (funded by DTI and managed by BRE) and The Solar Grants Programme (funded by the DTI and managed by EST) are two such programmes. Under Clear Skies, for example, housing associations are eligible to receive grants of up to £50,000 for renewable energy installations, including solar thermal and wind turbines. Furthermore, as we have classed this funding as 'other public subsidy', it is available in addition to our own grant funding, as opposed to being deducted from it.

That's not to say that it won't be a challenge for housing associations and developers to increase their standards, which is why we've organised a series of seminars on how to build 'very good' homes running



Western Challenge HA scheme: "86 new homes in Poole by Western Challenge Housing Association. EcoHomes 'very good' achieved at a cost of £84,884 per unit"

throughout this year and next year. The Corporation has also funded the establishment of the One Planet Products buying club, which reduces the price of sustainable products by buying in bulk on behalf of housing associations. And on top of that, the Sustainable Homes consultancy offers free advice on how to build and refurbish sustainably.

Finally – and lest the accusation of 'talking the talk' should be levelled at the Corporation – we are continuing to lead the way with initiatives closer to home by reducing the emissions that are directly produced from our own offices. Over 80% of the electricity the Corporation uses is from a renewable tariff, staff have been educated to turn computers and lights off at night, we use recycled paper in our offices and recycle all we can, and staff can receive funding to maintain bicycles they use to get to and from work.

In addition, via an agreement signed this year with the environmental charity Climate Care, the Housing Corporation is now 'climate neutral', effectively offsetting our own CO₂ emissions by investing to reduce carbon dioxide output from building projects in the developing world. The Corporation is doing its bit. Even the tea, coffee, sugar and juice used in our London offices are 'Fair Trade'.

The Housing Corporation has taken the lead in bringing sustainable housing into the mainstream. It is now time for builders, consumer groups and environmentalists to draw consumers' attention to the availability of these affordable, low impact houses. The next step is to get people using these cleverly designed and super insulated houses – with space for bikes and recycling boxes, and little need for heating – in the way they were conceived. That's the true change we're hoping for.