

## RE-Charge

### **Using a second charge on the property to finance domestic On-site Renewable Energy installations**

#### **Introduction**

The Renewable Energy Association has been examining current methods of financing the capital costs of on-site renewable installations for householders. Current rates of installations in existing housing are still at a very low level. If the numbers of installations are to rise significantly then we need to address the issue of cost to the householder. On-site renewable energy could play a crucial role in helping the government achieve its obligations under the EU 20% Renewable Energy target and provide the crucial impetus needed to make domestic renewable heat a realistic option.

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#### **The Vision – An Energy Generating Democracy**

There is much discussion in political circles regarding the need for a vision of the future of our society. Any vision we construct should play a key role in addressing global environmental concerns. Mitigating climate change in the UK has not been an empowering or positive experience for the average UK citizen. We have been exhorted to 'do our bit' by usually not doing things, saving energy, turning lights off, turning thermostats down, turning off appliances on 'stand by'. Where we have been encouraged to invest it has been in passive measures such as loft insulation and cavity wall insulation. These approaches all make unarguable environmental and economic sense. They do not however form the components of an inspirational vision for the future of our society. The 'real' way of tackling climate change has seen a focus on big infra-structural approaches such as windfarms, paving the way for nuclear, exploring carbon capture and storage approaches. Infra-structural approaches will have a significant impact on reducing carbon emissions. They do not however engage with the wider public at all other than in a fairly negative way through the planning process.

The 1980s saw the Thatcherite vision of a 'Property Owning Democracy' become a key plank of Conservative policy. There was a view that people aspired to own property and that it was a positive and empowering experience. Owning property provided people with capital resources and ensured that money that would otherwise be 'lost' in rental payments was used to finance property ownership. To back this vision billions of pounds of public resources were utilised. The sort of money needed to make a vision a reality. Council houses were sold to tenants at huge rates of subsidy and policies such as MIRAS (Mortgage Interest Relief at Source) encouraged people to get on the 'property ladder'. The vision became real.

The vision of an Energy Generating Democracy is one where an increasing proportion of the population of householders produce their own heat and power on-site. The production of heat and power in people's own homes makes tackling climate change a more participatory and empowering experience and not one where people are simply told not to do things. It will raise awareness of the value of saving energy, of using it more efficiently. The household energy balance sheet will no longer simply show energy being used but also the energy produced. The impact on energy use within the home can only be positive.

One way to achieve the vision of an Energy Generating Democracy is to utilise the equity people have within their homes to generate the energy they need to live in them. In this way the huge public resources that were used to create the Property Owning Democracy can not only be released for huge environmental benefits but be used to transform the way people regard themselves. No longer are they simply consumers of energy, they are generators. They are a real part of the solution to the biggest problem of all.

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### **Some Advantages and Disadvantages of Grant based schemes**

There have been a number of grant schemes used in the UK to encourage the take-up of on-site renewables by householders (Clear Skies, Major PV Demonstration Programme, Low Carbon Buildings Programme). These funding mechanisms have had the benefit of providing a boost to the industry, brought wider attention to the renewables sector and provided financial incentives to householders to install a range of renewable technologies in their home.

There have been downsides to grant-centred approaches. They have made the potential for growth in the on-site renewables sector 'grant dependent' in the absence of any other funding support mechanism. Grant based schemes have been time-limited leaving the industry facing a predictable 'cliff edge' when financial incentives disappear and demand plummets. The level of reward offered under grant based schemes limits the market to a narrow sector of the very committed environmentally aware with access to a spare several thousands of pounds to invest.

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### **Are 'soft loans' the answer? The experience of Chichester District Council**

'Soft loans', with very low rates of interest, have been floated as a method of boosting the microgeneration sector. Some of the admittedly limited experience of such schemes doesn't indicate that will be a very effective route to a mass market for on-site renewables.

Chichester District Council has been running an interest free renewable energy loan scheme covering all the principal technologies for a 10 month period. Over this period 223 requests were made for information regarding the scheme resulting in 8 application forms being completed and of these only 5 actual loans actually got paid out. These loans were all paid for solar water heating at the lower cost end of the renewable technologies scale.

A number of reasons may contribute to the low take up under the loan scheme. Take up of the loan was dependent on a successful Low Carbon Buildings Grant application which over the last 10 months has gone through monthly caps, suspension of the scheme and a re-launch at a much reduced grant maximum level. The level of the loan at £4000 might not have been as attractive for the higher cost technologies such as photovoltaics and biomass boiler. There is however the fundamental issue that the purchase of renewable energy equipment is not an essential item for householders and purchase of it requires ready cash for something which is not a necessity; even if that is limited to regular loan repayments at a low rate of interest.

A similar scheme to Chichester's which provided solar water heating at under £2000 with an interest free loan option was trialled over a three year period in Kirklees and produced only around 130 installations despite a heavy marketing budget to support the programme. If the aim of a finance scheme is to encourage a mass market of renewables the capital cost to householders should be extremely limited to ensure a high take up. Soft loan schemes operated by British Gas/Centrica have had a similarly disappointing impact.

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### **RE-Charge – a second charge on the property to boost on-site renewables**

The attraction of a second charge scheme is that it would lack any significant upfront cost to the householder or any monthly loan repayments. Once the 'kit' is installed the householder gets the benefits of renewable energy immediately. For many this 'no cost' option should in fact result in a reduction in monthly fuel bills providing an additional incentive to take advantage of the scheme. A £3 million RE-Charge scheme is scheduled to be launched by Kirklees Council in April 2008.

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### **What is a second charge on a property?**

A second charge is an alternative name for a secured loan, so called because the loan is guaranteed or 'charged' on your home, and is the Second Charge on your home – your Mortgage being the first. The holder of a second charge has a legal call on the property in the event of the borrower defaulting on repayments, but only after all liabilities to the holder of the first charge are settled.

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### **How could the scheme operate?**

The householder applies to have on-site renewable technology installed in their home to a maximum value of £10,000. Any excess above this amount will have to be paid upfront by the householder. Approved contractors selected through a competitive tender process will install the kit. A £10,000 limit is set on the second charge to ensure the maximum number of homeowners are able to take part in the scheme. The £10,000 limit is very roughly equivalent to the current cost of an average 2kWp PV system, a full wood pellet boiler installation or a ground sourced heat pump system. There will be a legal cost for setting up the second charge of between £200 and £300. This cost could either be paid up front by the householder or be rolled in with the second charge. It would be reasonable to ask householders to pay this charge upfront bearing in mind the value of the renewable energy installation. This would free up more funds to support more installations for more householders

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### Turnover of the housing stock

Current median length of residence in owner occupied housing is around 7 years. This average turnover will vary according to the state of the housing market. It is anticipated that the turnover of housing for a mass scheme for hundreds of thousands of households with no upfront costs would not differ widely from the average turnover.

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### Financial impact of RE-Charge on the householder

The financial impact on householders should be neutral as the 2<sup>nd</sup> charge on the property should be offset by the increased value of the property gained through the installation of renewable energy equipment. With fossil fuel based energy costs rising, the value of a renewable energy installation should rise over time.

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### A 'revolving' RE-Charge fund

When a property that has benefited from the scheme is sold the second charge will be recovered and paid into a revolving fund to be used again to provide further second charges to other householders enabling the installation of more renewable technology. This will have the advantage over grant schemes of being a more cost effective use of funds.

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### Is negative equity a significant risk?

The risks associated with negative equity for the scheme are limited. The value of the second charge is limited at around £10,000. The scheme will be most attractive to the majority of owner occupiers who have considerable equity in their property gained through years of sustained rises in house prices. The possibility of negative equity impacting on the recovery of the second charge following repossession can be further limited by assessing this risk at the application stage of the process.

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### Advantages of the RE-Charge scheme

Cost effectiveness/value for money – Unlike grant programmes the money invested in a second charge scheme is not lost. It can be recycled and reused for more installations upon sale of the property

No/minimal upfront costs to the householder – Householders have a variety of calls on often limited funds for home improvements and repairs and leisure activities which limit their ability to decide to install microgeneration. The second charge enables householders to decide to install renewable energy in their home with no impact on other day to day priorities. This also makes the use of renewables to assist owner occupiers in fuel poverty a real option.

Immediate financial benefits of some technologies – Technologies which use solar, wind or heat from the ground could have an immediate impact on reducing fuel bills for many households.

Contributes to the reduction of fuel poverty - A certain proportion of the funding, a minimum of 10% could be earmarked for households identified as suffering fuel

poverty. This will be of particular benefit for hard to treat households in areas off the gas network where there are limited options for cost effective low carbon heating e.g. oil and on peak electricity.

Contribution to achieving 2020 Renewable Energy target – It has been estimated that around 1% of the 2020 target of 20% can be met in the new build sector through the Zero Carbon homes policy. The potential for renewables within the existing housing sector is much greater and could be as much as a quarter of the total target. Onsite renewables can also play an important role in helping achieve the 2010 and 2020 renewable electricity targets. This will be particularly important for planning authorities based in largely urban council areas where there is little potential for wind development

Security to industry/Zero Carbon Homes – a second charge scheme would provide the certainty the industry needs to grow and develop in readiness for the challenge of delivering Zero Carbon homes in 2016 and Code for Sustainable Homes Level 5 in 2013.

Reduce fossil fuel dependency – a large scale second charge scheme enabling millions of householders to install renewable energy will have a major impact on reducing our dependency on fossil fuels and thereby helping address security of supply concerns.

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### **A national RE-Charge scheme**

Funding support could be sought from the European Investment Bank of £1 Billion/year for a seven year scheme, the scheme will then continue for a further 14 years using recycled funds.

Further financial and organisational support will be sought from Energy Suppliers through CERT obligations, Regional Housing Boards and Regional Development Agencies.

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### **Why the European investment bank?**

The EIB raises substantial volumes of funds on the capital markets which it lends on favourable terms to projects furthering EU policy objectives. The EIB continuously adapts its activity to developments in EU policies.

Energy has become a key item on the European Union policy agenda and for the European Investment Bank (EIB), the Bank promoting European objectives, which has made “sustainable, competitive and secure energy” one of its priority objectives in its Corporate Operational Plan for 2007-2009. In line with EU policy orientations, five areas have been defined for EIB lending; renewable energy (RE); energy efficiency (EE); research, development and innovation (RDI) in energy; security and diversification of internal supply (including trans-European energy networks); and of external supply (Neighbour and Partner Countries).

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## What sort of bodies could deliver a RE-Charge scheme?

There are a number of bodies that could enable delivery of a second charge scheme. The scheme could be piloted on a regional basis with support from Regional Development Agencies. Local Councils could also have a role in delivering such a scheme. Sheffield City Council operates a loan fund for private sector housing improvements for all 9 South and West Yorkshire Metropolitan Councils. A Second Charge scheme could fit well with the new ESTAC/Green Homes Service enabling them not just to provide advice but also attractive options to offer householders who want to install renewables energy in their homes. A particular benefit of involving a third party in the delivery role is that it provides a valuable advocacy role for householders who may have little knowledge of the technologies, its costs and capabilities.

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## Key issues to address

*Financing the borrowing* – 2 approaches could be taken to this issue. Either you accept that it is good value for money to use householder capital to pay for renewable installation and government takes the interest 'hit' on the borrowing or you could seek get others to finance the borrowing such as Energy Suppliers.

*Financial sustainability* – If the aim is to maintain a high volume of installations at what point does the scheme become self sustaining at high level through the recycling of loans in the revolving fund (following house sales). A detailed financial model of the RE-Charge scheme would be needed to test out scenarios.

*Inappropriate installations* – We would want to ensure that installations met high standards and that the technology used and their siting is such that they will generate optimum amounts of energy. This could be addressed at the outset through the standards the scheme operates to, such as the REAL Assurance Consumer Code.

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## Conclusion

A second charge scheme could deliver large numbers of renewable heat and power installations to millions of homes in the UK. To progress the scheme further will require detailed financial modelling to enable the concept of a second charge scheme to develop into a detailed proposal. This would enable government to seriously consider it as a major climate change mitigation initiative which engages millions of householders.

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