

## UK-GBC SUBMISSION TO BRIGHT BLUE: HOME ENERGY EFFICIENCY

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The UK Green Building Council (UK-GBC) is an independent, membership-based, not-for-profit organisation committed to radically improving the sustainability of the built environment by transforming the way it is planned, designed, constructed, maintained and operated.

UK-GBC represents organisations from across the energy efficiency supply chain and has been heavily involved in the development of domestic retrofit policy. We have convened industry task groups looking into Pay As You Save (2009)<sup>1</sup>, Retrofit Incentives (2013)<sup>2</sup> and Green Deal Finance (2014)<sup>3</sup>. We have also been directly involved in the Green Deal Providers Strategy Group, the ECO Delivery Group and the DECC working group on minimum energy efficiency standards in the private rented sector. Our submission focuses around the green deal and future approaches to fabric energy efficiency.

### Summary

The Green Deal and ECO were specifically designed to be complementary, but delays to implementation and concerns about the costs of delivery led to sudden changes which disrupted delivery and brought the two policies into competition. Even if these changes had not been made however, the experience of the past few years have also shown that it is not possible to design one-size-fits-all policies which aim to address, for example, all able to pay households or all hard to treat properties.

Instead the Government should recognise energy efficiency as a national infrastructure priority and set long term targets for improving all existing homes. This would provide a long term policy framework under which various policies could be implemented which are tailored to different housing sectors and household circumstances. Establishing an expected delivery trajectory over and above individual policies would offer certainty for the industry to invest and provide a more stable foundation on which to build a genuine market for home energy efficiency.

Cambridge Econometrics have modelled the macro economic impacts of a major national investment programme<sup>4</sup> and shown that it would represent 'high value for money' as an infrastructure investment, helping to stimulate economic growth, increase tax receipts, cut household energy bills and reduce NHS spending.

### Why did the Green Deal fail? In particular, what mistakes were made in the design of the finance mechanism and the communication of the scheme?

The Green Deal was conceived as a way to overcome various barriers to uptake through a pay as you save finance mechanism, an accreditation scheme and a standard assessment process. But each of these aspects only dealt with barriers that householders would face once they had already decided to undertake energy efficiency improvements, and there were insufficient policy drivers in place to stimulate this initial demand.

This issue has been identified in Germany and France with their respective energy efficiency loans, the KfW Energy Efficiency Programme and Domofinance. Both of these schemes offered low interest loans for energy efficiency improvements and have seen greater uptake than Green

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<sup>1</sup> Pay As You Save: <http://www.ukgbc.org/campaigns-and-policy/task-groups/pay-you-save>

<sup>2</sup> Retrofit Incentives: <http://www.ukgbc.org/campaigns-and-policy/task-groups/retrofit-incentives>

<sup>3</sup> Green Deal Finance: <http://www.ukgbc.org/campaigns-and-policy/task-groups/green-deal-finance>

<sup>4</sup> Energy Bill Revolution, *Building the Future*: <http://www.energybillrevolution.org/wp-content/uploads/2014/10/Building-the-Future-The-Economic-and-Fiscal-impacts-of-making-homes-energy-efficient.pdf>

Deal Finance, but additional incentives and demand drivers have been used in both cases. This demonstrates that an attractive finance mechanism alone is insufficient to create a mass market for energy efficiency.

The Green Deal finance mechanism itself was also undermined by a combination of the Golden Rule and high interest rates. The Golden Rule limited the size of repayments so that they did not exceed the savings on the energy bill, meaning that Plan repayments could extend up to 25 years. But over a period of 25 years, an APR of 8-10% often meant that the total interest payable could equal or even exceed the initial amount borrowed to fund the measures<sup>5</sup>. This limited the amount that householders could borrow under the Green Deal and allowed only the cheapest measures to be funded. It would have been possible in some circumstances to double the funding available under the Golden Rule if the interest rate had been around 1-2% instead of the 8-10% offered under the Green Deal.

As a result, the Green Deal became appropriate for only a specific type of household that had a below average income but were not in fuel poverty. Those on or above average incomes were usually able to access other forms of cheaper finance such as mortgage extensions and were therefore uninterested in the Green Deal. But for those who could not access cheaper finance elsewhere the lower monthly outgoings of the Green Deal offered a unique opportunity to fund measures, and customer research by the Green Deal Finance Company showed that it was predominantly these households that were taking up the scheme.

#### What aspects of the Green Deal scheme should be retained in a future policy?

Any new loan scheme for the able to pay should take into account a number of lessons from the Green Deal. Different households will require different financial products which fit with their circumstances and requirements, rather than the one-size-fits-all of the Green Deal. The pay as you save mechanisms of the Green Deal worked for those on modest incomes, but those middle and higher incomes were put off by the available interest rates and the constraints of the Golden Rule.

The Green Deal demonstrated that funding whole house retrofits through a loan mechanism would require lower interest rates and flexibility around the amount that can be borrowed. And making loans available through high street banks has the potential to greatly increase the marketing exposure to householders. The principle of offering low interest loans to able to pay consumers through high street banks is a well-established mechanism in a number of European countries. The most notable examples include the KfW Energy Efficiency Programme in Germany<sup>6</sup> and interest-free Domofinance eco-loan in France<sup>7</sup>.

#### How should Green Deal-style loans for the able-to-pay sector be financed in the future? Is it necessary for the Government to provide any subsidy to the scheme?

Given the scale of the challenge in retrofitting the UK's existing homes, it would be impossible for improvements to be funded solely through government subsidy. Private householder loans and institutional investment will therefore need to fund the vast majority of retrofits, but initial government investment will also be vital to help stimulate the market.

Recognising the national benefits of improving home energy efficiency, funding should be provided through government infrastructure funds. Commercial loans could be provided with a

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<sup>5</sup> Green Deal Finance: <http://www.ukgbc.org/campaigns-and-policy/task-groups/green-deal-finance>

<sup>6</sup> Impact on public budgets of KfW promotional programmes in the field of "Energy-efficient building and rehabilitation": <https://www.kfw.de/migration/Weiterleitung-zur-Startseite/Homepage/KfW-Group/Research/PDF-Files/Energy-efficient-building-and-rehabilitation.pdf>

<sup>7</sup> Energy efficiency action plan for France - 2014, Pg.25:  
[https://ec.europa.eu/energy/sites/ener/files/documents/2014\\_neeap\\_en\\_france.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/2014_neeap_en_france.pdf)

Government guarantee to reduce the initial cost of finance, with additional subsidy then used for an interest rate buy-down. Using the Help to Buy agreements with UK retail banks as a model, a mechanism could be developed to allow the distribution of retrofit loans through the UK's 9,500 retail banks.

Given the job creation potential and competitiveness gains from a more energy efficient housing sector, the UK could decide to direct some of its European Structural and Investment Funding 2014-2020 toward regionally sensitive interest rate buy-down. DG Regio has provided guidance draft term-sheets for such "renovation loan" structures offering a model approach for Member States wishing to develop such approaches and it appears that initial concerns over State-Aid rules are considered and dealt with through such models.

The mortgage market also offers another potential source of funding and a route for bringing institutional investors into the market. Current mortgage affordability calculations do not take into account the energy efficiency of the property being bought. Recent work by UK-GBC and UCL<sup>8</sup> shows that using more accurate energy bill estimates included in affordability calculations could reduce risk exposure for lenders and allow purchasers of more efficient homes to borrow larger amounts. This same mechanism could also allow lenders to offer mortgage extensions specifically to fund energy efficiency improvements. The European Mortgage Federation is currently exploring the creation of a green covered bond market for mortgages on energy efficient properties and mortgage extensions used to fund energy efficiency improvements.

### What lessons do you anticipate from the Bonfield Review about quality assurance in the supply chain? How can these be incorporated into a Green Deal successor scheme?

The Bonfield review will provide a comprehensive overview of consumer protection when the findings are presented shortly, but there are some overarching consumer protection measures which would be complementary to a long term policy framework. Robust technical monitoring should require installers to register all installations in advance which would allow spot checks to be carried out during the works. Pre-registration of the work could be a requirement for issuing a completion certificate, without which the EPC cannot be automatically updated. To ensure consistency across all policies and housing sectors, a single accreditation and technical monitoring programme should be used for all energy efficiency installations. The quality mark could be industry-led in a similar way to the Gas Safe register.

### How can a Green Deal successor scheme be successfully communicated to consumers?

In order to drive a genuine market for energy efficiency, structural policy drivers are needed which are targeted at different housing sectors and start to link energy efficiency to property prices. For owner occupiers, adjusting stamp duty up and down according to the energy efficiency of a property would help to drive home buyers towards more efficient properties<sup>9</sup>. The inclusion of a property's energy efficiency in mortgage affordability calculations, as recommended in UK-GBC's recent report with UCL<sup>10</sup>, may also allow mortgage providers to lend more for efficient properties and thereby create a 'green premium' in values. While in the rented sectors, the displaying of the total cost of occupancy on marketing materials would make more efficient properties more attractive to prospective tenants and allow landlords to increase rents in line with lower energy bills.

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<sup>8</sup> The role of energy bill modelling in mortgage affordability calculations: <http://www.ukgbc.org/resources/publication/role-energy-bill-modelling-mortgage-affordability-calculations>

<sup>9</sup> Retrofit Incentives: <http://www.ukgbc.org/campaigns-and-policy/task-groups/retrofit-incentives>

<sup>10</sup> The role of energy bill modelling in mortgage affordability calculations: <http://www.ukgbc.org/resources/publication/role-energy-bill-modelling-mortgage-affordability-calculations>