SSRH - Heat Meters Tagging

1. Introduction

SSRH Scheme offers ongoing operational support (a tariff) based on useable heat output in renewable heating systems in new installations or installations that currently use a fossil fuel heating system and convert to using biomass heating systems or anaerobic digestion heating systems. These technologies are supported through a multi-annual payment (for a period of 15 years), on the basis of prescribed tariffs. Each tariff sets the amount of financial support that the scheme participant receives in respect of each unit of heat energy used for an eligible purpose. The amount of financial support each participant can receive in a year is also capped.

To process payments, participants are required to install heat meters[1] and submit readings on a quarterly basis, confirming the amount of renewable heat used for eligible purposes. Heat Meters are required to be permanent, fixed and tamper-proof, to prevent any reading alterations. The emerging method of ensuring meters are tamperproof is by tagging using TwistLock Tags. This document sets the parameters for their use.

2. TwistLock Tags

So far, the TwistLock tag has been installed on SSRH sites.

It is an easily applied seal for all types of heat meters. It has a one directional rotatable locking mechanism to prevent extraction of the sealing wire from its body, making it a single use tag. The rotating handle can be snapped off after application to prevent any manipulation. The transparent polycarbonate body reveals any sign of tampering.

The twistLock is formed of a 2-piece plastic and a wire twist seal. Sealing wires can be supplied with a pack of 100mm or bundles of 250mm or 300mm.

The text on the plastic piece has 1 line of text / logo and a 6 digit number, forming a unique identification reference for each tag. All seals are printed with a factory logo (the logo can be customized if requested) and are individually and sequentially numbered. The high number of possible permutations makes it almost impossible to duplicate a unique identification.

In view of the above, SEAI is content to rely on Applicants (or their Agents) fitting their own tags. Should there be any specialist installations where an alternative tag design is required this must be agreed with SEAI prior to entry to the payment cycle.

1: EU Measuring Instruments Directive 2014/32/EU (MID) S.I. No 2 of 2018

3. Tag locations

Heat Meter tags will be fitted as per the table below:

Location	Quantities	Purpose
Calculator	One in each hole on the outer edges of the calculator, typically 2 per calculator	Prevent the removal of the calculator cover to avoid any reading alterations.
Temperature probe: Flow	1 tag	Avoid the flow probe being unscrewed or removed from the pipework. Typically, the wire passing through the tag will pass through a small pre-manufactured hole in the probe and a small pre-manufactured hole in the connecting pipework.
Temperature probe: Return	1 tag	Avoid the return probe being unscrewed or removed from pipework. Typically, the wire passing through the tag will pass through a small pre-manufactured hole in the probe and a small pre-manufactured hole in the connecting pipework.
Flow Meter	None	The flow meter does not appear to be a security risk.

4. Evidence of tamperproof tagging

At completion, Applicants must provide the following evidence:

Schedule of heat meters, meter readings and associated tag unique identification, example below:

SSRH Heat Meter Schedule					
Meter Label	HM1	HM2	HM3	HMGas 1	HMGAS 2
Location	Warehouse	Tunnel 1	Tunnel 2	Tunnel 1	Tunnel 2
Most Recent calibration	15/02/2020	26/02/2020	26/02/2020	11/03/2020	25/02/2020
Next scheduled calibration	N/A	N/A	N/A	N/A	N/A
Meter Type	Vol Flow	Vol Flow	Vol Flow	Vol Flow	Vol Flow
Make					
Model	Multical	Multical	Multical	Multical	Multical
Serial Number	52690620	52690621	52690658	52690671	52690688
Opening Reading (MWh)	0	3,3	2	1	1
Date of Reading	10/04/2021	10/04/2021	10/04/2021	10/04/2021	10/04/2021
Security Seal S/N					
Calculator	MFT013123	MFT013456	MFT013789	MFT013000	MFT013001
	MFT013013	MFT013014	MFT013015	MFT013016	MFT013017
Flow	MFT013002	MFT013003	MFT013004	MFT013005	MFT013006
Return	MFT013007	MFT013008	MFT013009	MFT013011	MFT013012

Where COVID restrictions are in place, photos should be provided as follows:

- Photo of each tag, showing the unique ID
- Photo in elevation showing heat meter location and tag position
- Photo showing how the tag is securing the calculator cover or probes to the pipework

See below examples:

1) Photos showing unique ID

2) Photo in elevation showing heat meter location and tag position.

3) Photo showing the tag is securing the probes / calculator

The inspector will validate unique ID`s at site inspection.

The Auditor/ Inspector will record each unique tag ID on a tab on the Desktop Audit/ Inspection Report.

Meter Data	Biomass Meters (Mwh)			Fossil Fuel Meter (Kwh)	
	Heat Meter 1	Heat Meter 2	Heat Meter 3	Heat Meter 1	Heat Meter 2
Meter Label	HM1	HM2	HM3	HMGas1	HMGas2
Most recent calibration	21/06/2019	20/07/2020	21/06/2019	21/06/2019	28/08/2019
Next scheduled calibration					
Meter Type (Ultrasonic, Singlejet, Multijet)	Ultrasonic	Ultrasonic	Ultrasonic	Ultrasonic	Ultrasonic
Make					
Model	256	256	256	256	256
Serial Number	50389377	50599878	50389379	50389380	50451681
Completion Date Reading	3,2	4,3	2	1	0
Completion Date	29/10/2020	29/10/2020	29/10/2020	29/10/2020	29/10/2020
Inspection Date Reading					
Inspection Date					
Are meter readings at completion consistance with evidence from inspection / documentation checks? If no, confirm reason					
Meter/sensors sealed on site by inspector	Yes/ No	Yes/ No	Yes/ No	Yes/ No	Yes/ No
Security Seal Ref Calculator					
Security Seal Ref Calculator					
Security Seal Ref Flow					
Security Seal Ref Return					
Recommended Zero Meter Reading					
Recommended Commencement Date					
Zero Meter Reading - IU					
Commencement Date - IU					

5. Where a heat meter requires reparation /replacement

SEAI must be notified in writing by the Applicant or by the representative in advance of any heat meter or heat meter tag replacement or alteration.

Such notifications must be sent via email to SSRH@seai.ie, indicating the reasons for the heat meter or tag replacement or alteration, when the heat meter reading will be stopped and when started again.

A follow-up email will be sent by the Applicant or the representative, once the new heat meter/new tag has been installed, with photographic evidence of last heat meter reading and new heat meter reading clearly showing the heat meter location and tag ID in the photos.

SSRH team will maintain log recording any such changes and keep the IU informed so audits and inspections capture the most up to date information.

6. Consequences of damaged/ altered tags:

Where tags appear to have been broken / removed or altered without SEAI having been notified, SEAI may seek clarification from the Applicant as to the reason.

In so doing, SEAI would reserve the right to adjust or withhold payments until the matter had been resolved to its satisfaction.