**Non-domestic Renewable Heat Incentive (RHI) Fuel Measurement and Sampling (FMS) Questionnaire (v2.1)**

The FMS process seeks to agree suitable procedures to determine the renewable proportion of fuels eligible for RHI payments, as well as to fulfil the sustainability reporting requirements.

* **Installations <1MWth sourcing 100% of their fuel from the Biomass Suppliers List (BSL) do not need to complete this document.**
* **All self-reporters must complete sections A-C.** *[You can find out what a ‘self-reporter’ is in the Sustainability Self-Reporting Guidance]*
* Biogas self-reporters must complete section D as well.
* Any installation ≥1MWth using fossil fuel for ancillary purposes must complete section E ("Ancillary fuels").
* Any installation ≥1MWth using non-biogenic fuel needs to complete section F ("Assessing your Qualifying Percentage").

Before completing this document, ensure you have read the following guidance documents:

* [Fuel Measurement and Sampling (FMS) Guidance](http://www.ofgem.gov.uk/ndrhi-guidance)
* [Sustainability Self-Reporting Guidance](http://www.ofgem.gov.uk/ndrhi-guidance)

The submission and agreement of this document forms part of the RHI accreditation process for installations required to undertake FMS procedures. Accreditation will not be granted unless FMS procedures are agreed.

**Participants accredited before 5 October 2015 should submit their completed questionnaire as soon as possible.**

|  |  |
| --- | --- |
| Sustainability Reporting Requirements | Participants who ‘self-report’ are required to report the sustainability information of fuels on a consignment basis which are used from 5 October 2015 onwards. To meet this requirement, you will need to:   * Classify your fuels into ‘consignments’; and * Implement a method to track the sustainability information of each consignment where consignments are mixed. |
| Questionnaire Completion | When completing this questionnaire, clearly outline how you will undertake your procedures. The size of the response text box indicates the length of answer expected. There is extra space for your answers at the end of the questionnaire if you need it.  When referencing any industry standards include the name, issuing body and reference number of the standard. |
| QuestionnaireSubmission | Your questionnaire will need to be submitted alongside your application in the FMS Submission section of the RHI Register as a PDF document.  You may also submit a new or amended questionnaire during your participation on the scheme by going to the FMS Submission section in the RHI Register. If you have already uploaded an FMS questionnaire there, you can simply upload your new one over the existing one.  Participants accredited before 5 October 2015should submit their completed questionnaire as soon as possible. |

|  |
| --- |
| **Declaration** |
| I can confirm that all the information provided in this document is correct, to the best of my knowledge and belief.  I am aware that I need to notify Ofgem where any of the procedures detailed in this document and/or the fuels change.  Signed by authorised signatory: |

|  |
| --- |
| **Section A:** Installation information   1. RHI Number      1. Name of installation *[answer to HA100 of the RHI application]*      1. Technology      1. Capacity of installation (kWth) |

|  |
| --- |
| **Section B:** Consignments  This section helps determine whether the fuels or feedstocks used at your installation are single consignments or a mixture of consignments. Please refer to Chapter 7 of the [Sustainability Self-Reporting Guidance](http://www.ofgem.gov.uk/ndrhi-guidance) before completing this section. |

1. Are you sourcing 100% of your fuel or feedstock from the Biomass Suppliers List (BSL)?

yes *[🡪 go to Section E]*  no *[🡪 answer question B2]*

1. Please list your consignments in the table below. *[refer to Chapter 7 of the* [*Sustainability Self-Reporting Guidance*](http://www.ofgem.gov.uk/ndrhi-guidance)*]*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name and source | Country of origin | Fuel classification | Feedstock type | Biomass form (solid biomass only) | Sourced from BSL?\* |
| e.g Miscanthus, own farm | e.g. UK | e.g. product | e.g. energy crop (grass) | e.g. bales | e.g. no |
| e.g. Virgin woodchip | e.g. UK | e.g. forestry residue | e.g. wood | e.g.chips | e.g. yes |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

*\*Biomass Suppliers List*

*[If you require more space please use an additional sheet]*

1. Have you classified any of your consignments as wastes or residues?

yes *[🡪 answer B4]*  no *[🡪 go to B5]*

1. Please provide further details of the consignment(s) and the reasoning behind your classification as a ‘residue’ and/ or ‘waste’.

*[If your consignments are already identified in Appendix 2 of the* [*Sustainability Self-Reporting Guidance*](http://www.ofgem.gov.uk/ndrhi-guidance) *then you do not need to provide further details.]*



1. If wood pellets are used at the installation do they contain binders?

yes *[🡪 answer B6]*  no *[🡪 go to section C]*  n/a *[🡪 go to section C]*

1. Is the binder ≤2% by weight of the wood pellets used at the installation?

yes  no

We require evidence to demonstrate that the binder is ≤2% by weight of the wood pellets. If applicable, tick the box to confirm that you have provided this evidence.

*[If binders contribute >2% of the wood pellets’ weight then the sustainability criteria of the binder will need to be reported on a consignment basis]*

|  |
| --- |
| **Section C:** Assessing consignments  This section will allow us to assess how you will quantify the consignments of feedstock/ fuel used. |

1. Are any of your consignments mixed?

yes *[🡪 go to section C2]*  no *[🡪 go to section C1]*  one consignment only *[🡪 go to section C1]*

|  |
| --- |
| **Section C1:** Unmixed consignments |

1. How will the quantity of any consignment(s) used in a quarter be known or measured?



1. How accurate is the equipment used for measuring quantity (as a percentage or using units e.g. ± X% or X kg)? Also outline steps taken to ensure accuracy is maintained, such as calibration undertaken on a periodic basis (including relevant standards this would be conducted to).

*[Your response to this question should reflect the size and complexity of your installation]*



1. What evidence will you retain to substantiate the figure for each consignment used per quarter?



|  |
| --- |
| **Section C2:** Mixed consignments  For mixed consignments, we recommend using a mass balance system to determine the proportion of consignments used at the installation. Please refer to Chapter 7 of the [Sustainability Self-Reporting Guidance](http://www.ofgem.gov.uk/ndrhi-guidance) before completing this section. |

1. How will the quantity of any consignments used in a quarter be known or measured?



1. Please state which of your consignments are mixed and whether or not the mixing takes place at your installation or prior to arriving at your installation.



1. Explain how you will use a mass-balance system, including:

* whether you are using a proportionate or non-proportionate mass balance system

*[If any of your consignments have fossil fuel contamination a proportional mass balance approach must be used]*

* where in the supply chain and/or installation the method will be used
* to which fuel/ feedstock consignments it will apply
* how you will use the system to determine the quantity of each fuel/ feedstock consignment used in each quarter



1. How accurate is the equipment used for measuring quantity (as a percentage or using units e.g. ± X% or X kg)? Also outline steps taken to ensure accuracy is maintained, such as calibration undertaken on a periodic basis (including relevant standards this would be conducted to).

*[your response to this question should reflect the size and complexity of your installation]*



1. What evidence will you retain to substantiate the figure for each consignment used per quarter?



|  |
| --- |
| **Section D:** Determining gas yield (Biogas installations only) |

1. How will you quantify the amount of biogas produced from each consignment of feedstock?

If you are planning to use Ofgem’s Biogas and Biomethane Apportioning Tool please ensure you include the following information:

* whether or not you are using the data provided in the tool;
* how you have derived the data if you are not using that provided in the tool.

*[Please note that sites using only one consignment each quarter do not need to answer this question.]*



|  |
| --- |
| **Section E:** Ancillary fuel  You only need to fill out this section if your installation is ≥1MWth and you are using ancillary fuel. |

1. What type of fossil fuel is used at the installation for any permitted ancillary purpose?



1. What is the purpose of fossil fuel use?

|  |  |
| --- | --- |
|  | The heating of the accredited RHI installation's combustion system to its normal operating temperature or the maintenance of that temperature |
|  | Cleansing other fuels from the accredited RHI installation's combustion system prior to using fossil fuel to heat the combustion system to its normal temperature |
|  | The ignition of fuels of low or variable calorific value |
|  | Emission control |
|  | In relation to accredited RHI installations which are CHP systems, standby generation or the testing of standby generation capacity |

1. Does ancillary fossil fuel result in heat generation?

yes *[🡪 answer questions E4 to E8]*  no *[🡪 go to section F]*

1. How will the quantity of any fossil fuel used in a quarter be known or measured?



1. If any fuel is carried over from one quarter to the next, how will this quantity be accounted for?



1. How accurate is the equipment used for measuring quantity (as a percentage or using units e.g. ± X% or X kg)? Also outline steps taken to ensure accuracy is maintained, such as calibration undertaken on a periodic basis (including relevant standards this would be conducted to).



1. How will the gross calorific value (GCV) of any fossil fuel used in a quarter be known or measured? Include in your answer how you will demonstrate this figure to us each quarter.



1. What quarterly evidence will you send Ofgem to substantiate the figure for each fuel submitted?



|  |
| --- |
| **Section F:** Assessing your Qualifying Percentage  Only complete this section if your installation is ≥1MWth and you are using any non-biomass fuels. |

1. State the type of waste used at the installation or the type of contamination of your solid biomass – whichever is relevant.



1. How will the quantity of waste or contaminated solid biomass used in each quarter be known or measured? Include in your answer details of the location at which quantity is measured, any equipment used and measures taken to ensure the result is accurate.



1. If any waste or contaminated solid biomass is carried over from one quarter to the next, how will this quantity be accounted for?



1. How will you measure the quantity of any biomass or biogas combusted that does not result in the generation of heat, if any, (e.g. that is used for start-up), so that you are able to deduct this from the figure submitted to Ofgem? If this is not applicable, state why this is the case.



1. How accurate is the equipment used for measuring quantity (as a percentage or using units e.g. ± X% or X kg)? Also outline steps taken to ensure accuracy is maintained, such as calibration undertaken on a periodic basis (including relevant standards this would be conducted to).



1. How will you extract a representative sample of the waste or contaminated solid biomass used for gross calorific value (GCV) analysis? State:

* the location from which the sample is taken and make reference to any apparatus used;
* the size of the sample extracted (e.g. in kg); and
* if sample extraction is in line with any recognised standards.



1. If composites are formed from the original samples, explain how they are formed. Outline the number of composites produced per quarter and the size of any composites samples produced (e.g. in kg). In addition, state if the production of composites is in line with any recognised standards.



1. If more than one sample/composite of the same fuel type is analysed per quarter, how will the final figure be calculated from multiple sample results (e.g. average taken)?



1. How will the proportion of solid biomass or fossil-derived energy content used in each quarter be known or measured? Include in your answer:

* how will you produce a sample
* any laboratory testing conducted
* Make reference to relevant standards and/or state if the fossil fuel component analysis will be undertaken on the sample produced for GCV analysis described in the previous answers.



1. What quarterly evidence will you send Ofgem to substantiate the quantity and GCV for each fuel submitted?



|  |
| --- |
| **Additional information**  Please use the space below if you need to add additional information to any of the questions in this document. |



|  |
| --- |
| **Additional information**  Please use the space below if you need to add additional information to any of the questions in this document. |

