

# Nuclear Free Local Authorities

# briefing



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Subject: **The Green Deal: Will it achieve the required cuts in carbon emissions and fuel poverty and what can local authorities do?**

## 1. Introduction

This NFLA Policy Briefing has been developed by the NFLA Scotland Policy Advisor for the NFLA Secretariat and complements NFLA Policy Briefing 110 on fuel poverty and energy efficiency. This report focuses on the UK Government's recently launched 'Green Deal' and considers whether it will have a positive impact on the required cuts in carbon emissions expected over the next 30 years. It also considers if it will have any positive effect on fuel poverty. Comparison with similar policies of other countries, such as in Germany and Austria, is also briefly provided to compare the ambition of these policies.

## 2. What is the 'Green Deal'?

The Green Deal is an innovative financing mechanism that lets people pay for energy-efficiency improvements through savings on their energy bills. It was launched in January 2013 and applies to both the domestic and non-domestic sector. It replaces earlier programmes such as the Carbon Emissions Reduction Target (CERT) and the Community Energy Saving Programme (CESP). (1)

The idea allows the installation energy efficiency measures in a property with no up-front costs. The scheme covers 45 measures or areas of home improvement including insulation, heating and hot water, double glazing and microgeneration. For the non-domestic sector lighting, mechanical ventilation and heat recovery measures can also be covered.

The cost of the improvements is paid back through energy bills over a period of time. Unlike a conventional loan the bill stays with the property where the savings are occurring and not with the bill payer. The "golden rule" of the Green Deal is that the *expected* financial savings must be equal to or greater than the costs attached to the energy bill. (2) But the 'Golden Rule' is not a guarantee, just a guideline based on energy-saving estimates.

## 3. Problems with the Green Deal

The Green Deal Finance Company, which is providing the money to companies to give Green Deal loans, has stated that interest rates could range from 7.67% and 9.3% depending on how long the loan is taken out for, how much is borrowed and whether charges and the cost of the initial assessment are included in the cost. (3)

This relatively high interest rate could well prove to be off-putting for poorer households, and the scheme on its own is not going to stop fuel poverty rocketing in the face of high gas prices. (4)

**THE LOCAL GOVERNMENT VOICE ON NUCLEAR ISSUES**

c/o Town Hall, Manchester, M60 3NY

Tel: 0161 234 3244 Fax: 0161 274 7397 E-Mail: [s.morris4@manchester.gov.uk](mailto:s.morris4@manchester.gov.uk) Website: <http://www.nuclearpolicy.info>

According to *Which? Magazine* a Green Deal Loan may not be the most cost effective way for a householder to carry out energy efficiency improvements. Luciana Berger, Labour's shadow climate change minister, says "*the whole point of the Green Deal is that households are meant to save money on their energy bills – but with rip-off interest rates, hidden charges and penalty payments the green deal will end up costing people more than they save. With sky high interest rates like these it's hard to see how the green deal will be anything other than a bad deal for the public*". (5)

Interest at 7.5% adds a substantial amount to the overall repayments – on a 10 year Green Deal Loan, for example, it adds over 40% to the principal repaid – taking a very substantial bite out of any savings. Borrowing at this rate for the full 25 years means that more would be repaid in interest than the original amount spent on the property. (6) This means that, apart from the very cheapest measures, the savings will be simply too low to cover the costs of the finance and so won't meet the 'Golden Rule'.

Alan Milstein, chairman of the Residential Property Surveyors Association, also points out that there is uncertainty surrounding how having a green deal loan attached to your property will impact on its future saleability. Guardian journalist John Vidal bemoans the fact that ordinary tradesman, co-ops and small renewable-energy companies will be excluded from the scheme, which seems designed to ensure only large installation and energy companies profit from the anticipated market. (7)

On the other hand, Paul Davies, a partner at Price Waterhouse Coopers says the Green Deal has the potential to be a truly transformational programme, kick starting a much needed upgrade of Britain's housing stock, and helping the economy on the way. It could also make one of the most significant contributions to our 2020 carbon reduction commitments. James Murray, editor of the Business Green website, agrees. He says ministers were right to realise the only way to deliver a national scale upgrade of our appallingly inefficient building stock is to switch from a grant scheme that could never be sufficiently scaled to a financing model that still promises to deliver households and businesses net savings. The rates of interest may be higher than people would have liked, but for some households and small businesses they will still represent a good deal, particularly when the government's initial cashback offer is taken into account.

Sustainable Building consultant, Kate de Selincourt, writing in *Green Building* magazine says taken together the high interest rates, the fact that many customers will be worried by warnings that the Green Deal might not save them money, and the lack of public discussion of the 'softer' benefits of retrofit, such as having a warmer home, it is hard to be convinced that the Green Deal will "transform" 14 million homes, as was originally promised. The nation's carbon emissions will not be dented much either. Deeper retrofits that would achieve this will almost certainly need a different financing model. (8)

DECC admits that there is not a pent-up demand for carrying out self-financed energy efficiency improvement work, even for the most cost-effective measures such as loft and cavity insulation. The previous CERT and CESP programmes, despite large subsidies of up to 100%, struggled to meet their targets: "You can't give it away." DECC is pleased to have secured £200 million from the Treasury for a cashback incentive scheme to kick start the Green Deal, but there are concerns this might create a boom and bust scenario for the insulation industry. (9)

#### **4. Energy Company Obligation**

DECC now seems to have accepted that it will be the Energy Company Obligations, not the Green Deal, which will be the "backbone" of the programme. These are obligations on energy companies to pay directly for additional energy saving work – the so-called ECOs. These obviously offer a more attractive deal for customers, as they offer substantial subsidies of up to 100%.

There are three types of ECOs:

- (1) Carbon ECO for solid walled properties or hard-to-treat cavities for owner occupiers and private and social tenancies.
- (2) Carbon Saving Communities for any home in specified low-income areas, plus some low income rural households, all occupancies.
- (3) Affordable Warmth – for owner occupiers and private tenants who meet vulnerable criteria.

Because the energy companies struggled to meet their obligations under the CERT and CESP schemes, much of the early activity is likely to involve mass-scale solid wall schemes, generally involving large housing associations, where economies of scale mean high volumes of notional savings may be possible, relatively cheaply. There were also several cities that won extra funding from DECC to 'go early' and test out the programme.

These 'alternative Green Deals' aspire to overcome some of the many shortcomings highlighted with the Green Deal itself. But even if they do well, they aren't mass programmes, and whilst the improvements to buildings are likely to make them more comfortable, the savings in terms of running cost and emissions may be quite modest with no radical transformation. There is an emphasis on solid wall insulation, which is much more expensive per tonne of carbon saved than cavity and loft insulation, although it is hoped that the price will start to come down.

## **5. Green Deal & ECO vs Taxpayer Funded Efficiency Programmes**

Government projections suggest that 100,000 households per year will take up a Green Deal loan in the period 2013 to 2027, and a further 260,000 households per year are expected to take up measures funded by ECO up to 2022. Overall the Green Deal and ECO are expected to deliver fewer basic energy efficiency measures than CERT and CESP. The Energy Bill Revolution campaign says without greater financial support the Government won't be able to meet its legally binding carbon and fuel poverty targets. (10)

Energy suppliers will only be spending £1.3bn a year subsidising insulation for poorer consumers, which will not be enough to lift people out of fuel poverty. In fact the number of households suffering is likely to continue rising from 6 to 9million by 2016 if gas prices rise by as much as the government forecasts. (11)

Vulnerable households will be the beneficiaries of the ECO measures, and those that have work done will individually be better off. But there are many more households in fuel poverty than are scheduled to be assisted by ECO spending. For the rest, the ECO will simply make their situation worse, since ECO is paid for by all of us through our energy bills. Paying for a more extensive energy efficiency and building renovation programme by this method could get very expensive for bill payers indeed.

Fuel poverty costs us all money because living in cold conditions is linked to a number of detrimental physical and mental health impacts (particularly the risk of excess winter deaths in the elderly; respiratory disease among children; and diseases such as pneumonia and asthma among adults). Whilst improved thermal efficiency, leading to increased indoor temperatures would have a positive impact on health and wellbeing, we don't see the results on our energy bills. It would make much more sense for this type of spending to be funded by the taxpayer. (12)

A report for the Energy Bill Revolution estimates that the average income for the Government from two different kinds of carbon tax will be around £4bn per year between now and 2027. This money could be used to target all 9 million homes projected to be in fuel poverty by 2016, or some of it could be used to help boost Green Deal take-up. It could quadruple the carbon savings and the number of jobs expected with the Green Deal and ECO alone. (13)

## 6. Energy Efficiency spending is good for the economy.

In November 2012, Consumer Focus published a report suggesting that direct government investment in energy efficiency here would have benefits 'broadly consistent' with the German experience, and would deliver more jobs and growth than spending on big infrastructure or tax cuts. It shows that an energy efficiency programme could have substantial economic benefits. It would create 71,000 jobs by 2015 and boost gross domestic product (GDP) by 0.20 per cent. (14)

This would not be impossible to fund. Stuart Hay of 'Changeworks' in Edinburgh is one of many to point out that "*The government could borrow cheaply, but as a consequence of the crash they won't.*" (15) The same point has been made in the Financial Times – which reported last year that effective interest rates for the government were actually zero. (16)

Energy efficiency spending can make the unit cost of energy lower – or lower than it would have been otherwise. It saves the nation more than it costs. When this happens, the spending should reduce, not increase, everyone's bills. The most striking savings are to be had with electrical efficiency, because electricity and its associated infrastructure are so expensive – and at the moment, it is high-carbon as well. Analysts suggest that for £30 spent on electricity demand reduction, we can avoid spending £100 on replacing generation and transmission infrastructure.

Allowing – or indeed requiring – energy companies to fund electrical efficiency improvement that is cheaper than new generation would benefit all bill payers. Indeed the Government already seems to have recognised this by putting forward proposals which, according to The Independent will be announced later this year to divert money currently earmarked to build a new gas fired power station into projects to cut electricity demand. It will announce plans to allow companies to "bid" for up to £1 billion in public funds to carry out large scale energy efficiency projects which would otherwise be uneconomic. Projects might include replacing the entire stock of motorway lighting with LED bulbs, for example or retrofitting energy efficient technology to electricity intensive industries like steel and aluminium smelting. (17)

## 7. Germany's energy efficiency programmes

Securing the take-up and financing of the level of domestic energy efficiency improvement that will be required to meet climate objectives presents a significant challenge. But this problem is by no means confined to the UK. So it is worth looking at what can be learnt from successful programmes elsewhere.

The German energy efficiency programme uses incentives rather than a compulsory renovation programme, but minimum efficiency standards for buildings will be gradually raised. Overall, primary energy demand of buildings should fall 80 percent by 2050. The German Government has set a goal of reducing electricity consumption by at least 10% by 2020 (18) and 25% by 2050. (19) This is in sharp contrast with the UK Government's expectation of a doubling in electricity demand by 2050. (20)

The building renovation rate has been doubled from the pre-Fukushima level of less than 1 % a year to 2 % of the total building stock. The objective is to reduce the heating requirement of building stock over the long term so that by 2050 all building stock is almost climate-neutral. To achieve this, the German government is creating considerable financial incentives for building modernisation – every euro the state invests triggers significant private investment, thus contributing to economic growth. The government's programme of subsidised loans for energy efficiency improvements has been shown to give the German treasury a return on their investment of 5:1 in terms of extra VAT, tax, and avoided benefits. (21)

Unlike the UK Green Investment Bank, the German KfW banking group – the German development Bank - borrows freely in order to invest in energy efficiency measures. Funding for KfW's CO<sub>2</sub> building rehabilitation programme is raised from international markets at low

interest rates. The key to the success of the programme is very low interest rates, currently 1-2%, compared with the Green Deal's 7.5% interest rate. (22)

As of 2010, KfW had financed in total the rehabilitation to high energy efficiency standards of 9 million pre-1979 housing units. Between 2006 and 2009 KfW programmes retrofitted 1 million existing homes with energy-efficient products, and approximately 400,000 highly energy-efficient new homes were built, directly generating approximately a quarter of a million jobs per year, largely in the construction and supply chain. It is estimated that every €1 of subsidy has leveraged €9 in loans and private investment. (23)

## **8. Austrian energy saving measures**

Similarly, Austria plans to achieve an energy savings target of 9 percent of its average annual consumption over the period 2001-2005, i.e., 22 TWh (1.9 Mtoe), by 2016. Since the household sector accounts for about 31 percent of energy consumption, energy saving measures is particularly focused on buildings. Austria provides about €2.4bn/year (\$3.2bn/year) in funding for housing support programs, including building renovations and subsidies for energy-efficient or renewable heating systems. By 2020 Austria also aims to have achieved the thermal renovation of all buildings constructed between 1950 and 1980. (24)

## **9. The UK Green Investment Bank**

In the UK the Green Investment Bank (GIB) doesn't borrow money. It became operational in October 2012, with £3 billion in UK taxpayer capital dedicated to its mission of "*accelerating the UK's transition to a more green economy, and creating an enduring institution, operating independently of government*". The Banks task is to act as a catalyst to encourage in more private sector lenders and investors. Support for the Green Deal is one of the four areas GIB is tasked to support – the others being offshore wind, waste recycling and energy from waste and non-domestic energy efficiency. GIB expects to provide finance for the Green Deal Finance Company ("GDFC") initially and help to develop a long term financing solution, enabling GDFC to access long term institutional finance and to keep the financial cost to consumers as low as possible. (25)

## **10. Local Authority Green Deal Action**

Seven cities are to receive a share of a £12m fund to run pilot projects for the Green Deal that should deliver around 2,500 retrofits to households and non-domestic properties. The Department of Energy and Climate Change (DECC) said Birmingham, Bristol, Leeds, Manchester, Newcastle, Nottingham and Sheffield all submitted "ambitious" proposals to lower their emissions. DECC said the City Green Deal scheme is intended to raise awareness of the Green Deal through community engagement and show homes, as well as provide support to local supply chains. (26)

Eleven local authorities in Yorkshire have launched the country's largest Green Deal scheme, predicting that more than 12,000 homes should undertake energy efficiency improvements in the next few years. The £100m initiative is designed to help domestic and non-domestic properties reduce their energy bills and cut carbon emissions, while maximising economies of scale for the programme through collective purchasing. The councils expect to appoint a single delivery partner to manage the programme following a procurement process that will kick off next month. It predicted the scheme would create 600 jobs over three years, while supporting a further 24,000 direct and supply chain jobs through to the mid-2030s.

The local authorities including Leeds, Wakefield, Barnsley, Bradford, and York together boast a population of more than three million people. It is one of the first areas to agree a so-called 'City Deal' with the government to pilot its flagship energy efficiency financing scheme, which offers property owners loans to cover the up-front costs of installing measures such as loft insulation or energy-efficient windows. Collective purchasing through City Schemes is seen as one way to drive household and business take-up by driving down the cost of improvements. It

is also expected to improve the reach of the Green Deal's accompanying ECO grant scheme, which offers subsidised property improvements to households suffering from fuel poverty. (27)

Birmingham City Council has partnered with Carillion Energy Services to form Birmingham Energy Savers. Birmingham was the first city to sign a City Deal with a Green Deal Provider. The £3 million partnership is still in development but it expects to create up to 360 new jobs. (28) By the time the scheme was officially launched on 1<sup>st</sup> February 2013 it had received over 1150 calls to our call centre and completed over 200 energy assessments. (29) Carillion expects 60,000 households across the city receive energy and carbon efficiency improvements.

The plan is that in the first year Carillion will sell to 15,000 households to take up a Green Deal package. Carillion doesn't get a fee from Birmingham City Council – it has to make it has own money. But through Birmingham Energy Savers the Council has lent its brand to Carillion. Carillion Business Development Director, John Swinney, says what they are trying to do is to use the community to create a momentum. The company has also made a commitment to use local labour and local small businesses. It is committed to keeping 90p of every pound spent within Birmingham. Swinney says this isn't just about energy; it is also about helping to kick start the economy and generate local wealth and local economic regeneration. Carillion has engaged with over 200 businesses in Birmingham. (30)

In Manchester two green co-ops are taking a community approach to the Green Deal. Community based green organisation, Carbon Co-op, and urban design co-op, URBED, launched their Community Green Deal project last September at Manchester Town Hall. The project worked as a test for the Green Deal and works in association with the Greater Manchester Authority. Carbon Co-op have received £250,000 of funding from DECC for their pilot programme. (31) The ten local authorities in Greater Manchester are now working together to deliver Eco through a partnership approach with the Greater Manchester Energy Advice Service (GMEAS) in readiness for a 'GM' Green Deal offer due to be available in early January 2014. (32)

## 11. Conclusion

The Green Deal and ECO are an innovative way of implementing the energy efficiency programme that is needed to achieve carbon and fuel poverty objectives, but they will need a much larger cash injection to bring down the interest rate on green deal loans and to boost the numbers of households in fuel poverty which can be renovated if they are to succeed.

Once the Green Deal scheme is up and running and delivering energy savings, the pressure on the Chancellor to boost funding will grow. At the same time there is a growing body of evidence which shows that energy efficiency programmes are one of the most effective ways to boost the economy.

Local Authorities are beginning to sign up to the Energy Bill Revolution campaign, including Leeds City Council, Islington, Knowsley, Bath and North East Somerset and North East Lincolnshire. This is an idea whose time has come. (33)

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