



Metering an Monitoring Service Package (MMSP) Checklist for biomass pellet boiler 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 the biomass pellet boiler in the MMSP agreement

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 biomass pellet boiler in the MMSP agreement.	
2	connected to the same heat distribution system select option 1 or option 2	Option 1: eligible heat meters (<i>Req 9 below</i>) must be installed to record the heat generated by any other plant feeding into the same heating system as the biomass pellet boiler in the MMSP agreement.	
		Option 2: if Option 1 is not feasible an eligible electricity/gas/oil meter (<i>Reqs 10, 11 or 12 below</i>) 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 record the temperature of the liquid leaving & returning to the biomass pellet boiler in the MMSP agreement.	
		(Note : these temperature sensors should form part of the eligible heat meters measuring the heat generated by the MMSP boiler; or separate ones that are installed at the same location as those used by that heat meter)	

No.	All/or only answer if	Requirement	Yes, No, or N/A
4	All	One or more eligible electricity meters (Req 10 below) must be installed to record the electricity supplied to any component of the biomass pellet boiler in the MMSP agreement that is used to generate the heat output.	
5	The biomass pellet boiler also generates heat for 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 biomass pellet boiler in the MMSP agreement provides heat to.	
7	All	One or more temperature sensors must be installed to measure the external air temperature.	
8	All	Measuring equipment must be installed to enable the efficiency of the plant to be determined. Please circle. a. Pellet counter; b. Flue gas analysis; c. Other – please provide details:	
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 this table.	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 this table.	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 the biomass pellet boiler in the MMSP agreement

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 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, if not, 10Wh or less 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 biomass pellet boiler 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). 	
4	All	 All eligible electricity meters must be accurate enough to detect energy of: 1Wh or less; or 7.5% of the smallest amount of electricity that the biomass pellet boiler in the MMSP agreement is designed to consume in Wh in 2 minutes. 	

No.	All/or only answer if	Requirement	Yes, No, or N/A
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.	
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.	

Table 3: Requirements regarding the data presentation for the biomass pellet boiler in the MMSP agreement

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 qualified to install MMSP; and your customer as • the Domestic RHI 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 in	staller qualified to install MMSP must be able to	
3	All	• view all of the information/data as detailed in Table 1 above over the last 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 a "data completeness" percentage¹ for each three month period over the last 12 month period or if the period is shorter than 12 months; for any 3 months period for which the data has been recorded. 	

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.

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 energy generated by the biomass pellet boiler	
		•	the energy (including electricity) consumed by the biomass pellet boiler to generate the heat output	
		•	the internal room temperature in any/all rooms where the temperature is recorded	
		•	the external air temperature	
		•	the efficiency of the biomass pellet boiler 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 biomass pellet boiler which contributed to working out the efficiency	
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

<u>Package for the Domestic RHI</u> <u>Factsheet: Tariffs and Payments</u> 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)

<u>Domestic RHI Payment Calculator</u>

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 nation

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.