Metering requirements for the Renewable Heat Incentive

GSHPA Technical Seminar

Jennifer Moore, 5th December 2013
Renewable Heat Incentive

Outline

• Introduction to the RHI
• Non-domestic RHI Metering
• Domestic RHI Metering
  – Metering for Payment
  – Metering and Monitoring Service Packages
  – Metering for Evaluation
• Reducing the hassle of metering
# Introduction to the RHI

<table>
<thead>
<tr>
<th>Non-domestic RHI</th>
<th>Domestic RHI</th>
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<tbody>
<tr>
<td>Launched Nov 2011</td>
<td>Due to be launched Spring 2014</td>
</tr>
<tr>
<td>Paid over 20 years</td>
<td>Paid over 7 years</td>
</tr>
<tr>
<td>Supporting a range of technologies including GSHP, biomass, biomethane and solar thermal with the intention to expand the scheme to other technologies.</td>
<td>To support GSHP, AWHP, solar thermal and biomass boilers.</td>
</tr>
<tr>
<td>Paid on eligible heat for an eligible purpose</td>
<td>Paid on renewable heat</td>
</tr>
<tr>
<td>Always metered</td>
<td>Expected to be paid mostly on deemed heat demand with a minority to be metered for payment</td>
</tr>
<tr>
<td></td>
<td>Additional incentive of £230 per year for 7 years for installing Metering and Monitoring Service Packages</td>
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Non-domestic RHI Metering

• Heat metering regulations have been simplified recently:

Updated metering requirements

• Redundant heat meters no longer required- only heat meters that will be used for payment
• Allow heat loss calculations to be used where installing meters is unduly burdensome
• Allow calculations to be used to estimate losses for external pipework
• Allow fuel input metering where appropriate as a proxy to heat metering
Non-domestic RHI Metering

Future metering requirements with effect from next year published in government response this week:

- These changes will not affect payments.
- Electricity consumption metering in order to monitor SPF for heating.
- For systems capable of simultaneous heating and energy recovery from cooling, monitor heat from the ground as a fraction of total heat supplied by heat pump.
  - Heat for payments can include component from recovered heat
  - Evidence collected will inform future policy for payments.
Domestic RHI Metering

Requirements for scheme launch in Spring 2014

• Broadly 90% of RHI applicants expected to receive payments based on deeming

• Applications for second home or where a proportion of their heating demand could come from another source (e.g. bivalent system) required to be metered for payment.

• Optional Metering and Monitoring Service Packages (MMSPS)- Consumers offered financial incentive for installing detailed monitoring to help consumers and industry to understand performance.

• Where metering is installed, it needs to be put in by a certified installer (MCS or equivalent)
# Comparison of metering for payment in the RHI

<table>
<thead>
<tr>
<th>Non-domestic RHI</th>
<th>Domestic RHI</th>
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<tbody>
<tr>
<td>All systems metered for payment</td>
<td>Only second homes and where proportion of heat could be supplied from another heating source</td>
</tr>
<tr>
<td>Paid based on total eligible heat output for eligible purpose</td>
<td>Paid based on renewable heat output</td>
</tr>
<tr>
<td>Independent Reports on Metering Arrangements required for complex/multiple systems</td>
<td>No equivalent to independent metering reports, and in most cases, schematics will not need to be uploaded</td>
</tr>
<tr>
<td>Class 2 heat meters (MID)</td>
<td>Class 3 heat meters (MID) plus Class A electricity meters (MID)</td>
</tr>
<tr>
<td>All information provided by applicant</td>
<td>Possibility for some information to be supplied directly by installer</td>
</tr>
</tbody>
</table>
Domestic RHI Metering

Metering for Payment
Renewable Heat Incentive

Domestic RHI Metering

Metering for Payment

Metering requirements for the Renewable Heat Incentive
Domestic RHI Metering

Metering for Payment
Metering and Monitoring Service Packages

What is the purpose of package?

- To help consumers and industry to understand how well heat pumps are performing and optimise their installation and operation.
- 2,500 in first year, rising substantially in second year
- £230 per year for maximum of 7 years

Equipment requirements

- Heat metering of heat outputs
- Metering of electricity consumption
- Temperature sensors
- Recording data at 2 minute intervals - requires high resolution sensors

Software requirements

- Data platform to show how system is performing, accessible to applicants and industry.
Metering and Monitoring Service Packages

Renewable Heat Incentive

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Metering and Monitoring Service Packages

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Metering requirements for the Renewable Heat Incentive
Evaluation metering for domestic RHI

• All systems should be meter-ready where this means
  – Leaving space
  – Isolation valves
  – Accessible pipework
  – Reporting relevant information to MCS via compliance certificates and providing information to customer

• DECC intends subsequently to fit metering equipment to meter-ready sites in order to evaluate the effectiveness of the policy
Improving metering standards and reducing metering hassle

• Working with Ofgem to understand key reasons for heat meter installation errors in the non-domestic scheme

• MCS guidance for metering for the domestic RHI

• Working with Ofgem to develop easy-to-use interactive guidance to help installers be sure that the right meters are installed at the right locations.

• Metering is part of an RHI installation and needs to be conducted by someone with the appropriate skills.
Summary

- Non-domestic RHI heat metering for payment purposes has been simplified recently in a number of key ways
- Monitoring introduced for electricity consumption and simultaneous heating and cooling systems to enable recovered heat to count towards payments
- Domestic RHI Metering to include the following:
  - Metering for Payment
  - Metering and Monitoring Service Packages
  - Metering for Evaluation
- Update on the ways in which we’re trying to improve metering standards
Thank you Questions?

Key sources of information:

• MCS guidance on Metering for the Domestic RHI- anticipated to be published this month

• Government Response to Non-Domestic RHI Consultation- Improving Support, Increasing Uptake

• Government Response to Domestic RHI Consultation- the first step towards transforming the way we heat our homes

• Ofgem guidance on the Non-Domestic RHI- Volume 1, version 3