

## SO WHAT'S THE BIG DEAL?

The Green Deal is supposed to be the biggest domestic refurbishment programme since the Second World War. But the government's own figures predict it will be anything but.

**Joey Gardiner** asks if the coalition's flagship policy could be heading for failure

The £14bn Green Deal is going to be nothing short of the "the biggest housing retrofit programme since the Second World War," if you believe the energy minister Greg Barker. Designed to bring about a cut in emissions of over 2 million tonnes of carbon dioxide a year, it is also set to create 65,000 jobs for a beleaguered construction industry and warm the homes of some of the poorest in society. Millions of homes could see energy efficiency improvements, all at no upfront cost for owners. For the self-styled "greenest government ever", this is its flagship eco policy and most public commitment.

However, the reality is 1,900 pages of policy – which finally came out to consultation in November last year – which makes clear the rhetoric masks a veritable viper's nest of problems. And it's not as if the government doesn't understand this. Buried in its own impact assessments is the evidence to show that the move to the Green Deal will actually dramatically reduce the uptake of the

most efficient domestic energy efficiency measures, leaving parts of the energy efficiency industry in despair. According to figures from the Department of Energy (DECC) and the government's carbon reduction watchdog, the Climate Change Committee (CCC), the policy shift leaves the UK falling well short of what is needed to meet its long-term goals on reducing carbon emissions, so severe is the problem. Andrew Warren, director of the Association of the Conservation of Energy (ACE), says: "We're putting in the public domain projections that demand is going to fall sharply. The signal it's sending is actually really alarming." So what's causing the problems and what can be done?

The principle behind the Green Deal is simple enough – and widely supported. The idea is that energy efficiency measures, such as loft insulation or heat pumps, can be provided free to homeowners, with the costs paid back over 25 years through a charge on energy bills. This overcomes the

main disincentive for undertaking the work – the upfront cost. Under the policy's "golden rule", energy efficiency measures will only be provided if the expected saving on your fuel bill from installation is greater than the charge to pay it back.

At the same time the introduction of a system, called the energy company obligation (ECO), will see the utility companies put aside £1.3bn a year to subsidise further energy efficiency works beyond those available under the Green Deal, with a proportion of this specifically targeted at low income "fuel poor" homes. The government's best guess of the impact of these policies, compared against simply leaving the market to its own devices, is to reduce emissions by 2.1 million tonnes of carbon dioxide per year, saving the country £8.7bn.

However, this assessment ignores the impact of the government's existing policies in this area, called the CERT, CESP and Warm Front, which work in a similar way to ECO, by getting utility firms to offer their customers subsidised energy efficiency measures.



93%

ESTIMATED FALL IN LOFT INSULATION INSTALLATIONS





Ultimately, under these schemes, around 650,000 lofts have been insulated and 53,000 cavity walls insulated each year between 2008-2010. But all of these schemes will finish by the end of 2012, leaving the Green Deal and ECO as the only game in town for renewing and improving existing homes. And in comparison to them, the Green Deal and ECO's output looks woeful. Figures obtained from the DECC, not previously published, show that the annual number of installations of Cavity Wall Insulation is expected to drop by 70%, from 510,000 to 170,000. Worse still, the number of loft insulation installations will plummet by more than 93%, from over a million to just 70,000 – in contrast the CCC says the figure need to be 2.1 million annually for the next four years. At the same time the previous government's albeit ambitious target to get all of the UK's remaining loft and cavity walls insulated by 2015 has been quietly moved back to 2022.

The ACE's Warren says: "The impact assessment is ghastly. It's absolutely plain – less work will be done in future than today. Basically it accepts it's not going to be a success, and the UK won't meet the aspirations it has set itself."

One of the key reasons for this is because of the way it is proposed the ECO will be set up. Under CERT, energy companies can subsidise loft and cavity wall

installations. However, under ECO these measures will not be allowed, because

they are supported instead by the Green Deal. As the Green Deal doesn't actually subsidise work, but merely finds a way to finance it, this shift makes it much less attractive and the government estimates the number of installations will plummet.

The CCC is so worried about this that its chair, Adair Turner, wrote an open letter to climate secretary Chris Huhne before Christmas pleading with him to change track. Rather than saving two million tonnes of carbon a year, he said the government needs to be aiming for four or five. However, the government is thought to be worried any change of tack risks upsetting the finance firms whose support is needed to fund the Green Deal's upfront costs.

Turner's letter says that the Green Deal and ECO will see just 700,000 of a possible six million lofts insulated, and 1.7 million out of an available 6.3 million cavity walls insulated. The CCC's chief executive, David Kennedy, says: "The government looks to be moving away from a system where it's had some success. There's no evidence, as the government is accepting, that a market-based mechanism such as the Green Deal can deliver here."

On a more basic level, the difficulty which the government's disappointing estimates of uptake demonstrate, is that there is little evidence consumers will actually want to take part. This is because while it might, in theory, make economic sense for everyone to take part, in reality the hassle

of getting in builders to install insulation or ground source heat pumps means most will not take up the offer. Hence the £200m for short-term incentives announced by the Treasury in November. It will be a huge struggle to make sure that consumers, with busy lives and many more pressing priorities, even get to know about it.

The ACE's Warren also chairs the government forum charged with working out how to maximise Green Deal uptake, and is under no illusions about how difficult it will be. He says changes to stamp duty and VAT on energy efficiency measures are needed to encourage uptake, and that the £200m funding boost will not be enough. It also looks likely that the communities department may introduce consequential improvements into buildings regulations, which would be a significant trigger – a revised impact assessment due in the summer taking all this into account is likely to be more positive. "The aspirations are quite fantastic, but it's going to need a whole range of other changes to make the Green Deal actually happen," says Warren.

However, these fears of poor uptake are not even the biggest surrounding the Green Deal. There are problems, as yet unresolved, which mean it may not be able to work at all. Under the policy, consumers who take up the Green Deal will be offered a warranty covering the

works for the whole 25-year period of the contract. This is seen as crucial by the government in order to stave off the possibility of complaints and ©

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MILLION TONNES OF CARBON EMISSIONS AT STAKE

70%

LESS WORK INSTALLING CAVITY WALL INSULATION



© litigation from consumers who have installed products which have later failed, but which they're still paying for. The problem is that most of the products approved under the Green Deal have warranties of just three to five years. Many may need replacing. Green building expert David Strong, who is chairing the forum looking into accreditation for the Green Deal, says he is only aware of one of the 30 agreed Green Deal measures with a warranty of 25 years. This is for cavity wall insulation through a pan-industry scheme, and while the solid wall insulation industry is developing an equivalent scheme, it's not launched yet.

Officials at DECC are aware of the issue, and think it can be addressed by giving longer warranties for some products than for more fragile, more complex technology. But Strong thinks this will add an impossible level of complexity to an already complex scheme. "Some measures might require replacing two or three times over the 25-year period. If you add on that cost then it'll completely blow the golden rule. The more I look at it, the more difficult this issue becomes," he says.

If the government presses ahead regardless of this it could end up in a legal minefield if householders decide to sue over failed Green Deal measures. An example of how bad this could get comes from Australia where the government is facing a £285m remediation bill after its botched introduction of a similar scheme. The Home Insulation Program was associated with at least four deaths by electrocution from incorrectly installed foil insulation that touched cables and became "live".

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MILLION HOMES COULD  
LOSE OUT ON  
LOFT INSULATION

## GOVERNMENT RESPONSE

### Building asked the Department of Energy and Climate Change about the expected uptake of the Green Deal. Here is its response:

How does the estimated reduction in the installation of energy efficiency measures such as cavity wall and loft insulation fit with the government's rhetoric?

**We're making the Green Deal energy efficiency scheme more ambitious [...] than anything that's happened before, and thereby stimulating more investment than ever before. We want all easy to insulate loft and cavity walls to be done by 2022. The Green Deal will for the first time offer help to those 8 million homes that have had no means of insulating their solid wall properties.**

Will DECC consider allowing loft and cavity wall insulation to be offered under ECO?

**Once the Green Deal is in place we envisage there'll be plenty of cost-effective offers on loft and cavity wall insulation, making it easy for households to install with no need for any subsidy. We want ECO to target harder to treat homes and provide help for the fuel poor.**

What other measures will the government take to drive uptake of the Green Deal?

**We have announced £200m of funding to help boost early take-up of the Green Deal [...] From 2016 residential landlords cannot reasonably refuse requests to improve energy efficiency under the Green Deal and ECO, and from 2018 all rented properties must achieve an EPC rating of E - or carry out the maximum package of measures.**

Traditional buildings specialists say one trigger for the UK Green Deal to become that kind of legal minefield is around solid wall insulation. The Society for the Preservation of Ancient Buildings has said that the Green Deal runs the risk of causing serious and irreversible damage to the 20% of the UK's buildings which were built before the First World War, through the incentive it provides to install solid wall insulation. Solid wall insulation, currently a niche market, is one area of predicted huge growth under the Green Deal programme, with the government expecting a 10-fold increase in installations from just 14,000 each year today. However, the fear is that, when fitted to older buildings, non-porous insulation designed for more modern buildings has the capacity to allow damp to build up to levels that could cause serious structural damage. It could also harm residents' health, as a little-noticed paragraph buried in the middle of the government's impact assessment makes clear: "... the reduction in permeability in homes could ... have long-term negative health impacts - for example, lung cancer (radon), stroke or heart attacks (second hand smoke) and respiratory illness for children (mould)."

The government is now so worried about the issue that civil servants have recommended the government commission a serious study into it, and it has convened an expert panel to see how concerns can be mitigated. Neil May, founder of the Good Homes Alliance, says: "We must achieve an understanding among advisers, installers and product suppliers. If we don't, we will all carry the responsibility for the fabric decay of traditional buildings and the sickness of their occupants."

Amid all of the uncertainty around the Green Deal, probably the most surprising fact is how much faith the government has put in this policy working. As a concept, the Green Deal has near universal industry and political support. However, as a policy, it requires the creation of a system of the most byzantine complexity, requiring buy-in from consumers, high-finance, big retailers, local white van builders and lawyers. At each of these levels, there is a risk that the scheme won't work, or at least not as intended. As part of a toolkit of measures, the Green Deal is a very positive step, but the concern is, in the words of one influential expert, that the government is putting "all its eggs in one basket". With no other options on the table for improving the energy efficiency of the nation's homes, it is vital these manifold problems are tackled.



DOES THE GREEN DEAL STACK UP FINANCIALLY? SEE ECONOMICS, P42



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