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Domestic Renewable Heat Incentive (RHI)

Domestic

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Metering an Monitoring Service Package (MMSP) Checklist for heat pump requirements

This checklist confirms the requirements for all equipment installed as part of a Metering and Monitoring Service Package (MMSP). All relevant requirements will have to be met in order for an MMSP to be eligible for registration.

Table 1: Requirements regarding the use of meters & sensors for MMSP heat pumps (Air source or Ground source heat pumps)

No.	All/or only answer if...	Requirement	Yes, No, or N/A
1	All	One or more eligible heat meters *(Req 9 below)* must be installed to record the heat generated by the heat pump in the MMSP agreement or its components.	
2	Another plant is connected to the same heat distribution system select option 1 or option 2	**Option 1:** eligible heat meters *(Req 9 below)* must be installed to record the heat generated by any other plant feeding into the same heating system as the heat pump in the MMSP agreement.	
		Option 2: if Option 1 is not feasible an eligible electricity/gas/oil meter *(Reqs 10, 11 or 12 below)* must be installed to determine the heat generated by any other plant by recording the fuel used by any other plant feeding into the same heating system to enable the equivalent heat output to be estimated.	
3	All	Temperature sensors must be installed to enable the recording of: • The temperature of the liquid leaving the heat pump in the MMSP agreement to provide **space heating**; and • (if relevant) the temperature of liquid leaving the heat pump in the MMSP agreement for the sole purpose of heating **domestic hot water** or feeding into a domestic hot water cylinder where the heat pump generates heat for the purpose of heating domestic hot water as well as space heating.	

No.	All/or only answer if...	Requirement	Yes, No, or N/A
3	All	*(Note: these temperature sensors should form part of the eligible heat meters measuring the heat generated by the heat pump in the MMSP agreement; or separate ones that are installed at the same location as those used by that heat meter. It would also be possible to do this using one temperature sensor and knowledge from the heat pumps control system of whether the system is providing space heating or domestic hot water).*	
4	All	One or more eligible electricity meters *(Req 10 below)* must be installed to record the electricity supplied to any component of the heat pump in the MMSP agreement is used to generate the heat output.	
5	The heat pump in the MMSP agreement generates Domestic Hot Water & there is an electrical contribution into this process	One or more eligible electricity meters *(Req 10 below)* must be installed to record the total electricity supplied to the domestic hot water system including the electrical consumption by any immersion element in a Domestic Hot Water Cylinder	
6	All	One or more temperature sensors must be installed to measure the indoor temperature in at least one room in the property that the heat pump in the MMSP agreement provides heat to.	
7	The MMSP heat pump is a Ground Source Heat Pump	Temperature sensors must be installed to record the temperature of the liquid in the ground/water loop as it enters, and returns from, the ground or water.	
8	The MMSP heat pump is an Air Source Heat Pump	One or more temperature sensors must be installed to measure the external air temperature.	
9	All	All heat meters must be 'eligible' by meeting the relevant requirements set out in Annex 1 to the Measuring Instruments Directive, the specific requirements listed in Annex MI-004 to that Directive and the requirements for accuracy class 3 as defined in Annex MI-004 to that Directive.	
10	All	All electricity meters must be 'eligible' by meeting the relevant requirements set out in Annex 1 to the Measuring Instruments Directive, the specific requirements listed in Annex MI-003 to that Directive and the requirements for accuracy class A as defined in Annex MI-003 to that Directive.	

No.	All/or only answer if...	Requirement	Yes, No, or N/A
11	A gas meter has been used to meet the requirements of requirement 2, Option 2 in Table 1 above	All gas meters must be 'eligible' by meeting the relevant requirements set out in Annex 1 to the Measuring Instruments Directive, the specific requirements listed in Annex MI-002 to that Directive and the requirements for accuracy class 1.5 as defined in Annex MI-002 to that Directive.	
12	An oil meter has been used to meet the requirements of requirement 2, Option 2 in Table 1 above	All oil meters must be 'eligible' by meeting the relevant requirements set out in Annex 1 to the Measuring Instruments Directive, the specific requirements listed in Annex MI-005 to that Directive and the requirements for accuracy class 1 as defined in Annex MI-005 to that Directive.	

Table 2: Requirements regarding the accuracy of the meters & sensors for MMSP Heat pumps

No.	All/or only answer if...	Requirement	Yes, No, or N/A
1	All	All eligible meters installed or used for the MMSP (heat, electricity, gas or oil) must record information at least every 2 minutes.	
2	All	All temperature sensors installed or used for the MMSP must be properly installed and must record information at least every 2 minutes.	
3	All	All eligible heat meters must be accurate enough to detect energy at a rate of: • 1Wh or less; or • 10Wh if the heat meter is measuring the heat in domestic hot water as it leaves a domestic hot water cylinder; or • 3% of the smallest amount of heat that the heat pump in the MMSP agreement is designed to generate in 2 minutes in Wh *(**Note** – only relevant if the heat meter is not measuring the heat in a domestic hot water loop as it leaves a domestic hot water cylinder).*	

No.	All/or only answer if...	Requirement	Yes, No, or N/A
4	All	All eligible electricity meters must be accurate enough to detect energy of: • 1Wh or less; or • 3% of the smallest amount of electricity that the heat pump compressor, any supplementary electric heater and any electric immersion heater (where the energy consumed by those components is metered) is designed to consume in Wh in 2 minutes.	
5	a gas meter has been used to meet the requirements of requirement 2, Option 2 in Table 1 above	All eligible gas meters must be accurate enough to detect a volume of: • 10 litres or less; or • The equivalent volume in any other unit or less than.	
6	an oil meter has been used to meet the requirements of requirement 2, Option 2 in Table 1 above	All eligible oil meters must be accurate enough to detect a volume of: • 0.1 litres or less; or • The equivalent volume in any other unit or less than.	

Table 3: Requirements regarding the data presentation for heat pumps in the MMSP agreeement

No.	All/or only answer if...	Requirement	Yes, No, or N/A
1	All	All the information/data recorded as detailed in Table 1 above must be automatically available and presented in a viewable and readable format (ie on a computer screen or equivalent) by both: • you as the **MCS certified Installer** who is qualified to install MMSP; and • your customer as the **DRHI Participant**.	
2	All	All the information/data as detailed in Table 1 above must be automatically updated within one week of it being recorded.	

You as the MCS certified Installer who is qualified to install MMSP must be able to…			
3	All	• view all of the information/data as detailed in Table 1 above over the latest consecutive 12 month period; or for the time that the MMSP agreement has been in place if less than 12 months.	
4	All	• View all of the information/data as detailed in Table 1 above as it was recorded in 2 minute intervals or smaller.	
5	All	• View all of the information/data as detailed in Table 1 as a "data completeness" percentage[1] for each three month period over the latest consecutive 12 month period or if the period is shorter than 12 months; for any 3 months period for which the data has been recorded.	
Your customer as the MMSP Domestic RHI participant must be able to…			
6	All	• separately identify and view the following pieces of information/ data as recorded by Table 1 above:	
		• the heat output of the heat pump	
		• the electricity consumed by the heat pump to generate the heat output	
		• the internal room temperature in any/all rooms where the temperature is recorded	
		• the external air temperature	
		• (if relevant) if the heat pump is a GSHP, the temperature of the liquid in the ground/water loop as it enters the ground or water	
		• (if relevant) if the heat pump is a GSHP, the temperature of the liquid in the ground/water loop as it returns from the ground or water	
		• the efficiency of the heat pump over the latest consecutive 12 month period or over any period for which data is available if less than 12 months of data is available.	
		• an assessment as to the accuracy of the efficiency detailed above	
		• information about the components of the heat pump which contributed to working out the efficiency	

[1] The "data completeness" percentage is defined as the total number of readings from the meters and sensors presented over a particular period divided by the maximum number of readings that might have been possible ie that could have been recorded at 2 minute intervals by the meters and sensors over the specified period.

No.	All/or only answer if...	Requirement	Yes, No, or N/A
7	All	• view the information/data recorded as listed in Req 6 above in the immediately preceding week broken down by **hour** or any smaller unit of time.	
8	All	• view the information/data recorded as listed in Req 6 above over any period greater than a week broken down by **month** or any smaller unit of time.	
9	All	• view as a 75% "data completeness" percentage.	

Guide Material

We update our guide material regularly. Check the website for the latest versions, to be sure you're reading the most up-to-date information.

See our website:
Domestic RHI Non-Domestic RHI

Domestic RHI Factsheets
Factsheet: The Renewable Heat Incentive – Domestic or Non-Domestic?
Factsheet: A Metering and Monitoring Service Package for the Domestic RHI
Factsheet: Tariffs and Payments
Factsheet: Do I Need Metering?

Domestic RHI Essential Guides
Essential Guide for Applicants
Essential Guide for Installers
Essential Guide to Metering
Essential Guide to Metering and Monitoring Service Packages (MMSP)

Domestic RHI Reference Document
Domestic RHI Reference Document

Find out more

Next steps

See the Department for Business, Energy & Industrial Strategy (BEIS)
Domestic RHI Payment Calculator

Ask your installer to fill out and give to you:
Installer Checklist

For Help

For queries regarding Domestic RHI scheme requirements and eligibility and for free impartial general information on how to save energy in the home:

Energy Saving Advice Service
(England or Wales) **0300 123 1234**
Calls are charged at the standard national rate
Email energy-advice@est.org.uk

Home Energy Scotland
(Scotland) **0808 808 2282**
Calls are free from landlines and most mobile networks
Online email form

For consumer protection information

Renewable Energy Consumer Code (RECC)
www.recc.org.uk

The Home Insulation and Energy Systems Contractors Scheme (HIES)
www.hiesscheme.org.uk

The Glass and Glazing Federation (GGF)
www.ggf.org.uk

If you need help with a Domestic RHI application:

Domestic RHI Applicant Support Centre

Telephone: **0300 003 0744**
Email: DomesticRHI@ofgem.gov.uk

For opening hours, please see our website.