Domestic Renewable Heat Incentive (RHI)

Version 1.1 August 2017



Alternative Metering Arrangement Template - Heat Pump

For heat pump installations using an alternative metering arrangement for scheme payments

How this template works

This template works in tandem with the <u>Installer Metering Questions</u> (IMQs) for the Application Form document. It requests additional supporting information for certain metered installations that require an alternative meter arrangement. It will enable us to accredit them and work out a heat equation for payments.

If you are the MCS certified installer who installed the meters: you must complete this template, sign the declaration (at the end) and then either send electronically, or hand over as a hard copy to your customer, attached to the 'Installer Metering Questions' to assist in their application to the scheme.

If you are the customer: you must send this completed template by email to us at domesticrhi@ofgem.gov.uk alongside a copy of the 'Installer Metering Questions' to assist us in generating a formula to allow us to make payments to you.

Terminology used throughout

SH: Space Heating; **DHW:** Domestic Hot Water; and **HWC:** Hot Water Cylinder **ASHP:** Air Source Heat Pump

1. MCS Certified Installer Contact Details

1.1	Name of Installer:
1.2	MCS Installer Certificate Number:
1.3	Heat Pump Installation Address:

2. The scenario requiring an alternative metering arrangement¹

•	the MCS certified installer) will have been requested to complete this ase check appropriate box(es))
	One or more of the heat meters installed to measure the heat output from the Domestic RHI heat pump installation include heat output supplied by an additional plant ² located on the heating system; and/or

b. A heat meter has been installed after a standalone HWC (ie not an integrated HWC³) and the HWC uses an additional supplementary heat source⁴.

c. The heat pump is capable of cooling and the customer does not want to be under compensated⁵ if they are using it for cooling during the summer months.



¹ It may be necessary in some rare instances alternative metering arrangements are required for 2 scenarios. If so please complete two of these alternative metering arrangement templates.

² Additional plant could include a fossil fuel plant or an ineligible renewable energy installation etc.

³ If integrated this should have been included in the metered electricity used to run the heat pump compressor either included in the same meter reading or via a separate electricity meter.

⁴ An additional suppliementary heat source used in a HWC might include an electric immersion heater; or if the HWC is a twin coil cylinder with a secondary heating coil fed from a fossil fuel heat source etc.

⁵ This will result from the electricity being <u>used when in cooling mode</u> that will be being metered using the electricity meter installed to record the electricity used to run the compressor. This figure will be subtracted from the heat output figure that the customer is being paid on.

Depending upon the selected scenario, please can you provide the following supporting information:

A. A Description of the Metering Arrangement

Please provide a written description detailing⁶:

one of either:

- a.(i) (if you selected a. or b.) Why the heat output from the Domestic RHI heat pump installation cannot be metered so that it does not include any heat contributed by an additional plant; or
- a.(ii) (if you selected c.) Why you feel that the customer will be under compensated if they use the heat pump for cooling (this should take account of any additional costs attributed if installing an additional meter to account for the cooling load).

and both of:

- How your metering arrangement will allow the heat output from the Domestic RHI heat pump installation alone to be determined⁷.
- Any further relevant information. C.



⁶ Refer to information about 'Alternative Metering Arrangements' in the Domestic RHI Essential Guide to Metering.
⁷ Using either one of the suggested/ preferred 'Alternative Metering Arrangements' options as detailed in the Domestic RHI Essential Guide to Metering.

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C.	Additional Heat Source(s) (only answer if you chose one of scenarios a. or b. in que	
	Please provide the following information relating to the additional heat source being u on the heating system.	seu
	a. Technology type(s):	
	b. If an ASHP , does it use heat from the home (eg a buffer tank) to defrost	
	the evaporator (ie there is no additional heat source that wasn't generated	
	by the ASHP contributing to the defrost mechanism)? Yes No	
	c. Capacity (kWth):	7
	c. Supucity (KWH).	
	d. Fuel type ⁹ of additional heat source (eg gas, electricity, oil, LPG etc):	

Refer to information about 'Simplified Schematics' in the Domestic RHI Essential Guide to Metering.
9 A standard gross calorific value will be selected from DECC's published calorific values in DUKES (Digest of UK Energy Statistics), Annex A1. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/225067/DUKES_2013_published_version.pdf For LPG, we will use Propane/Butane (LPG); for oil, we will use burning oil, which is the large majority of all oil used for domestic heating; for natural gas, we will use natural gas consumed. The calculation to work out the equivalent heat output based on the fuel input would be carried out using an assumed 100% boiler efficiency figure (ie 100% of the fuel input being converted to heat output).

D. Electricity, Gas and Oil Meters

Please provide the following information where relevant if you have used one or more electricity, gas or oil meters (in addition to the heat meters listed in the IMQs document).

Table 1: Please provide the following specific details for any relevant meter.

MeterType	Meter Label ¹⁰	Manufacturer	Model	Serial Number
Eg: Electricity, Gas, Oil etc	EM1, GM1, OM1 etc			

Table 2: Please provide baseline meter readings for each of the meters uses.

Meter Label	Date of Meter Readings (DD/MM/YYYY)	Units	Meter Reading
Example: HM1	14/05/2014	l/s	0087

3. Declarations

I declare that:

- All meters have been labelled appropriately.
- Any electricity meters installed are MID Class A compliant or better.
- Any gas meters installed are MID Class 1.5 compliant or better.
- Any oil meters installed are MID Class 1 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 Domestic RHI eligibility requirements.
- I have advised the customer on the correct procedure to read the meters.
- I have advised the customer of their obligation for providing meter readings and implications if they fail to do so.

Installer name: (Please print clearly)	
Installer signature:	
Date: (DD/MM/YYYY)	

¹⁰ Meter labels should take the following format: 'EM1' for an electricity meter, 'GM1' for a gas meter and 'OM1' for an oil meter.