Architects need to help the government shape the Green Deal... it's too important to fail, writes *Doug King*

The Green Deal, the government's flagship energy efficiency scheme, is coming and it will bring with it substantial changes to the way the construction sector does business The headline policy instrument of Zero Carbon Buildings will address only about 20 per cent of the building stock by 2050, the remainder having to be refurbished. The coalition's Green Deal, previously known as Pay as You Save under the Labour government, is designed to make the up-front costs of energy efficient refurbishment more palatable to homeowners and small businesses by deferring payment and financing it through future savings on utility bills.

The rate of refurbishment required to achieve 2050 targets amounts to about one building per minute for the next four decades. This is a tremendous opportunity for our industry, but it brings with it great responsibility. If we get it wrong we could not only set back vital climate change mitigation, but also damage our reputation irreparably. Research, such as the Carbon Trust's report Closing The Gap: Lessons Learned On Realising The Potential Of Low Carbon Building Design and The Joseph Rowntree Foundation's Low-Carbon Housing: Lessons From Elm Tree Mews, demonstrates just how far, as an industry, we are from being able to reliably deliver low-carbon new construction, let alone refurbishment. We need to rapidly assimilate these lessons and move on to a robust model for delivering eco-retrofits. The Green Deal has the potential, but the design professions urgently need to engage with the government to ensure that it delivers rigorous and verifiable solutions rather than perpetuating the present ad-hoc approach to low-carbon.

For example, the recent consultation on the Green Deal indicates that the government believes it is acceptable for Green Deal advisors to be employed by companies that will benefit financially from retrofits. Supposedly, the Green Deal advisor will act impartially in preparing the initial report and recommendations, although he or she is then free to act as an agent for an installation company, manufacturer or supplier. This is totally contrary to the model for design and consultancy services, where architects and engineers are required to be independent.

It is clear that for the Green Deal to be a success, the government needs to establish a system where advice is free at the point of delivery. However, in present proposals it is hard to see how advisors can remain impartial when their employment relies on the success of a single supplier or installation company.

Further, it is estimated that out of the 25 million homes in the UK, at least 7 million will be hard to treat, requiring special measures such as solid wall insulation. In these cases a simple checklist approach, as is currently applied by domestic energy assessors, cannot deliver appropriate recommendations. Hard to treat homes will require consideration of issues, such as interstitial condensation and indoor air quality, by experienced design professionals.

Decarbonising the UK building stock will be easy or

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cheap. The range of estimates for low-carbon retrofits, from £10,000 for an average home assumed in the Green Deal to the £70,000 to £80,000 being spent on some trials of hard to treat housing, implies spending a significant proportion of the one per cent of GDP that Nicholas Stern estimates is necessary to decarbonise the whole economy. It is vital that money spent decarbonising building stock is spent wisely, as every year we delay action the cost of mitigation increases exponentially.

The government has plenty of experience in creating market incentive structures, but a much poorer record of consulting with design professions. It is now essential that the construction industry engages with those in Whitehall charged with delivering the Green Deal to help them produce legislation that works. As designers, we know that nothing is ever perfect on the first attempt and we should be prepared to trial the legislation and quickly feed back to government our inevitable necessary improvements. Doug King, principal, King Shaw Associates consulting engineers Find out more about the Green Deal at TheAJ.co.uk/Footprint

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