

# Response to the RHI consultation by Renewable Heat Incentive Limited

April 2010

Dear Renewable Financial Incentives Team,

Renewable Heat Incentive Limited has been established to inform prospective beneficiaries about the RHI and to help them participate.

Our website [www.RHIincentive.co.uk](http://www.RHIincentive.co.uk) has been viewed nearly 50,000 times since it was established in August 2009, so there is clearly an appetite for this scheme.

We are also receiving a large number of queries, which we are answering to the best of our ability, and with help from the RFI Team for which we are grateful. We welcome the introduction of the Renewable Heat Incentive, which is a genuine 'world first' in the way it incentivises a broad range of renewable heat technologies. We find your proposals generally clear and workable.

This response is based on the feedback we are receiving from prospective beneficiaries of the tariffs, and comments highlighted are from individual respondents. We are also encouraging them to submit their own responses to the consultation.

## Key issues

The most significant defect in the present proposals is the proposed **exclusion of systems installed prior to July 2009**. This is counterproductive from several standpoints as further detailed in answer to question 28 below.

The following issues are also important:

- Improving the robustness – and thus financeability – of the **right to assign the benefit of the RHI to third parties** (see questions 1 and 2)
- The **12% return rate** must be maintained to encourage take-up of the many renewable heat technologies not currently widely deployed in the UK
- Setting the **energy efficiency requirements** for deeming calculations at 'best practice' standards (see question 10)
- The inclusion of **other renewable heat technologies**, such as geothermal (see question 24)
- Ensuring that, if Ofgem are to administer the scheme, they have appropriately streamlined, simple and **user-friendly procedures** (see question 3)

## Responses to specific questions

*Q1: Are there any issues relevant to the design or operation of the RHI that are not addressed in this consultation document? If so, how should we deal with them?*

There needs to be more clarity of the assignability of tariff income (see also Q2 below)

*Q2: Do you see any barriers to such financing schemes coming forward? In particular, are there any limitations in leasing and finance legislation that you feel inappropriately restrict the development of RHI financing models?*

We believe financing schemes will come forward, providing that the returns are adequate, and the RHI is structured in a simple and transparent way.

One key requirement is the ability to assign the benefit of the tariff income to third parties (such as finance providers). Under the present proposals it is not yet sufficiently clear that sufficiently robust assignment arrangements are possible.

We believe that the 12% return rate proposed should achieve that, and note that with the 5-8% returns typical within the Feed-In Tariffs, it is proving difficult to encourage new finance providers to participate in the early stages of the scheme.

**Q3: Do you agree with our proposed RHI registration and payment approach? If not, can you suggest how this approach can be improved?**

We agree with the principles of what you have proposed.

It is important that the tariffs can be assigned to third parties as described under Q2 above.

It is clear that Ofgem has little experience of operating schemes with large numbers of installations, nor of working extensively with household customers. If they are confirmed as the scheme administrator in this way, they will need to invest substantial time, effort and resource on developing appropriate systems as described under Q29 below.

We agree with the proposal that installations should be properly maintained.

**Q4: Do you agree with our approach of requiring products and installers for installations up to 45kW within RHI to be accredited under MCS or equivalent?**

Yes, provided that the MCS is developed to make it more accessible to products and installers that have already achieved accreditation under relevant schemes elsewhere.

“As a small company installing heat pumps, our biggest problem is the mis-selling and design of systems.

This will very quickly lead to an industry with a very bad reputation and therefore limited or no future

**Q5: Where MCS product and installer certification is extended beyond this limit, do you agree that we should introduce the requirement of using certified installers and equipment for eligibility for the RHI?**

The MCS is designed to serve consumer customers. As this class of user is unlikely to install systems above 45kW<sub>th</sub> it is inappropriate to seek to stretch the Scheme beyond this limit.

**Q6: Can you provide details of any UK or European standards that should count as equivalent to MCS? How should we recognise these standards for the RHI?**

The Solar Keymark is one

**Q7: Do you agree with our proposed approach to eligibility of energy sources, technologies and sites?**

We do not agree that equipment should only receive the RHI if installed after July 15 2009. See question 28.

The exclusion of certain forms of biomass heating is confusing and anomalous. It will prospectively lead to all sorts of definition problems.

“Would a wood burning stove be eligible or is that a biomass stove?”

We believe that wood-burning and pellet stoves should be included and a form of self-certification used (similar to that for the deeming approach) to overcome the potential objections you have pointed to.

“It is unclear whether dedicated wood burning boiler stoves will qualify. The model we are looking at is designed as a wood only stove. If this type of boiler is excluded because it is classed as a 'stove' this is ridiculous. We understand why multi fuel boilers may need to be excluded if they could potentially be continually running on coal but surely not wood only appliances.

“Our system will be about as green as they come. It is our opinion that there should be a list of wood only appliances that do qualify for the RHI in this type of system particularly where there is no other source of non-renewable heat. Please could you reassure us that common sense will prevail and we will not be penalised for going for the greenest option of all.

“I am planning to install a wood-burning stove with back-boiler (enough to provide hot water & central heating), but am struggling to find a list of approved appliances that will qualify. Help!

**Renewable cooling should also be supported – the rationale is the same whenever energy is being used to transport heat.**

“I would like to see Exhaust Air Heat Pumps mentioned in the RHI.

See also answer to question 24.

**Q8: Do you agree with our proposed approach on bioliquids? Are you aware of bioliquids other than FAME that could be used in converted domestic heating oil boilers? If so, should we make them eligible for RHI support, and how could we assess the renewable proportion of such fuels to ensure RHI is only paid for the renewable content of fuels?**

We believe that bio-liquids should be included without restriction. It is inappropriate for general schemes of this type to skew eligibility criteria to seek to distort markets in the hope of channelling fuel resources preferentially to specific uses.

“We are particularly interested in Biodiesel heating option, we would like to find out if Biodiesel heating using Waste cooking oil is an accepted technology and will it qualify for RHI

**Q9: Do you agree with the proposed emissions standards for biomass boilers below 20MW? If not, why, and do you have any evidence supporting different ones, in particular on how they safeguard air quality?**

We agree there need to be some emissions standards to protect air quality, but that they should not be excessively onerous so as to substantially restrict the roll-out of modern low-emissions biomass boilers.

**Q10: Do you think the RHI should be structured to encourage energy efficiency through the tariff structure (in particular the use of deeming), or, additionally, require householders to install minimum energy efficiency standards as a condition for benefiting from RHI support?**

We believe that the RHI should support good energy efficiency standards. However it is not fundamentally an energy efficiency measure, so we do not believe that specific entry requirements should be set.

We therefore support the way that you propose using the deeming calculations to incentivise energy efficiency without acting as a specific obstacle to eligibility. In this light, however, we believe you may set the thresholds too low, and suggest that the calculation norms for loft insulation, for example, should be set at the ‘best practice’ level of 270-300mm.

**The approach needs to address different building types pragmatically:**

“In relation to tariffs, the ‘deeming’ of certain levels of insulation in houses will be unfair to those in listed buildings with stone walls where existing government policies on protection of the historic environment effectively prevent owners from installing cavity wall insulation and the like.

**Q12: Do you agree with our proposals on where we should meter and where we should deem to determine an installation's entitlement to RHI compensation?**

Generally we think you have plotted a sensible path through this prospectively complex issue.

**Q13: Do you agree that a process based on SAP or SBEM for existing buildings or the Energy Performance Certificate for new buildings is the best way of implementing deeming? Do you have any suggestions on the details of how this assessment process should work?**

We would recommend that a streamlined and much simpler version be developed for this purpose. SAP and SBEM are notoriously complex and often maligned tools, which are very much less than transparent to the average energy user (i.e. the prospective beneficiary of the RHI).

**Q14: Do you agree that at the large scale/in process heating, where we propose metering, the risk of metering resulting in a perverse incentive to overgenerate is low? How could we reduce it further within the constraints of using metering, to ensure only useful heat is compensated? Do you see any practical difficulties concerning use of heat meters (such as on availability, reliability or cost of heat meters) and, if so, how should we address them?**

Yes.

**Q15: What is the right incentive level required to bring forward renewable heat from large-scale biomass including in the form of CHP while minimising costs to consumers?**

We don't have specific evidence on this topic, but would support the findings of the Renewable Energy Association.

"Looking at the fact that CHP has basically been taken out of the FIT's for electricity but there is still a proposal to include biomass/biodiesel in thermal incentives would it not make sense to include some form of biomass/biodiesel CHP option? Generate both heat and electricity local to the point of use using a renewable resource.

**Q16: What is the right incentive level required to bring forward renewable heat from biogas combustion above 200 kW including in the form of CHP while minimising costs to consumers? Do you have any data or evidence supporting your view?**

Ditto (beyond:)

"Can you request RHI support for Biogas heat usage > 500kW

**Q17: Do you have any data or evidence on the costs of air source heat pumps above 350 kW or solar thermal above 100 kW?**

The currently proposed levels look thoroughly anomalous, but ditto

**Q18: Do you agree with the proposed approach to setting the RHI tariffs, including tariff structure and rates of return? Do you agree with the resulting tariff levels and lifetimes? If not, what alternatives would you prefer, and on the basis of what evidence?**

We agree that a 12% return rate is a pragmatic level at which to start bearing in mind the need for rapid take-up and the relative lack of familiarity with renewable heat in the UK market.

We suggest that water-source heat pump tariffs should be based on grand- rather than air-source units as these are technically much more similar.

There is some justification to relating tariffs to fuel costs, though we accept that this could make it excessively complex:

“The proposal does not seem to discriminate between wood pellets and wood chip or other biomass such as miscanthus. So far as I am aware, wood pellets are considerably more expensive than wood chip. Pellets are usually the most appropriate for domestic applications so should attract a higher supporting tariff than chips.

**Q19: Do you agree with our proposed approach on mixed fuels? Do you agree with our proposal that, at larger sites, with the exception of EfW, RHI will require the use of a dedicated boiler for the renewable fuel? Where our approach is to follow the Renewables Obligation, do any aspects need to be adapted to account for the different situation of renewable heat?**

No comment

**Q20: Do you believe that we should provide an uplift for renewable district heating?**

Yes – district heating systems can play an important part in improving the UK’s security of supply as well as renewables uptake.

**Q21: Do you believe that an uplift should be available to all eligible district heating networks, or that eligibility should be determined on a case-by-case basis depending on whether a network contributes to the objective of connecting hard-to-heat properties (and, if the latter, how should we determine this for each case)? Do you agree that situations of one or a small number of large external heat users should not be eligible for an uplift, and, if so, what should be the minimum eligibility requirement for an uplift (expressed for instance as a minimum number of external customers)?**

We don’t have sufficient experience yet in this area to comment.

**Q22: Do you agree that RHI tariffs should be fully fixed (other than to correct for inflation) for the duration of any project’s entitlement to RHI support? Do you agree that we should include bio-energy tariffs, including the fuel part of those tariffs, in such a grandfathering commitment?**

Yes – a stable long-term is fundamentally important to the success of the RHI.

**Q23: Do you agree with our proposal not to introduce degeneration from the outset of the scheme but consider the case at the first review?**

Yes.

**Q24: Do you agree with our proposed approach on innovative and emerging technologies?**

We believe you should specify tariffs for all renewable heat technologies, however rare their use might currently be. Geothermal heat, for example should be given a tariff from the start.

If you do not do so, you will be discouraging innovative technologies from coming forward.

We understand that tariff levels may be somewhat speculative where little information currently exists, but this can be refined through the review process.

**Q25: Do you have any views on how we should encourage technology cost reductions through the RHI, particularly on solar thermal heat?**

Simple! Setting tariffs at attractive levels will grow the UK market and hence the volume, not just of production, but all aspects of the supply chain right through to



installation. Experience shows that market volume is the most powerful driver to cost reductions.

**Q26: Do you agree with our proposed approach to reviews, and the timing and scope of the initial review?**

Yes, generally, though please resist the temptation to meddle!

**Q27: Can you provide examples of situations that could be taken into consideration in determining criteria for an emergency review?**

- Important new technologies coming forward
- Uptake of the scheme falling drastically short of the level required
- Major errors in the legislation or administrative arrangements
- New improved RE targets needing accelerated uptake

**Q28: Do you agree with our proposed approach to allow access to RHI support to new projects where installation completed after 15 July 2009, but not before? Do you have any evidence showing that in particular situations RHI support for installations existing before this date would be needed and justifiable?**

**No.** It is very unfair to exclude those pioneers who have led the way in this. The additional cost would be marginal and these early adopters should be encouraged to act as ambassadors for the scheme, rather than potentially resentful of it.

“My heart was telling me I should do it, my pocket was screaming for mercy.

This approach also risks encouraging owners of existing plants to seek ways of ‘gaming’.

Furthermore and crucially it means there is a danger that existing installed renewable heating systems will not be operated, because there is no income to offset the marginal cost (in biomass fuel or electricity) of running them.

For fuelled plants, the introduction of the RHI may lead to increases in fuel costs across the board, and so excluded existing plant would be put at a disadvantage.

This aspect has received as many comments on our website as all other issues put together.

Here is just a selection:

“It would seem unfair to say the least that we would not be able to benefit from the RHI and will in fact be penalised for being proactive and getting our systems up and running at the first opportunity.

The main driver behind us making this investment was to reduce the carbon footprint of our three properties, we were aware that financial savings were likely to be small and the payback period for the systems was likely to be long.

Please do your best to allow projects like ours to benefit from the RHI - it seems very unfair that our enthusiasm to reduce our properties carbon footprints should result in us being penalised!

“In December 2008 our school had a Biomass boiler installed. The installation has gas fired back-up boilers with the lead boiler being the Biomass boiler. However the cost of the woodchip is in excess of the cost of gas and the school is proposing to change the control system to make the gas boilers the lead. This will obviously reduce their running costs but increase the carbon footprint. Surely there must be an earlier cut off date or even no cut off date.

“The RHI is a great idea but it is a big mistake to exclude pioneers of renewable heating systems before July 2009. They are the best source of data and publicity to encourage others to follow. Excluding them will undoubtedly result in decommissioning of existing systems and lead to bad press.

“As we installed and commissioned a ground source heat pump before 15th July 2009 it is unfair that we are not allowed to participate in the Government's renewable heat incentive.

What justification is there for excluding those who helped establish the technology in this country by making a considerable investment some three years ago?

“In February 2009 we put in a 45 kW biomass heating system with solar input for our house (wood pellet/log) and at that time we were also putting in air source heat pumps into two barn conversions on the same site. This was entirely funded by us and the total cost was in the region of £32,000. This replaced an oil system and in the three properties we now burn no fossil fuels.

“I have a new build and I installed a GSHP early 2009 and it was commissioned May/June 2009. I went to great expense to install the heat pump as I was doing it as more or less a duty to my responsibility to the environment. My Heart was telling me I should do it, my pocket was screaming for mercy. Now I see the cut-off date for incentives is July 15th 2009. Is this really fair? Particularly as I have also incurred extra electricity costs during the first year.

“Existing installations should be included within the schemes. The number of micro-generation sites according to government figures I have read has an installed base of approx 100,000; relate that to the scale of what is being proposed.

Most of the people involved with these installations have invested at a much earlier stage in reducing energy consumption, and I am sure have helped seed the technologies involved to the broader public.

“It could well be worth replacing the existing installed base of equipment, so as not to be personally financially disadvantaged. I do feel this situation mustn't be allowed to happen, as this would be a true waste of resources!

“Those of us who were early adopters of this technology would also like to be rewarded for cutting our carbon emissions. We had to replace our very old and inefficient boiler in 2008 and opted for a biomass boiler. So we saved 2 years of carbon emissions at our own expense. It is terrific and produces much more hot water and heating than the old boiler

“We installed a 10kW wood pellet fired boiler about twelve months prior to 15 July 2009. At the time, there were relatively few examples of small domestic pellet boiler installations, but we now regret being early adopters in this field unless the proposed RHI is amended to include those fitted before 15 July 2009

“I have calculated that I would be better off decommissioning my heat pump and reinstalling the whole system!

“I have two wood chip boilers. One of them was installed in 2005 for a commercial building and the other for my house in December 2008. As you are aware, the installation cost of a wood chip boiler is relatively expensive without a grant and I am sure that many people including myself did not install such schemes on purely economic grounds.

I feel quite strongly that those of us who have 'taken the lead' in installing such schemes without a subsidy should be recognised through the feed-in Tariff system.

My domestic 4kw heat pump is now 6 years old and as I am one of the earlier pioneers so to speak believe I should be recognised as such and become eligible. Seems to me like the RHI proposal is trying to incentivise the take up of these systems but ignore existing systems which have been instrumental in 'spreading the word'.

I have had much interest in my system in Orkney which at the time was unique. Surely therefore I have been promoting the technology and should be recognised for this.

“It's important to recognise those of us who installed renewable heating systems prior to 2009, and were unable to get an accredited installer at the time. Why not let installers check such systems, and if they are appropriate, certify them and allow us to claim the RH incentive?

People seem sceptical about the scheme, so any negative comments from these disgruntled earlier installers will be detrimental.

“Installations from November 2008, when the Act was passed, should be eligible. Why penalise early installers? It seems crazy not to use these as good marketing and publicity.

I understand the Government is concerned about the cost of including installations before this date; surely there cannot be many pioneers.

“I suggest the date is moved to when the Act was passed in November 2008, many people were encouraged by installers to take advantage of this forthcoming incentive.

“Powers for the government to introduce a Renewable Heat Incentive were included within the 2008 Energy Act, passed by Parliament in November 2008. I think back dating should be extended to include existing installations from November 2008, not July 2009.

Many people were encouraged to invest in renewable heat because of this incentive, albeit details were not finalised. This would at least reward these early pioneers.

***Q29: Are there any parts of the proposals set out in this consultation that in your view would allow for unacceptable abuse of RHI support, or other unintended consequences? If so, how could we tighten the rules while keeping the scheme workable, and avoiding an overly high administrative burden?***

We don't envisage this being a major issue. Our respondents show a keen interest in installing renewables for the 'right' reasons. Occasional spot checks on significant claimants should root out any abuse.

Minimising the administrative burden is a much more significant issue to the success of the scheme (see also answer to Q3 Above).