

REVIEW OF DOMESTIC RATING

GREEN REBATES

CONSULTATION RESPONSE

CTS PROJECTS LTD

KEY POINTS

- We welcome this proposal from the Department of Finance & Personnel, after the removal of the mandatory renewables from Building Regulations and the withdrawal of the Reconnect Grant Scheme under the Environment & Renewable Energy Fund.
- The proposals in Section Two of the document do not go far enough in that they only specify wall and cavity insulation. The DEFRA 'Carbon Emissions Reduction Target 2008-2011' has proven that Loft Insulation has less of an energy reduction, less of a Carbon Reduction and less of a Saving to the home owner than Biomass, Heat Pumps and Solar Water Heating (Copy of extract appended top this response).
- The proposal in Section Three of the consultation document is welcome to encourage the market but should be introduced on a sliding scale giving the definition of 'zero-carbon' is still not set.
- DFP should relate with Building Control to verify the homes that have benefited from renewable technologies and, homes that have a High SAP rating to allot all new builds into a Carbon band for rates rebate and perhaps a future rates scheme instead of capital valuation. This will link into the EPBD and the Energy performance Certificates.
- DETI should provide addresses that have benefited from the installation of renewables from the Reconnect Scheme to benefit those that have already installed renewables.
- These proposals are replicated from the 2006 English Council rebates and Northern Ireland deserves are more up to date Green Rebate.
- The Home Energy Conservation Authority report of 2008 stated that 85% of the homes in NI have loft insulation, 10% do not have lofts (ie flats) and the other 5% are vacant properties unlikely to enter back into occupying homes therefore not requiring loft insulation. Therefore offering rebates for loft insulation is only a token gesture to be seen to be Green by DFP.

SECTION ONE - INTRODUCTION

In the light of the Executives commitment to promote sustainable development, soaring energy costs, the lack of relevant new policies for Northern Ireland in promoting renewable technologies, enabling us to achieve our Carbon Reduction targets and promote a more self sufficient energy future we express concern that this Green Rebate does not extend to the wider rate payer.

By utilising the local taxation system to full effect, and in a similar way to that of the local Councils in England, we can influence lifestyles and contribute to energy conservation and indeed growing the indigenous renewable energy sector.

In order to achieve investment in the energy efficiency of Northern Irelands existing housing stock, Green Rebates are a good way to incentivise. However, energy efficiency measures are more than just loft and cavity insulation. By expanding this term to include solid wall insulation and renewables along with energy efficient light bulbs we can encourage more of the population to invest. In light of paragraph 7, a green rebate will not result in additional consumer action unless it is clearly defined to include renewables and solid wall insulation which are proven by the DEFRA document on Carbon Emission Reduction target to be the best measures to achieve a cost benefit and lower Co2.

SECTION TWO – GREEN REBATES

This section needs to be inclusive of all Green Measures. Energy efficiency measures such as those mentioned in paragraph 20 are not inclusive and are not regarded by DEFRA to be the best forms of Green Measures. As stated previously it needs to include solid wall insulation, renewables and energy efficient light bulbs.

We agree that the Energy Saving Trust should remain as a first point of contact as stated in paragraph 23, although we disagree that Eaga should be mentioned in paragraph 25 as their contract with the DSD is set to expire and go for public tender in 2008.

As mentioned in paragraph 27, the Northern Ireland Audit Office pointed to the fact that homes that are already energy efficient have benefitted through the Warm Homes Scheme, managed by Eaga Plc. That is to say those homes already with loft insulation and cavity insulation have merely topped these up rather than the most pressing housing stock of the solid walls construction and what is termed the hard-to-treat. Therefore a home already with some loft insulation topping up is not a beneficial investment in our existing housing stock.

By expanding this scheme to those availing of renewable technologies as outlined above it may be that the £150 cash back will have to change to perhaps £100 rate rebate. This could be used as a tool to ensure that all renewable energy installations eligible apply for Building Control approval, ensuring high quality installations. The £60 fee for a Building Control Notice could be applied in part to fund the rate rebate, as Building Control is within the remit of DFP. This would act as a quality control mechanism and would also be a better investment in the existing stock of houses. There are already linkages between DFP Land and Property Services and Building Control. This would remove the need for NIE Energy carrying out 10% inspections, as Building Control carry out inspections on all applications. The rate rebate should not be available until the Completion Notice has been issued by the relevant Council.

As this scheme is not due to come into effect until April 2010, it would be most prudent to have this Green Rebate drive the renewables industry given the removal by Peter Robinson MP MLA of the proposed 2008 mandatory renewables as outlined by Rt Hon Peter Hain MP while Secretary of State for NI. It would also go some way to replacing the EREF grant fund that has been stopped and the Low Carbon Buildings Programme which only 4 companies are registered with due to incompetence by DETI in not ensuring that NI firms who trained under the DETI funded Renewable Energy Installers Academy (REIA) were qualified.

DFP SET QUESTIONS – GREEN REBATES

What are your views on the proposal to provide a rates rebate for households that carry out energy efficiency improvements to their properties?

This is a welcome proposal. However as detailed above it does not go far enough. DFP Committee recommendation 15 from the recent report on the Amendments to Building Regulations stated that the green Rebates should be used to reduce the Carbon Emissions. As shown in the Appendix, Loft Insulation and Cavity Wall Insulation do not reduce Carbon Emissions as much as Biomass Boilers, Heat Pumps and Solar Panels. Cavity Wall Insulation will save 6.92 tonnes of carbon over the lifetime of 40 years and 25.4 tonnes of CO2 whereas a Biomass Boiler as a Primary heat source will save 39.8 tonnes of Carbon over 20 years and 146 tonnes of CO2, Solar Water Heating will save 2.22 tonnes of Carbon over 25 years and 8.14 of CO2 and Heat Pumps will save 19.9 tonnes of Carbon over 20 years and 73 tonnes of CO2. Even Heat Pumps will save 12.5 MWh/yr of energy compared to 3.01 for Cavity Wall Insulation and 1.49 for loft insulation which is bettered again by Biomass saving 2.61 MWh/yr

What are your views on the preferred means of delivery for the rate rebate, that is in partnership with the NIE Energy Insulation cash-back scheme?

I do not think this is a feasible option. It ties the LPS into a partnership with one organisation and may be seen as a conflict at some stage in the future. We feel that a partnership approach towards renewables would be better served for reasons outlined above and the fact that this may be more achievable. With the current ties existing between Building Control and LPS this would be a better marriage to achieve a Green Rebate based on technologies and enhancements that are actually beneficial to the home owners and the Carbon Emissions. The £60 fee for renewables could help fund some of this Rebate and also enhance the quality of installation, and further remove the 'fear factor' that a poor installation may destroy the industry through fire. It has already been highlighted to Action Renewables and DETI of Wood Pellet Boilers being installed on timber bases which is against Building Regulations. Therefore it is our opinion that a partnership with NIE serves no benefit and that of a partnership that already exists would be best extended for the good of the renewable industry and that of the Carbon reductions.

What are your views on limiting the rate rebate scheme to owner occupying households only?

We feel that this is a good policy. The owner occupier sector can sometimes be left out and in this time of need this policy of aiming the rebates at this sector. The public housing sector will be receiving grants and enhancements through already set policies within DSD. Therefore any rebate will not affect the actual rate payer.

This part is welcome.

What are your views on the option of providing a higher level of rebate than is currently awarded in terms of the cash back scheme?

We feel that the rebate should be set around £150 for all renewables and leave the £150 NIE EEL cash-back in place. This policy of a Green Rebate must be directed towards measures that are proven by the DEFRA document to actually act as Green technologies with proven savings financially and environmentally.

There is no benefit in having a Rate Rebate for Loft and Cavity Wall Insulation, therefore a higher level than the cash back scheme makes no economic sense. As stated by the DFP Committee we need to use these measures and the Building Regulations to lower Carbon Emissions, therefore the rebate must be targeted at renewables as per Clause 1 of the 2008 Amendments.

SECTION THREE – ZERO CARBON HOMES PAYMENT HOLIDAY

While the regulations outlined in paragraph 38 were welcome at the time it has become evident that the department lacked the knowledge to produce documents and easy access files for designers and builders to build such a home. This has led to a very low take up of the UK SDLT exemption.

In order to achieve this status designers and builders need to be educated and coerced through legislation. Therefore this proposal is welcome. It is however, cautiously stated that the definition needs to be firm between all bodies and governments as to what a 'zero-carbon' home is. We propose that a home that imports its electricity from a renewable tariff should be allowed to use this as a contributor towards 'zero-carbon'. Paragraph 39 needs to be expanded before final documents are issued.

In order to encourage the development of technologies and raise public awareness as per paragraph 40, the green Rebate needs to include renewables as per the last section. The 'zero-carbon' home standard should be measured using SAP. Details are submitted at design stage to Building Control, therefore this already 'joined-up' approach between Building Control and LPS needs to be expanded to include the sharing of this information. The proposed 'holiday' of 5 years is acceptable as by 2016 it is expected through the UK legislation that all new homes should be 'zero-carbon'. Therefore this 5 year period is a reward to the early adapters.

The proposal outlined in paragraph 49 is encouraged. It should be linked to the Department of Communities and local Governments 'Code for Sustainable Homes'. The areas in this document that has already been adopted by the Department of Social Development for its Social Housing are:

1. Energy & Co2 Emissions
2. Water
3. Materials
4. Surface Water Run-off
5. Waste
6. Pollution
7. Health & Wellbeing
8. Management
9. Ecology

It enhances the whole construction process of the houses as it refers to site waste management and the embodied ecological impact of certain materials.

Our proposal is that giving that DFP Building Regulations are introducing Code Level 3 in 2010, when this Rate Rebate is due to take place, homes constructed to a better star rating should receive the sliding scale.

A home attaining Code Level 4 (44% reduction in TER) should receive a reduction in rates for the 5 year period equivalent to the reduction in TER on a sliding scale. Homes that achieve Code Level 5 (100% reduction in TER) should receive a rate reduction linked to the TER reduction on a sliding scale. Perhaps a 25% reduction for 5 years for Code Level 4 and a 50% reduction for Code Level 5 then Code Level 6 (zero-carbon) should have the 100% rate holiday for 5 years.

This approach would need to remove the Code Level 4 by 2013 as that is the scheduled next reduction in the TER through the Building Regulations to the 44% reduction.

This approach would be supported by the DFP Committee response to the Building Regulations (Amendment) Bill 2008 (NIA 11/07) which called for a reduction in the TER and encouragement through Clause 1 of the use of renewables, which will be required to reach 'zero-carbon' (Recommendation 5)

In conclusion it is our opinion that Building Control already have the knowledge to carry out and certify the SAP rating of a new home and with the already existing liaison with LPS there is strong linkages that could be used to have homes completed and the Rates Holiday started when Building Control carry out their final inspection of new properties.

DFP SET QUESTIONS – ZERO CARBON HOMES PAYMENT HOLIDAY

What are your views on the proposal to introduce an initial exemption for new zero carbon homes?

This is an excellent policy introduction by DFP. This will create market awareness of 'zero-carbon' homes and hopefully increase the demand. However as little or no knowledge exists in the mainstream construction sector in how to build a 'zero-carbon' home it will be necessary that DFP publish documents supporting this policy to enable some early adapters to achieve the classification of 'zero-carbon'.

What are your views on providing this initial exemption to the first residents, rather than first purchaser, of such homes (so that self builds and buy to lets are included)?

This again is very welcome in that it will allow the self-build sector to avail of this. It is most likely that it will be self-builders that will become the first builders of such homes therefore this is a necessary point to include.

What are your views on the departments approach to the definition of 'zero carbon'?

The department needs to ensure that a standardised definition exists so as no confusion exists in the construction sector. It will need to be closely linked to the Code for Sustainable Homes as this is the template currently in use by the Housing Associations of Northern Ireland through the DSD Housing Strategy. It is important that we do not widen the gap existing between the Public and Private Housing Builders by having not only 2 sets of standards but also two sets of definitions for 'zero-carbon'.

APPENICES

TABLES FROM DEFRA 'CARBON EMISSIONS REDUCTION TARGET 2008-2011'

Table 1: Annual savings per measure for the average 3-bed semi-detached house (weighted average of all fuels, and taking account of any correction factors)

	Gross savings			Comfort factor	Net savings	
	Energy MWh/yr	Cost £/yr	Carbon tC/yr		Energy MWh/yr	Carbon tC/yr
Cavity wall insulation	3.54	112	0.20	15%	3.01	0.17
Loft insulation (professional)	1.75	55	0.10	15%	1.49	0.085
Loft insulation (DIY)	1.50	47	0.086	15%	1.28	0.073
Glazing E to C rated	0.46	14	0.026	15%	0.39	0.022
A/B rated boilers (exceptions)	1.87	54	0.10	0%	1.87	0.10
Fuel Switching	7.12	317	1.11	0%	7.12	1.11
Heating controls - with boiler	0.18	5.3	0.010	0%	0.18	0.010
Heating controls - extra	1.46	43	0.077	0%	1.46	0.077
CFLs - retail	0.0080	2.2	0.0022	0%	0.0080	0.0022
CFLs - direct	0.0080	2.2	0.0022	0%	0.0080	0.0022
Appliances - Cold	0.037	6.9	0.0072	0%	0.037	0.007
Appliances - Wet	0.10	10	0.012	0%	0.10	0.012
Appliances - iDTVs	0.027	5.8	0.0059	0%	0.027	0.0059
Hot water cyl. insul. topup	0.94	29	0.054	0%	0.94	0.054
Draughtproofing	0.74	23	0.043	15%	0.63	0.036
Solid wall insulation	11.79	371	0.68	15%	10.03	0.58
Measures below are open for consultation						
Wood burning stoves (sec)	0.18	15	0.16	0%	0.18	0.16
Biomass boilers (prim)	2.61	468	1.99	0%	2.61	1.99
PV (2.5 kWp)	2.12	212	0.25	0%	2.12	0.25
SWH (4m ²)	1.55	50	0.089	0%	1.55	0.089
mWind (1 kWp, 10% LF)	0.88	88	0.10	0%	0.88	0.10
mHydro (0.7kWp, 50% LF)	3.07	307	0.36	0%	3.07	0.36
Heat pumps	12.5	389	1.00	0%	12.50	1.00

Table 2. Lifetime Carbon/CO₂ Savings for the average 3-bed semi-detached house – the EEC 'scores' (weighted average over all fuels)

Measure	Lifetime (years)	Carbon savings (tonnes)	CO ₂ savings (tonnes)
Cavity wall insulation	40	6.92	25.4
Loft insulation (professional)	40	3.42	12.53
Loft insulation (DIY)	40	2.93	10.75
Glazing E to C rated	20	0.46	1.64
A/B rated boilers (exceptions)	12	1.17	4.28
Fuel Switching	20	22.2	81.2
Heating controls - with boiler	12	0.11	0.42
Heating controls - extra	12	0.92	3.39
CFLs - retail	17.7	0.039	0.14
CFLs - direct	17.7	0.039	0.14
Appliances - Cold	12	0.086	0.32
Appliances - Wet	12	0.15	0.53
Appliances - IDTVs	7	0.041	0.152
Hot water cyl. insul. topup	10	0.54	1.98
Draughtproofing	20	0.72	2.66
Solid wall insulation	30	17.3	63.3
Measures below are open for consultation			
Wood burning stoves (sec)	20	3.26	12.0
Biomass boilers (prim)	20	39.8	146
PV (2.5 kWp)	25	6.21	22.8
SWH (4m ²)	25	2.22	8.14
mWind (1 kWp, 10% LF)	10	1.03	3.78
mHydro (0.7kWp, 50% LF)	20	7.21	26.4
Heat pumps	20	19.9	73.0

In addition we take account of the difference in dwelling size for PG and non-PG homes compared with the average 3-bed semi-detached house as shown in Table 4. Based on EHCS data for floor area, PG dwellings are 15% smaller while non-PG dwellings are 7% larger than the average, i.e. a floor area factor of 0.85 and 1.07 respectively. A geometric factor is applied as appropriate for each measure. The corrected saving = (saving of a 3-bed semi) x (floor area factor)^(rate of variation with dwelling area). A value of 1 for the rate of variation means the saving is linearly proportional to floor area; a value of 0 means it is independent of floor area.

RECOMMENDATIONS FROM DFP BUILDING REGULATION (AMENDMENT) BILL 2008 REPORT

1. The Committee broadly welcomes the provisions in the Bill and considers that its importance lies not only in that it will update and streamline existing regulatory and enforcement provisions but, more especially, that it will extend the general principles of the primary legislation on building regulations to reflect the increasing significance of energy conservation, sustainable development and environmental protection. (Paragraph 12)

5. The Committee notes the DFP advice that, given the applicability of building regulations beyond the domestic property sector, it would not always be appropriate to use the Code for Sustainable Homes as a template for the new guidance-based system. Nonetheless, in view of its formal application in GB, the Committee recommends that, where possible, the Code is used to inform the forthcoming guidance documents pertaining to domestic property. (Paragraph 22)

13. The Committee is mindful of the fact that the current building regulations apply to only a small percentage of the total building stock in NI and believes that continued focus should be placed on identifying and introducing additional measures aimed at reducing the carbon footprint of existing buildings. (Paragraph 59)

15. The Committee looks forward to examining the outcome of the forthcoming consultation on 'green rebates', which should inform consideration of the potential of temporary rates reliefs /rebates as a tool for reducing household carbon emissions by encouraging the retro-fit of existing homes with energy saving materials. Such measures would have the added benefit of helping to address fuel poverty. (Paragraph 61)

17. The Committee concludes that there is an important interrelationship between demand for LZC technologies, the capacity of the local renewables industry, and the further commercialisation and development of the technology. The Committee considers that market forces alone may not be able to sufficiently drive increased uptake of LZC systems and to support technological development. A firm and challenging timetable for the introduction of stricter regulations on carbon emissions from buildings will assist in this regard and, conversely, faster technological development will facilitate even higher standards. The Committee, therefore, recommends that the Department:

- uses building regulations to further promote and encourage the use of LZC technology by establishing 2016 as a firm target date for all new builds in NI to be zero carbon, thereby keeping pace with developments in GB and RoI; and
- follows the example of England and Wales in working jointly with the construction industry to achieve the 2016 target. (Paragraph 84)

18. The Committee acknowledges the strong arguments for and against the introduction of mandatory microgeneration. However, the Committee considers that the nub of the issue is one of timing as the use of LZC systems will increasingly become a necessity to help meet the carbon emission requirements in new builds. On the basis of the evidence provided, it is clear to the Committee that energy efficiency measures alone will not be sufficient in the medium to long term if NI is to keep in step with GB and RoI in reducing the levels of carbon emissions from buildings. In addition, the current trend in rising fossil fuel prices is likely to result in decreasing payback periods for LZC technologies which, in the view of the

Committee, will place the promotion of renewables in a new context. The Committee, therefore, calls on the Department:

- to regularly assess the cost-effectiveness of LZC systems in light of the ongoing increases in fossil fuel prices; and
- on the basis of the changing circumstances, keep under review the option of using building regulations to require that a proportion of the energy needs of newbuilds are provided from LZC systems. (Paragraph 85)

21. The Committee considers that using building regulations to promote and facilitate both energy efficiency and the use of renewable energy in buildings can play an important part in helping NI to achieve the targets which have been set at an EU, UK and regional level for reductions in carbon dioxide emissions and greenhouse gases and increases in renewable energy generation. (Paragraph 97