CALL FOR EVIDENCE –GREEN DEAL FRAMEWORK

Response from:

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1. What roles do you see in the future for the above Participants? Can any or all of these roles be fulfilled without the need for formal Green Deal status?

2. What interactions and relationships need there be between different Green Deal Participants?

There is significant evidence to suggest that the myriad of different actors involved in the green deal process created an extremely complex 'customer journey'[1]. Successful retrofit programs in other EU countries[2] and the USA have often integrated the activities of advisor/auditor, installer and finance provider to provide a one stop shop for customers[3]. The 'atomisation' of these various actors in the Green deal, combined with a highly fragmented supply chain (where single measures are offered by separate supply chain actors) created this complex customer journey[1].

Therefore, policy should seek to promote integrated business models[1], where these multiple functions are offered by a single actor with a single point of contact for consumers throughout the retrofit process[4]. In this way, the separate accreditation and certification schemes for assessor, advisor, provider and installer can act as market barriers for SMEs to engage more fully with residential retrofit and create integrated business models. This means reducing complexity for installers as well as consumers, whilst balancing the need for quality control and consumer protection.

4. In their current form, are GDARs necessary, or helpful to Providers and consumers? What outputs might lenders need in any future scenarios?

A key issue surrounds the capabilities of the energy assessor. Many examples in the Green Deal rollout involved energy assessors with very limited knowledge of retrofit in practice[1]. This meant that the key initial interface with customers, lacked an in depth understanding of how the basic measures within the Green Deal Assessment Report (GDAR) would be implemented on the home in question. Combined with the up-front cost of the audit, this undermined consumer uptake. Additionally, the Reduced Data Standard Assessment Procedure (RDSAP) model on which the GDAR is based is a very crude energy model and makes extremely basic assumptions about a building. Other successful schemes such as Germany's KfW scheme employ highly qualified individuals as assessors, who undertake a much more thorough energy audit and provide tailored recommendations for the home[2]. Whilst such assessments may be expensive, it may be possible to front load the cost of the audit, or undertake a basic free audit that can be followed up with much more bespoke advice tailored to the individual property. Such a program may require government funding.

8. Are there alternative ways to determine what measures could be installed and funded using the PAYS mechanism, which would help enable the deployment of innovations and new technologies?

A recent BRE (Building Research Establishment) backed review of solid wall insulation (SWI) has shown that improper installation of single measures such as SWI has created a host of negative unintended consequences[5]. This has emphasised the need for a whole house approach to retrofit, and a shift away from single measures to consider the building in a systemic fashion. So, while research suggests that the Pay As You Save (PAYS) mechanism is considered useful and promising by many in the energy efficiency sector[6], the approach here is very narrow. The focus in the Green Deal on the payback periods of individual measures in the Green Deal is extremely unhelpful in this regard. Instead the audit and proposals should seek to design a technical solution that works for the whole building rather than be based on the economics of individual measures. The financial solution should then work back from this point and where the Golden rule is broken look at supplementary financing options to deliver the totality of these measures. Finally, the interest rate of the PAYS are an important factor, with many experts believing that a 0% interest rate, or at least a very low interest rate, would incentivise many more households to participate.

10. Could the system which provides consumer confidence, protection and redress be managed differently? For instance, do other existing general consumer protections, such as those available to consumers under the broader consumer credit regime, provide alternatives? Can you foresee developments resulting from the implementation of the Each Home Counts recommendations as offering scope for change?

Other mechanisms still use the UKSAP as a base but go for a more detailed assessment using the full version of SAP. Others may incorporate dynamic modelling, more commonly used for larger or non-domestic buildings, others such as Enerphit utilise the Passivhaus PHPP methodology to produce a more detailed assessment. Given that these methodologies are all considered more accurate than the RDSAP approach, it seems perverse to mandate a weaker methodology for proof of savings. Integrating the standardised Golden rule requirements into such an approach would be challenging, although if anything a more detailed audit should be more robust from a financial risk management perspective. Again other successful schemes such as Property Assessed Clean Energy (PACE) in the US are open to this plurality of assessment approaches[7].

12. Where consumers wish to make a number of improvements but not all meet the Golden Rule, are there any ways of better facilitating this?

The Golden Rule is conservative and limiting, both because it puts a cap on how much can be invested in refurbishing the house, and because it only works for low-hanging fruit, as only the most economical measures are put in place, encouraging a piecemeal approach. Easing or lifting this requirement would allow not only for more measures to be installed, it also better matches a whole house approach, and recognises that households' considerations are not limited to savings, but include comfort, aesthetics, soundproofing and more.

13. Do you have any other comments on these elements of the Framework? Are there any ways in which they could be re-organised and improved, without any detriment to the consumer?

In recognition that engagement with consumers is crucial for large scale success – and this includes building trust – the following is a summary of our recommendations:

- A single point of contact for the audit/assessment, installation and financing will drive demand and customer satisfaction
- Free audits will also drive demand
- More accurate and tailored advice, delivered by a more in depth assessment and audit and highly skilled assessor are needed
- These functions could be delivered by a single retrofit co-coordinator/project manager
- Coordinated, local initiatives can help realise the potential of energy efficiency programmes; these can take advantage of local authorities' knowledge of fuel poor and vulnerable households that benefit the most from such investments [8].

We refer to the Kirklees Warm Zone programme, the success of which is partly attributed to an emphasis on quality of installations and significant consumer engagement, including household visits and sustained marketing, and which, in contrast to the Green Deal, offered free surveys and assessments[9].

14. Are there changes that could be made to the Framework to make it more accessible or attractive to landlords and tenants in both the private rented and social housing sectors?

The landlord and tenant refurbishment conundrum is a long running problem, and there are no quick fixes. There are barriers which include information to both parties, split incentives for cost and benefits, complexity, permission from landlords, etc. Some things that might help the framework be more attractive and accessible include:

- Free assessments, which would make it easier for landlords or tenants to check out possibilities for improving the house, together or separately.
- Information packages aimed at each party, including their rights and commitments, including changing energy efficiency regulations.
- Trained intermediaries which might sit down with both parties together to assess how refurbishment under the Green Deal would work, and offer potential solutions around rent guarantees, dealing with disruption, and splitting costs and savings.

15. Do you see a need for specific Green Deal authorisation and accreditation? What role might parties involved in this play in the future?

Standardisation and a single point of accreditation and information as outlined in the Each Home Counts report[10] would be preferable. Loan provision is another matter – while FCA accreditation for vetting households might be necessary, capital providers should *not* have to deal with individual households. Our research suggests[6] aggregation of loans for a large number of households is vital for investors from the finance sector to be involved in loans for home energy efficiency improvements.

18. Are there factors that we have not identified that you believe will, or should, influence the future of the Framework? How might they influence it?

First and foremost, the objectives and target of this framework need to be clearly set out. The Green Deal was originally set up as a flagship policy, with expectations of it being the main vehicle for home refurbishment, potentially leading to millions of homes undergoing energy efficiency improvements. This consultation does not specify what the expectations or targets are of this framework are. Is it expected to be the *main* vehicle for home improvements, or one of many, targeting certain able-to-pay households?

Second, a crucial piece of the puzzle is the finance of the scheme. We note that there is no detail on who will provide the capital for the programme. If the Framework is seeking private investment from mainstream finance, then consideration must be given as to how individual projects can be aggregated so that thousands of home improvements are financed by one investor in a suitable vehicle. Our research suggests[6] this sort of aggregation is vital for investors from the finance sector to be involved in loans for home energy efficiency improvements. This would require intermediation between financiers and the energy efficiency sector, and government commitment to reducing risk and increasing confidence among investors, for example, by underwrite loans.

Further, this consultation document provides no discussions of alternative ways of funding the mechanism or ways of reducing the interest rate. Other schemes such as PACE in the US have shown how a more senior security and repayment channel (senior lien to the property and repayment through local property taxes) can reduce the cost of private capital. In addition, these schemes now have well developed secondary markets, which the Green Deal was not able to achieve.

19. Are there any other opportunities to improve the Framework, not covered by the above?

One serious concern among energy efficiency experts is a perceived lack of leadership and long-term vision from government to improving energy efficiency in homes. The historical lack of policy continuity, including the end of the Green Deal in its original form, has damaged the energy efficiency sector as investments in skills were not rewarded, hurting business and in turn reducing confidence in policy. This Framework would do well to better address these concerns by signalling a long-term commitment to building up installer skills and ensuring financial viability of the programme.

The introduction of this consultation suggests the availability of finance was addressed in the original Green Deal. In fact, the Green Deal had limited financial appeal, with interest rates above mortgage rates or high street secured loans[6,8]. While this might require some government investment in the shorter term, it would signal a much clearer intention and long-term commitment to domestic energy efficiency improvements. Thus, a key issue remains the interest rate on Green Deal Loans. Because of the long-term nature of Green Deal finance packages the interest payments can amount to over 50% of the total repayment. This has two effects. Firstly, the high interest rates of 8-11% can deter consumers who might perceive a much lower cost of capital on a mortgage or other types on interest free credit on consumer purchases. Secondly, these high interest rates retard the economics of measures with long payback periods, such as SWI – which is probably the single most important measure needed to meet UK climate change targets.

However, a range of policy options for further reducing the cost of capital for On Bill Repayment (PAYS) programs include:

- Credit enhancements such as government providing the first loss tranche (subordinated debt): examples include the LEEF[14] program in London as well as several Green Investment bank funded projects[15]
- An Interest rate buy down for private capital[16]
- State provided low cost loans – this example is being trialled in Scotland with a 0% interest loan funded by the Scottish Government, money is either repaid in instalments or taken as an equity release upon sale of the property.
  This is the approach adopted in Germany through the KfW state bank, which is

arguably the most successful retrofit financing program in the world with over 10 million homes having taken out plans.

Finally, there is little recognition in the Framework that the primary problem for residential retrofit is a lack of demand (although other documents, such as the consultation *Building a market for energy efficiency*, acknowledge that finance is not the only barrier). There is limited evidence that financing is a demand driver for retrofit and it is at best an enabler[12]. Therefore, polices to drive demand including area based consumer engagement schemes and supply chain upskilling[4] alongside incentive schemes such as variable stamp duty, VAT, council tax etc[13], need to operate hand in glove with any financing program. Notwithstanding this, successful financing schemes elsewhere have also included a simpler customer journey (as outlined above) and offered much lower rates of interest. The Framework considers householders as concerned with finance alone, leading to a plan for limited engagement with consumers and a focus on payback times of installations. Again, research suggests[6] that a more holistic approach would be more appropriate – focusing on how renovation offers a possibility for energy savings, but can also make homes more comfortable, sound-proof, modern, energy secure etc.

About the Centre on Innovation and Energy Demand (CIED)

CIED is a collaboration between researchers from the Science Policy Research Unit (University of Sussex), Transport Studies Unit (University of Oxford) and the Sustainable Consumption Institute (University of Manchester). It is one of six Research Centres on End Use Energy Demand funded by the Research Councils UK Energy Programme. Our primary focus is on the processes of innovation – both technological and social – that will contribute to energy demand reduction for a more sustainable energy future.

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