



Which?

A Local Approach to Energy Efficiency

Implementing the locally-led, area-based approach with a new supplier obligation and improved Green Deal

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1 Executive summary

Energy efficiency is one of the most effective ways to help people reduce their energy bills, tackle fuel poverty and improve health outcomes, but its potential is not being realised. Successive governments have sought to address the fact that the UK's housing stock is amongst the least energy efficient in Europe. While this has led to some progress, we are still some way from ensuring that consumers can really overcome the many barriers they face in making their homes energy efficient.

A new approach is now needed and the new government needs to move swiftly to ensure it is effectively introduced in April 2017 when the current Energy Company Obligation (ECO) ends. Given that we cannot expect more public funding to be invested in energy efficiency, or more finances to be raised via levies on bills, this approach must ensure that the existing resource is used more cost effectively. To achieve this, the next government's energy efficiency strategy should be focussed around a locally-led, area-based approach. Through local partnerships, for example between councils and GPs, this approach can make the best use of local knowledge to successfully engage consumers and achieve higher take-up. It also offers economies of scale. The new approach needs to learn from previous schemes: key lessons are the need for robust cost monitoring and a long-term approach.

Alongside this shift, the ongoing failure to ensure greater scrutiny of the money spent from consumers' bills must be tackled. The impact of the ECO, CERT and CESP on energy bills has been highly uncertain and should not continue to go unchecked. While a case remains for a supplier obligation, it should be changed into a fixed levy, providing the greater cost certainty that is essential. Uncertain, open-ended amounts should not be taken from people's bills. The levy should be combined with public funding, at the level of existing spend, and paid into a centrally-overseen fund that would be allocated to local authorities to take forward energy efficiency and fuel poverty schemes in their area.

For those people who are able to pay, the lessons must be learnt from the extremely low take-up of the Green Deal. A 'pay as you save' product has merit, but the Green Deal in its current form has proved unappealing to consumers and fundamental improvements are now needed.

While this approach focuses on local delivery, at a UK government level much greater cross-departmental activity is needed. While DECC must lead on this agenda, the impact of energy-inefficient homes on people's health, as well as the need to ensure that policies are effectively targeted at those in most need, have long been recognised. The current DECC energy efficiency strategy is welcome, but the next government should adopt a cross-departmental strategic approach with clear long-term targets and plans to be delivered by the Department of Health and others.

This approach should be delivered without delay after the election. Too many consumers continue to live in energy inefficient homes and are paying higher energy bills. Their health is also suffering and costs to the NHS are higher than they need to be. Opportunities for economic benefits such as new jobs are being missed. As a result, Which? expects the new government to prepare new legislation in its first year and ensure that the transition to a new approach begins immediately.

We set out below two primary recommendations. The first is to make better use of existing resource by focusing on the local approach and more effectively supporting all consumers. This recommendation is made up of a package of reforms and should be the primary focus for the new government.

The second recommendation is for a cross-departmental energy efficiency strategy, reflecting the wider benefits that energy efficiency can bring. The new government should look to develop this in 2015/16 for introduction from 2016.

1: Making better use of resource through the local approach

Continuing with the existing level of spend from bills and taxation, the new government should move to a locally-led, area-based approach to make better use of funding. The benefits of this approach include more effective targeting of those in need, better engagement through community working, economies of scale and a closer fit with other objectives such as fuel poverty and health. This will be a shift away from putting suppliers at the heart of delivery, in order to achieve more cost certainty and a holistic use of resource, focussed on those most in need.

The reforms that are needed

In order to deliver this, a package of reforms is required:

● **Creating a central fund from existing funding streams, with better cost control and monitoring by:**

- Transforming the supplier obligation into a levy, with more cost certainty and improved reporting.
- Bringing together funds into a central pot, with more strategic allocation via a central administrator.

● **Requiring local authorities to develop and implement new energy efficiency strategies from 2017 - under the oversight of a central administrator - which:**

- Prioritise people most in need, and put partnerships in place.
- Provide advice, and where possible support, for the able to pay e.g. reduced rates on insulation as a result of economies of scale.

- Maximise the 'trigger point' opportunities of home renovations and smart meter installations.

- Use local authority branding and endorsement to promote trust.

● **Keeping financial incentives for the able to pay:**

- Retain a stand-alone financial incentive scheme for the able to pay, similar to the Green Deal Home Improvement fund but with greater stability.
- The fund must ensure that the incentive levels continue to reflect the needs of consumers in hard to treat properties, for example those with solid walls.
- In the run-up to and introduction of the energy efficiency regulations in the private rental sector in 2018, there must be sufficient and well publicised incentive funding available for tenants and landlords.

● **Retain the 'pay as you save' model but make fundamental changes to the Green Deal including:**

- DECC should commission an immediate, comprehensive evaluation, including consumer research, to pinpoint the reasons for low appeal and to inform improvements. For example, to what extent the current interest rate, loan terms and impact on saleability of the house are barriers.
- The amount that can be lent under the Golden Rule to households using less energy than average should be limited to their actual usage. This would reduce the risk of their repayments exceeding energy bill savings.
- Green Deal quotes should be standardised to enable comparison with Green Deals from other providers and other forms of credit.
- Existing consumer protections should be retained, including the Consumer Credit Act and the Golden Rule. Weakening these would result in harm to consumers.

- DECC and/or the Green Deal Oversight and Registration Body should set out actions to improve the quality of advice from Green Deal assessors.

Preparation and transition to the new approach

The proposals set out above require a number of changes and a period of transition. This will include in 2015/16:

- Legislation for the new levy.
- Establishment of the central administrator function and central support unit.
- Allocation of initial seed funding to all local authorities in England to prepare them for the new fund, to enable them to prepare the initial strategy and to collate housing stock data.

In addition, a number of further pieces of work by government are required, drawing on the Scottish and Welsh area-based schemes and Green Deal Communities, including:

- Determining the right balance between high-cost and low-cost measures in area-based schemes, and the inclusion of offers for the able to pay. This should be done in partnership with local authorities.
- Understanding how best to cater for those in need but who are outside the target areas, and whether local schemes could be required to offer this support within local authority boundaries.
- Following further evaluation of the Green Deal, piloting a range of improvements to the Green Deal, including lower interest rates in 2015/16.



2: A cross-departmental strategy on energy efficiency, backed up by clear targets and plans

Taking action on energy efficiency has substantial benefits not just for cutting energy bills, but for fuel poverty, health, job creation, economic activity and tax revenues. As such, a cross-departmental approach must be developed:

- Under DECC's leadership, but working across Whitehall departments, notably DCLG (given the key role of local authorities), HMT, DH and BIS, and between Whitehall and the devolved administrations, the government should prepare a strategy with common objectives. The new strategy should be in place by mid-2016 in order to help guide the implementation of the new approach in 2017.
- A cross-departmental group needs to be set up to monitor progress on the strategy and share new learnings and best practice.

Sitting underneath this cross-departmental strategy, the new government should set a long-term (10 year) policy framework. It should back this with targets and delivery plans for insulation:

- New shared targets for loft insulation, cavity wall insulation and solid wall insulation.
- A solid wall insulation task force to identify how to drive down costs.

2 The need for a new approach

Energy efficiency is a cost-effective way of cutting energy bills and delivering wider benefits to society

Energy costs are consistently a top consumer financial concern: 66% of consumers are worried about them.¹ Energy efficiency is one of the most cost-effective ways for consumers to manage these costs, whether through installing measures such as insulation or changing their behaviour.

Improving energy efficiency of homes is also the most cost effective way to permanently reduce fuel poverty.² And it has substantial benefits for health, job creation, the economy and tax revenues. A recent study has estimated that the economic benefits of a large-scale energy efficiency programme would be considerable: including £3.20 returned through increased GDP and £1.27 in tax revenues per £1 invested by government.³

Looking at health benefits, cold homes due to poor energy efficiency have severe health impacts: 21.5% of all 'excess winter deaths' are attributable to the coldest quarter of housing.⁴ This leads to people dying early and extra cost for the NHS. The cost of treating illnesses caused and exacerbated by cold homes has been estimated to be £1.36 billion per year.⁵ Analysis has found that each £1 spent on improving the ability to heat the home to an adequate level for household comfort and health delivers a 42 pence saving for the NHS.⁶ This is in addition to the other benefits.

But the full potential of energy efficiency is not being realised

The full potential of these benefits has not been realised under successive governments. In September 2014 (Table 1 below):

- 28% or 5.4 million GB homes with cavity walls remained uninsulated;
- 30% or 7.4 million homes with lofts could have benefited from loft insulation;

- Only 3% of homes with solid walls (30% of the housing stock) have been insulated.⁷

This is despite there being supplier obligations in place - paid for by consumers - to promote insulation and other measures since 1994 and at scale since 2002.⁸

The failure to realise this potential has had serious consequences for consumers, as well as for the economy. For example, cavity wall insulation could save consumers up to £140 a year - around 10% of the average annual dual fuel bill.⁹ There are also non-financial implications for consumers: 40% of consumers say that their home is not warm enough in winter.¹⁰

Like the policies that came before them, current policies are not achieving enough and a new approach is needed

In late 2013 we published our report *The Imbalance of Power - The Challenge of Energy Efficiency*.¹¹ The report evaluated the effectiveness of past policies, such as the Carbon Emissions Reduction Target (CERT) and the Community Energy Saving Programme (CESP) - introduced by the previous government in 2008 and 2009 respectively. While these policies had positive elements, they also had flaws. CERT was successful in that it delivered low-cost measures at scale. However, it failed to engage consumers sufficiently, particularly where consumers were required to respond to offers from suppliers that they did not trust. It also delivered relatively few measures to landlords or tenants.¹² And a complete lack of cost monitoring meant it was impossible to judge cost and value for money. CESP was a valuable opportunity to test the area-based approach but it did not run for long enough to become established and so needed more time.

In our 2013 report we also assessed the early evidence of the then recently introduced Energy Company Obligation (ECO) and Green Deal - the Government's two primary policies for energy efficiency retrofits of homes. We made a number of recommendations to improve these. A number of changes were made by the Government, for example the largest element of the ECO was refocused on low-cost measures and early repayment fees were

abolished for the Green Deal, but these did not go far enough. For example, the cost of the ECO to consumers remains both uncertain and unmonitored.

And, through the ECO, insulation rates have fallen dramatically:

- In 2013/2014 loft insulation rates were 87% lower than 2012/2013;
- While installation rates for cavity wall and solid wall insulation fell by 46% and 30%¹³ respectively.

Installations in 2014 remain low in comparison with 2012: loft insulation is still down by 86%, cavity wall insulation by 45% and solid wall insulation by 40%.¹⁴ When the ECO ends in April 2017, it is expected that considerable numbers of all three key types of insulation will still be required (Table 1).

Many of the measures required are still of the less costly 'easy to treat' type. Yet the 'easiest' of these have increasingly been done and many of the households needing these measures may have been resistant to free or heavily discounted insulation offers. The costs and the challenge of engagement are both likely to increase.

The huge potential of solid wall insulation has hardly been tapped to date (Table 1 and Box 1). As the potential for 'easy

to treat' measures declines, it will be increasingly important to do so. However, there are considerable challenges, not least its high cost and the uncertainty over the costs of a large-scale programme (Box 1).

Box 1: Solid wall insulation

Solid-walled homes represent around 30% of the UK housing stock but 97% - 7.7 million homes - remain uninsulated. The high cost of around £4,000 to £26,000¹⁷ is a substantial barrier to uptake, as is the disruption involved. The Committee on Climate Change (CCC) has concluded that there is considerable uncertainty over the costs of a large-scale installation programme. The CCC considers that the measure is currently only a cost-effective means of reducing carbon emissions for around 1 million homes.

Therefore reducing installation costs is essential to increase cost-effectiveness and help drive higher uptake. This can be achieved either by installing measures at scale, such as a local authority-led programme of works, or when undergoing home renovation works such as a loft conversion when scaffolding is in place.¹⁸

Table 1: Remaining insulation potential (Great Britain), current and forecast to April 2017¹⁵

Number (millions)/%	Cavity Wall	Solid Wall	Lofts
Total properties (m)	19.35	7.99	23.87
Insulated as at Sept 2014 (m)	13.89	0.27	16.49
Un-/under-insulated at Sept 2014 (m)	5.45 - 1.61 'easy to treat' - 3.36 'hard to treat' - 0.48 uncertain	7.71 - 7.58 'hard to treat' - 0.13 uncertain	7.38 - 5.57 'easy to treat' - 1.7 'hard to treat' - 0.11 uncertain
Un-/under-insulated at Sept 2014 (%)	28	97	31
Forecast remaining potential at April 2017 (m)¹⁶	4.50	7.64	6.89
Forecast remaining potential at April 2017 (%)	23	96	29

The Green Deal has so far had minimal impact on uptake of insulation. The take-up of the Green Deal has been very low for a flagship energy efficiency policy, with on average only 399 plans taken out per month since launch (section 3). This means consumers are not getting the measures they need. It has also damaged the supply chain, with many job losses.¹⁹

There is now a window of opportunity to change this for the better

Discussions are beginning on what should replace the ECO, due to end in March 2017. There is also widespread recognition that the Green Deal is not up to the job in its current form. Now is the time to take a fresh look at the policies, the approach to delivery and the ambition, as these have not been a success to date across successive governments.

Given that we cannot expect more public funding to be invested in energy efficiency or more finances to be raised via levies on bills, the new approach must ensure that the existing resource is delivered more cost-effectively. In this report, we assess a number of schemes, the success they had in engaging consumers, and the available evidence on their costs and benefits. It is important that the new approach is effective in overcoming the barriers that consumers face. It must also represent the most effective use of resource, taking account of the full range of social and economic benefits that energy efficiency can deliver, including helping consumers with their energy bills.

From our assessment below of these factors, and based on the evidence available, we consider that the local approach is generally the most effective approach for

engagement and delivery. However, it cannot cater for all types of consumers and situations. We show that it needs to be complemented by a number of other approaches, such as making use of the 'trigger point' of home renovations, and incentives, such as financial incentive schemes.

In this report, we present a package of recommendations for the change that is needed. These are based on lessons for home retrofits from the ECO, the Green Deal and the CERT and CESP policies that preceded them. They centre on how to fund, design and implement the locally-led, area-based approach that Which? considers must be centre stage. Through involving trusted intermediaries, this approach has been shown to be successful in engaging consumers and so achieving higher take-up. It also offers opportunities to realise important economies of scale. We show how an improved supplier obligation and Green Deal-style product could be integrated with this approach.

The new government should place this approach at the centre of a clear and ambitious energy efficiency strategy.

As we set out above, energy efficiency has many benefits for a number of government departments. Therefore, to be effective the strategy needs to be developed and implemented at a cross-departmental level. This would also help ensure efficient use of scarce public resource as each action would deliver a range of benefits.

With this in mind, in the following sections we analyse and assess first, the key policies of this and the previous government, with our focus on the current policies, and second, past and present delivery approaches.

3 Review of policies

The ECO, Green Deal and Green Deal Home Improvement Fund (GDHIF) are not up to the job

In this section we consider in more detail the primary policies: the ECO, Green Deal and GDHIF. We also draw on our analysis of CERT and CESP from our 2013 report.

The ECO, Green Deal and GDHIF are all essentially funding mechanisms. The ECO (Box 2) has a dual purpose of supporting the fuel poor and funding insulation measures for all types of consumers. The Green Deal and GDHIF (Boxes 4 and 6) are aimed at able-to-pay households.

These policies need to provide the right combination of support mechanisms ranging from lighter touch support for the able-to-pay to more comprehensive packages for low-income and vulnerable consumers. However, this is not currently the case. There is also insufficient certainty around the cost of these policies and who is meeting that cost.

The ECO

Working effectively, the ECO should deliver the right type of measures in adequate numbers to those who need it most. This includes those in fuel poverty and private tenants, and also those with homes off the gas grid and who have electric heating.²⁰ Each requires a different approach. For example, private tenants are more likely than any other type of occupant to live in poorly insulated 'F' and 'G' rated homes.²¹ But due to the 'split incentive' the decision is out of the tenant's hands and the landlord has little incentive to make improvements as he or she does not pay the energy bills.

Under a successful ECO, costs would also be recovered fairly and the policy would deliver maximum value for money for consumers. There would also be an effective cost control mechanism.

The ECO is not delivering enough

With the inclusion of low-cost loft and cavity wall insulation, the ECO now supports the right type of measures. However, the ECO is not delivering enough of these for the money. Analysis by the Association for the Conservation of Energy suggests that the CERO could fund up to 50,000 more loft insulations, 100,000 cavity wall and 25,000 solid wall insulations for the same amount of money.²² The ECO also has a number of other disadvantages that we describe below.

The ECO is not delivering enough to those in need

The ECO must be focussed on those most in need, especially the fuel-poor. This is even more important given that all consumers pay for it through their energy bills. However, only 57% of the ECO is aimed at low-income or vulnerable consumers²³ and consumers living in deprived areas. The remaining 43%, the CERO element, can be spent on any consumer, irrespective of need.²⁴

But it is not possible to tell how much even of the money assigned for priority consumers is actually reaching them. The CSCO can be spent on any household in a deprived area. There has been no evaluation yet of the extent to which the ECO is reaching the fuel poor or other priority groups, such as private rental tenants. Ultimately, we cannot be confident that those who need it are benefitting from it. This was also the case under CERT and CESP.²⁵

Box 2: The Energy Company Obligation

The ECO is an obligation on energy suppliers to deliver carbon savings and reduce heating costs through promotion of energy efficiency measures in homes. The ECO started in January 2013 and runs until March 2017.

There are 3 elements:

- 1 The Carbon Emissions Reduction Obligation (CERO) (or Carbon Savings Obligation) which primarily supports insulation measures. It was originally focussed on expensive 'hard to treat' insulation: the ECO and Green Deal were expected to work together to fund the whole cost. However, low take-up of the Green Deal (see below) meant this did not happen.
- 2 The Affordable Warmth (or Home Heating Cost Reduction) Obligation to help low-income households with replacement boilers and basic insulation measures.
- 3 The Carbon Saving Community Obligation (CSCO) to deliver insulation measures, mostly loft and cavity wall insulation, in low-income communities.

Changes were made to CERO in 2014 to reduce the cost. These included making 'easy to treat' loft and cavity wall insulation eligible for the CERO, reducing the target by 33% and allowing suppliers to carry over excess activity from previous obligations. The ECO is now estimated to be costing around £1 billion a year, reducing further to around £800 million per year from April 2015 - a considerable cut from the estimated £1.3 billion a year for the original ECO. To make up for the reduction in carbon savings, the Government made available additional public funding for energy efficiency incentives such as the GDHIF (see below).



It is not clear whether the ECO is reducing fuel poverty

The ECO is paid for through bills and as such is regressive - often those who spend more of their income on energy are low-income households.²⁶ It is important that paying for the policy does not exacerbate fuel poverty. This depends on, first, the level of the cost and how it is recovered from bills, and second, the balance of who is paying and who receives the benefits.

First, the level of the cost and how it is recovered from bills. The impact on bills of the new, smaller ECO (Box 2) should be much lower. However, it is not possible to measure this as there is still no reporting of what costs are recovered from consumers (see below) or how. Suppliers are free to recover costs from their customers' bills however they wish, as a flat rate or according to energy consumption. They could recover more through certain tariffs (e.g. standard tariff). As with CERT and CESP, there is no way of ascertaining the distributional impacts.²⁷

Second, as all consumers pay for the ECO, individual consumers will only be better off if they also receive an ECO-funded measure. The more expensive the measures funded, the fewer the number of households that can receive the measures and benefits. Recent analysis concludes that the Affordable Warmth element of the ECO could be putting more people into fuel poverty than it is taking out. This is as a result of it funding boilers - which are costly - and so benefitting fewer low-income households.²⁸ Prior to the ECO, these boiler replacements were largely funded from taxation.

It is not yet possible to determine the net impact of the ECO on fuel poverty due to the lack of monitoring of distributional impacts. This is even more important given the need for a greater focus on high-cost measures.

The ECO's cost-effectiveness ('bang for buck') is questionable

Successive governments have failed to ensure value for money under the supplier obligations. For example, under CERT and its predecessor obligations in place in 2002-08, 453 million low-energy light bulbs were distributed - an average of 17 per household. For some time, these could be distributed through mail outs even if consumers did not request them. As a result many were probably not wanted or suitable for the consumers' light fittings, and therefore not used.²⁹

It is questionable whether the ECO is delivering value for money. For the ECO to deliver the maximum energy savings obtainable for its spend depends on:

- 1 Whether it funds the most cost-effective measures, given what needs to be done;
- 2 Whether suppliers are delivering efficiently at the lowest-possible cost; and
- 3 Whether installations are high-quality and so delivering maximum savings.

First, the type of measures. The recent inclusion of loft and cavity wall insulation into the CERO has, in theory, improved the cost-effectiveness of the ECO.³⁰ However, surprisingly, the expected number of loft insulations is now lower than under the 'original' ECO and the number of 'easy to treat' cavity wall insulations barely increases.³¹ Second, cost effective delivery. This depends on the efficiency of suppliers, or their contractors. Partial data is published by DECC on a quarterly basis which shows the average, highest and lowest delivery costs across suppliers.³² This is an improvement on the situation under CERT, where no data was reported which meant it was impossible to judge cost-effectiveness and value for money.³³ The ECO data suggests significant differences in delivery efficiency across suppliers. However, independently verified figures with the costs per supplier are needed for a full assessment.

Finally, the quality of the installations. Ofgem's monitoring of sample installations found that 13% and 11% of solid wall and loft insulation installations respectively showed 'Type 1 fails'. These are fails that could moderately or significantly reduce carbon or energy savings.³⁴ However, there is no indication yet that any of the savings claimed are being revoked, nor whether suppliers have had to fix the problems or improve quality in the future. Consumers may still be paying for savings not being delivered.

Reasonable certainty and transparency of cost are both lacking

As the ECO is paid for by consumers through their energy bills, it is essential that there is a reasonable degree of certainty over its cost.

Yet the ECO's costs are far from certain for three reasons. First, we have already shown that there is inadequate data on suppliers' delivery costs. Second, there is no cap on the ECO's costs. Suppliers can spend whatever they wish to meet their obligations. Third, the ECO is not included within DECC's Levy Control Framework (LCF, Box 3). It is not defined as a levy on the technical grounds that it is not collected as a fixed sum but costs whatever is spent to meet the obligations.

Box 3: The Levy Control Framework (LCF)

Introduced in 2011, the LCF places a cap on the total policy costs that DECC can levy on consumers' energy bills. It aims to ensure that DECC meets its fuel poverty, energy and climate change goals in a way that is consistent with economic recovery and minimises the impact on consumers' bills. It includes policies such as the Feed in Tariff, the Warm Homes Discount and Contracts for Difference.

The current cap runs until the end of the Spending Review period in 2015. DECC is allowed to exceed the cap providing it does not go above the 'acceptable headroom' (initially 20%), agreed with the government at the start of each period.

Also, there is no assurance that suppliers' costs are being kept in check by competition in the energy market. This is a market that has been referred to the Competition and Markets Authority for a market investigation due to concerns about weak competition.

This means that, as under CERT, there is inadequate certainty around the total cost borne by suppliers. Reasonable certainty only exists in relation to carbon savings. This is because the ECO is set primarily as a carbon saving obligation, enforceable by Ofgem.

Worse still, suppliers are not being open about the costs they pass through to their customers. In April 2014,³⁵ the Secretary of State requested data from suppliers on the impact of ECO on their customers' bills. However, data has not yet been published, possibly because suppliers have

either not provided the data or not consented to its publication. This means there is no way of knowing how much consumers are paying or whether suppliers are passing on the cost savings they promised as a result of the recent ECO changes.

There is even a significant discrepancy between DECC's own estimates which casts doubt on whether the changes have actually reduced costs. DECC's estimated average impact of the ECO on a dual fuel bill in 2014 was £36.³⁶ However, DECC's latest assumption of average pass-through costs - based on the delivery costs data from suppliers - is £55.³⁷ Although the delivery costs may not yet reflect all the CERO-related changes, it is a concern that the average pass-through cost is still so high, and as much as £21 higher than DECC's cost estimate for 2014 - made after the changes.

The overall picture is one of inadequate cost control and transparency, despite the ECO being a programme which is expected to be costing consumers nearly £1 billion a year.

The Green Deal

The desirability and challenge of a 'pay as you save' loan product

There is a clear appeal in able-to-pay households making a contribution to the cost of improving the energy efficiency of their homes. A 'pay as you save' (PAYS) loan-type mechanism, where the loan is repaid over time from the savings on energy bills, is a means of doing this which can overcome the consumer barrier of upfront cost. It was on this premise that the Green Deal (Box 4) was developed by the current Government. That a PAYS product has merit was recognised by each of the main political parties prior to the 2010 general election.

However, encouraging people to take out a loan has been and will continue to be a challenge. Our 2013 research found that, of the 32% of people who said that they were likely to undertake energy saving improvements in the next year, almost three quarters (72%) said they would not consider taking out a loan to fund the work.³⁸ DECC's own research found that many more consumers (53%) expressed a preference for an upfront discount than a 12-year loan (31%). This was despite the loan being interest free and requiring a lower upfront contribution from the consumer.³⁹



Box 4: The Green Deal

The Green Deal was launched by the Government in January 2013. At its heart is a market-based PAYS credit product which can be used to finance insulation, boilers and glazing but not appliances and lighting. It is not a personal loan but is a charge on the property with new occupants continuing with the repayments. The scheme is supported by a government-backed framework of a code and accompanying standards.

The consumer receives a Green Deal energy assessment in the home and then takes out a finance plan from a Green Deal Provider (or can self-finance the measures recommended in the assessment). The 'Golden Rule' (only a principle not a rule) is that the regular finance repayments should not exceed the average energy bill savings that could be expected. But, due to the high rate of interest, many energy efficiency measures do not fit within the Golden Rule. This means they can only be financed through the Green Deal if the household meets part of the cost themselves or through another form of finance.

These findings are not surprising given that measures have been heavily subsidised upfront for many years. In our 2013 report, we concluded that loans are most likely to appeal to 'early adopters' who are already willing to install energy efficiency measures.⁴⁰ Maximising the appeal of a PAYS loan product to these consumers means providing it at an attractive cost, with simple and fair terms and processes.

The cost and terms of the Green Deal do not provide what consumers want

DECC's pre-launch research suggested that consumers found some features of the Green Deal off-putting. These include the net energy bill saving being too small, the payback period of 10 or more years being too long, and the worry that the charge being attached to the property might put off a future buyer.⁴¹

However, all of these features remain. The Green Deal does not provide enough of the short-term, net saving that consumers said they want. A major reason for this is the high rate of interest of 7% (plus charges), which exceeds what people with a good credit history would pay through mortgage finance or a personal loan. By contrast, in the PAYS pilots the 0% interest rate was one of the most commonly cited reasons for joining the scheme.⁴² A lower rate under the Green Deal would increase the net saving,

enable shorter repayment periods and increase what can be financed under the 'Golden Rule'.

At 10 years plus, the length of the loan terms is also longer than the research participants said they wanted. Consumers wanted shorter payback periods and greater flexibility. They also preferred the in-home assessment to be free of charge: most said they would be prepared to pay up to £50, and a few were prepared to pay up to £100.⁴³ Yet the average charge for assessments (where the consumer pays a fee)⁴⁴ is estimated to be £157.⁴⁵ As a result, the level of charge could also be a barrier to Green Deal take-up.

The product is also complex

The Green Deal's complexity is also likely to be off-putting to consumers. The concept is novel - a loan attached to the property and governed by the 'Golden Rule' - and could be difficult for some people to understand.⁴⁶ The process and paperwork are also complex and potentially confusing. While some improvements have been made, such as shorter documentation,⁴⁷ these do not go far enough. For example, British Gas has seen drop-out rates increase because of the complexity of the process which can involve multiple and unnecessarily lengthy visits to customers' homes.⁴⁸ An area of potential confusion is that the EPC and the Occupancy Assessment (OA), which together constitute the Green Deal Advice Report, can provide different estimates of costs and savings.

Consumers could be at risk of ending up worse off - despite the consumer protection framework in place

The in-home assessment is positive but is undermined by estimates of savings not being fully personalised. The savings estimates used for the Golden Rule calculation - i.e. to work out the amount that can be lent and the size of the repayments - are not based on the household's actual usage. They are based on the energy usage of a 'typical' household in that type of property, despite actual usage being included in the personalised OA. As a result, it is highly likely that these estimated savings will not be accurate and consumers may be misled into believing that savings may be greater than they will be.

Because savings estimates are based on 'typical' usage, low energy users could even end up worse off financially. A low-usage household could expect to see lower than average savings and is therefore at particular risk that the finance repayments exceed the savings. This raises questions over whether this product is suitable for low-income consumers and private tenants who are more likely to be low-users of energy.

New evidence suggests Green Deal customers are receiving poor advice

Recent mystery shopping for DECC has revealed that consumers are receiving poor quality advice.⁴⁹ The mystery shoppers did not receive consistent advice on the energy efficiency performance of their home or the measures to improve it. In particular:

- There was significant variation in the EPC and OA results produced by the different assessments conducted at individual properties. The range of EPC ratings spanned at least two EPC bands for almost two thirds of the dwellings analysed.
- Assessors appear to have adopted a variety of approaches to the selection of measures, such that recommendations for the same property varied widely.

This raises serious questions about the reliability of the information and advice. It is especially worrying when the Green Deal is predicated on an assumption of a standardised assessment process.

It is also a concern that around 10% of Green Deal assessor organisations and 12% of Green Deal installers have had their Green Deal authorisations removed for non-compliance with the Code of Practice.⁵⁰ The reasons why are not yet clear. Green Deal certification bodies and the Green Deal Oversight and Registration Body have an

important role in investigating this to ensure improvements in industry practices. There have also been well-reported problems with rogue traders using the Green Deal to exploit consumers. For example, falsely claiming to be Green Deal-registered in cold calls or on the doorstep and taking money for assessments never undertaken.⁵¹ Trading Standards, and where appropriate the police, have the responsibility to take enforcement action, with national co-ordination where required.

As regards installers, further investigation is needed to determine whether Green Deal standards are having any impact on raising the quality of installations, as they were intended to do. There is currently a lack of evidence on this important issue.

There is also a risk of mis-selling because a Green Deal assessor can be commercially tied to or employed by a Green Deal provider. This is despite consumers in DECC's qualitative research having expressed a preference for objective advice, independent from commercial interest.⁵² DECC's mystery shopping found little evidence of inappropriate marketing but, given the potential risk, this should be kept under review.

Low take-up is not surprising

Given all these problems, it is not surprising that uptake has been extremely low. At the end of January 2015, only 9,583 Green Deal finance plans were completed or in progress since launch in January 2013.⁵³ This is an average of just 399 Green Deals per month. There are recent signs of higher take-up: with a reported 500 households requesting Green Deal plans every week in early February 2015.⁵⁴ However, it is too early to tell why this is and whether this is a long-term trend.

DECC claims that the high number of Green Deal assessments - 422,436 as at 30 November 2014⁵⁵ - should be taken as a measure of success of the Green Deal.⁵⁶ However, this high number reflects the requirement in the ECO and Green Deal Cashback rules for a Green Deal assessment, rather than genuine consumer demand for assessments. A survey found that installation of measures following a Green Deal assessment was driven largely by this funding.⁵⁷ In other words, many of these assessments were commissioned in order to comply with ECO or Green Deal cashback rules.

This low take-up is despite public funding having been made available for Green Deal incentives for consumers (see below). And despite £88 million of 'Green Deal Communities' funding (Box 5) for local authorities to promote the Green Deal. In the absence of an evaluation, it is reasonable to assume that this funding has resulted in little take-up of Green Deal finance, given the extremely

Box 5: The Green Deal Communities Fund

DECC has made capital funding available to local authorities for promotion of the Green Deal through 'street by street' or area-based approaches. To date, £88 million has been shared among the 24 local authorities who made successful bids.

The funding can be used to deliver Green Deal plans or to support households who choose to self-finance measures, using ECO too where possible. Consumers will generally be required to have a Green Deal assessment, but they cannot be required to take out Green Deal finance. DECC expects proposals to include delivery of solid wall insulation to private households with a strong blend of Green Deal finance/ECO subsidy. Schemes are expected to make a comprehensive offer to as many households as possible.⁵⁸ Data is not yet available on what this funding has delivered.

low take-up overall. In fact, as a personal financial product - the suitability of which depends on the individual - the Green Deal is not well-suited to playing a central role in a street-by-street approach. This is not to say that an improved Green Deal cannot be one of a number of support options, but its contribution should not be overstated. Other financial support options will also need to be available, particularly given that, as we said above, many consumers are currently unwilling to take out credit to pay for energy efficiency measures.

The Government has not yet conducted the post-launch research which is needed to identify the precise improvements required, such as how far costs need to be lowered to increase consumer appeal. Evaluation would also reveal the extent to which potential customers are being deterred by up-front costs for assessments or by worry that a Green Deal would affect the saleability of their house.

Evaluation would also help identify how the Green Deal could best be promoted. For example, promoting it among households planning renovations (see section 4) is likely to be more productive than promoting it among homebuyers.⁵⁹ This research and the new evaluation must inform the essential improvements required.

Box 6: The Green Deal Cashback Scheme and GDHIF

The Green Deal Cashback scheme ran in England and Wales from January 2013 to June 2014 (Scotland continues to run a similar Green Homes Cashback Scheme). Through a voucher scheme, it provided cashback for customers who had installed energy efficiency measures after a Green Deal assessment and through a Green Deal provider.

The GDHIF replaced the Cashback scheme in June 2014. It introduced higher payment rates for some measures, for example up to £6,000 for solid wall insulation. It also removed the requirement for a Green Deal assessment. The requirement remains for installation through a Green Deal provider.

Green Deal Cashback and Green Deal Home Improvement Fund

As we set out in our 2013 report, people need to see short-term benefits and so an upfront financial incentive such as a cashback is often important to encourage consumers to install measures.

We consider below the old Green Deal Cashback scheme and the current GDHIF (Box 6), and its predecessor. Both schemes have been funded from taxation.⁶⁰ The Government first allocated £125 million to the Green Deal Cashback scheme which proved unpopular. It then allocated £150 million to the GDHIF. This proved much more popular and the Government allocated an additional £100 million in October 2014. Despite their names, neither scheme requires Green Deal finance, but can be combined with it.

The GDHIF has been popular, but subject to sudden fund closures without notice

It is no surprise that the GDHIF has been very popular. Its popularity is consistent with consumer research which found that high upfront payments for specific measures were the most attractive of the options tested.⁶¹ The GDHIF has offered high payments for solid wall insulation in particular. Launched on 9 June 2014, the first phase of £120 million had run out by 24 July. The second phase of £30 million was launched on 10 December but the main part of the fund ran out the next day.

By contrast, the Green Deal Cashback scheme was underspent: only £16 million of the £125 million was paid out. This might have been the result of lower payment rates and/or the requirement for a Green Deal assessment, but there is no evidence to confirm this.

Consumers got very little notice of the closure of both phases of the GDHIF: on each occasion, it was only announced on the day it closed. Consumers might already have commissioned works and paid a substantial deposit in the expectation that they would receive a voucher. This also hinders their planning of investments.

GDHIF's insulation focus is likely to be better value for money than Green Deal Cashback

The cost-effectiveness of both schemes has not yet been assessed. However, the 2010 English boiler scrappage scheme was found to be poor value for money. It only brought forward by 1.4 years the replacement of boilers that would have been replaced anyway.⁶² The same is likely to apply to the Green Deal Cashback scheme - 79% of the vouchers were used for boiler replacements. Value for

money is likely to have improved with the GDHIF as it has tighter conditions around boiler replacements and a greater focus on insulation,⁶³ which is not a replacement product.

Conclusions - both the ECO and Green Deal show serious failings

The ECO is not delivering enough energy efficiency measures. The amount of ECO funding dedicated to low-income and vulnerable consumers is also insufficient. It is not even possible to tell how much even of this (i.e. 57% of the ECO) is actually reaching them.

Given the lack of adequate monitoring of costs, it is also not clear whether the ECO is being well-spent. This means it is not possible to know how much consumers are paying for the ECO, what the distributional impacts are or whether it is cost-effective. Due to the lack of an effective cost control mechanism, costs are unlikely to be as low as they should be. This is despite an uncapped cost expected to be nearly £1 billion per year.

And the Green Deal is failing in its current form. An improved Green Deal offering lower cost and better terms for the consumer, combined with low-cost assessments and local endorsement, would have more appeal. However, the role of a loan scheme should not be overstated given the reluctance of many consumers to borrow for energy efficiency.

An additional and upfront financial incentive would help increase take-up, either in conjunction with the Green Deal or as alternative support. The GDHIF shows how popular such incentives can be. However, its value is undermined by the sudden fund closures which result in a lack of notice to consumers and hinder their ability to plan.

Together, the picture is of policies which are failing to provide the right combination of support that is needed for fuel poor and able-to-pay consumers.



4 Learnings from different approaches

What works for effective engagement and delivery

In this section, we apply three success factors for an effective delivery approach to draw on lessons from effective approaches. We derive these factors from the analysis in our 2013 report. These success factors are:

- 1 Effective engagement that persuades individuals to participate.
- 2 A visible, clear and trusted offer for both the fuel poor and able to pay.
- 3 An efficient process and easy customer journey.

We use these to assess a variety of schemes - funded by CERT, CESP, ECO or Green Deal - and the approaches to delivery used in those schemes, such as local partnerships or national offers from energy suppliers.

1: Effective engagement that persuades individuals to participate

Getting consumers interested and engaged is a significant hurdle. In our 2013 report we concluded that persuading people to act means communicating the relevance to the individual, using trusted sources at the right time.⁶⁴ We draw out the key findings below.

The local approach is more effective at finding those in need

Effective targeting requires identification of consumers in need who live in energy-inefficient homes. Targeting has been and remains a challenge because of the availability of data and the need to match data, such as on income and housing circumstances.⁶⁵ The Government is seeking to improve data matching and data sharing arrangements, including between public sector organisations involved in delivering fuel poverty schemes.⁶⁶

Using local organisations can help address some of these challenges. In CERT and CESP, the involvement of local partners in scheme delivery enabled useful data on housing stock and residents to be brought together. This was done in recognition that traditional marketing methods, such as mail-outs, were not generally effective in reaching vulnerable people. Therefore many schemes worked with organisations which knew their target group (e.g. Age UK, housing associations).⁶⁷

GPs and other health care workers are increasingly playing a role in helping find people in need of energy efficiency improvements. Reflecting this, DECC announced in its new fuel poverty strategy that it is now funding more of these local 'warmth on prescription' projects, which should cut consumers' energy bills and NHS costs (Box 7). DECC has concluded that this referrals approach has potential, not just with GPs but with a broad range of health professionals, and will be evaluating its success. There are also welcome signs in England's new fuel poverty strategy of the increased collaboration between DECC and health bodies needed to facilitate and strengthen these types of approaches. This includes a cross-Whitehall working group focusing on the links between health and fuel poverty⁶⁸ and could encourage cross-departmental funding to scale up this activity further.

Box 7: 'Warmth on prescription' schemes and the role of GPs⁶⁹

DECC's 2015 fuel poverty strategy for England announced £1 million of funding to scale up local 'warmth-on prescription' projects to help people who face health risks because of the cold. These projects involve GPs identifying patients whose illness has been caused or exacerbated by living in a cold home and referring them to energy efficiency schemes for new boilers and/or insulation. DECC will be working with the Royal College of GPs to develop their plans to pilot an electronic referral system as part of this.

These projects build on recent experience from similar schemes. Initial results from a pilot by Gentoo in Sunderland found a 28% reduction in the number of GP appointments and a 33% reduction in outpatient appointments after patients' homes were made warmer.⁷⁰ Nottinghamshire and Derbyshire Local Authorities' Energy Partnership is identifying vulnerable residents through a sophisticated targeting approach by cross-referencing data on benefits, housing and health. GPs then write to them inviting them to contact the project. This increases response rates due to trust in doctors and maximises efficiency by pre-selecting people in need, making better use of resource all round.



The local approach also enables use of tailored messages from trusted sources

Local schemes can tailor messages to the local context. For example, in the Newark and Sherwood Warmstreets scheme, the council varied their messages according to consumer sub-groups they had identified through matching their property database with a database on residents' demographics and lifestyles. This helped lead to

a fourfold increase in properties signing up for home insulation.⁷¹ Tailored messages delivered through community engagement were shown to be effective in 'local' pilot projects run by DECC.⁷² DECC's Community Energy Strategy therefore recognises the value of involving communities here.⁷³

Engagement is helped by the ability of locally-led schemes to use trusted, local intermediaries such as local authorities and housing associations. In CERT and CESP, branding by the local authority or other local organisation was considered important in increasing consumer trust and awareness of offers.⁷⁴ This is consistent with findings of Which? research in 2013.⁷⁵ Housing associations have also played a valuable role in CERT and CESP area-based schemes, not just because they manage a considerable amount of housing stock but also because of their good relationships with residents and strong local presence and knowledge. This meant that they could deliver information and advice tailored to residents' needs. They often employed their own, established tenant engagement services, such as the tenant liaison officer.⁷⁶

And intensive, area-based marketing taps into community networks, improving take-up

Intensive, door-to-door marketing can be the most productive way of engaging with households.⁷⁷ CERT schemes that used this method found it to be a positive enabler of 'friends and family' and 'word of mouth' effects, particularly for people seeing at first-hand neighbouring homes with solid wall insulation.⁷⁸ Because of these effects, a number of studies have found high take-up from intensive, area-based marketing.⁷⁹ Quantifiable comparisons are few, but CERT managing agents reported up to 60-70% take-up, compared to 20-25% for advice centre website referrals.⁸⁰ By contrast, Scottish Power mailed 1.3 million customers with a free insulation offer and received only 929 responses,⁸¹ perhaps because of people's scepticism of national offers from energy suppliers.⁸²

However, a doorstep approach needs to be done in the right way, and involving the right organisations. Where door knocking was carried out in CERT and CESP, the endorsement and support of the local authority added to the effectiveness of the engagement.⁸³ Research by Sheffield City Council found that, due to residents' fear of 'rogue traders', the scheme needed to be branded by the council, because "the Council is always there, people know who to call if there's a problem". The scheme also used council officers, rather than contractors, to conduct the energy assessments. And sample ID badges were included in resident communications prior to the visit to help address the problem of fake IDs.⁸⁴ This shows how the

local approach can employ a doorstep approach in a way that increases trust. Where contractors are used, for assessments or installations, robust quality assurance processes are essential, with monitoring of a sample of installations.

Tailored communications and door knocking are also expensive. However, and more evidence is needed to confirm this, because local schemes can achieve much higher take-up rates, this may mean they are more cost-effective overall.⁸⁵ Targeting allows schemes to make more efficient use of their resources, focusing and tailoring activity on prioritised consumer groups and avoiding wasting effort on others.⁸⁶ Using trusted sources increases the likelihood that the message gets through and that the consumer takes action. And because many households have been resistant to offers in the past, it is increasingly important to use the method that stands the best chance of improving take-up, as well as of making best use of resource.

Renovations also provide a valuable opportunity to engage consumers on energy efficiency

It is also necessary to reach people at key life stages and 'trigger points' such as home renovations.⁸⁷ In fact, householders choose more commonly to install energy efficiency measures with renovations than energy efficiency measures alone. Only 1 in 10 said they were considering doing 'energy efficiency only' renovations, yet over 3 in 10 were considering these as part of wider renovations such as new kitchens.⁸⁸

This suggests that renovations are a very important route to engaging consumers on energy efficiency. A report by the Energy Saving Trust (EST) also concluded this but found that it is important to fit within consumers' renovation plans, on a room-by-room or project-by-project basis. The 'whole house' retrofit approach is an unrealistic option for most homeowners.⁸⁹ Also, Which? research has found that consumers have a low level of trust of builders and tradesmen as accurate sources of energy efficiency advice.⁹⁰ This suggests that advice from more trusted sources is more likely to succeed, which could also be through a locally-led approach.

Voluntary approaches to engagement will not be enough in the private rented sector

Recognising that the current, voluntary approach is insufficient due to the 'split incentive' in this sector (section 3), the Government is introducing minimum energy efficiency standards for this sector from 2018. However, Which? considers that the planned regulations

are overly complex and will be difficult to enforce. We have suggested a simpler alternative⁹¹. It is important that adequate financial support for landlords and tenants is available: reliance should not be placed on a future supplier obligation that is yet to be determined and a Green Deal that is currently unappealing.

2 A visible, clear and trusted offer for low-income and vulnerable households and the able to pay

Once consumers have been found and their interest engaged, there remain other barriers to overcome. One of the key barriers is affordability or a perception of high upfront cost. We concluded in our 2013 report that reducing the price of the measure is most important here and that an additional, upfront incentive can make the offer more appealing still.⁹²

The area-based approach can offer a street-by-street, house-by-house offer

The local, area-based approach can provide a tailored offer to every house on the street, where a street-by-street approach is taken. Depending on resource, it can offer free measures to all residents or vary offers according to ability to pay. The former approach is likely to see higher take-up⁹³ but has a higher cost, and will not be realistic for high-cost measures.

A successful example of the former is Kirklees Council's Warm Zone. Using CERT, council and other funding, it provided a 'free to all' loft and cavity wall insulation scheme. It insulated over 51,000 homes (1/3 of homes in the area) and was the area that insulated the highest proportion of its housing stock over the first two years of CERT.

The second approach uses means testing and is more common. Indeed, Warm Zones schemes tend to take this approach. Warm Zones work with local authorities, energy suppliers and other local partners to offer individually tailored energy efficiency measures and advice, adapted to local needs and priorities. They generally use a five minute doorstep questionnaire to determine eligibility. They often offer advice and/or basic

measures such as draught-proofing to the able to pay. Other schemes, such as Cosy Devon⁹⁴ or Cardiff Partnering have focussed on priority consumers but offered discounted rates to the able to pay. In the Cardiff scheme, owner-occupiers not eligible for grant aid were offered the opportunity to purchase insulation at preferential rates, using the economies of scale that the scheme offered. The scheme achieved a relatively high 20-25% take-up rate of measures from private sector households not eligible for grants.⁹⁵

Area-based schemes that do not provide some form of offer to the able to pay can be divisive and unpopular with residents and councillors.⁹⁶ Where resource permits, a form of offer for everyone should be the aim. A discount or partial grant could even be combined with a subsidised loan (or Green Deal). However, CESP shows the challenge of achieving high take-up rates for high-cost measures among able-to-pay owner-occupiers, even within an area-based approach. This was partly because of the difficulty in encouraging able-to-pay households to contribute to the cost.⁹⁷ It is therefore important to be realistic about the level of uptake of high-cost measures, even within street-by-street delivery – although any available economies of scale can reduce the cost to the householder.

Local authority involvement in area-based schemes is essential, and they can play a number of roles

We have already shown how councils can play many important roles. They can also add value through a wider range of activities important for scheme promotion, co-ordination and facilitation. Local authorities can raise awareness among residents, apply their local knowledge and housing stock data to inform the design of schemes and bring together local organisations such as housing associations to form partnerships. All of these attributes were shown to be useful under CERT and CESP, where housing associations often played a similar and valuable role.⁹⁸ In fact, housing associations will often be better equipped than councils to take a more hands-on role in delivery given their experience of delivering major improvement programmes to their own stock.

Local authorities and housing associations can also leverage in other sources of funding. And they can work with third parties, such as a managing agent or a Warm Zone, to contract out delivery.⁹⁹ In Scotland, even though local authorities have a responsibility for delivery (see below) they will tend to contract out to installers using the centrally-procured 'framework' panel (see below).¹⁰⁰ Councils need not therefore deliver in-house. There is no 'one size fits all' approach but all councils have a valuable role to play.

But successful schemes rely on adequate resource for the organisations developing, promoting and delivering schemes, including local authorities

Sufficient funding is required not just for an appealing consumer offer but also for the organisations involved to set up and run the schemes. This is relevant to local authorities whatever role they play. Pulling together housing stock data, for example, can be challenging and require significant council resource and staff time.¹⁰¹ A 2012 survey found that the greatest barrier to councils taking further action on energy efficiency and fuel poverty was a lack of funding, both to provide attractive offers and resource in-house activities, including bidding for funds.¹⁰² Councils consider sufficient in-house resource to be a key ingredient in their successful participation in energy efficiency schemes.¹⁰³

Yet the evidence suggests that councils in England still lack adequate financial support. In a 2013 survey, 39% of respondents said they were not involved in Green Deal or ECO due to a lack of (internal) resource capacity. Nearly half (47%) of councils who said they were involved in ECO¹⁰⁴ (47%) were drawing in other sources of funding in order to increase uptake of ECO i.e. the ECO was not enough to cover the full cost of measures.¹⁰⁵

Although an increase in funding is unlikely to be realistic, a report by Demos for Which? concluded that a small amount of funding for energy efficiency scheme capacity building does seem to be effective. It cited examples of Scottish councils who are able to co-ordinate their area-based energy efficiency schemes (see below) with one full-time officer or even one part-time officer.¹⁰⁶ Funding from the Scottish Government recognises the need to support councils in building up their capacity: up to 15% of funding is initially available for administrative and enabling costs.¹⁰⁷

The Scottish and Welsh administrations fund local authority-led, area-based programmes through a more strategic and long-term approach than in England

In Scotland, the area-based scheme funded by the Scottish Government (Box 8) is a 10-year programme, providing certainty and stability. Funding is allocated to all councils for delivery of an area-based approach designed to be led by them. The devolved administration funding in Scotland and Wales also enables a national scheme offering wider support for those most in need of help outside those areas.¹⁰⁸

Whereas in England, there is no long-term, local authority-led programme with central oversight to help co-ordinate

Box 8: The current approach in Scotland

Launched in 2012, the Home Energy Efficiency Programme for Scotland (HEEPS) applies Scottish Government funding for Area Based Schemes (ABS) and the Energy Assistance Scheme (EAS) to improve energy efficiency and tackle fuel poverty. ABS has an initial focus on the most deprived areas but is intended to cover all homes in Scotland in 10 years. £42 million of an initial £60 million fund was allocated by the Scottish Government to all local authorities as 'core' funding and the remaining 'additional' funding was made available to local authorities to develop larger scale schemes.¹⁰⁹

Core funding is allocated using a needs-based model according to the number of fuel poor residents and hard to treat homes in their area. The additional funding is allocated using a competitive bidding process. Eligibility for 'core' and 'additional' funding depends on a broad set of criteria, such as prioritisation of hard to treat insulation. Councils are currently expected to obtain ECO funding from energy suppliers to fund easy to treat insulation. Councils are expected to work with housing associations, energy companies, installers and consumers. Responsibility for programme delivery falls to local authorities who have duties under Local Housing Strategies and climate change legislation.

In addition, the EAS national scheme is available for the most vulnerable Scottish households who live outside ABS areas but are not eligible for the Affordable Warmth (ECO-funded) programme. It provides grants for insulation and heating.

Central funding is also provided for five regional telephone advice centres. The centres have strong relationships with local authorities and community groups and refer callers to the ABS or EAS where they are eligible.¹¹⁰ They also offer callers free energy saving advice and, in some cases, a free in-home assessment.

this. The only public funding for an area-based approach is the ad-hoc funding provided by DECC for Green Deal Communities (Box 5). Not only is the amount of funding much lower in relation to the size of the population, but there is no assurance regarding future funding. Nor even is the Green Deal intrinsically suited to area-based delivery (Section 3).

Central oversight and support is an important element. The Scottish Government allocates the ABS funding and provides support to councils with their bids. A framework of contractors has also been established to avoid the need for each council to procure their own installers. This enables councils to take advantage of economies of scale.

By contrast, in England, councils are merely required under the Home Energy Conservation Act (HECA) to report on energy efficiency actions every two years. They are encouraged but not required to develop strategies. Whether councils take action will largely depend on whether they can secure ECO funding from energy suppliers - who hold the purse strings. Funding has also been available through the Green Deal Communities fund but only 24 English councils have benefitted from this (Box 5) out of over 350 councils in England. The result is insufficient resource and stimulus for locally-led delivery.

3 An efficient process and easy customer journey

We set out above a number of the benefits of the locally-led, area-based approach. For example, it can find consumers in need more easily and at lower cost than the energy suppliers. When well-designed and given the right conditions, it can also offer delivery efficiencies and an easier consumer journey - we explore this below. It can therefore enable more to be done with the resource available. But we also explore the challenges to implementing and delivering an effective locally-led approach.

Area-based approaches can deliver economies of scale

Area-based schemes differ greatly in scale, from a street or several streets, to a ward, a local authority area, or group of areas, or even larger scale. However, a consistent conclusion from previous studies is that area-based schemes have resulted in more cost-effective delivery of insulation. Geographical concentration delivered operational efficiencies in both surveying and installation, with good levels of take-up also reducing the cost per lead.¹¹¹ There is a need for more data to confirm the scale of the cost reductions (see below) but some examples can be found. The economic evaluation of Kirklees Warm Zone found that area based schemes can be 'up to 50% more efficient than the usual scattergun approach', according to estimates. This was due to factors such as greatly reduced travel times and the ability to purchase materials in higher

volumes achieving better pricing. These findings are consistent with the low installation costs seen for the scheme.¹¹²

Available evidence suggests that the economies of scale can be considerable for installation of solid wall insulation in multiple properties at the same time. The Government estimates cost reductions in the social housing sector are up to 30% (up to 40% for flats) and 10-20% in the owner-occupied and private rented sectors.¹¹³ The Cardiff Partnering Scheme mentioned above - a retrofit of 100 homes and five blocks of flats - reduced costs by 20% through targeting a whole area rather than upgrading homes individually.¹¹⁴ Although fuller evidence on cost savings is required, it is clear that a street-by-street approach is the primary opportunity to reduce solid wall insulation costs e.g. through reducing costs of scaffolding (Box 1).¹¹⁵

While the area-based approach clearly brings benefits, the poor cost monitoring in place for schemes from the outset means there are gaps in the evidence on the scale of these benefits. The CERT and CESP evaluation was unable to quantify benefits due to the lack of reported data on costs - a situation that continues with the ECO (section 3 above). The economic evaluation of Kirklees was also unable to do so. However, it was still able to conclude that the high energy bill savings relative to the low investment per house - higher than in other schemes - were achievable because of the economies of scale. These came from treating as many properties in the same area as possible.¹¹⁶

The area-based approach can also reduce hassle for the consumer

In our 2013 report we set out that a well-designed customer journey to reduce the hassle factor is integral to any successful energy efficiency scheme.¹¹⁷ The area-based approach can, if done well, deliver a smoother and quicker customer journey, avoiding the dissatisfaction that can arise when surveys and installations take longer than expected:

[The key lesson is] really focus the marketing on one area at a time, which maximises efficiency of delivery (very important in a rural area) and also ensure the customer doesn't have to wait too long for a survey/install¹¹⁸

Another study found that area-based schemes provided flexibility in meeting the needs of householders through convenient times for home energy assessment visits and installations, which helped improve uptake and the overall success of the scheme.¹¹⁹

But the area-based approach is not easy or quick to implement

As well as having higher communications and marketing costs (see above), area-based approaches are also complex and time-consuming to set up and implement. Kirklees' 'Zip-Up Method' of delivery by council wards took 18 months to refine. This suggests that adopting an area-based approach may require at least 12 months of intensive planning.¹²⁰ The time is needed to develop partnerships, for local authority procurement processes (that are often slow) and for implementation. Under CESP, suppliers only had from October 2009 to December 2012 to plan, develop and implement schemes from beginning to end. This was not nearly enough. The evaluation concluded that the short timescale, as well as the scheme's complexity (for example the scoring system), increased the overall costs and largely outweighed the area-based efficiencies.¹²¹

Therefore area-based approaches need adequate time and resource if they are to be successful and effective

Successful local approaches depend on effective partnerships¹²² and these need time to develop and establish. Longer timescales, plus greater support, guidance and resource for delivery partners could have strengthened effective partnership working under CERT and CESP. Longer timescales were felt to be essential for future policies.¹²³

Adequate resource is also key, as we set out above. A lack of funding for local authorities has been and continues to be a major barrier, with some councils better resourced than others. Smaller councils and councils without their own social housing stock are in a weaker position to attract ECO funding and negotiate effectively with suppliers.¹²⁴ These councils in particular need easier access to supplier obligation funds to enable them to play an effective role in partnerships.

Local councils have an essential role in partnerships but there is still a role for energy suppliers

Key organisations for effective, local partnerships are local authorities and housing associations. The involvement of local authorities appears to be critical, and they can work with housing associations to combine their valuable resources and skills. We have described above the many useful roles local authorities can play, whether in the design and delivery of schemes or in promoting, co-ordinating and facilitating them. Their role will depend on their resource, capacity and objectives, not just in relation to energy efficiency and fuel poverty but also wider

outcomes such as local jobs and health. These other objectives are often important ones on local authority agendas, particularly given their participation in the new Health and Wellbeing Boards. From a perspective of ensuring holistic outcomes, it is therefore more appropriate for local authorities to co-ordinate local schemes than energy suppliers who do not have these same interests. This also avoids the problem of multiple energy suppliers setting up area-based schemes in the same area, leading to inefficiencies.

Despite some of the issues highlighted above, including low trust in energy efficiency offers marketed directly by energy suppliers, energy suppliers could also continue to play a useful role within local partnerships. The largest energy suppliers have experience in running energy efficiency retrofit schemes and many consumers are receptive to suppliers helping them save energy. In fact, Which? research in 2013 found that more consumers (30%) cited energy suppliers as who they would want to help them save energy in the home than any other type of organisation, and ahead of the EST (26%) and a consumer group (18%).¹²⁵ It is likely that energy suppliers are perceived to have expertise which overcomes consumers' scepticism about energy suppliers' self-interest.

However, supplier involvement in does not necessarily equate to giving them responsibility for energy efficiency. In the past, suppliers have primarily had responsibility for delivering 'easy to treat' cavity wall and loft insulation. These are relatively standard commodities. Yet, increasingly, the focus will shift to 'hard to treat' measures which are bespoke, multi-skilled building projects requiring extensive site and customer management skills.¹²⁶ Suppliers should not be obliged to have responsibility for these projects. These projects are more appropriately delivered through locally-led, area-based

partnerships for the reasons we have explained above. Suppliers should however be free to participate in such partnerships and to develop, should they wish, service divisions with these skills.

Finally, all energy suppliers will have a responsibility to deliver energy efficiency guidance when installing smart meters for gas and electricity. This requirement is a valuable opportunity to advise on saving energy, whether using smart meters or otherwise.

Conclusions - the area-based approach gives the best chance of success

Evidence to date shows the benefits of locally-led, area-based schemes. Together these attributes can bring increase consumer engagement, economies of scale and an easier journey for consumers. Further evidence is needed to quantify the cost savings that this approach brings for solid wall insulation, but it is clear that it presents an important opportunity to reducing these costs. This is essential to increase cost-effectiveness, drive higher uptake and make best use of resource.

The locally-led, area-based approach must be placed centre stage to maximise these benefits. Partnership approaches are an effective way to do this but local authorities should be given more say in commissioning and in developing schemes and adequate resource for this. Energy suppliers should be able to play a role in local partnerships if they wish. Because partnerships need time to develop and implement, government policies must provide the long-term certainty and stability required, with effective working at cross-departmental level to facilitate effective local ways of working.

5 Conclusions

Lessons need to be learnt from the failings of past and present policies - more cost certainty and appealing financial support are essential

Successive governments have failed to maximise the full potential of energy efficiency, and so failed to do enough to reduce consumers' energy bills, tackle fuel poverty, reduce costs for the NHS and generate benefits for the economy. The policies have not provided the right combination of support or done enough to engage consumers to take action. Despite this there are lessons from past and current policies on how to do this successfully.

The previous government's CERT policy delivered low-cost measures at scale, but a key flaw was the lack of cost monitoring. There is still a lack of adequate cost monitoring under the ECO and so it is not possible to know whether the expected cost reductions have been realised and passed on to consumers. There is still a reliance on the retail market to keep costs in check, but competition is ineffective and provides insufficient incentive to keep costs down. Even if costs are as expected, the ECO is not delivering enough measures to justify the cost, and is not sufficiently focussed on those in need to make best use of this resource.

Although there remains merit in the 'PAYS' model, the Green Deal is not appealing to consumers in its current form. The new government urgently needs to make fundamental improvements including lowering the cost of finance. Even then, there must be realistic expectations of the Green Deal's appeal as many consumers will be unwilling to take out a loan. An additional financial incentive scheme will also be required if consumers are to be encouraged to contribute towards the cost of measures - the GDHIF shows how popular such incentives can be.

The best ways of engaging consumers and driving efficient delivery are through the locally-led area-based approach and home renovations

The evidence shows that a local, area-based approach is more effective at targeting consumers in need than leaving this to energy suppliers. Local authorities and housing associations in particular have an important role. When done well, the local approach can also be the most effective way of engaging consumers and encouraging them to take up offers. It enables tailored messaging and

intensive, community-based marketing that has been found to be effective. Consumer engagement will become increasingly difficult and important as the opportunity for low-cost insulation diminishes - leaving households who have resisted free or heavily subsidised offers unassisted, and a need to shift focus to high cost measures. There will increasingly be a role for GPs, other health workers and others providing support and care for consumers. An area-based approach is essential to enable this to happen at scale.

The local approach also enables economies of scale, particularly for solid wall insulation. It is therefore critical to make use of the local approach not just to engage consumers most effectively but also to make best use of scarce resource.

This approach should be focussed on the fuel poor in the first instance but it has the advantage of being able to provide a tailored offer to every house on the street depending on consumers' ability to pay. It could also use home renovations as a means of encouraging the able to pay to take action on energy efficiency. Three times as many households consider energy efficiency as part of home improvements than consider energy efficiency measures alone. This would help schemes to work for people in different circumstances.

The new approach must be implemented through effective collaboration and partnership working at national and local level, within the framework of a long-term approach

There is increasing recognition within Government of the importance of the community-based approach, notably in DECC's Community Energy Strategy and the new Fuel Poverty Strategy for England. The new government needs to put this centre stage. Effective cross-departmental planning and collaboration will be required. This can build on the example of stronger collaboration between DECC and health bodies shown in England's new Fuel Poverty Strategy. This national-level working will help facilitate the success of the local partnerships that are needed to deliver on the ground.

The new government must also ensure that the policy framework provides the long-term certainty and stability that is essential. Scotland has a model that provides a stable, long-term framework, supported by long-term funding, to enable councils to lead, supported with central

guidance. Previous UK-wide policies have been too short and subject to peaks, troughs and abrupt transitions. By contrast, Scotland has a 10-year programme. Finally, it will be essential to ensure extensive evaluation, piloting and testing before the introduction of the new approach to ensure a smooth transition this time round.

We now set out our recommendations for the new and improved approach.



6 Recommendations

We set out below two primary recommendations. The first is to make better use of existing resource by focusing on the local approach and more effectively supporting all consumers. This recommendation is made up of a package of reforms and should be the primary focus for the new government.

The second recommendation is for a cross-departmental energy efficiency strategy, reflecting the wider benefits that energy efficiency can bring. The new government should look to develop this in 2015/16 for introduction from 2016.

1: Making better use of resource through the local approach

Continuing with the existing level of spend from bills and taxation, the new government should move to a locally-led, area-based approach to make better use of funding. The benefits of this approach include more effective targeting of those in need, better engagement through community working, economies of scale and a closer fit with other objectives such as fuel poverty and health. This will be a shift away from putting suppliers at the heart of delivery, in order to achieve more cost certainty and a holistic use of resource, focussed on those most in need.

In order to deliver this a package of reforms is required:

- Creating a central fund from existing funding streams, with better cost control and monitoring.
- Requiring local authorities to develop and implement new energy efficiency strategies from 2017 under the oversight of a central administrator.
- Financial incentives for the able to pay.
- Improvements to the Green Deal.

These proposals will require some legislative changes and a period of transition to prepare for the change.

Creating a central fund from existing funding streams, with better cost control and monitoring

We believe that existing levels of funding should be continued but that funding from suppliers and consumers bills should take the form of a levy, subject to the Levy Control Framework (LCF). These funds should be brought together with existing public spending into a central pot for allocation.

Transform the supplier obligation into a levy, with more cost certainty and improved reporting

The new, long-term supplier obligation from 2017 should be a long-term fixed levy, designed to run for 10 years. This would bring greater cost certainty as suppliers would no longer be able to take from bills whatever is needed to meet carbon targets. To further strengthen control of the impact of bills, the levy should be brought within the LCF. And to provide transparency of pass-through costs, DECC should require suppliers to report costs passed through on an average and per tariff basis.

As set out below, suppliers would also no longer have responsibility for delivery, unless driven through a partnership with a local authority.

Bring together funds into a central pot, with more strategic allocation via a central administrator

The levy should be combined with existing public spending and administered by a central administrator.

The central administrator would allocate funds to local authorities (Scottish and Welsh administrations could continue to use this funding to support their existing approaches). Core funding should be available for all local authorities on a needs basis, which could be the proportions of fuel poor households and average EPC ratings. This will reflect the local authorities' proposals based on prioritising deprived areas with high proportions of EPC 'F' and 'G' homes, and additional offerings, for example, for the able to pay. Criteria should include value for money, but with allowance for rural areas, and a principle of 'low cost measures first', but with flexibility for councils to fund 'whole house' retrofits.

In addition to the core funding, local authorities would be able to bid for a second element of funding through a competitive bidding process, as in Scotland (see Box 8).

The administrator would assess funding proposals, ensure compliance (through contracts) and quality assurance - including monitoring of a sample of schemes, collect cost data and conduct an annual fund assessment for Ministers. The administrator could potentially be DECC's Energy Efficiency Deployment Office (EEDO) or the government could contract with an organisation such as Ofgem's E-serve unit.

Government should also explore establishing a central support unit to assist local authorities with their funding proposals, identification of areas, data sharing, bidding processes and procurement - similar to DECC's Heat Networks Delivery Unit.

Some public funding should be retained for local authority capacity building, financial incentives and improving the Green Deal.

Requiring local authorities to develop and implement new affordable warmth strategies from 2017

Building on the biennial Home Energy Conservation Act (HECA) reports, local authorities should produce new affordable warmth strategies that address both energy efficiency and fuel poverty. The strategies should include actions to improve their area's housing (private and public) using the funding - this should be a contractual requirement rather than statutory duty. These strategies should:

- **Prioritise people most in need, and put partnerships in place**
- The funding should be spent on deprived areas with high proportions of EPC 'F' and 'G'-rated homes. Within these areas, priority should be given to low-income and vulnerable consumers, and include support for private tenants and consumers off the gas grid.
- Local authorities should set out how they would work in partnership with local organisations such as housing associations, community groups and primary care trusts to target and deliver energy efficiency.
- **Provide advice, and where possible support, for the able to pay**
- To maximise community and area-based effects, local schemes should seek to include information, advice and/or financial support for the able to pay. Depending

on resource, this could be free or discounted measures, a preferential rate for insulation as a result of economies of scale or a locally-endorsed loan scheme or Green Deal.

- **Maximise the 'trigger point' opportunities of home renovations and smart meter installations**
- Local authority planning and building control should provide information on energy efficiency, promoting the local scheme, to residents submitting planning enquiries or applications.
- Local authorities and energy suppliers should work together to provide locally-endorsed energy efficiency guidance during smart meter installations. Where possible, suppliers should share their roll-out plans with local authorities.
- **Use local authority branding and endorsement to promote trust**
- Local schemes should be endorsed by the local authority and/or housing association and include robust quality control of contractors to reassure and protect consumers. Referrals should come from trusted, local sources such as GPs, as well as national routes, such as the Energy Saving Advice Service.

Financial incentives for the able to pay

The new government should retain a financial incentive scheme for the able to pay given the attraction to consumers of up-front subsidy of the cost of measures. It must provide greater continuity and stability than the GDHIF to avoid sudden fund closures. The incentive should be offered on a stand-alone basis and alongside an improved Green Deal, and could be offered as part of local schemes. The fund must ensure that the incentive levels continue to reflect the needs of consumers in hard to treat properties, for example those with solid walls.

In the run-up to and introduction of the energy efficiency regulations in the private rental sector in 2018, there must be sufficient and well publicised incentive funding available for tenants and landlords.

Improving the Green Deal

A 'pay as you save' model should be retained but fundamental improvements are needed to the Green Deal including, but not limited to, lowering the interest rate. There are a number of immediate changes that are required, as well as fundamental changes to the nature of the deal.

DECC should commission an immediate, comprehensive evaluation, including consumer research, to pinpoint the reasons for low appeal and to inform improvements. For example, to what extent the current interest rate, loan terms and impact on saleability of the house are barriers.

DECC should also take the following actions now to make it a better deal:

- The amount that can be lent under the Golden Rule to households using less energy than average should be limited to their actual usage. This would reduce the risk of their repayments exceeding energy bill savings.
- Green Deal quotes should be standardised to enable comparison with Green Deals from other providers and other forms of credit.
- Existing consumer protections should be retained, including the Consumer Credit Act and the Golden Rule. Weakening these would result in harm to consumers.
- DECC and/or the Green Deal Oversight and Registration Body should set out actions to improve the quality of advice from Green Deal assessments and investigate whether improvements are needed to the quality of installations.

Informed by the evaluation, DECC should undertake pilots in 2015/2016 to test a range of options, including lower interest rates, shorter loan periods, a personal loan as compared to a loan attached to the property and a simpler process. The findings should then be used to launch a new Green Deal, with more appealing interest rates and terms.

Lower interest rates could be delivered through a government guarantee of the risk-bearing debt of the Green Deal Finance Company,¹²⁷ as well as potentially direct government subsidy to reduce the interest rate further.¹²⁸

Preparation and transition to the new approach

The proposals set out above require a number of changes and a period of transition. This will include in 2015/16:

- Legislation for the new levy.
- Establishing the central administrator function and central support unit.
- Allocation of initial seed funding to all local authorities in England to prepare them for the new fund, to enable

them to prepare the initial strategy and to collate housing stock data.

In addition, a number of further pieces of work by government are required, drawing on the Scottish and Welsh area-based schemes and Green Deal Communities, including:

- Determining the right balance between high-cost and low-cost measures in area-based schemes, and the inclusion of offers for the able to pay. This should be done in partnership with local authorities.
- Understanding how best to cater for those in need but who are outside the target areas, and whether local schemes could be required to offer this support within local authority boundaries.
- Following further evaluation of the Green Deal, piloting a range of improvements to the Green Deal, including different interest rates, in 2015/16.

2: A cross-departmental strategy on energy efficiency, backed up by clear targets and plans

Taking action on energy efficiency has substantial benefits not just for cutting energy bills, but for fuel poverty, health, job creation, economic activity and tax revenues. As such, a cross-departmental approach must be developed:

- Under DECC's leadership, but working across Whitehall departments, notably DCLG (given the key role of local authorities), HMT, DH and BIS, and between Whitehall and the devolved administrations, the government should prepare a strategy with common objectives. DECC's new Fuel Poverty Strategy for England shows the value of closer cross-departmental working, such as with DH and the NHS on 'warmth on prescription' schemes. The new strategy should be in place by mid-2016 in order to help guide the implementation of the new approach in 2017.
- A cross-departmental group needs to be set up to monitor progress on the strategy and share new learnings and best practice.

Sitting underneath this cross-departmental strategy, the new government should set a long-term (10 year) policy framework. It should back this with targets and delivery plans for insulation:

- New shared, cross-government targets for loft insulation, cavity wall insulation and solid wall insulation - to maximise cost-effectiveness, the new government should adopt the Committee on Climate Change's indicator that 90% of lofts and cavity walls should be insulated by 2022 - 90% being what is technically achievable.¹²⁹ The target for solid wall insulation should be informed by the cost-reduction task force (see below). These measure-based targets

would complement the EPC-based targets in England's fuel poverty¹³⁰ which take account not just of insulation but also the heating improvements needed.¹³¹

- Solid wall insulation task force - the new government should set up an industry-led task force to map out a plan for delivery at lower cost. This follows the approach taken for offshore wind. It would address the considerable uncertainty over the potential costs of a large-scale programme. The task force should take account of the forthcoming review by the Government's Chief Construction Adviser of the long-term potential for innovation and deployment of solid wall insulation.¹³²



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- 121** *Evaluation of the Carbon Emissions Reduction Target and Community Energy Saving Programme*, Research undertaken for DECC by Ipsos MORI, CAG Consultants, UCL and Energy Saving Trust, 2014.
- 122** *Power to our neighbourhoods: towards integrated local sustainable energy solutions*, Ashden Awards, 2010.
- 123** *Evaluation of the Carbon Emissions Reduction Target and Community Energy Saving Programme*, Research undertaken for DECC by Ipsos MORI, CAG Consultants, UCL and Energy Saving Trust, 2014.
- 124** *Local authority Green Deal and ECO analysis focus group*, A report for the Local Government Association, 2013
- 125** Which? survey of 2,055 UK adults online, June 2013.
- 126** *Beyond the ECO*, a report by the Centre for Sustainable Energy for SSE, November 2014.
- 127** Subject to state aid clearance, this would reduce the interest rate to around 3.5% by 2020. Meeting Carbon Budgets - 2014 Progress Report to Parliament, Committee on Climate Change, July 2014.
- 128** Through government guarantee and public subsidy. The annual cost to government to provide 200,000 households with a 0% interest rate would be £167 million. Verco research for IPPR. Help to Heat, IPPR, 2013.
- 129** Meeting Carbon Budgets - 2014 Progress Report to Parliament, Committee on Climate Change, July 2014.
- 130** England's new national fuel poverty strategy aims for as many fuel poor homes as practicable to achieve EPC Band C by 2030. This *Cutting the cost of keeping warm: A new fuel poverty strategy for England*, DECC, March 2015.
- 131** The CCC considers that targets or incentives for boiler replacements for the able to pay are not required to meet target budgets, given the large numbers of boilers being replaced every year. *Meeting Carbon Budgets - 2014 Progress Report to Parliament*, Committee on Climate Change, July 2014.
- 132** Speech by the Secretary of State, Ed Davey, at Ecobuild, 4 March 2015. The Government-industry Green Construction Board has now commissioned the Government's Chief Construction Adviser, Peter Hansford, to conduct this review.