

Non Domestic Renewable Heat
Incentive (NDRHI) Stakeholders

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Our response on the operational approach in respect of installations generating heat using ground source heat pumps and recovered heat

This letter outlines Ofgem's position on the Non-Domestic Renewable Heat Incentive (RHI) and heat pump installations using recovered heat. It summarises the key issues from our consultation and the next steps on our administration of the scheme in respect of this matter.

We would like to thank all respondents for their considered and thoughtful feedback.

Consultation process

On 26 January 2016, we opened a consultation¹ requesting views on the proposal that recovered heat² would no longer be required to be stored in the ground before circulating a heat pump unit in order to be eligible for the Non-Domestic RHI scheme. The consultation also included the proposal that, in order to be eligible for the RHI scheme, the following rule (the '3/5 Rule') would need to be used for systems using 'recovered heat':

$$\frac{\text{Heat extracted from the ground}}{\text{Total heat supplied to the heat pump}} \geq \frac{3}{5}$$

The consultation closed on 23 February 2016. Our decision takes into account the 12 responses we received, as well as relevant European legislation, RHI Regulations and current policies.

We summarise stakeholder responses to the consultation in Annex 1: "*Summary of responses to the consultation*" of this document. In addition, we set out the relevant European legislation, RHI Regulations and current policies ("*Context*") in Annex 2.

Our decision

At this time we will not change our current operational approach and will not provide RHI support to recovered heat that has not circulated the ground loop. Our detailed review and consideration of the responses presented has highlighted the importance of providing clarity and certainty on what would be supported, and how this would be implemented. For example, it would be important to clarify the approach to

¹ https://www.ofgem.gov.uk/system/files/docs/2016/01/non-domestic_rhi_heat_pumps_consultation_0.pdf

² In line with RHI Regulation 8(3)(b) and 8(3)(c), recovered heat is taken to mean heat from space cooling or process cooling, or heat from processes other than the generation of heat.

systems such as those that may not need any electrical input to satisfy the heat demand, potentially acting in effect as a 'heat exchanger'. This will need to be considered in more detail and it is likely that any decisions will need to make provision for specific cases.

While Ofgem remains supportive of the principle of enabling heat pump systems to use recovered heat, which has not been stored in the ground, we recognise the need for further policy work, which will possibly need to be reflected by regulatory change.

Clarity and guidance on the types of systems that would be considered eligible is also needed to provide certainty for investors. Careful consideration needs to be given to this policy development work as the consequences of our decision involve financial entitlements that are from public funds.

Next steps

Ofgem will continue to administer the RHI Regulations in line with our current operational approach to recovered heat i.e. that in order to be eligible for the RHI scheme, such heat must have first circulated the ground loop. Where an installation is designed to use recovered heat that has not circulated the ground, suitable metering arrangements would need to be proposed to Ofgem to allow such heat to be deducted from an installation's eligible heat output.

Ofgem and BEIS are aware of this issue and remain supportive in principle of enabling heat pump systems to use recovered heat. However, at this time, BEIS 's resources are focused on implementing the BEIS consultation proposals, and further work to enable this change is not considered a priority.

Please contact the team if you have further questions about the content of this letter or wish to discuss the eligibility of potential projects at NDRHI.heatpumps@ofgem.gov.uk or on 0300 003 2289.

Yours faithfully

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Annex 1. Summary of responses to the consultation

The responses to the consultation showed overwhelming support for the proposal that recovered heat should no longer be required to be stored in the ground before circulating a heat pump unit in order to be eligible for the RHI scheme. Respondents cited the potential for more efficient system design and reduced energy consumption in the operation of heat pump units.

A number of respondents said there is a need for detailed schematics which will help provide a clear steer to industry on the eligibility of different scenarios where 'recovered heat' may be used.

One respondent highlighted the concern that systems may be designed to maximise RHI payments in line with the '3/5 Rule', instead of maximising the potential for using available recovered heat.

In general, it was not felt that there would be significant barriers to installing the required meters to measure the heat extracted from the ground, although respondents again asked that detailed metering examples be provided by Ofgem.

Two respondents highlighted that calculating the '3/5 Rule' on a quarterly basis may not allow for seasonal variation in the use of recovered heat and that this should be calculated on an annual basis instead.

Annex 2. Context

Ofgem's administration of the Non-Domestic RHI scheme must be considered in the context of European legislation, the RHI Regulations and current policies.

The Non-Domestic RHI scheme supports both the generation of renewable heat in line with the EU's Renewable Energy Directive (RED)³ and carbon savings, through the use of renewable and lower carbon intensity heating systems. The RED sets a binding target for the UK of 15% final energy consumption from renewable sources by 2020. Heat generated by heat pumps contributes to this target, *'provided that the final energy output significantly exceeds the primary energy input required to drive the heat pumps'*.

Annex VII of the RED on 'Accounting of energy from heat pumps' includes the formula showing that the SPF of a heat pump unit should be at least 2.5 in order for the energy to be counted as 'renewable'. Whilst the principle of using recovered heat as a means of contributing to low carbon heating is supported, Ofgem's administration of the Non-Domestic RHI scheme remains a mechanism to support renewable energy generation and therefore also needs to continue to consider the SPF requirement outlined above.

Where recovered heat has circulated a ground loop, Ofgem is satisfied that such heat is counted as renewable for the purpose of RED targets and is also eligible for the RHI scheme. In this consultation we considered whether recovered heat, which has not circulated the ground loop, could also be eligible for RHI support.

³ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0028&from=EN>