This document should be used by participants who have applied for accreditation BEFORE 24 September 2013

Renewable Heat Incentive (RHI)

Meter Readings

This document contains:

- **A conversion table to help you convert MWhth (megawatt hours of heat) to kWhth (kilowatt hours of heat).**
- **A step-by-step example table of how to calculate the heat data you submit to us for a complex system**

Conversion Table for Taking Meter Readings

All meter readings must be provided to us in kWhth (kilowatt hours of heat)but some heat meters are in MWhth (Megawatt hours of heat).

Use this table to help you convert MWhth (megawatt hours) to kWhth (kilowatt hours).

Your meter reads	Your meter reads in	Conversion to what we require (kWhth)	Reading in kWhth (no decimals)
1,000	kWhth	No conversion	1,000
1,000.1	kWhth	No conversion	1,000
10	MWhth	Multiply by 1,000	10,000
10.00	MWhth	Multiply by 1,000	10,000
100.10	MWhth	Multiply by 1,000	100,100
1,001	MWhth	Multiply by 1,000	1,001,000
1,001.50	MWhth	Multiply by 1,000	1,001,500

How to Calculate the Heat Data you Submit to us for a Complex System

This example in the table below shows a heating system consisting of a biomass boiler (RHI eligible) and an oil boiler (ineligible for the RHI):

- The biomass boiler supplies heat to two buildings for which there is a heat meter each.
- The effective date of accreditation was 18th July 2012 with opening meter readings on this date.
- As meter readings for this installation must be made quarterly, the next meter readings date is 18th October 2012.
- Periodic data must be submitted based on the meter readings for the three month period between 18th July and 18th October 2012.

Look at the table below and follow the steps:

- Start by taking the meter readings shown as Steps 1, 2 and 3.
- Next make the calculations to get the meter readings for the latest three month period only. You do this by subtracting the previous meter reading from the new one as shown in Step 4.
- You now have the three heat output figures you need to submit as periodic data on the RHI Register for the most recent quarter as shown in Step 5.

Although there are some exceptions, in most instances the principle is the same no matter how many meters you have for eligible heat use buildings.

THE METER READINGS YOU TAKE	WHAT IS BEING MEASURED	OPENING METER READING ON 18/07/12	METER READING 3 MONTHS LATER ON 18/10/12	STEP 4 MAKE THE CALCULATIONS TO GET THE HEAT DATA FOR LAST THREE MONTHS ONLY (Subtract previous reading from new reading)	STEP 5 THE PERIODIC DATA YOU WOULD ENTER ON THE RHI REGISTER FOR 3 MONTH PERIOD ENDING 18/10/12
STEP 1 Take the reading for the heat meter that measures the heat generated by your RHI installation. e.g. a biomass boiler	The heat generated by the RHI installation.	50,000	100,000	100,000 – 50,000 = 50,000	50,000
STEP2 Take the reading for the heat meter that measures all the heat generated on the system. e.g. total for a biomass boiler (RHI installation) and oil boiler.	The heat generated by all plants supplying heat to the total heating system of which RHI installation is a part.	75,000	150,000	150,000 – 75,000 = 75,000	75,000
STEP 3 Take the individual meter readings for each heat meter in an eligible use building. This example shows 2 eligible use buildings.	Heat used in eligible building 1	14,000	49,000	49,000 – 14,000 = 35,000	
	Heat used in eligible building 2	2,500	9,500	9,500 – 2,500 = 7,000	
	The total of the heat used for eligible purposes in the system			35,000 + 7,000 = 42,000	42,000

How payments are calculated

Once you have entered the meter readings and the figures for the three heat data figures that are shown in Step 5 in the example table, the IT system on the RHI Register will calculate and display the 'Eligible Heat Output' (EHO) figure in kWhth. This is the amount that will be multiplied by your tariff to determine the payment amount.

The formula to determine how many kWh have been produced is:

Eligible heat output =
Heat used for eligible purposes * Heat generated by RHI Installation
Total heat generated on system

Using the figures in the table, the calculation is:

42,000 * (50,000/75,000) = 28,000 kWh.

This shows that the eligible heat output is 28,000 kWh for the three month period ending 18th October 2012. This is the amount that will be multiplied by the appropriate tariff to determine the payment for that quarter.