Renewable Heat Incentive: Consultation on proposals for a domestic scheme.

GSHPA Consultation Response

Introduction to the GSHPA

The Ground Source Heat Pump Association (GSHPA) aims to encourage the growth and development of the ground source heat pump industry in the UK and help to set and safeguard standards. For more information about the GSHPA visit: www.gshp.org.uk

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Response to above consultation on behalf of the **Ground Source Heat Pump Association**.

Consultation Questions

Objectives and approach

1. What are your views about the proposed approach of a universally available tariff scheme? Is a tariff scheme the most efficient way to drive down technology costs, increase innovation and value for money, together with developing a home grown supply chain? Please include reasoning for your response.

A tariff scheme is certainly needed to pick up the demand for ground source heat pump (GSHP) systems and other renewable heating technologies.
The tariff scheme alone will not be sufficient to drive down the costs, though the increases in demand should play a part in that. For GSHP systems, the costs may not be driven down considerably for individual installations, though as demand increases and numerous boreholes are being drilled in close proximity, those costs should reduce proportionally.

It is important that the domestic RHI is relevant to rented accommodation since it is the property portfolios of both social and private landlords that will allow this technology to be rolled out at scale to the extent that installation costs will reduce from high resource utilisation rates.

2. Do you think that there would be advantages in phasing or piloting roll-out of the scheme? On what basis do you think it might make sense to phase or pilot the scheme?

No – it is critical that this scheme is launched with some urgency, considering it is already running 4 years behind schedule. The longer the scheme is delayed, the more damage will be done to the industry and the more businesses may collapse due to lack of demand.
A carefully designed and installed GSHP system should have an SPF much >3 (unless there is a technical reason to fit it onto a high flow temperature application) and so will be the lowest cost/carbon heating system available on the market. Therefore, GSHP systems need to be widely deployed and not implemented in pilot or phased schemes.

3. Do you think that there may be alternative or additional approaches to incentivising renewable heat deployment that we should pursue? What approaches do you think might add most value?

No. At this stage it is important to focus on what has been planned and is much anticipated. Judge the success of this scheme before considering additional complexity to the process.

Eligible properties

4. Do you have any comments on the proposed exclusion of second homes from the RHI?

We see no reason to exclude second homes from the scheme and can foresee problems with definition of a second home compared to private rented accommodation or holiday rentals. We recognise that second homes may prove to be used less than primary homes but this should not preclude them from installing renewable energy technologies. There is no restriction or benefit accrued from individual property occupancy levels. Similarly, there should be no restriction on second homes as all properties require heating.

5. Do you have any comments on the proposed approach to private landlords and their tenants under the RHI? Have you any suggestions about how to ensure that the RHI incentivises the installation of renewable heat in the private rented sector and does not disadvantage tenants?

Since the landlords will not benefit from the running cost savings of introducing renewable energy technologies it is important that the RHI tariffs are sufficient to make the capital cost investment attractive to the landlord, with short payback periods. It may be necessary to introduce a premium tariff for landlords to achieve this.

The social housing property stock is crucial to achieving the economies of scale of installing ground source heat pumps on a street by street basis.

6. What are your views on our proposals for the treatment of legacy applications for installations between July 2009 and the opening of the scheme?

It would seem appropriate that all applications for systems installed since 15th July 2009 should be, as long as they meet the full RHI eligibility criteria, be eligible for the RHI payments when they begin in summer 2013. Any suggestion that this may not be the case would be a massive u-turn and would stop the market dead!
We agree that any payments previously received for their system installations (other than RH-PP) should be deducted from their RHI payments.

7. Are there any other legacy applicants (aside from those that have received RHPP, a Home Renewables Loan, or installed renewable heating systems since 15 July 2009) that you think we need to consider?

No. Though it will be frustrating for those 'early adopters' that had systems installed pre 15th July 2009, there has to be a cut off point and the proposed date is as good as any.

8. What are your views on phasing legacy applications over the first year and the option of setting a cut-off date for legacy applications?

There should be no phasing for legacy applicants other than that ALL legacy applications must be received by Ofgem before the end of the first year after the RHI payments have begun.

Legacy applications received after this date will NOT BE PROCESSED.

Eligible Technologies

9. Do you agree with the proposed approach to the selection of eligible technologies for the domestic RHI scheme? Please include reasoning for your response.

Yes. Renewable energy technologies should have a required performance factor to be considered eligible for the RHI scheme.

However:

Our proposal is that the current requirement for a SPF of 2.5 should be increased to **2.8** to reflect the generating efficiency of the UK electricity supply rather than that of Europe as a whole.

10. Do you agree with the proposed eligible technologies set out above? Are there others that should be considered for inclusion?

Yes. All relevant technologies are currently included. There may be developments over the coming years, in which case the eligible technologies may need to be reviewed.

11. Do you agree that an approved supplier's scheme is the best option for domestic biomass heat installations to demonstrate their use of sustainable fuel? Please provide reasoning with your response.

Yes.

There must be strong evidence provided that the biomass / sustainable fuel being used is sourced sustainably, preferably as grown in the UK. Biomass cannot genuinely be considered a sustainable fuel if it is grown for example in Canada and shipped to the UK for use in domestic (or other) systems. We are concerned that the carbon emissions of biomass burning

are currently being assessed wrongly and that a complete review of the figures used needs to be undertaken.

12. Do you agree that as part of the approved biomass supplier list we should assume a level of boiler efficiency? Please provide evidence to back up your response.

Yes. As with other technologies, there should be a threshold level of boiler efficiency which products need to exceed to be considered for RHI support.

13. Do you agree that April 2014 is an appropriate date from which to start requiring users of domestic biomass heat installations to provide proof of meeting the sustainability criteria? Please provide reasoning with your response.

No. Users of domestic biomass heat installations should need to provide proof of meeting the sustainability criteria from the launch date of Phase 2 of the RHI – *summer 2013*.

Other technologies, such as GSHPs must meet these criteria before being eligible, for consistency, this should also be the case for biomass heat installations.

14. Is the air quality approach set out above appropriate for the domestic RHI sector? Please provide your reasoning with your response.

This is not our area of expertise, however, common sense would suggest that the air quality approach for the domestic RHI sector should be the same as that for the non-domestic sector. It may be necessary for the approach to be more stringent considering the systems will be operating in more densely populated areas.

The biomass appliances used for domestic systems should also be listed on the HETAS list and the RHI application should not be eligible if this is not the case.

Excluded technologies

15. Do you have any views on our proposals for excluding certain technologies? If you would like to suggest changes, please provide evidence to support your view.

Yes. We are concerned that air to air heat pumps (which have been installed for 30+ years and are clearly not in need of incentive support) may now be replaced with new systems, drawing massively on the RHI budget and leaving behind very little for other technologies – including ground source heat pumps.

We agree that air to air heat pumps are NOT included within the domestic RHI. We agree that all other currently excluded technologies should remain excluded.

Heat Pump Standards

16. Do you agree with our proposed approach to efficiency requirements for heat pumps?

It is important that the RHI is delivered in line with the EU and RES Directive but that we aim for SPF's higher than 2.8 to reflect the UK electricity generating efficiency.

To determine this, the SPF of an installation will have to be estimated in accordance with EN 14825, as required by RES Directive. We note that the Heat Emitter Guide is based on EN 14825.

Deeming delivered heat using estimated SPF's will streamline the OFGEM review and approval process and enable potential customers to understand their RHI income prior to making a buying decision.

17. Do you agree with our assumption that heat pump systems, using technology that meets MCS efficiency specifications, should meet an SPF requirement of 2.5 providing they are designed, installed and used appropriately?

Agreement that it is important to have a minimum SPF requirement for a system to be eligible, though installers should be doing all they can to design the systems to perform at maximum SPF possible for the situation.

Our recommendation would be to set a minimum SPF of 2.8 for heat pump systems which will result in better performing systems and more renewable heat being delivered with less impact on the electricity network.

Energy Efficiency Requirements

18. Do you think that the 'Green Ticks approach' to an energy efficiency requirement is appropriate to the RHI? Please provide reasoning for your response and further information on any exceptional cases you think might arise.

As with any consideration of heating systems, the first to be addressed should always be the overall energy efficiency of the property (whether it be domestic, commercial or industrial).

We agree that in the majority of cases the 'Green Ticks' approach to an energy efficiency requirement is appropriate for the RHI. We do not think it should however, be essential for the homeowner to have a Green Deal Assessment in order to be eligible for RHI payments for a GSHP system installation if they already have an appropriate higher level/achievable measures EPC in place.

19. What are your views on our proposal to require consumers to have installed energy efficiency measures and provided proof to Ofgem before they become eligible for the RHI? Can you suggest an alternative approach that guarantees the installation of the green tick measures, but provides RHI subsidy at an earlier point?

Consumers should understand the positive impact that increased energy efficiency of their home would have on the performance (and sizing) of a renewable heating system.

When an RHI application is submitted to Ofgem, it should include the existing EPC (if one is available) with confirmation that the proposed steps for improvement will be taken during the installation of the renewable heating system and that the designer of the system will take this into consideration at design stage. It will be the designer/installer's responsibility to then, at time of completion of the system, provide MCS notification and self-certification or building control approval that the appropriate steps have been taken.

20. Do you think that solid wall insulation should be excluded from the energy efficiency requirements or be introduced in a phased way? Please provide evidence for your response.

Yes, we think that solid wall insulation should be excluded from the requirements. We do not think that it should be introduced in a phased way.

In a vast number of homes, the rooms are relatively small and the impact of installing (internal) solid wall insulation could be considered overly disruptive and inconvenient. There may of course be occasions where the homeowner will opt for solid wall insulation of their own accord, which is great news; however, we do not think that this is appropriate as a mandatory measure.

Tariff Design

21. Do you think that 7 years is a suitable time period for tariff payments under the RHI to be made? Would a different time period for tariff payments suit different technologies? Please provide evidence to support your view.

Yes. 7 years seems to be an appropriate time period for domestic tariff payments, considering the average time currently spent in each property before moving on.

22. Please provide evidence on the potential lifetimes for the different renewable heating technologies, particularly where they are expected to last less than the 20 year period that we are assuming.

Ground Source Heat Pumps have a lifetime of 20 year, though potentially requiring certain internal component replacements on a more frequent basis.

The ground heat exchanger (collector loop, whether vertical or horizontal) can be considered as energy infrastructure and has a lifetime in excess of 100years but this should not be taken into consideration in the tariff calculation.

We are concerned that some air source heat pumps may last considerably less than the 20 years, indeed in coastal conditions they may deteriorate within the proposed 7 year RHI period. This is of great concern and begs the question whether such a technology should receive RHI support without much more rigorous product quality criteria.

23. What is the risk of switchback after the period over which tariff payments are made? Do you think this applies solely to biomass?

This is a potential risk for technologies with higher running costs that the displaced heating system. This risk is mitigated by the removal of the existing heating system.

This is not an issue for ground source heat pump systems which have lower running costs than any other form of heating, including gas boilers.

24. Do you think that either of the proposed solutions would mitigate the risk of switchback? Which approach would be better? Is there any other action we could take to ensure the continued use of biomass in this way?

The scheme should follow real market rates and not estimate future market prices.

25. What do you think are the other risks associated with paying a tariff over a shorter period, say 7 years, but assuming heat delivered for 20 years? How do you think we should mitigate these risks?

It is important that the tariff paid over 7 years provides sufficient cover to support the potential maintenance / replacement of components during the anticipated 20 year lifetime of the system.

This could be mitigated by setting the tariffs appropriately for each technology to cover this potential, if this has not already been taken into consideration.

26. Do the tariff ranges above accurately reflect the costs faced by consumers installing renewable technologies? Where possible we would welcome cost-based evidence that supports your views.

As illustrated in the GSHPA response to the Call for Evidence for GSHPs, we propose that for the domestic scheme two tariff levels are available:

- **Vertical Borehole systems @ 17.3p/kWh**
- **Horizontal Loop systems @ 14.5p/kWh**

It is recognised that the installation costs for vertical borehole systems is higher than that for horizontal trenches and therefore the tariff rate should be increased accordingly.

It is likely that the majority of domestic retro-fit installations for GSHP systems will be using boreholes due to reduced land area available in a large number of gardens (in terraced housing for example) and the tariff for this large number of properties needs to be set appropriately to encourage the uptake in these homes.

If the tariff is to be applied to the renewable proportion of the delivered heat only then these tariffs will need to be increased by a factor accordingly.

Solar Thermal Tariff

27. What are your views on the support for solar thermal as set out? What evidence is there to support a tariff higher than the renewable energy cap? Do you have any suggestions / views on other ways in which a subsidy for solar thermal could be paid, for example, through a capital grant or through increasing the tariff beyond the cap?

As highlighted in the consultation document, Solar Thermal technology brings considerable benefits when fitted in conjunction with a GSHP system and we would like to see an extra capital grant for the cost of the HW cylinder and ancillaries with a 17.3 p/kWh solar tariff and GSHP tariff as set out in question 26 for combined Solar Thermal and GSHP systems.

GSHP Thermal Tariff

28. What are your views on the support for GSHPs as set out? What evidence is there to support a tariff higher than the renewable energy cap?

A GSHP system installed with boreholes is the most durable solution to providing heating (& cooling) to a building and includes energy infrastructure which will be re-used for subsequent heat pump installations.

The governments long term energy policy is reliant on widespread take up of heat pumps and it is important to stimulate market growth at this stage to establish the supply chain and intellectual property within the UK to meet future demand.

Failure to kick start the UK market with an adequate tariff will jeopardise these goals. We note that Professor MacKay has recently stated on several occasions that there are likely to be 20 million heat pumps in use across the UK in 2050. We also note that GSHPs are, as set out in the heat emitter guide and demonstrated by field trials results, an SPF factor of 0.7 superior or greater than ASHPs. Therefore, it is in the countries long term interest to offer the greatest incentive to the lowest cost/carbon and so lowest draw-on-the-grid heating solutions.

The cap at the marginal cost of renewable energy is illogical in the light of the need of a diverse range of energy solutions. Target the lowest cost/carbon solutions from day one of the RHI for the long term benefits.

29. What are your views on differentiated tariffs for GSHPs?

As detailed in the GSHPA response to the recent Ground Source Heat Pump Call for Evidence, we propose that there should be a higher tariff for Borehole systems (17.3p/kWh) and a lower tariff for horizontal heat exchangers or ground arrays (14.5p/kWh) we mentioned in our answer to question 26.

We do not think the scale of the systems within the domestic scheme will justify differentiated tariffs in terms of heat generated.

30. Do you have any data that you can share on the current market split between borehole and ground array GSHPs, associated costs and the likely future demand of these?

Installations with boreholes should be eligible for a higher tariff; particular for retro-fitting systems to existing housing stock, boreholes is often the only practical option.

The current market split indicates that the majority of domestic installations are using vertical boreholes and the majority of the housing stock would require vertical boreholes, which are more expensive than horizontal trenches during the installation process. This is similar to the European trend where vertical boreholes are more common than horizontal collectors.

31. Are there other factors which should be taken into account when calibrating the tariff levels for either air source heat pumps or biomass boilers if the value for money cap were to become applicable to those technologies?

No comment.

New Build

32. Do you believe that the introduction of a domestic RHI tariff for new build is appropriate? If so, what additional costs and/or savings should DECC take into account if setting a new build tariff?

Yes, we think that a new build tariff is appropriate for the RHI.

As detailed in the consultation document, the lower fabrication and ventilation heat losses will mean the systems could be smaller and be required to provide less heat.

But the builders of new houses will not benefit from RHI directly and so system costs will still need to be covered in the house price.

For this reason, we believd that the tariff for new build should be the same as for retrofit to incentivise house buyers to seek out more energy efficient properties and drive demand. If we do not incentivise new houses in this way then we will have to retrofit them within the next 20 years at greater cost to UK plc.

33. Do you have any evidence on the percentage cost reductions associated with fitting a renewable heating system into a new building, compared with retrofitting it?

This question has to be addressed on a project-by-project basis. In certain individual circumstances, the GSHP system can be more expensive to install in a new build situation because of the many site visits for all the different project stages. The potential cost saving on new build comes from the smaller system because of the improved energy efficiency of the building but this has been offset by MIS 3005 which encourages accurate rather than assessment based heat loss calculations. The cost saving from the smaller new build system can be lost from the many site visits at different stages of the project.

Then, on the counter side to this new build versus retrofit discussion, if there are economies of scale due to fitting multiple GSHP systems to several adjacent properties, significant volume cost savings can be realised.

Therefore, we see the answer to this question related to volume. Any project that groups installations whether it is retrofit or new build will probably realise economies of scale whilst individual installations, whether new build or retrofit will probably have significantly higher costs.

34. If you do not agree with a domestic tariff for new build along the lines proposed, can you propose alternative ways to incentivise the uptake of renewable heating in the sector?

In addition to RHI eligibility for new build houses, We propose that changes are made to legislation so that it is mandatory to install ground source infrastructure at build stage routinely as part of the installation of other underground services. This then gives the builders and buyers real choice as to heating system installed.

In parallel, we should stop builders connecting new homes to the already overstretched gas grid - we are now a net importer of gas with insufficient storage an should stop expanding demand for this diminishing resource.

It seems perplexing that this has not been higher on Government's agenda considering the targets the UK is committed to meeting by both 2020 and 2050. The "10% Merton Rule", introduced almost 10 years ago, gave hope that steps were being taken in the right direction and it would make sense for targets of 50% to be set in place moving forward – AS A PRIORITY.

Social Landlords

35. In light of the above, do you think we should introduce a domestic RHI tariff for social landlords? Why/why not?

Since the landlords will not benefit from the running cost savings of introducing renewable energy technologies it is important that the RHI tariffs are sufficient to make the capital cost investment attractive to the landlord, with short payback periods. It may be necessary to introduce a premium tariff for landlords to achieve this.

The social housing property stock is crucial to achieving he economies of scale of installing ground source heat pumps on a street by street basis.

36. Do you think that the proposed 7 year period for tariff payments would be appropriate for social landlords too or would another timeframe within the assumed 20 year life of equipment be more appropriate?

7 years is good, this will fit in well with finance directors.

37. Do you have any evidence on the percentage differences to costs/benefits of fitting individual renewable heating systems into social housing?

There are many case studies on this question. And as ever with building services questions, it needs to be addressed on a case-by-case basis. GSHPA representative's would be pleased to meet with DECC official's to share further case studies. We have several good examples of very satisfied residents with GSHP systems. They report warm houses with plenty of hot water and flexible heating systems.

As noted previously in this consultation response, GSHP technology is the lowest running cost heating system bar none and is the only renewable heating system that is cheaper-to-run than natural gas. Further GSHP systems are being fitted to social housing as part of the RHPP social housing programme and the GSHPA anticipates that there will be many further satisfied residents in these GSHP supplied properties.

38. Is there an alternative way in which you think we should incentivise renewable heat in the sector?

No, RHI should be used to incentivise all similar scenarios. Multiple grant/incentive/tariff schemes for different situations causes confusion in the market. Keep the final scheme as simple as possible and only use either a grant or tariff or incentive scheme. In the UK, we have opted for an innovative RHI incentive and other countries are waiting in the wings to see how successful our RHI scheme is before potentially copying our model.

Metering versus Deeming

39. Do you agree that deeming, as opposed to metering; is the most appropriate approach on which to base the calculation of RHI payments? If not, why not?

We agree that deeming is most appropriate; although metering would provide a far more accurate picture of heat generation and use within the domestic market, it is unfortunately cost prohibitive.

The method of deeming is critical:

- It is apparent that in retro-fit situations, a green deal check will already be carried out, hence an up to date EPC should indicate the average heat load of the building. The GSHP (or other) system, would then be sized accordingly with payments made on that assumption.

- In new build it is likely to be using SAP, which will eventually be linked to EN14825; with the heat load of the building estimated, the system sized accordingly and payments made on that basis.

We also suggest however, that a random selection of a minimum of 250 installations of each technology are metered (with the costs being covered by DECC), allowing a much clearer and more accurate evidence base for the performance of these systems 'in-loco'. This in turn will help with managing the RHI tariff rates.

40. Do you agree that a calculation by the MCS installer, or equivalent, is the best approach and that the above criteria are adequate for developing an effective calculation?

Yes. As long as the MCS installer is appropriately qualified and fully understands the processes for calculating the heat load of the building (whether using Green Deal procedures

or RdSAP) and that the MCS installer is equally knowledgeable to judge appropriately the most appropriate system type to suit a range of applications.

The Heat Emitter Guide, worked on by DECC's Chief Scientific Advisor and his team, in conjunction with EST, IDHEE, BEAMA, HHIC, HPA, UHMA and the GSHPA, should be used at every opportunity, as intended to aid the MCS installer with this process.

Using the MIS3005 v3.1 calculations should result in more accurate system sizing for ground source heat pumps and is the suggested preferred calculation method.

41. Do you have any views on which calculation would be most appropriate for deeming heat? Please provide evidence to support your claim.

We are great believers in simplicity, making it easy for the consumer to access the technology and make a buying decision.

Our preference would be to use a simply look-up table along the lines of that used in CERT, whereby the deemed heat is based on house, age, number of bedrooms and occupants. We recognise this is not accurate bjt it would give consistent answers for all houses in a street and make RHI calculation very open and accountable.

If this is not considered appropriate then we must adopt the Green Deal heat assessment, since this will be done anyway it would be impractical to expect householders to then underteake a second subsequent heat assessment for their heat pump installation. This may not be technically perfect but is a good compromise without putting in additional barriers for the consumer.

Bivalency

42. Do you agree with the approach outlined here for the treatment of bivalent systems?

Yes. We agree that meters should be used to measure the amount of heat generated by the GSHP system and that the tariffs should be paid accordingly. One would hope however that the majority of GSHP systems would not need a bivalent or back up heat source as can quite comfortably deliver 100% of all space and hot water heating for the property, if designed and installed appropriately (according to MIS3005 3.1 and GSHPA's industry standards). The exception will be larger houses where an adequately sized heat pump would require a three phase electriciy supply, which is not widely available. In this case metering is appropriate.

Financing

43. Do you anticipate that financing offers will come forward from the market to provide support for renewable heat in conjunction with the RHI? If not, is there anything DECC could do to support this?

Yes

44. To what extent do you believe the ability for some consumers to fund their renewable heat installations through Green Deal and the RHI will improve deployment of renewable heat?

Green Deal not classed as State Aid as it is a loan, hence can be eligible for RHI post installation of a system as funded by GD. At the moment it is not clear if RHI will be considered part of the Golden Rule.

Awaiting clarity on the GD in general as it develops, including input from EU.
Industry needs as much clarity on GD as possible to help moving forward.

Raising Performance

45. Do you agree that a metering and monitoring service package like the one we have outlined would be effective at driving long-term system performance improvements?

We are keen to have the ability to install better systems in the future, through metering and monitoring current systems as they are being installed. This is the aim of Chief Scientific Advisor and his team.

46. Do you think that the additional financial support in option 1 should be distributed as a flat-rate increase to the RHI tariff, a one-off upfront payment or in some other way?

The fundamental design of the RHI tariff as it currently stands surprisingly results in higher tariff levels for less efficient systems. Before mechanisms can be established to incentivise improved performance it will be necessary to re design the tariff calculation completely.

47. Do you offer a system that already provides some of the requirements outlined in option 1? If so, please can you provide details of how your system works and whether you would be interested in helping us develop this proposal further.

As an Association, we would be pleased to continue to work with DECC on new systems and proposals whether they be technical, financial, regulatory or other in nature and we will also gladly act as an interface between DECC are our individual members.

48. Should consumers' RHI tariffs for heat pumps vary according to the measured or estimated performance of the system? Do you think installers would offer performance guarantees if this was offered in the RHI? Please comment on the method we have described in option 2.

No. This is an over complication at the domestic level and consumers need certainty before making buying decisions.

Keep the RHI simple at this stage and the introduce refinements at a later stage.

49. Do you think that setting a minimum SPF higher than the EU minimum for air source and ground source heat pumps could be an effective driver of performance? What figure do you think might be suitable?

A threshold SPF figure of 2.8 should be used to reflect the UK generating efficiency.

This would also safeguard against the worst air source heat pumps which might scrape through MCS product approval but in practice would deliver SPF below the threshold in the UK climate.

50. If we took this approach, should the minimum SPF required increase over time? Please comment on how quickly you think the required SPF should rise and to what level it should rise.

It would change as the UK generating mix changes

51. What are your views on the use of the RHI budget to pay for metering equipment to be installed for the purpose of policy evaluation?

We agree that funding should be provided to cover the cost of metering equipment as monitoring the performance of these installed systems is critical to the future of the RHI tariffs and ensuring that these are set appropriately at any future review period.

52. What are your views on the proposal that we should share data with MCS Certification Bodies so that it can be used to improve MCS installer surveillance?

We agree that all information held in relation to the RHI should be available to all, transparency is essential and it would be beneficial in the longer term for on-going developments not only for MCS installer surveillance but for other areas too.

53. What are your views on the requirement to make all installations 'meter ready' and the use of an Installer Checklist?

We agree that as many installations as possible should be 'meter ready', not least as it will be beneficial to monitor the performance of as many systems as possible moving forward. This would also allow meters to be added at a later date by the user if they wanted to do so.

We agree that an installer checklist is essential as it will be one additional way of ensuring that the system has been installed and commissioned appropriately. The presence of an installer checklist, to be left with the system user / owner will also act as a guarantee for the installer's sake that everything was done according to guidelines.

54. Do you agree that there should be a financial penalty for consumers who do not ensure their installation is 'meter ready'?

No. It should be the responsibility of the installer of the system to make sure that their installation is 'meter ready' and this should be done for the majority of installations, as above.

55. Should the penalty for consumers who do not make their installation 'meter ready' be the loss of the first year of their RHI payments or a reduction of all of their payments? What other penalty might be appropriate?

There could be many reasons why a system is not left meter ready and the level of sanction should be adjusted related to the cause of the issue. If it is not possible to leave the system meter ready, there should be no sanction. If the installation was wilfully left meter not-ready, then a reasonable sanction would seem to be appropriate. There could also be increased sanctions for repeated deliberate infringements from an installation company and in this case the sanction should be on the installation company and not the householder.

56. What are your views on providing a tariff uplift for systems where solar thermal is installed alongside other renewable technologies.

As mentioned in our response to Question 27, if solar thermal is installed alongside (in conjunction with) a ground source heat pump system, this will bring considerable benefits and we suggest that an extra capital grant is made available to cover the cost of the HW cylinder and ancillaries, with a 17.3 p/kWh solar tariff and GSHP tariff, as also mentioned in response to Question 26.

57. Do you have any evidence on the size of tariff that should be provided in order to encourage the deployment of these systems?

See above (questions 26, 27 & 56)

58. Are there any other approaches that you think could drive continued improved performance of renewable heating systems?

Strategically choose to increase the benefits for high performance systems such as low flow temperature GSHPs. Measures such as this should only be implemented when their market impacts can be fully reviewed and RHI is currently too immature to accept such developments.

Delivery

59. What are you views on the above options for the proposed pattern of payments?

They should be implemented as proposed and kept under regular review to fine tune the scheme.

Consumer Protection

60. Do you think that MCS (or equivalent schemes) will provide sufficient consumer protection for the RHI or should additional consumer protection be built into the scheme? If you think more is necessary, please explain what you think is required.

MCS has to be the vehicle for this process, as it was set up for this purpose. If we add in, or try to add in alternative or additional methods then this will add to the complexity of the process.

We should develop what we've got to ensure it covers all that is required.

As currently set up, MCS is creating a two tier marketplace with accredited installers quotes being consistently under-cut by non-registered businesses. This needs to be addressed through more marketing of the benefits of MCS and incentivisation through the RHI – these were supposed to come in hand-in-hand not have a 3 year lull.

Maintenance

61. Do you agree that our proposed approach of an annual consumer self-declaration, supported by supplementary spot checks is the best way to ensure that equipment installed under the RHI continues to be operational and generate heat optimally over time? What should the penalties for non-compliance be? If you think that the proposed approach is not the best or could be improved, please set out your reasoning and any evidence to support that.

It was included in the original RHI plans (as with the FiT) that the owner of the system would have to report back that the system is being maintained and still being used and performing as installed.

It is the responsibility of the owner of the system to maintain as appropriate.

Fraud

62. Are there other risks of fraud or gaming that we have not identified in the table above?

Fraud/gaming is relatively low risk and should not generate too much additional income on the domestic scale. Your proposals seems reasonable and fair.

On the bivalency issue, if all heat sources are metered and so the total heat consumption is known, payments can be adjusted if the consumer is favouring the lower carbon heat source.

Consumer Journey

63. In terms of communicating the RHI scheme to consumers and other interested parties, what do you consider that the role of government should be?

It is imperative that the public of the UK is aware of the availability of the RHI and the opportunities it provides regarding their opportunities for on-site generation of heat. At present, our understanding is that relatively few people know about this scheme and we suggest that the people of the UK are given some confirmation that the RHI will be delivered, will provide them with financial support for onsite heat generation and will continue for the anticipated timescales.

Perhaps some money could be made available for a mass marketing campaign to be delivered for a period of months (tv, radio, press) to highlight the availability of the RHI.

64. Do you have any comments on how RHI information to support and guide consumers along the journey should be provided? If so, please set them out.

A range of interactive, free to attend sessions should be made available during three months of 2013 (March, April, May or May, June, July for example) at which demonstrations of the renewable heating technologies are available, along with Q&A sessions and fact sheets that give an overview of what the system can offer the end user, the potential heat generated over the year (depending on system size), the energy (& cost) savings this equates to and of course the amount of RHI payments that would be available for the homeowner.

65. Do you have any comments on or additions to the identified events and issues affecting the consumer along the customer journey? If so, please set them out.

No.

66. Are there any specific customer journeys that you feel would be helpful to analyse? If so, please set them out.

The 'customer journeys' that people will be going on may vary considerably; some may follow the specific journeys highlighted in the Consultation Document, others may differ. We do not think it possible to consider all possible alternatives for the journeys of the entire population of the UK and that what is important is that the process is simple, transparent and well communicated by DECC and others.

67. Do you have any comments on or additions to the actions identified here? If so, please set them out.

No.

68. In particular, do you have any comments on how to make the RHI and Green Deal relationship as seamless as possible in order to minimise disruption to the consumer? If so, please set them out.

It is important that there are clear guidelines already set in place for the interaction between the RHI and Green Deal. As mentioned in response to previous questions, there should be energy efficiency pre-requisites for RHI applications, though possibly not ALL of the Green Tick elements should be mandatory in all cases. Applications should be dealt with on a case by case basis and meet minimum criteria.

Budget Management

69. Do you agree that the system of degression described would provide us with a sufficient means of controlling the costs of supporting the domestic RHI scheme? If you would prefer a different approach to budget control then please set out what that might be and how it might operate.

Yes, however we note that a system of pre-approval with tariff held for a period of time must be implemented, otherwise the deadlines chaos as demonstrated within the LCBP monthly payments and FiTs tariff change dates will happen again with RHI. With good pre-approval, uptake rates can be accurately estimated and followed.

70. Do you agree that we should build in greater flexibility to the system such that degression might not occur if overall deployment levels are low? If yes, how do you think this could be achieved?

We agree that degression should not come into effect if overall deployment levels are low; it may be important to be prepared for mass uptake of renewable heating technologies and to have plans in place to minimise negative impact this may have on the available budgets

We also agree that if ASHPs are included in RHI Phase 1, that due to the potential higher uptake rates and its effects on other technologies, a 10% rather than 5% reduction rate should be used.

It is vital that a key technology such as GSHP is not affected if much of the RHI budget is being consumed by other technologies and these technologies must be degressed rather than the overall budget being degressed so that key technologies have the opportunity to obtain good market penetration rates.

71. How do you think we should set triggers which would result in tariff reductions to ensure fairness, value for money and certainty? Do you agree with the options presented, or would you prefer we took an alternate approach?

The options as presented are a fair starting point but we want to particularly note one of the bullet points in the Summary of Proposals about flexibility affecting the system of degression. Tariff rates should have the option to be increased as well as degressed so that if as has occurred to GSHP in Phase 1 RHI, the tariff can be reviewed to increase uptake.

72. Would you prefer a system which announces any tariff rate reductions every two months (with up to a one or two week notice period before the reduced rate comes into effect), or on a quarterly basis (with up to a months' notice period)? If you would prefer a different period please set this out and explain why.

We would prefer the shorter interval tariff rate reduction announcement system.

73. Do you agree that the system should specifically recognise legacy applicants when calculating whether trigger points have been met? Do you agree with the options presented, or would you prefer we took an alternate approach? If yes, then please provide details.

Legacy applications should be reviewed over the next few months through the Gemserv MCS database. Legacy applications should be open to claims up to 12 months after the launch of RHI Phase 1. If legacy applications have not been registered with Gemserv, this issue should be addressed in the near future via the MCS secretariat and associated management structures.

If this process is followed, fair treatment of legacy applications can be applied to RHI Phase 1 and reasonable trigger points can then be applied.

74. Do you agree that we should base degression calculations and triggers on pounds spent, or do you consider it would be more appropriate to use an alternative approach, such as installed capacity and renewable heat produced? Please provide reasons for your preferred approach?

We prefer trigger points based on pounds spent as this provides more reliable and accurate results.

75. Do you agree that we should not apply EPA or a similar option to the domestic scheme? If not, why not? How could this work?

We strongly favour a form of Enhanced Preliminary Accreditation so that the scheme can be carefully managed by DECC and Ofgem and so that recipients of RHI know in advance actual tariff rates. Without EPA, the chaos that occurred during monthly LCBP payments and FiT tariff change deadlines is likely to be repeated with all the associated market confusion and dissatisfaction.