



For Heat Pump Installations - Installer Metering Questions (IMQs) for the Domestic RHI application form

For heat pump installations metered for scheme payments

This form is for customers with heat pump installations who need to install [metering for payment](#).

How this document works

This document contains the questions about metering for payments on the Domestic RHI application form.

If you are the MCS certified installer who is responsible¹ for the meter installation: you must complete this document, sign the declaration (at the end) and hand it (or a copy) to your customer who will be applying to the scheme. Depending on your earlier answers to questions 2.3, 2.4 and 2.9, you will also have to provide supporting information using our [Alternative Metering Arrangement Template](#). It is strongly recommended that you read the [Essential Guide to Metering](#) before completing this form.

If you are the customer:

- You must use this completed document to answer the metering questions in the metering for payment part of the online application form.
- Only if required, your installer will give you a separate document called an alternative metering arrangements template with supporting information related to questions 2.3, 2.4 and 2.9.
- This must be emailed alongside a copy of this document (the installer metering questions) to DomesticRHI@ofgem.gov.uk as part of your application.
- We recommend that you read the [Essential Guide for Applicants](#) and relevant sections of the [Essential Guide to Metering](#) before submitting your application.

Terminology used throughout

SH: Space Heating; **DHW:** Domestic Hot Water; and **HWC:** Hot Water Cylinder

Packaged Heat Meters: The heat meter is bought as one unit containing all components

Non-Packaged Heat Meters: The heat meter components are bought and combined separately

¹ If the Heat Pump is a legacy installation (ie installed before scheme launch) it may be that the meters were also installed before scheme launch. If this is the case an MCS Certified Installer must be responsible for their arrangement and specification in ensuring that it meets the Domestic RHI Regulatory Requirements.

1. MCS Certified Installer Contact Details

1.1 Name of Metering Installer:

1.2 Metering Installer's MCS Certificated Company Name:

1.3 Metering Installer's MCS Certificated Company MCS Number:

1.4 MCS Installation Certificate Number:

1.5 Metering Installer's Company Address:

1.6 Metering Installer's Company Phone Number:

1.7 Heat Pump Installation Address:

2. Installer Metering Questions (IMOs) for a heat pump installation

2.1 Is the heat pump installation:

(NB: the applicant will not be requested to provide this information in their online metering questions)

- a. an ASHP (Air Source Heat Pump)
- b. a GSHP (Ground Source Heat Pump)

2.2 If an ASHP, does it use heat purely from the home to defrost the evaporator? (ie there is no additional heat source that wasn't generated by the ASHP contributing to the defrost mechanism) (please check appropriate box)

- a. **Yes**
- b. **No**

2.3 Can one or more heat meters be installed to measure the heat output from the Domestic RHI heat pump installation alone? (please check appropriate box)

- a. **Yes**
The heat meters measure heat output from the heat pump installation only and this does not include any heat contribution from any other heat source²?
- b. **No**
The heat meters include heat output from both the heat pump installation and an additional heat source¹.

¹ If the Heat Pump is a legacy installation (ie installed before scheme launch) it may be that the meters were also installed before scheme launch. If this is the case an MCS Certified Installer must be responsible for their arrangement and specification in ensuring that it meets the Domestic RHI Regulatory Requirements.

² Heat source: this relates to any additional heating plant used on the system that contributes to the metered heat output figure of the heat pump installation. This heat source could be anything from from a fossil fuel boiler to another ineligible renewable energy technology include where a heat pump uses an integrated HWC with a supplementary electric immersion heater.

If **No for 2.3**, the installation will require an alternative metering arrangement³ and you must provide your applicant with some supporting information within our [Alternative Metering Arrangement Template](#) as to how the meters are arranged to enable only the eligible renewable heat output from the heat pump installation to be calculated.

Please complete the **Alternative Metering Arrangement Template** requesting:

- A simple illustration/schematic showing the metering arrangement.
- A written description as to why the heat output from the heat pump installation cannot be metered alone.
- Information relating to what the additional heat source is.

2.4 If the heat pump is capable of cooling, is your customer likely to be under compensated during the summer months due to the additional electricity used by the heat pump and therefore subtracted from the heat output figure and as such would prefer that an alternative metering arrangement⁴ was used? (please check appropriate box)

- a. **Yes**
- b. **No**

If **Yes**, you must provide your applicant with some supporting information within our [Alternative Metering Arrangement Template](#) as to how the meters are arranged to enable only the eligible renewable heat output from the heat pump installation to be calculated.

Please complete the **Alternative Metering Arrangement Template** providing:

- A simple illustration/schematic showing the metering arrangement;
- A written description as to why the heat output from the heat pump installation cannot be metered alone;
- Information relating to what the additional heat source is.

2.5 How many heat meters have been installed? (please check appropriate box)

- a. One heat meter (HM1).
- b. Two heat meters (HM1 + HM2).
- c. Three heat meters (HM1 + HM2 + HM3).
- d. Four heat meters (HM1 + HM2 + HM3 + HM4).
- e. If none of the above (ie five or more heat meters have been installed) please specify the number and in addition ensure that your customer (the applicant) emails a copy of these completed 'Installer Metering Questions' to us at DomesticRHI@ofgem.gov.uk

2.6 What does the Domestic RHI heat pump installation provide heat for?

(please check appropriate box)

- a. Space Heating (SH) only.
- b. Space Heating (SH) **and** Domestic Hot Water (DHW).

³ Please refer to the alternative metering arrangements section in the Ofgem Domestic RHI Metering Guidance document.

⁴ Please refer to the alternative metering arrangements section (specifically the part focussing on metering arrangements for heat pumps capable of cooling) in the Ofgem Domestic RHI Metering Guidance document.

2.7 If the DOMESTIC RHI heat pump installation is supplying a combination of SH and DHW, please select the positioning of the heat meter in relation to the HWC: (check appropriate box)

- a. Before the HWC.
- b. After the HWC – where the HWC is integrated into the heat pump unit.
- c. After the HWC – where the HWC is separate and standalone.

If a. or b. please go to question 2.10.

If c. please answer question 2.8, 2.9 and then move to 2.10 etc.

2.8 Please provide us with the label reference next to the heat meter that is installed after the HWC:

Only answer this question if you selected c. in question 2.7 above.

2.9 Does the standalone HWC use an additional supplementary heat source? For example uses an electric immersion heater; or is a twin coil HWC with a secondary heating coil fed from a fossil fuel heat source etc? (check appropriate box)

Only answer this question if you selected c. in question 2.7 above.

- a. No: the heat pump installation alone heats the hot water in the HWC.
- b. Yes: the HWC uses a supplementary heat source.

If **Yes**, the installation will require an **alternative metering arrangement**⁵. You must provide your applicant with some supporting information within our [Alternative Metering Arrangement Template](#) as to how the meters are arranged to enable only the eligible renewable heat output from the heat pump installation to be calculated.

Please complete the **Alternative Metering Arrangement Template** requesting:

- A simple illustration/schematic showing the metering arrangement.
- A written description as to why the heat output from the heat pump installation cannot be metered alone.
- Information relating to what the additional heat source is.

2.10 Which of the following heat pump components are included in the metered heat output from the heat pump in addition to the compressor? (check appropriate box(es))

- a. None
- b. Integrated HWC with an immersion heater
- c. Internal or external supplementary heater(s)
- d. Circulation pump(s)
- e. Ground loop circulation pump (for GSHPs)
- f. Evaporator fan (for ASHPs)

2.11 How many electricity meters have been installed to measure the electricity required to run the components (as checked above) used by the heat pump unit to generate the metered heat?

- a. One electricity meter (EM1).
- b. Two electricity meters (EM1 & EM2).

⁵ Please refer to the alternative metering arrangements section in the Ofgem Domestic RHI Metering Guidance document

3. Technical Meter Specification Questions:

Please complete one of the following two tables depending upon whether the installation uses packaged or non-packaged meters.

3.1 Packaged heat meters, please provide the following:

Meter Label	Manufacturer	Model	Serial Number
<i>Example: HM1</i>	<i>Abcdef Ltd.</i>	<i>Multical 602</i>	<i>12345678/2017</i>
HM1			
HM2 (only answer if 2 meters)			
HM3 (only answer if 3 meters)			
HM4 (only answer if 4 meters)			

3.2 Non-packaged heat meters, please provide the following for each component:

Meter Label	Component	Manufacturer	Model	Serial Number
<i>Example: HM1</i>	<i>Flow meter</i>	<i>Abcdef Ltd.</i>	<i>L500</i>	<i>ABC1234</i>
	<i>Temperature sensor 1</i>			
	<i>Temperature sensor 2</i>			
	<i>Digital calculator</i>	<i>Abcdef Ltd.</i>	<i>Multical 602</i>	<i>123456</i>
HM1	Flow meter			
	Temperature sensor 1			
	Temperature sensor 2			
	Digital calculator			
HM2 (only answer if 2 meters)	Flow meter			
	Temperature sensor 1			
	Temperature sensor 2			
	Digital calculator			
HM3 (only answer if 3 meters)	Flow meter			
	Temperature sensor 1			
	Temperature sensor 2			
	Digital calculator			
HM4 (only answer if 4 meters)	Flow meter			
	Temperature sensor 1			
	Temperature sensor 2			
	Digital calculator			

3.3 Electricity meters:

Please provide the following:

Meter Label	Manufacturer	Model	Serial Number
<i>Example: EM1</i>	<i>TBC</i>	<i>L500</i>	<i>ABC1234</i>
EM1			
EM2 (only answer if 2 meters)			

3.4 Opening meter readings:

Please provide meter readings below for each of the meters used and the dates the readings were taken⁶

Meter Label	Date of Meter Readings (DD/MM/YYYY)	What units? (kWh/MWh)	Meter Reading
<i>Example: HM1</i>	<i>14/04/2014</i>	<i>kWh</i>	<i>0002</i>
HM1			
HM2 (only answer if 2 meters)			
HM3 (only answer if 3 meters)			
HM4 (only answer if 4 meters)			
EM1			
EM2 (only answer if 2 meters)			

⁶ If these meters readings are to be used as the baseline meter readings for payments to start, they can have been taken up to 2 weeks before the date that your customer makes their application. It is preferable to receive meter readings taken on the date of application by the customer as otherwise we will need to estimate the likely payments between the date of the meter readings and application for subtraction from the first quarterly payment.

3.5 Declarations

I declare that:

- All meters have been labelled appropriately (ie HM1, 2 etc).
- All heat meters installed are MID Class 3 compliant or better.
- All electricity meters are MID Class A compliant or better.
- All meters are properly calibrated.
- All meters are properly installed in accordance with manufacturer's instructions.
- The metering arrangement, to the best of my knowledge, has been installed in line with the MCS Domestic RHI Metering Guidance Document.
- I have advised the customer on the correct procedure to read the meters.
- I have advised the customer of their obligation for providing ongoing quarterly meter readings and the implications if they fail to do so.

Installer name: (Please print clearly)

Installer signature:

Date: (DD/MM/YYYY)