

Development of the Northern Ireland Renewable Heat Incentive

Rural Generation Ltd's Response to Consultation

30th September 2011

Susan Stewart
Department of Enterprise, Trade and Investment
Room 44
Netherleigh House, Massey Avenue
Belfast
BT4 2JP

Dear Susan

Thank you for allowing us the opportunity to respond to the Department's consultation. Please find our comments below?

Q2.1 Do you have any comments on the current status of the Northern Ireland Heat Market?

- Much is said of Heat Density and the potential for District Heating, but nothing is said about the barriers to District Heating in NI and this is further compounded in the consultation, where the inclusion of District Heating in a NI RHI, will only be looked at during the first review in 2014
- Nothing is made of our massive exposure to importing our energy, in what has now become a very unstable, global political, world
- Nothing is said about the current state of the built environment, the predominance of old buildings, poorly insulated, predominately in the private sector and a lot of them very rurally isolated. This makes it even more challenging to find a way to heat them using low carbon technologies.
- Nothing is mentioned about the 46% of NI Households living in fuel poverty and the particular challenge of heating these homes, especially with low carbon technologies
- Nothing is mentioned about the fact that Northern Ireland is the only part of the United Kingdom with a Land Border with another Member State. The Republic of Ireland has already a different policy tool to create the necessary behavioural change, away from a fossil fuel economy, to a low carbon economy. They are using a Carbon Tax. Currently it is €15/t of Carbon. Next year it will rise to €30/t and it is suggested that it will rise further to €50/t in 2014. As a direct consequence, current biomass prices are considerably higher here than in GB, as the value of this carbon tax, on transportable NI biomass, far outweighs the greater transport cost of exporting biomass from NI to the ROI. This uniquely Northern Irish issue will only get worse as the ROI Carbon Tax increases.

Q3.1 Do you agree with the decision to introduce a RHI tailored for Northern Ireland instead of pursuing other options considered? If not please elaborate

Northern Ireland is uniquely different to the rest of the United Kingdom. Whether it is our reliance on oil for heating; the fact that 98% of all energy consumed is imported; our atrocious level of fuel poverty; our old and poorly built buildings in the private sector; or the fact that we have a porous land border with another Member State using different policy instruments, Northern Ireland needs a scheme tailored for these unique issues.

Q3.2 Do you agree that Ofgem are best placed to administer the NI RHI? If not, who should administer the NI RHI?

We do not agree that OFGEM are best placed. Yes they should be able to give a more competitive administration cost, created through the economies of scale of looking after all of the UK RHI Schemes, but experience has shown that a London based organisation struggles to understand why there are issues that are different in N. Ireland to England, and do struggle to accommodate these. Developing a NI Renewable Heat industry is particularly challenging, with such significantly different issues to the rest of GB, that an indigenous independent organisation, such as the N. Ireland Authority of Utility Regulation, would be far better placed to understand the needs of administrating a NI Scheme.

Q3.3 Do you agree with the eligibility requirements as prescribed? Please provide comments

Excluding renewable heat installations installed before 01/09/10, yet again penalises Northern Ireland's innovators and entrepreneurs, and disincentivises people to lead through innovation. How will N. Ireland's economy ever lift itself out of recession if the innovators and early adopters always get ignored for their leadership? This happened with the introduction of the electricity Feed in Tariffs and yet again, DETI is going to penalise the renewable heat, early adopters. This problem will be compounded, particularly with existing Bioenergy projects, who are dependant on purchasing bioenergy feedstuffs, as the presence of a RHI tariff will have the consequence of pushing up the prices of feedstuffs, regardless whether your project will be receiving the RHI tariff. So if a person has a renewable heat installation installed prior to 01/09/10, not only will they not get the tariff, they will also have to pay more for their fuel. A special exemption should be made for Bioenergy projects installed before 01/09/10, as all the other technologies do not need to buy in fuel and won't be hit financially by this problem.

Q3.4 Do you agree with DETI's treatment of those who have received grant support for renewable heat installations?

Yes, we understand that installations can not be double funded.

Q3.5 Are there any further issues, at this stage, which you think DETI should also consider?

None

Q3.6 Do you agree with the proposed eligible technologies and standards? If not, please explain

We do not agree with the exclusion of AD plants which are in receipt of support under NIRO. Most AD installations will be in rural areas where there are very few natural heat consumers. To utilise the heat from an AD Project, a purpose built heat consumer will have to be created adjacent to the AD project. This will have a significant capital cost and for this to happen, a RHI tariff would be needed to give an

appropriate return on that extra capital investment, over and above the capital cost of the AD Plant. Without this, the easiest solution, with the best pay back and the least capital requirement, is to the dump the heat.

Regarding potential biomass projects with a greater output than 1MWth, at a tariff rate as poor as 1.3p/kwhr, if the reporting criteria on Bioenergy sustainability is too onerous, then these projects will choose not to go ahead with the installation, as it will not be cost effective. Very little is said about what will be included in the sustainability criteria. Until this is in the public domain, we can not give a definitive comment. We trust that when these criteria are being discussed, the Industry will be asked for their views, as this has not happened in Northern Ireland to date?

Q3.7 Do you agree with the proposed tariff levels and standards? Where you disagree with the proposed approach evidence should be provided to the contrary

No

- Once again we do not agree with the exclusion of AD plants receiving support under NIRO
- Neither this consultation, nor the Cambridge/AEA Report explain why the sizes of the biomass technology bands being proposed, are considerably different to the GB Scheme. If Northern Ireland is to accept this, then it deserves to be told why the technology bands have been greatly reduced.
- It completely ignores the tiered system being introduced in the GB scheme, to alleviate fuel poverty, and it further financially penalises NI biomass schemes

Q3.8 Do you agree with the Department's rationale for tariffs? If not, please provide comments on the assumptions contained in the economic appraisal on the technical performance and cost of heating technologies and fuels.

- The assumptions used in the Cambridge/AEA Report to work out the financial support needed to make a biomass project competitive in N. Ireland is flawed. Firstly it compares a delivered NI oil price against an unprocessed, undelivered UK woodchip price. We know of no one who supplies dry graded woodchip in Northern Ireland who was surveyed in this "UK" survey. It states the current woodchip price is £6 - £10/gigajoule, yet when we work through their calculations we can only repeat them at figures close to £6/gigajoule. The true figure today for delivered, dry (15% moisture) and graded wood is £10.3/gigajoule in Northern Ireland. It also excludes any impact on the woodchip price in NI, created by the Carbon Tax in ROI and it states that there will be no inflation in woodchip price till 2020 (p124 of Cambridge/AEA Report). When all of this taken into consideration, there is no justification for lowering the tariff from GB, and in fact, the tariff should be higher. This has been compounded by the extra cost of drying woodchip created by the recent announcements of a 28% increase in NI electricity prices. Again this is not included.
- Currently a 200kw woodchip boiler ESCO project, with a 36% loading and 85% output has a pay back of 6.1 years in GB. In Northern Ireland it is 8.2 years, due to the extra cost of woodchip in N. Ireland. Post the introduction of the various RHIs, the GB project's payback drops to 3 years and the NI project drops to 5.2 years. Please see supporting slides attached at the end? This, for Northern Ireland, is not parity of treatment for a scheme funded centrally by the UK exchequer and will make it even harder to raise private funds for the capital cost of a renewable heat project in NI, when comparing it to the realisable return for the same project in GB.

- The assumption that NI projects need a lower tariff because GB projects will be displacing cheaper gas and that NI projects will be displacing more expensive oil is not correct. Our company has already installed 12 projects in GB which will qualify for their RHI and in every case they are displacing oil.

Q3.9 Do you agree that all heat should be metered under the NI RHI? If not, please explain

Yes, except where the project is so small that the cost of administration outweighs the benefits of being metered.

Q3.10 Do you expect any obstacles or difficulties in metering heat output? Please give details

The accuracy of heat meters has become very reliable in recent years. But our experience shows that the positioning of the meter within the system's pipe work is critical. The two key issues which must be observed when installing a heat meter are firstly, making sure that the meter is installed after the return flow diverter device on a biomass boiler, but before the first header, diverting heat around the installation. Secondly, if the meter is installed in a position within the pipe work, where cavitations or air locks occur, then erroneous recordings will occur. Installers of metering equipment should be qualified/accredited, as there are a number of current installations which have had to have their meters repositioned to deliver the accuracy desired.

Q3.11 What alternative measures to metering heat could DETI employ in ensuring payments are made on heat delivered?

None

Q3.12 Do you agree that sustainability reporting should be introduced as part of the NI RHI?

Yes, as long as they don't become an impediment to behavioural change and stop the installation and use of renewable heat in Northern Ireland. It is also very important that a NI Scheme recognises grass as an energy crop.

Regarding biomass plants with a greater output than 1MWth, at a tariff rate as poor as 1.3p/kwhr, if the reporting criteria on Bioenergy sustainability is too onerous than these plants will choose not to go ahead with the installation as it will not be cost effective. Very little is said about what will be included in the sustainability criteria. Until this is in the public domain, we can not give a definitive comment. We trust that when these criteria are being discussed, the Industry will be asked for their views, as this has not happened in Northern Ireland to date, but it is also imperative that this process does not delay the introduction of the NI RHI in April 2012?

Q3.13 Have you any views on how sustainability reporting should be handled by DETI?

Firstly, they need to engage the NI Industry and share with us their views of what will be included and what won't be included. It is also imperative that the process of reporting does not become a barrier for the uptake of renewable heat, when only 1.8% of N. Ireland's current heat consumption is from renewable sources.

Q3.14 Do you have any comments on the accessibility arrangements for the NI RHI?

The consultation document goes to great length to explain that DETI wants to ensure that the appropriate financing models are put in place by the private sector to allow them to deliver on the installation and running of new renewable heat projects. But with the significant reduction in tariff levels being proposed for NI over GB, why would any investor support an ESCO company in NI, when they could use the same amount of money to invest in an ESCO company in GB and get up to a 60% better return on their investment. If this is not sorted out, access to private finance will remain the barrier to the uptake of the NI scheme.

It is very important that the application process and the on going reporting requirements are proportionate to the size of project. Most RHI projects in NI will be under 1MW and will not be able to withstand an ocean of bureaucracy around the scheme.

Q3.15 Do you agree that regular planned reviews should be undertaken? If not, please explain

Regular reviews are essential, but the very first review and its out workings being proposed to take place by the 1st of April 2015 is too far away. We would suggest that the first review needs to be after two years and then revert back to every four years. This will allow for the early correction of any significant problems which often occurs, with the launch of such a major new scheme, such as the RHI.

Q3.16 Do you agree that the tariff levels should be guaranteed for the life time of the installation at the point of accreditation?

Yes, without this, it makes it impossible to secure private finance

Q4.1 Do you agree that the heavy industrial sector should be treated separately under the NI RHI? If not, please explain giving evidence to the contrary

No comment

Q4.2 What is your view regarding heavy industrial sites being awarded relevant tariffs on a case by case basis, following consideration by DETI of the need, value for money and sustainability of the proposal?

This sounds reasonable, but are you better to get a lot of consumers making a small behavioural change each, or one big consumer making the only behavioural change. Experience in Freiburg, Germany, would say the former, rather than the latter, as once you empower consumers to make positive behavioural changes, such as switching to renewables, then those same consumers are more likely to make other positive behavioural changes, such as recycling more or changing their mode of transport.

Q4.3 Do you agree with the criteria set by DETI for this sector?

No comment

Q4.4 Do you agree that co-firing should be allowed in this sector and, if so, should it be time limited?

No, if these consumers are to switch to renewable heat, then payment should only be for the renewable element

Q5.1 Do you agree with the phased approach for the domestic sector as proposed by DETI?

Yes

Q5.2 What is your view of the proposed support levels under the Renewable Heat Premium Payments?

These rates are significantly below the GB rates. With 46% of NI Households in fuel poverty, worse than anywhere else on these islands, the GB domestic tiered rates would at least go some way to help alleviate fuel poverty. This will not happen in NI, as this consultation as chosen to excluded the tiering structure designed to help alleviate fuel poverty.

Q5.3 Do you agree with the proposal that existing gas customers should not be eligible for the Renewable Heat Payments?

They are not discriminated in GB, so why should they be here? This is even more pertinent with the recent announcements of significant gas price increases by both our major gas suppliers. Excluding them limits those house who currently fuelled by gas, but are fuel poor, to seek more competitive solutions through using renewables over time.

Q5.4 Any other comments on incentive support for the domestic sector are welcome?

Firstly, no explanation has been given for ignoring the tiering system which is purposely in the GB scheme to help alleviate fuel poverty. With NI's fuel poverty worse than any other region in the UK, this is an incredible omission.

Secondly, the dismissal of district heating till the 2014/15 review is also an incredible omission. If fuel poverty is to be seriously targeted and addressed by the use of renewables, then support for district heating to supply the fuel poor is the only way forward. Why is it omitted?

Q6.1 What impact do you think the implementation of the NI RHI will have on the future development of the Natural Gas market? Please provide evidence of any impact

The recent massive increase in gas prices will have a far bigger impact on the gas network than any new renewable heat incentive

Q6.2 Do you agree with DETI's assessment of potential support CHP and agree that no changes should be made to existing arrangements until April 2014, at the earliest? If not, please explain

No comment

Q6.3 What is your view on the proposal that AD systems which avail of the NIRO will be excluded from receiving payments for useful heat output under the NI RHI?

We can not agree. Most AD plants are in rural locations where significant heat consumers are very difficult to find. If the renewable heat is to be used constructive, new heat consumers will have to be created and this will have a significant cost. Without the RHI, there is no incentive for the new heat consumer to build a genuine heat utilisation project, adjacent to the new AD plant.

Q6.4 Would you support a reduced ROC level in order to avail of the RHI also?

No, as our understanding is that ROCs are paid by electricity consumers and the RHI will be paid by tax payers. If you reduce the ROC, then this money is lost and can not be recycled to support the RHI.

Q7.1 What key actions should the Renewable Heat Strategy Group consider in supporting the development of the renewable heat market?

- Actual progress against the trajectory needed to deliver the 10% renewable heat by 2020
- Barriers to the up take of the scheme and how these can be removed
- How the “Green Book” guidelines to public procurement needs to be changed to allow private ESCO companies to supply the Government Estate with renewable heat
- Other ways of stimulation greater up take of renewable heat
- How renewable heat can be used innovatively to help alleviate fuel poverty

Q7.2 Is there a need for ongoing engagement with external stakeholders as renewable heat policy is developed?

Definitely yes

Q7.3 Do you wish to be considered to potentially give evidence on renewable heat to a future meeting of the Renewable Heat Strategy Group?

Definitely yes

Dr John Gilliland OBE
Chairman

John Gilliland email redacted by the RHI Inquiry
John Gilliland mobile redacted by the RHI Inquiry

ESCO Profitability, England versus NI, Without RHI

200kW Woodchip Boiler, 36% Loading, 85% Output

Assumptions – 536,000 kWhrs/yr, 85% System Efficiency, 15% Wood Moisture
- Consumes annually 150t of Wood or 60,000 litres of Oil Eqiv.

	England	N. Ireland
Installation Cost £500/kW	£100,000	£100,000
Finance Charge 6%	£3,000	£3,000
Maintenance £10/t of fuel	£1,500	£1,500
Wood Fuel Cost (150t x £85/t)	£12,750	
	(150t x £125/t)	£18,750
Saving on Oil displaced	£33,600 (56p/l)	£35,400 (59p/l)
Annual Saving/Pay Back	£16,350 (6.1yrs)	£12,150 (8.2yrs)

ESCO Profitability, England versus NI, With RHI 200kW Woodchip Boiler, 36% Loading, 85% Output

Assumptions – 536,000 kWhrs/yr, 85% System Efficiency, 15% Wood Moisture
- Consumes annually 150t of Wood or 60,000 litres of Oil Eqiv.

	England	N. Ireland	
Annual Saving/Pay Back	£16,350 (6.1yrs)	£12,150 (8.2yrs)	No RHI
+ RHI GB			
Tier 1, 4.7p x 200kW x 1314hrs	£12,350		
Tier 2, 1.9p x 273,200 hrs	£5,190		
+ RHI NI			
536,000 kWhrs X 1.3p		£6,968	
Annual Saving/Pay Back	£33,890 (3yrs)	£19,118 (5.2yrs)	With RHI

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