Customers – Who Will Get What?

DISCLAIMER! This document has been prepared on the basis of the consultation documents published by DECC, and AECB's attempts to interpret them. DECC's consultation documents may well not be representative of the final scheme when it goes 'live', and additionally, our interpretation may be inaccurate. This is only a guide, though we hope you'll find it useful.

AECB will be perusing and commenting a little more on DECC's proposals in the coming weeks, in these pages and on the forum – but DECC has produced an extremely weighty set of documents, so any response will need to be a collective one, sourced through the joint input of membership.

So take a look at the proposals, in the light of the article below (as you see fit), and post your observations, suggestions and responses on the AECB forum here – and of course, share them with DECC.

Sections in double inverted commas ("") are quotes from the main DECC consultation document: *The Green Deal and Energy Company Obligation Consultation* (with page numbers given, generally), unless quotes are stated to be from another source.

Numbered questions from DECC's consultation are reproduced **in bold in red,** with DECC's other questions in red as well.

Points that AECB suggests members might also wish to comment on, are boxed.

The DECC Green Deal and ECO consultation and associated documents can be found at www.decc.gov.uk/en/content/cms/consultations/green_deal/green_deal.aspx#code . Do please refer to the original documents, and share your observations on the AECB forum.

Finance and Access: who gets what under Green Deal and ECO?

Information from chapters 2, 3, 4 & 5 of the consultation document, plus other sources

Green Deal finance depends on estimated energy savings

The Green Deal is a financial mechanism to allow the repayment of capital spending on energy efficiency measures to be collected through the electricity bill of the property on which the capital was spent. This will only be allowed as long as the repayments (of capital plus interest) are calculated to be less than or equal to notional energy cost savings in the same property (the 'Golden Rule'). The way these notional savings are to be arrived at is set out in chapter 1 of the proposal, and discussed by AECB in an earlier article in this series, downloadable here http://aecb.net/news/wp-content/uploads/2011/12/Assessment-Advice-Measures-Dec-2-v13b2.pdf .

Green-Deal only finance, because of the Golden Rule, can only support the most cost-effective measures. Not only will the measures have to pay for themselves within the customer's chosen repayment period (up to 25 years, but many customers would prefer shorter loans, see below) – but the energy savings will have to leave 'change' to cover the cost of borrowing.

Green Deal repayments may include substantial percentages of interest

The interest rates for Green Deal finance are not set by the government – the borrowing will be on a commercial basis (see for example the new Green Deal Finance Company *http://www.businessgreen.com/bg/news/2113872/blue-chips-confirm-plan-green-deal-finance-company)* The rates mentioned in this link are around 6%. The establishment of this finance company was described by Climate Change Minister Greg Baker MP as 'incredibly encouraging' – suggesting this is the kind of rate the Government has in mind.

The addition of interest charges effectively shortens the time available for a measure to pay for itself. We carried out this very crude calculation (table 1) to give an idea of the role played by interest in the total money repaid, assuming regular monthly repayments, and on the basis of an online calculator (http://www.thecalculatorsite.com/finance/calculators/loancalculator.php) – so this is only a rough indication, based on a fixed, 6% interest rate.

	5 year loan	10 year loan	15 year loan	25 year loan
% of total paid that is interest	13%	25%	34%	48%
How much of loan period 'spent paying interest'	8 months	2.5 yrs	5 yrs	12 yrs
Time in which measure effectively has to pay for itself	4yrs 4 months	7.5 yrs	10 yrs	13 yrs

Table 1: Estimated interest paid on 6% loan over varying loan terms

There may, additionally, be fixed costs added for the assessment and advice package and other elements.

Research by the Energy Saving Trust, DECC, and the Great British Refurb campaign suggests most customers are likely to prefer shorter loan periods: "The preferred payback period is 0 to 5 years, and acceptable is up to 15 years." http://www.energysavingtrust.org.uk/Publications2/Corporate/Research-and-insights/Trigger-Points-a-convenient-truth). While this would keep a lid on the amount of interest paid by customers, it does also restrict the measures eligible to those with the shortest payback periods.

If loans at a lower interest rate were available, then clearly much more of the 'saving' would become available to spend on measures – in turn, increasing the scale of available saving. However, all schemes will come up against the final 'buffers' of 'pay for itself within the Golden Rule' – however precisely that ends up being defined (below).

DECC propose to allow repayments to rise year on year, with inflation

In order to extend the Golden Rule as far as possible, DECC suggests allowing the finance providers to increase the payments over time, as fuel and other costs are likely to rise, so the effective savings would be increasing, while the apparent cost of repayments was decreasing:

P107: "In designing the policy we have sought to protect future consumers, particularly in domestic properties, from the likelihood of increased energy bills. We therefore propose to cap the Green Deal payment that can be collected in the first year ("year 1") of a domestic Green Deal plan to the estimated annual savings, based on standard energy usage at the property, and then to place controls on the extent to which instalments can increase in subsequent years.

While factoring in predicted future energy prices to the estimated energy bill savings would "create substantially higher overall estimated energy bill savings, allowing more measures to meet the Golden Rule principle at the outset and increasing the total sum available while still meeting the 'Golden Rule'," (p112) DECC shies away from allowing lenders and borrowers to bet on future energy prices. But they do propose allowing Green Deal providers "to factor

in a percentage rise in line with the Bank of England's targeted inflation (i.e. 2% every year fixed for the duration)."

There is also theoretical provision for loans to last longer than 25 years:
p186: "We are proposing that the life of a Green Deal Plan is only limited by the warranted lifetime of the measures installed and could extend to 25 years, or more in some cases."

This may not appeal to many customers in practice, especially given the diminishing increases in principal available, compared to the rising proportion of interest charged.

Note, DECC seeks views on whether the finance ought to be allowed to last longer than the guaranteed life of a given measure:
p27 "We would welcome views on the terms of the Green Deal plan, particularly on whether the length of a Green Deal plan should be limited to the guaranteed lifetime of the measures installed and the conditions around the early repayment of Green Deal finance."

DECC appears to want all measures to be covered by insurance backed guarantees for the duration of the loan (see companion article on installers and providers). Members may have views on what sort of loan terms could reasonably fit this requirement.

Most Green Deals will be for £4,000 or less, research suggests

DECC is hoping that for those with unfilled cavities and/or unlagged lofts, the cost-effectiveness of the basic loft and cavity wall insulation means that a Green Deal to pay for them would be affordable, and attractive:

p66 **"**Previous Government programmes have driven significant delivery of the cheaper insulation measures like loft and cavity wall insulation. However, Green Deal will allow households to insulate their homes with low cost cavity wall and loft insulation at no upfront cost." *

*Because the Green Deal Assessment and Offer are based on standard occupancy, in households that underheat, a Green Deal may in fact represent an increased cost to the householder from year 1. This is discussed below.

They go on: "Where a package includes a measure which is particularly cost-effective, the Green Deal Provider may be able to rely on the savings likely to be generated by that improvement to finance some slightly less cost-effective improvements under the Green Deal Plan which would otherwise have required top up finance from another source."

A number of people have attempted to predict what sort of measures might in practice fall within the Golden Rule. A report expected soon from the Charity Bioregional (http://www.bioregional.com/) suggests that Green Deal finance will only cover £4,000 of energy efficiency work at a typical home. They modelled a scheme to retrofit 2,500 homes in the south London suburb of Hackbridge, and found that the Golden Rule would exclude the most sophisticated measures for improving energy efficiency, even if no interest were charged on the loan.

Measures that would be eligible for green deal finance on this basis included loft insulation, heating controls, cavity wall insulation, lagging and boiler exchange – similar to the old CERT programme, but without a subsidy.

This set of measures is similar to what DECC themselves are expecting – albeit, with the addition of interest repayments into the mix: "Measures which can readily be fully funded by Green Deal finance, such as loft and standard cavity wall insulation ... are likely to be

delivered by Green Deal finance alone. In fact these highly cost effective measures are likely to form the core component of any Green Deal package."

Stricter rules if you borrow more than £10,000

In some situations – larger homes off the gas grid come to mind – more extensive measures might be financeable under the Green Deal, but DECC are proposing that any expenditure over £10,000 would require a competitive quoting process.

p94: "We are not proposing to place a requirement on customers to obtain a minimum number of quotes except in cases where a Green Deal package offered to a domestic customer is in excess of £10,000. In this case, customers will be required to obtain three quotes from different Green Deal providers. The requirement to ensure the quotes have been obtained will be placed on Green Deal providers via the code of practice and helps to provide an extra level of consumer protection."

Too cold to save money?

The Green Deal Assessment is based on the energy savings calculated at 'standard occupancy', ie 21 deg in living rooms and 18 deg in bedrooms. Research by the Centre for Sustainable Energy ('Understanding fuel expenditure' http://www.cse.org.uk/news/view/1587) shows that a very large proportion of British households live below these temperatures – and not just the poor.

The research found 'under-consumption' in rich and poor homes alike, with at least 80% of households in all income groups consuming "too little" electricity, gas or oil. Overall, the research showed British households consume on average only around 70% of the energy that the 2007 English House Condition Survey says that they "need".

DECC accepts that for households who can't or don't heat their homes to or near "standard occupancy", a Green Deal will not in fact "offer energy savings at no upfront cost", but, although hopefully improving their comfort, will nonetheless result in an increase in outgoings to cover energy, repayments and finance charges:

p129: "The Green Deal alone may well work for many of those in fuel poverty who actually spend a large proportion of their income on heating."

'Underheaters' will be allowed to borrow more than they stand to save – but they must be warned

But (p109): "If a customer is found during the occupancy assessment to be a low user of energy, their energy bill savings may be lower than the standard savings estimate. In these instances customers should be alerted that their bills could go up if the full Green Deal charge allowable (under the Golden Rule) is added to their bill."

DECC suggests extending the repayment period is one option: "The customer may wish to tailor the plan so that their bills are not expected to go up, so the Green Deal Provider may, for example, increase the length of the repayment period (as long as they remain within the lifetime of the measure) to reduce the charge that is added in each billing period."

Green Deal Providers will have to take 'reasonable steps' to satisfy themselves borrower can really afford the Deal

Alternatively, the customer may remain keen to go ahead with the maximum level of Green Deal finance that is permissible for their property. In such cases, as long as they are made aware that they potentially face additional cost and provided the Green Deal Provider has taken reasonable steps to ensure the anticipated extra payment is 'affordable' for them in line with OFT's Irresponsible Lending Guidance, the amount collected in year 1 under the Plan can still be up to the limit set by the standard savings estimate."

In other words, based on the occupancy assessment, the Green Deal Advisor should warn customers that their bills will, in fact , go up. It will be up to the customer to decide whether they can afford to go ahead (eg by extending the loan as long as possible, though this will lead to a higher overall cost), and also for the provider to take a view on whether the loan is advisable for the customer.

And if the customer and/or the provider do not feel a Green Deal is affordable? p110: "Government recognises that some households, particularly those on low incomes and at risk of fuel poverty may underheat their homes as they cannot afford to spend more on energy.

The initial stages of a Green Deal assessment process should screen and direct low income and vulnerable households eligible for assistance under the ECO Affordable Warmth Obligation to the remote advice service for further information. Households will also be provided with information on the support available through ECO for those who meet the eligibility criteria if their Green Deal assessment does not result in the offer of a Green Deal plan."

Note that not all customers in this position will be eligible for support from the ECO, as discussed later.

The Energy Company Obligations – to cut carbon with SWI, and to help some in fuel poverty

The two sorts of Energy Company Obligation are obligations on energy suppliers to provide:

- support for owners of hard to treat properties who might otherwise not be able to take up Green Deal finance
- support ... for vulnerable and low income households for whom energy performance improvements would help heat their homes more affordably

ECO targets & scoring
Energy companies will be given both a carbon target and an affordable warmth target. "Scoring would be kept simple. £1 reduced from a property's annual heating bill would earn one credit towards their Affordable Warmth target; and 1 tonne of annual CO2 cut from a property's emissions would earn 1 credit towards their CO2 target. No artificial incentives or uplifts would be necessary"

Should the Big Six spend all the ECO money, or should they be obliged to buy in 'credits' and open up the market?
DECC proposes that some (eg 50%) of the ECO funding is distributed via a brokered market in measures, whereby energy companies would buy in from third parties so many 'carbon credits' or 'affordable warmth credits', which are in practice records of particular energy saving measures having been installed. This suggestion is discussed in chapter 9 of the consultation document (see p177 onwards).

This suggestion is intended to reduce the risk of the big six and perhaps a few, large partner organisation, 'taking over' the market:

p178: "The small numbers of energy suppliers who will be responsible for fulfilling the ECO have the potential to exercise a large influence over the Green Deal market. Potential behaviours that would impede [the creation of a a diverse and competitive Green Deal provider market] include:

- ECO suppliers disproportionally funding their own internal Green Deal activity. This might happen where an energy supplier was both an ECO company and a Green Deal provider. It might prefer to provide ECO subsidy to its own Green Deal transactions, because this was simpler, and/or because this would allow it to grow the Green Deal side of its business and gain market share at the expense of Green Deal providers with no such access to funding;
- ECO suppliers only partnering with a small number of Green Deal providers. This might happen because energy suppliers would find it easier to communicate with a small number of Green Deal Providers – probably large, established players at national level - allowing them better to control their risk exposure, and potentially allowing them to develop a shared brand."

DECC proposes that the market is opened up to more providers by establishing a brokerage system: "The Government is attracted to introducing a market based solution to help suppliers make a significant proportion of their ECO spending fairly available to those Green Deal Providers who can commit to delivering in a cost effective way. This could be achieved through a brokerage system that brings together energy suppliers and Green Deal providers in an open market, via an online portal, where ECO "points" that energy suppliers required to meet their obligation are traded for ECO subsidy.

Questions 51-54 invite opinions on the brokerage suggestion.

AECB members who are hoping to be able to participate in delivering some of the work to be funded under the two ECOs (more information below) may wish to scrutinise and comment on this section of the consultation

ECO targets in more detail

Setting the ECO and target metrics

p33: "The overall ambition level of the ECO, when looking at its twin objectives of carbon saving and affordable warm combined, will be set at a level equating to £1.3 billion per annum, and this will be translated into obligations for each ECO supplier under each objective over the course of the life of the scheme. The two objectives of the ECO differ from each other such that each will require its own target metric. It is proposed that:

• the overall Carbon Saving target will use a metric based on annual tonnes of CO2 reductions; and that this should be set at a level of 0.52MtCO2/yr by 2015 (equivalent to 2.0MtCO2/yr in 2022 pro-rata)
• the overall Affordable Warmth target will use a metric based on reductions in lifetime heating costs; and that this should be set at a level of £3.4 billion reduction in notional lifetime costs of heating for low income and vulnerable households by 2015.

ECO savings to be calculated on basis of SAP

The scoring system will be much the same as that used for Green Deal Assessments, ie through RdSAP or similar. p33 "Suppliers will gain credits towards their obligations for each package of eligible measures installed. Property-specific scores will be calculated through a similar SAP or RdSAP methodology used for Green Deal assessments with scores reflecting the modelled reductions in carbon and heating cost reductions."

See http://www.hvnplus.co.uk/news/carbon-saving-link-to-green-deal/8623363.article - this states that the metric is still being developed by a working group.

AECB members who may wish to access ECO credits may have a view on whether the SAP/RdSAP methodology will offer carbon or affordable warmth credits that properly reflect the level of retrofit they are hoping to carry out.

As the ECO credits will be calculated on the basis of modelled savings, there may be no way of knowing how much of the saving is taken as comfort and how much as carbon reduction, in either category. It is not immediately obvious if this has any bearing on wider carbon reporting (or fuel poverty reporting for that matter) but AECB members with an interest in this issue may wish to explore this further.

Who will be eligible for help under the ECOs?

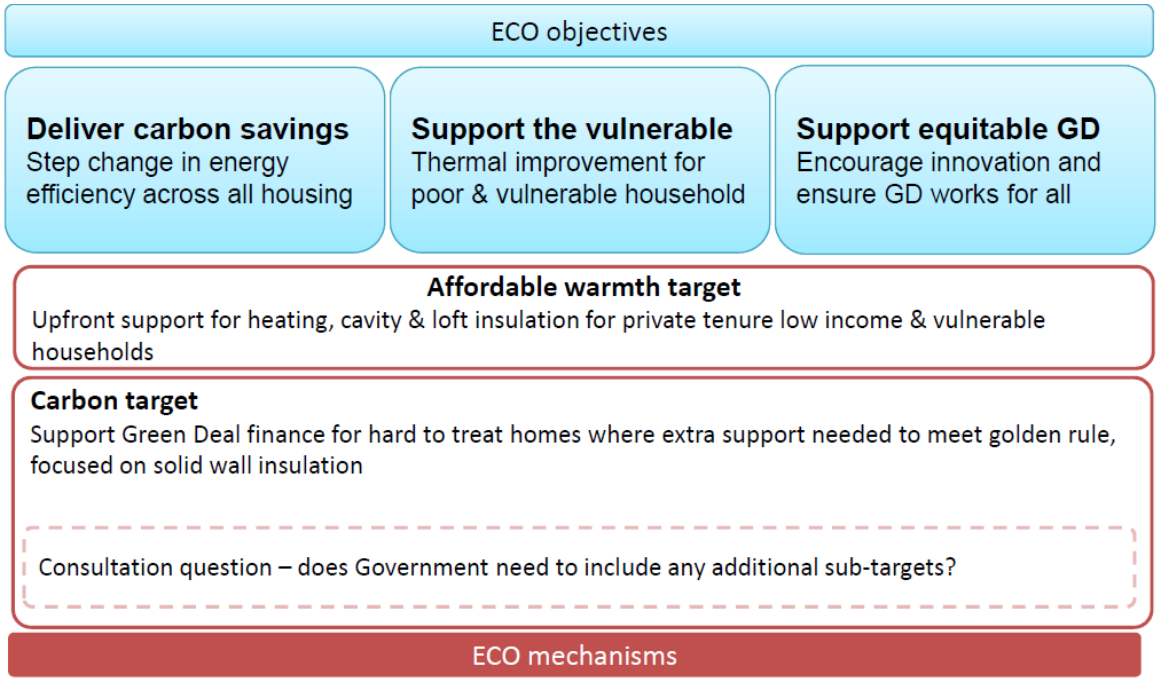
The Carbon ECO is restricted to solid walls – but any tenure is eligible

Broadly, the intention is that eligibility for the Carbon Saving ECO is based on fabric – it is aimed primarily at supporting solid wall insulation, which tends to be too expensive to pay for out of the fuel costs savings in 25 years or less (at least at today's relative fuel and installation prices).

The Affordable Warmth ECO depends on household circumstances rather than building type

The affordable warmth obligation is aimed at helping some – though by no means all – households in fuel poverty, so eligibility is based on household circumstances.

The diagram (below) was being shared by DECC officials shortly before the Green Deal launch shows the probably structure of the ECOs (source – Greater London Authority www.london.gov.uk/moderngov/mgChooseMDocPack.aspx?ID=4317&SID=5634)



The diagram shows that as well as the direct targeting of some 'low income and vulnerable' households through the Affordable Warmth measures, a 'sub-target' of, for example'

vulnerable households is being mooted within the overall distribution of the Carbon Saving ECO funding. See the discussion on 'who is eligible' below for details of what if proposed, and whether this structure may leave some sectors of society 'out in the cold'.

What will the ECOs pay for – 1: Measures under the Carbon Saving ECO

The Carbon Saving Obligation is primarily designed to extend the Green Deal in homes where only solid wall insulation is appropriate, and where that insulation can't pay for itself within a Green Deal. By focusing down on these two families of technology (internal and external SWI) DECC appears to be following the same logic which drove the FiT scheme – focussing assistance on a particular sector, to build up the supply chain and, hopefully, bring down prices.

p24 "The "Carbon Saving Obligation" within the ECO is designed to focus primarily on supporting those households who live in hard to treat homes and cannot fully fund energy efficiency improvements through Green Deal finance alone. Solid wall insulation is the key technology which we see ECO supporting. We are proposing that other measures under the carbon saving obligation will only be classified as eligible if they are promoted and installed as part of a package that includes solid wall insulation. Views are invited on these issues and in particular the policy for other measures for hard-to-treat properties.

The Carbon Saving ECO to focus on insulation and airtightness

"We further propose that within packages, support and ECO credit should only be attracted by measures which reduce the heat loss from a home rather than all possible energy efficiency* measures, as previous obligations have done. This would translate to measures that improve insulation and air-tightness levels, thus ensuring that the ECO focuses on what is widely seen as the first step in the hierarchy for reducing building emissions: reducing energy demand."

*Note by 'energy efficiency', in this context, we believe DECC means 'higher SAP rating therefore cheaper to run' – ie not only fabric measures, but also new heating systems, boilers and renewables.

We are proposing that ... ECO should not cover those measures which can readily be fully funded by Green Deal finance such as loft and standard cavity wall insulation ... as these measures is likely to be delivered by Green Deal finance alone." (This depends in practice on the occupants as well as the home, as discussed above, though this is not mentioned here)

DECC also states: "The administrator will need to be satisfied that the ECO contribution is material to the financing of the measures." AECB has not yet been able to identify where in the consultation documents, if anywhere, this is explained in more detail.

Should hard-to-treat cavities be eligible for hard-to-treat funding?

p 72: "There are a number of cavity wall properties [the insulation of which would be worthwhile], but do not pay for themselves through the Green Deal either because of high 'hard to treat' installation costs or high individual 'hassle costs'.

In hard to treat cavity cases the best way forward may be cavity filling using non-standard products or techniques or to provide solid wall insulation. Such cases may well occupy an equivalent space on the MAC curve to "normal" solid wall insulation (see section 5 of the accompanying Impact Assessment), that is to say, they can almost but not quite pay for themselves and there is a case to allow a measure of ECO subsidy to tip the balance.

However, such properties are by definition not straightforward, and an initial assessment may classify them simply as cavity wall properties, making it difficult to be clear without

further investigation whether solid wall insulation is the most appropriate technology or whether more technically complex cavity wall insulation is the most cost effective solution. Including such properties within the ECO risks complicating the scheme.

In considering ways in which the ECO might be broadened to support cavity wall installations that would not be fully fundable by Green Deal finance, it needs to be clear how such installations could be identified at the GD/ECO assessment and how their inclusion would impact on demand for the Green Deal."

Specifically, DECC asks:

Question 11: Please provide views on the potential inclusion of hard-to-treat cavities (and potentially other measures of a similar type), and proposals for how properties might be accommodated in the ECO without excessive complication or perverse consequences?

AECB members may well have useful information for DECC on the subject of hard-to-treat cavities. Note, DECC does not suggest the alternative course of action would be for a household with a hard-to-treat cavity, were the Carbon ECO not made available to them.

What will the ECOs pay for – 2: Measures under Affordable warmth 'mainly heating systems and basic insulation'

It appears DECC is envisaging a fairly basic set or measures: (p25) "Suppliers are expected to deliver primarily heating systems and basic insulation measures under the Affordable Warmth Obligation."

Measures for Affordable Warmth – how little is too little?

DECC invites views on whether to set a minimum standard for affordable warmth interventions. p25: "We will be interested in respondents' views on whether minimum requirements should apply to ensure major insulation and heating measures are delivered." It is not clear here what is meant by 'basic level of insulation" or '"major insulation measures", appearing as they do in successive sentences but apparently referring to the same programme. Elsewhere in the consultation document exactly the same phrase (basic level of insulation) is used to describe the measures available to improve social housing under the Decent Homes provisions (see below).

Affordable Warmth assessments – just a quick examination?

In contrast to the requirement for a Green Deal and/or carbon saving obligation, DECC suggests "a more basic survey to determine scores could be provided by suppliers where households were only receiving help through the Affordable Warmth obligation". In the Green Deal Impact Assessment (p39) the argument appears to be that 'full' assessments are too expensive, in relation to the relatively basic interventions DECC expects to be delivered (see below).

AECB members may have experience to share relating to the need for assessment when 'basic' energy improvement measures are installed, and possibly also on the role of advice and aftercare when offering improvements to the homes of fuel poor households.

Who will be eligible for Affordable Warmth:

In the Green Deal impact assessment, DECC states that 'a household is defined as fuel poor if it would need to spend more than 10% of its income to achieve an adequate level of warmth'.

It goes on: “There are three key drivers of fuel poverty; household income, domestic energy prices and the thermal efficiency of the home. Poorer thermal efficiency of the home results in a larger energy consumption requirement to heat the home to an adequate standard. In 2009, around 55% of houses with a SAP10 rating of 30 or below were lived in by fuel poor households and around 60% of all fuel poor households reside in a home with a SAP of 50 or below”

As we saw above, where DECC discusses low income households who underheat so much that a Green Deal would not be viable, they tend to imply that ECO will be an option for them. However, in practice it will only be an option for some, as they set out in Chapter 5:

p122 “Government proposes to target the Affordable Warmth obligation at low income households who include an older person, a child or someone with a disability, and who do not have access to alternative sources of support to improve their heating arrangements. Government also recognises the importance of identifying these households in a way that can be simply verified. Various options for designing eligibility criteria are explored in the accompanying Impact Assessment.”

While DECC does not specify here what is meant by ‘alternative sources of support’ , as DECC proposes ruling out tenants of social housing partly on the grounds of previous access to CERT and Decent Homes, these may be among the ‘alternative sources of support’ referred to. For more information on Decent Homes see below.

Using the benefit system to allocate eligibility for Affordable Warmth

p123. “The Government proposes to focus the eligibility criteria for support under Affordable Warmth on a similar group of benefit and tax credits recipients to those identified currently through the CERT Super Priority Group. This means people who are in receipt of state Pension Credit, Child Tax Credit under the ‘free school meals’ income threshold, or people in receipt of either Income Support, Income Related Employment and Support Allowance (where this includes a work related activity or support component), Income Based Jobseeker’s Allowance and at least one of the following:

• parental responsibility for a child under the age of 5 who ordinarily resides with the person
• child tax credit which includes a disability or severe disability element
• a disabled child premium
• a disability premium, enhanced disability premium or severe disability premium
• a pension premium, higher pension premium or enhanced pensioner premium”

Thus eligibility for help under Affordable Warmth is quite tightly defined, and a good number of low income households, even if they are in receipt of some benefits, appear to be going to be excluded.

Question 31: Do you agree that eligibility for Affordable Warmth measures should be restricted to households who are in receipt of the benefits and tax credits similar to the CERT Super Priority Group and who are in private housing tenures?

Social housing excluded from affordable warmth

The CERT super priority group still includes around 5 million households – and DECC fears offering Affordable Warmth measures to all 5 million would mean the benefits would not go to those in greatest need first, so they propose to focus in within that to a more ‘tightly defined’ target group – by excluding tenants in social housing. This is their argument:

p124 “The low-income group outlined above in the CERT Super Priority Group represents around 5 million households living in a wide variety of property and tenure types. Inevitably, the Affordable Warmth component of ECO will not be large enough to ensure that all in this

group receive early support under the scheme. The Government believes that there is a case for further focusing Affordable Warmth support, to ensure that it is targeted at those homes where it is likely to be most urgently needed and will make the most difference, by including tenure type as an eligibility criteria.

DECC say many in social housing have been helped already by CERT and CESP...

"Under previous obligations, social housing has tended to benefit disproportionately from measures, particularly through the Priority Groups within CERT and under CESP. The latest fuel poverty statistics for England demonstrate that 81% of the fuel poor live in private housing tenures, with 19% in social housing. Among the fuel poor in private tenure properties, 63% are owner occupiers and 18% are in private rental housing. The statistics also show that standards of energy performance are significantly lower on average in private tenure properties, SAP 51 compared with SAP 61 in social housing.

...and also by Decent Homes, which all social landlords should be implementing

"One of the reasons why social housing leads private housing in this regard is the significant investment through the Decent Homes programme in England, and a further £2.1 billion is committed to the same programme in the current spending review period, aimed at bringing the back log of social housing up to the standard which requires all homes to have a heating system and basic level of insulation. Financing arrangements are in place with DCLG to ensure that all local authority social landlords have access to resource necessary to meet the Decent Homes standard. Private Registered Providers of social housing are responsible for financing any changes they need to make to meet the Decent Homes standard from their own resources."

Note, 'hard-to-treat' (generally, solid-walled) social housing is expected to be eligible for help under the Carbon Saving ECO – this will be subject to the general considerations of availability and distribution of the Carbon Saving ECO – see below.

Will"Affordable Warmth" equate to "Decent Homes" for the private sector?

The Decent Homes standard addresses basic facilities such as kitchens and bathrooms, in social housing. The headline standard regarding energy and fabric is that a "Decent home" "provides a reasonable degree of thermal comfort"; see "A Decent Home: Definition and Guidance for Implementation.
http://www.communities.gov.uk/documents/housing/pdf/138355.pdf

More detail on the definition is set out on page 18 of the CLG document, and firstly prioritises "efficient heating", which is defined as either a central heating system or storage heaters. The standard then goes on to discuss fabric as follows:

"Because of the differences in efficiency between gas/oil heating systems and the other heating systems listed, the level of insulation that is appropriate also differs:

- **For dwellings with gas/oil programmable heating, cavity wall insulation (if there are cavity walls that can be insulated effectively) or at least 50mm loft insulation (if there is loft space) is an effective package of insulation;**
- **For dwellings heated by electric storage heaters/LPG/programmable solid fuel central heating a higher specification of insulation is required: at least 200mm of loft insulation (if there is a loft) and cavity wall insulation (if there are cavity walls that can be insulated effectively).**
- **5.27 A SAP rating of less than 35 (using the 2001 SAP methodology) has been established as a proxy for the likely presence of a Category 1 hazard from excess cold. From April 2007, local authorities will report energy efficiency using the new 2005 methodology5.**

- **5.28 Loft insulation thickness of 50mm is a minimum designed to trigger action on the worst housing. Where insulation is being fitted, landlords should take the opportunity to improve the energy efficiency and install insulation to a much greater depth."**

(AECB emphasis)

The Centre for Sustainable Energy, in the introduction to its April 2011 report 'Raising the energy standard in London' http://www.cse.org.uk/news/view/1527 quotes their researcher Martin Holley: "Most people would agree that the Decent Homes Standard we have today doesn't go far enough in improving environmental performance and quality, nor in contributing to national targets for carbon reduction within the built environment. We feel an enhanced Decent Homes Standard should be a priority, and indeed many housing organisations are already experimenting with measures beyond the current standard, what you might call 'Decent Homes-plus' programmes."

The UK Association for the Conservation of Energy goes further: "While the Decent Homes Programme has delivered significant improvements in social housing, the thermal comfort element of the current standard is woefully inadequate to provide affordable warmth. ACE therefore believes that, post-2010, a 'Decent Homes Plus' target should be set using a much more ambitious thermal comfort criterion. We endorse the recommendation of both the EFRA Select Committee and the Fuel Poverty Advisory Group that the Government should assess the cost and feasibility of introducing a SAP 81 standard as the basis of an improved thermal comfort level for all social housing.
http://www.ukace.org/index.php?option=com_content&task=view&id=518&Itemid=47

Given that DECC mentions that "Suppliers are expected to deliver primarily heating systems and basic insulation measures under the Affordable Warmth Obligation" (see above), it is possible that the Decent Homes Standard tells us roughly what DECC considers to be an appropriate level of intervention under Affordable Warmth, (rather, perhaps, than DECC implying that Decent Homes is delivering state-of-the art refits).

This interpretation may be incorrect, and AECB members may have additional insight into DECC's intentions. They may also have data on the effectiveness in carbon, cheapness-to-heat, comfort and health terms of Decent-Homes style interventions, perhaps compared with other levels of intervention, with particular reference to the homes of the fuel poor.

Is there any hope of changing DECC's mind about social housing and AW?

DECC does invite views about the exclusion of social landlords from the Affordable Warmth ECO (P125) "Some social housing providers have argued that households on the proposed eligible benefits in social tenure homes might benefit from Affordable Warmth support as not all social landlords have easy access to the resources needed to make these improvements, therefore Affordable Warmth should be "tenure blind". We will welcome evidence on this point."

DECC goes on to warn, however, that: "In the light of the discussion above, the Government is minded to restrict Affordable Warmth eligibility to properties in private tenures, where the majority of fuel poor live; that are of the lowest average standards of energy performance; and where alternative support is less likely to be available after Warm Front has come to an end.

"Using the benefit criteria listed above and focusing on private tenure properties only would mean the size of the eligible group was around 3 million households."

Note however that the number of homes likely to be treated is likely to be far from 3 million – for many years, at least. Darryl Croft of UK ACE has reported that the proposed level of spending works out as 325,000 fuel poor households assisted by Apr 2015.

Within this 3 million, the selection of beneficiaries will, to begin with, be 'left to the market', as DECC believes that the worst properties offer the most cost-effective opportunities for achieving the heating cost savings in the ECO targets, meaning these would naturally be targeted for treatment first by the energy companies, so DECC sees no need to set additional fabric-related targets:

p125 "Since the most cost-effective opportunities will be in households lacking basic heating or insulation, so by definition are of low energy performance standard, we feel it would add an unnecessary cost to impose a maximum energy efficiency level as an additional constraint on eligibility."

The calculations used to justify this assumption may be in the impact assessment that accompanies the consultation document – interested members may wish to look into this. Note, there may also be issues of uptake that determine where measures are in fact implemented. This may be an issue for tenants in private rental in particular.

Will everyone eligible for help under Affordable Warmth be able to get something if they want it?

There is a proposal that anyone in the eligible group for affordable warmth should be guaranteed at least a minimum level of ECO help if they request it; DECC is attempting to do this via a voluntary agreement with the power companies.

On p127 DECC grapples with the difficulty of leaving the selection of beneficiaries for affordable warmth 'to the market' with the aim of minimising costs, while at the same time trying to have some say over who gets helped: "Under new legal powers, Government will be able to stipulate that ECO companies must provide a certain level of support to certain persons or categories of persons... While on the one hand, providing referrals to energy suppliers could help to reduce delivery costs associated with identification of eligible households, utilising such a provision could be at odds with a key feature of the energy company obligation model under which companies have a degree of discretion as to which particular households they target for support ... enabling them to find the most cost effective way of meeting overall objectives."

It is worth reading this section of the proposal in full as it illuminates the essential conundrum faced, and not resolved, by DECC: some buildings and some people are very expensive to help – and if the costs of helping them are loaded on energy bills, as they will be with the ECO, then this puts an inequitable burden on – those same people you are trying to help. So should the energy companies be allowed to decide that some some people are too expensive to help, to spare the beleaguered bill payer the burden of an expensive policy?

DECC's answer in this context is to hope that, by setting up a referral service to assist the energy companies with the expensive and unrewarding work of attempting to find customers for home energy improvements, that in return the companies will consent to offer at least a basic minimum service to all those referred.

"A referrals system would be provided through the remote advice service, to help to identify households who expressed an interest in improving energy efficiency and who were eligible under the Affordable Warmth criteria. The information would be passed on to energy

companies, who in turn would agree to follow up all referrals. This would help to reduce the costs to energy suppliers of finding eligible households."

The minimum tentatively suggested by DECC is "a survey of the home and an offer of at least one major measure free of charge to the household within an agreed timeframe."

Question 32: We propose seeking a voluntary agreement with ECO obligated companies as to how they commit to following up referrals. Do you have any suggestions as to what this commitment should consist of?

AECB members might have views to share with DECC on the proposed levels of intervention under Affordable Warmth, as well as possible opinions on the way householders in most need can be assured of help.

Who can get help from the Carbon Saving ECO?

As currently proposed, you are theoretically eligible for ECO help, if a Green Deal assessment has shown that the recommended measures for your home include solid wall insulation. DECC assumes SWI will not be feasible for anyone under a 'straight' green deal.

As the delivery of the carbon obligation is to be 'left to the market' it is not possible to determine in advance what will be offered to whom. It is possible to imagine offers for 'cut price solid wall insulation' being promoted by the energy companies and perhaps their partners, in the way that CERT measures have been promoted hitherto, but DECC does not pretend to know if it will work out like this, whether the same sort of offers will be generally available to everyone in a solid walled home, nationwide, what sort of subsidies might be offered, and who might come forward to take the offers up; indeed DECC are hoping respondents to their consultation will help them work this out, see below.

Will the Carbon Saving ECO disproportionately benefit better off households?

DECC devotes a fair bit of the consultation to considering this matter, and asks similar questions a number of times. Their main difficulty seems to be that they can't work out what is likely to happen in practice – whether the energy companies are likely to be able to get more carbon 'points' for their ECO 'buck' from offering cut-price solid wall insulation to the able-to-pay-towards-it, or whether economies of scale in delivering street by street SWI, for example to the estate of a social landlord, would more than make up for the fact that the occupants would not be able to contribute much, if anything, towards the costs.

Mass schemes could offer economies of scale attractive to the Energy Companies

DECC offers some estimates of what economies of scale they believe are offered by multiple installations in the table below (from p131)

	Average Installation cost	
Aggregated house type	INTERNAL SWI	EXTERNAL SWI
Detached house	£7,180	£12,494
Semi-detached / end of terrace house	£5,407	£10,097
Mid-terrace house (multiple installations)	£2,997	£5,908
Flat (multiple installations)	£2,988	£5,899

As important as the capital cost of the works, is the likely cost of securing customers willing to sign up for the measures – early experience with 'Pay As You Save' (and even 'don't pay

anything and still save') projects is that solid wall insulation can be a tough sell, despite the potential benefits.

DECC has great hopes for economies of scale – and also for the 'interested neighbour' effect: (P130) "The impact assessment ... highlights that social housing... is expected to be a major beneficiary of Green Deal and the carbon saving ECO, particularly in the early years. Social housing often allows for economies of scale that reduce the cost of seeing out the obligation and lessen the impact on all bills. Emerging findings from CESP suggest that delivery to social housing often promotes relatively low cost delivery to neighbouring housing, encouraging a street by street or ward by ward approach that is also likely to be attractive under ECO*."*

Energy Companies to be credited with carbon savings they facilitate, whoever has paid for the rest of work

However, DECC could be said to have created an additional problem for itself by incentivising the energy companies to seek a contribution from the beneficiaries. The logic is that if you can pay, then you should, but if the government doesn't want to get involved in the means testing of customers to determine how much they 'should' pay, then instead they have to create a market mechanism to extract the maximum contribution from beneficiaries. This is what has been proposed, as explained in the impact assessment:

Impact Assessment p42: Green Deal providers would be incentivised to gain ECO subsidy to bring the cost of measures within the Golden Rule, thereby allowing them to put an attractive offer to their customers. Energy companies would be incentivised to combine their ECO subsidy with Green Deal finance.

"This is because energy companies would get "ECO credits" towards their obligations for packages of measures including SWI. Irrespective of the amount of ECO subsidy they provide they would receive full credit. Therefore because energy companies would be expected to want to meet their obligation as cheaply as possible, they would be incentivised to leverage in as many other types of funding as possible, including Green Deal finance, self finance from the customer, and local authority funding."

What of households that offer neither 'able to pay' green deal contribution, nor economies of scale?

However fuel poor households in private tenure don't naturally offer either 'economies of scale' (a species of contribution to the cost, in practice) or 'ability to pay'. And as the impact assessment points out, this will make such households less attractive to the energy companies to seek out and help,

"The roll-out of solid wall measures to owner occupiers is much harder to anticipate and we recognise low income households in private tenures make up the majority of the fuel poor."

p131 "Research suggests that vulnerable households on the lowest incomes, particularly the elderly and disabled who tend to under heat, will be unlikely to benefit from a saving on their bills and therefore unlikely to access the benefits of Green Deal finance. This may well make these types of household less attractive to serve because they would require a greater level of up front ECO subsidy to make the Green Deal viable."

"The Energy Companies, and those accessing brokered delivery of Solid Wall insulation, will need to weigh up whether to pursue the requirements on solid wall insulation by targeting homes where the job costs more but Green Deal finance will pay a good part of the costs or whether to pursue homes where lower levels of up front subsidy will be required and where it may be more acceptable if some cannot part finance through Green Deal."

The meaning of "acceptable" in this context is not entirely clear, but it may mean, with regard to distributional justice, or political acceptability. Or it may even mean that cold, low-income occupants might be more eager to accept home improvements from the energy company.

However, as things stand, it appears that as solid wall finance is not expected to be 100% (unlike Affordable Warmth, which would be) there may well be many households who are theoretically eligible but which won't be able to afford it on the terms the energy companies' offer.

Is it unfair on the fuel poor to help the fuel poor? – DECC's conundrum

The confusing drafting of this part of the consultation may reflect an essential contradiction at the heart of this strategy (indeed, the whole strategy, and not just the carbon saving ECO) – that with the market mechanism chosen, it is more expensive to improve the homes of those in fuel poverty. As the charge is added to fuel bills the cost burden falls disproportionately on those already in fuel poverty. But if you try to reduce the cost burden on people in fuel poverty by helping fewer people in fuel poverty, then you've got worse off people paying proportionally more for a policy from which they benefit proportionally less than wealthier people. So it is hard for DECC to know what to do for the best, as expressed here:

p128 "If companies are given complete flexibility as to which households they could deliver their Carbon Saving obligation to, they could be expected to prefer those households where they could achieve the greatest outcome at the lowest cost. On the whole this is one of the benefits of the ECO model, and a desirable outcome - obliging them to act differently could load extra costs into the scheme and, in turn, mean more costs passed through to all energy consumers."

However, if no low income households get any help, that's not particularly fair either: "Government ... recognises that it is important to consider carefully the distributional impacts of the policy, in particular with relation to low income households on whom any rise in energy bills resulting from the costs of ECO being passed through will have the greatest impact.

With this in mind, we are keen to understand better what the "natural" pattern of delivery of ECO and Green Deal activity might be, to assess whether there is a case for focusing the delivery of a number of measures to certain sections of the population, for example low income households, to provide greater certainty that they will benefit under this part of the ECO".

And again: "An issue we would welcome views on is whether ECO's requirement on Carbon Saving when left to the market, might systematically skew delivery away from the lowest income groups."

And once more: "**We would welcome views on how the delivery of solid wall will take place if left entirely to the market.** Will wider factors than cost of retrofit and green deal finance influence delivery, for example credit histories?

Should the providers be set a subsidiary target for delivering their carbon obligation to fuel poor households?

Given the likelihood of the 'natural' delivery of the Carbon Saving ECO being skewed towards the able-to-pay, DECC seeks advice on whether to try to anticipate and prevent this:

"Given uncertainties on delivery, the Government needs to consider whether anything additional should be done to ensure ECO delivery of solid wall insulation reaches a proportionate number of the lowest income households - particularly owner occupiers - who will not contribute green deal finance to the costs of work. **As part of this consultation, we**

are therefore inviting views on the need for and structure of any such "distributional safeguard".

The possible (partial?) solution offered by DECC to the 'cheaper to help the wealthy' dilemma outlined above, is to apportion a set fraction of the carbon ECO to be delivered in the homes of the fuel poor – but the fuel poor identified on the same basis as the Affordable Warmth eligibility, p132 "In terms of qualifying households should a safeguard be necessary, there are principled and operational grounds for aligning any target group for a distributional safeguard with the Affordable Warmth eligibility criteria." Once again, this would appear to leave out a number of lower-income fuel-poor households outside the targeted group.

DECC also considers, but dismisses, the idea that there should be geographical targeting, partly on the grounds that the Carbon Obligation aims at areas with a high prevalence of solid walled properties which have tended to miss out on CERT and similar programmes. (There could be said to be an element of geographical targeting being introduce by the inclusion for the first time of regional climate variation in the RdSAP assessment tool.)

In fact, alternative approaches have been suggested which might help DECC out of this double bind. On p128 of the consultation DECC say "We assume that the delivery costs of ECO will be recovered by the energy companies through an increase in consumer bills", but they state that "Government is unable to control how energy companies pass on the costs of meeting their obligations".

Yet if energy tariffs could be structured differently, as suggested by, for example, the UK Association for the Conservation of Energy in their paper 'A Future Obligation on Energy Companies' (http://www.ukace.org/publications/ACE%20Research%20(2011-06)%20-%20A%20Future%20Obligation%20on%20Energy%20Companies%20revisions%20following%20consultation and by David Olivier and Andrew Simmonds in the AECB report 'Less is More' (in press), then the cost burden of the Energy Company Obligation – or indeed, the cost burden of energy supply in general – might not have to fall so heavily on the poor. Both have suggested that high users should pay a higher price for the additional energy used – as opposed to a lower 'bulk buy' as is often seen currently. ACE also suggests that the charge for the ECO is spread over a longer period – thus being paid back rather like a national Green Deal – over the period that the savings are being enjoyed. The possibilities of, and constraints on, tariff restructuring, seem deserving of further exploration.

If you've got cavity walls, and you missed CERT , and you're not in the Affordable Warmth 'vulnerable' category and in a private tenure, its Green Deal or nothing

p129 "We propose that the Carbon Saving obligation within the ECO only supports homes which require solid wall insulation, meaning that households requiring cavity wall insulation who are not eligible for ECO support under the Affordable Warmth obligation may not be eligible for ECO support at all. Government recognises that there be also be a case for providing assistance for households with hard to treat cavities [see above]. "Arguably this focus on solid wall insulation may disadvantage households in cavity wall properties, since they will be paying for ECO but may not be benefitting."

However the Government argues that lots of homes have already had cavity-and-loft measures installed under CERT and other programmes (although of course, lots have not) And as we saw above, government considers that anyone who missed out on CERT or other programmes ought to be able to manage a Green Deal – even though, as we have seen, they also accept that there will be those who cannot. There appears to be no proposed assistance for this last group of households.

As well as commenting on the overall principles and likely practicalities of delivering SWI at scale, and on the likely distribution of benefit and desirable 'distributional safeguards', AECB

members might also wish to comment on:

- geographical variations in cost and access to SWI,
- the potential economies of scale that could be realised by delivering on a 'street by street' basis, where all dwellings are very similar
- the differing needs of homes on and off the gas grid, and in dense/accessible vs sparse/inaccessible locations – AECB has not located a mention of this in the proposal documents but members are invited to explore this issue if it is something they know about.
- the overall balance of people who will be helped, and people who will be paying

Outside the Green Deal?

For households with cavity walls, who do not fall into the defined fuel poor 'vulnerable' group that can benefit from the Affordable Warmth ECO, then after the demise of CERT a Green Deal is the only path being offered by central government to finance home improvements – so what will they be able to do?

It is possible that householders may wish to procure a home energy assessment, but seek private finance. It is also possible that larger organisation (we have heard for example of local authorities in this position) may wish to arrange their own finance but offer a 'green deal-like' programme.

These households or organisations may still wish to take advantage of the Green Deal accreditation system and use Green Deal approved installers. They may also wish to have access to ECO funding.

AECB has not yet discovered if or how far those not signed up to a 'Green Deal' will be able to benefit from Green Deal quality assurance systems – readers are invited to investigate the documentation where it describes the funding and accreditation mechanisms, and comment on this possibility.