



**DRAFT Non- Domestic Renewable Heat Incentive NI  
Audit Strategy 2016/17 – updated (highlights in yellow)  
for discussion in line with PwC recommendations**

This paper sets out the means by which  
Ofgem will fulfil its responsibilities to audit NI  
NDRHI installations to verify compliance with  
the scheme requirements

|          |                  |
|----------|------------------|
| Author   | Shaneigh Turner  |
| Audience |                  |
| Date     | 09 December 2016 |

**Contents**

|     |                                |   |
|-----|--------------------------------|---|
| 1.  | Version History .....          | 1 |
| 2.  | Introduction .....             | 2 |
| 3.  | Audit Objectives.....          | 3 |
| 4.  | Audit Types.....               | 3 |
| 5.  | Sample size .....              | 4 |
| 6.  | Site Selection .....           | 5 |
| 7.  | Audit findings .....           | 5 |
| 8.  | Reporting and Governance ..... | 6 |
| 9.  | Fraud .....                    | 7 |
| 10. | Required Resources.....        | 7 |
| 11. | Appendix .....                 | 8 |

**1. Version History**

| Version | Date                          | Author          | Comments   |
|---------|-------------------------------|-----------------|--|
| 1       | 1 September 2011              | Ade Obaye       |  |
| 2       | 16 January 2014               | Rob Reid        |  |
| 3       | 28 January 2014               | Rob Reid        | Incorporates Ade Obaye comments  |
| 4       | 20 February 2014              | Rob Reid        | Incorporates Jacqueline Balian comments  |
| 5       | 4 March 2015                  | Amy Powell-Tuck | Annual review which also incorporates Grant Thornton recommendations   |
| 6       | 13 July 2016                  | Shaneigh Turner | Spilt of GB and NI audit strategy for clarity. This version will cover the strategy specific to Northern Ireland sites only. |
| 7       | 9 <sup>th</sup> December 2016 | Shaneigh Turner | Review of audit strategy, including considerations for unannounced visits  |

DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/17 – updated (highlights in yellow) for discussion in line with PwC recommendations.

**Deleted:** DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/

## 2. Introduction

2.1. The Renewable Heat Incentive (RHI) is a Government environmental programme that provides financial incentives to increase the uptake of renewable heat. For the non-domestic sector it provides a subsidy, payable for twenty years to eligible, non-domestic renewable heat generators and producers of biomethane for injection.

2.2. Ofgem are responsible for implementing and administering the scheme. Our duties and functions lie primarily in the administrative and compliance elements of the scheme. These include:

- Receiving and assessing applications for accreditation
- Receiving and reviewing periodic generation data for accredited non-domestic installations
- Receiving and assessing proposed fuel measurement and sampling procedures for biomass fuels
- Receiving and assessing fuel measurement and sampling data for biomass generators
- Calculating periodic support payments to accredited installations and making payments
- Undertaking enforcement action such as withholding payments, reducing payments or revoking accreditation
- Undertaking fraud prevention and detection activities including site and desk audits, ID verification checks and reviews of information provided

2.3. With a scheme of this size, it is important that measures are put in place to protect the available funds from fraud and ensure that payments are only made to those that are entitled. An on-going cycle of RHI installation audits is a key tool in ensuring this.

2.4. Inspections of Northern Ireland NDRHI installations are permissible under the RHI Regulations (Northern Ireland) 2012 (as amended).

2.5. Part 9 – Inspection, Regulation 49 states that:

The Department or its authorised agent may request entry at any reasonable hour to inspect an accredited RHI installation and its associated infrastructure to undertake any one or more of the following—

- (a) verify that the participant is complying with all applicable ongoing obligations;
- (b) verify meter readings;
- (c) take samples and remove them from the premises for analysis;
- (d) take photographs, measurements or video or audio recordings;
- (e) ensure that there is no other contravention of these Regulations.

2.6. “We have interpreted “reasonable hour” to mean that site inspections will generally be conducted between 9am – 5pm, Monday to Friday. In order to simplify access and ensure availability of key personnel, data and documentation, we will normally give prior notice of inspections (10 working days for post-accreditation audits, 5 working days for pre-accreditation audits). However, there may be occasions where we believe it is appropriate to conduct unannounced site inspections and we reserve the right to do so.

2.7. This paper outlines the Audit Strategy for 2016/17.

DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/17 – updated (highlights in yellow) for discussion in line with PWC recommendations.

**Deleted:** DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/

### 3. Audit Objectives

3.1. The objectives for the NDRHI Audit Programme are:

- Monitor participant compliance against RHI eligibility criteria and obligations
- Detect instances of suspected abuse, misuse, fraud or non-compliance
- Act as a deterrent to those that may be tempted to break the rules of the scheme
- Use information gained (e.g. quality of system design) to act on and improve scheme understanding and capture lessons learnt
- Complete site audits on installations selected taking a risk based approach
- Consider additional sampling of Statistically selected sites using the Grant Thornton Monetary Unit Sampling calculator

3.2. In order to satisfy these objectives, audits will be completed on a sample of targeted installations to ascertain whether:

- Information provided during accreditation or registration is correct
- An installation has been installed as declared on the application form and schematic
- An installation exists / is eligible to be accredited or registered
- Eligible heat generation claims are plausible given the capacity of an installation and the amount of fuel being used
- Accurate and reliable fuel measurement data is being submitted to Ofgem
- Meter readings/output volumes notified to Ofgem are appropriate and are such that correct support payments are being made quarterly
- Meter numbers, positions, installation date, calibration date are correct
- Temperature sensors are appropriately placed and have not been tampered with
- The installation does not have a heat rejection facility, or if it does, that it is appropriately metered (to detect where a participant may be purposefully wasting heat)
- Any calculations of ineligible heat are plausible and failure to install meters is reasonable
- Heat losses are being measured appropriately
- Systems have been suitably installed, commissioned and maintained
- On-going obligations are being followed

3.3. All installations are subject to the potential for inspection during accreditation, registration and throughout the duration of eligibility for NDRHI payments.

### 4. Audit Types

4.1. The main emphasis of the audit programme is around site audits. This is because most non-compliance can only be detected during a site visit.

*Post-accreditation site audits:*

4.2. Post-accreditation audits are carried out (by an external contractor) on installations that have already been accredited on to the scheme.

*Pre-accreditation site audits:*

DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/17 – updated (highlights in yellow) for discussion in line with PwC recommendations.

**Deleted:** DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/17

4.3. Pre-accreditation audits are carried out (by an external contractor) on installations that have not yet been accredited on to the scheme. These may be recommended, for example, on the basis of size or complexity of an installation or as a result of concerns raised by accreditation reviewers who require assurance that an installation is eligible for the RHI. Recommendations are considered by the audit team and if selected are treated as a matter of priority.

## 5. Sample size

5.1. Ofgem, as NDRHI scheme administrators, have a responsibility to optimise risk mitigation within an acceptable cost.

5.2. Prior to the scheme audit programme commencing, Deloitte were commissioned to provide a view on appropriate sample sizes<sup>1</sup>. Their method was subsequently adapted by Ofgem as it did not take into account audit findings, in particular non-compliances identified to date and their material impact on payments.

5.3. In 2014/15 and 2015/16 sample sizes were based on 3% of the GB auditing sample size as it was agreed that this was appropriate given the size of the NI scheme. This was agreed by DETI and reflected in the Budget Strategy.

5.4. In Q3/4 of 2015/16 financial year, an increased number of audits was requested to support allegations of fraud and mis-use. As a result the decision was made to increase the initial sample size of NI audits to 25 to support concerns. These have been completed.

5.5. In addition, following further review an additional 31 audits may be commissioned before the end of the financial year (31<sup>st</sup> March 2017).

### *Statistical sampling*

5.6. As mentioned above, we are proposing to invite Grant Thornton to review our NI audit approach going forward. As part of the GB audit programme we completed a range of statistically selected audits using a Monetary Unit Sampling method. The review will look into whether this approach can be applied to the NI scheme and provide recommendations on sample sizes.

### *Targeted sampling*

5.7. Whilst the results of targeted audits cannot be extrapolated across the whole population they do provide value for money by focussing on higher risk areas or emerging trends.

5.8. The initial 25 targeted audits planned for 2016/17 have been completed. Current discussions continue as to whether the total number of audits will increase to 57 by the end of the financial year.

<sup>1</sup> "2013/09: Review of the revised RHI Non Domestic sampling methodology" - Deloitte

DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/17 – updated (highlights in yellow) for discussion in line with PWC recommendations.

**Deleted:** DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/17

**6. Site Selection**

*Operational considerations*

6.1. The approach for the 2016/17 audit programme was based on targeting sites for audit via an ad-hoc risk based referral process. The first round of selection criteria was agreed and audits selected in May 2016. This consisted of 26 audits. Subsequently, a further 6 audits have been completed during the last week of November/first week of December 2016.

6.2. Further considerations are being made regarding unannounced visits for the remaining 25 audits. Discussions have been held with audit contractors and a proposal has been received providing a summary of additional costs and conditions to unannounced visits.

*Selection criteria*

6.3. The selection criteria (for targeted audits) will focus on key risk areas, as per previous years, with risk categories reviewed and approved by senior stakeholders prior to the audit programme commencing.

6.4. In order to make best use of resources and be cost effective, the targeted audit sample will typically consist of installations targeted due to:

- Installed capacity
- Reasonable concerns by staff while processing applications or periodic data submissions
- Risk-based selection based on trends from previous audit findings and technology types.

6.5. Table 5 outlines some examples.

| Risk factor                                 | Rationale  |
|---|--|
| Risk based - Large biomass                  | Potential for greatest losses as a result of greatest payments.  |
| Risk based – Technology                     | Target different technologies, including WSHP’s, GSHP’s and Solar Thermal installations.   |
| Suggested sites/DA referral                 | Targeted selection of installations identified during or after accreditation that reviewers have suggested on the basis of concerns regarding eligibility / setup of the installation. |
| Non-single domestic/commercial use evidence | Sites that are referred for audit due to concerns around evidence of commercial use will be prioritised following concerns raised during PWC audit campaign in NI.                     |
| Heat use – drying                           | Sites where the heat use has been declared for the use of drying will be prioritised following concerns raised during PWC audit campaign in NI.  |

**Table 1: Examples of risk based selection criteria**

**7. Audit findings**

7.1. All audit results will continue to be logged on the Management Information log.

*Assurance Rating*

7.2. All completed audits receive an assurance rating, as per the Ofgem E-Serve Audit Assurance Rating Categories (see Table 6 in the Appendix).

DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/17 – updated (highlights in yellow) for discussion in line with PwC recommendations.

**Deleted:** DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/17

*Non-compliance categorisation*

7.3. All non-compliances are categorised into a risk category based on whether they have a material impact and the frequency (High/Low) of occurrence. This approach was agreed by Ofgem’s Risk and Fraud Management Group (RFMG) and DECC’s Audit and Risk Committee (ARC). The same approach has been applied to the categorisation of NI non-compliances as the NI and GB targeted auditing programmes follow the same process so this has been deemed appropriate operationally to ensure consistency.

*Potential Error*

- 7.4. Each non-compliance is assigned a ‘potential error’. This is the percentage applied to a non-compliance in order to provide a ‘snapshot’ financial impact (for reporting purposes).
- 7.5. The potential error percentage is applied to the lifetime value for that installation and the resulting potential error value feeds into the assurance rating for that installation.
- 7.6. If multiple material non-compliances exist on one installation the potential errors are added together to provide the overall potential error.
- 7.7. The audit team will work closely with the compliance team to understand what the *actual* impact of non-compliances found to date has been (i.e. following compliance action). This will enable us to review whether the potential error value for each non-compliance is appropriate and whether the method of adding potential error values together for multiple non-compliances is appropriate.
- 7.8. The potential errors of non-compliances will be reviewed on an annual basis and any changes recorded in the ‘potential error library’.

*Observations*

7.9. Observations are recorded as part of the site audit process. They refer to incidences that are not directly against regulations (and as such are not non-compliances) but which should be addressed or monitored to improve scheme understanding.

**8. Reporting and Governance**

- 8.1. Each audit report is reviewed by a member of the audit team, with any clarifications requested from the contractor recorded on a coversheet. The report is then approved by a different member of the audit team and the closure letter is sent to the participant with the key findings. Any non-compliant installations are passed to the compliance team for action.
- 8.2. Progress against Ofgem and audit contractor KPIs will be reported internally on a weekly and monthly basis.

|                     | Ricardo                  | Ofgem                    | Ricardo            | Ofgem                    | Ofgem          |
|---------------------|--------------------------|--------------------------|--------------------|--------------------------|----------------|
| WD = Working Days   | Draft report/V1 due (WD) | Draft report review (WD) | Version 2 due (WD) | Final report review (WD) | Closure letter |
| Post -accreditation |                          | 15                       | 7                  | 8                        | 5              |
| Pre-accreditation   |                          | 5                        | 3                  | 3                        | 3              |

On a 6-monthly basis, we will review management information on audit findings to date in advance of site selection for the next round of targeted audits. Audit findings

DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/17 – updated (highlights in yellow) for discussion in line with PwC recommendations.

**Deleted:** DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/17

will inform decisions regarding our risk-based approach to targeted site selection and will be agreed and signed off by DfE and senior stakeholders.

8.3. Reports will be provided on an ad-hoc basis to internal and joint boards such as the ND NIRHI Board, Management Committee and Joint Working Group.

## 9. Fraud

9.1. Any audits that unearth suspected fraud will be referred to the central fraud team for further investigation.

## 10. Required Resources

### *External contractor*

10.1. Following an open tender process an external contractor has been appointed to undertake the site audits of NDRHI installations. These will be carried out in accordance with the audit plan while ensuring value for money. The contractor is required to:

- Agree an audit programme with Ofgem
- Organise and notify participants / applicants of the site visit
- Review relevant documentation relating to the installation
- Carry out a site visit (including, where necessary, visiting any off-site heat use measurement or off-site sampling facilities)
- Provide a report detailing audit outcomes, within agreed timescales
- Amend / clarify reports based on feedback from the internal audit team

10.2. The external contractor will also supply the audit team with a periodic report for the relevant audit round that includes:

- A summary of the NDRHI audit programme findings to date
- A summary of the NDRHI audit programme findings for the reporting period
- Feedback on the NDRHI audit programme including any recommended actions related to the NI RHI Regulations, Ofgem NDRHI communications materials and improvements to internal controls to address issues identified at site audits.

### *Auditor capabilities*

10.3. For smaller installations, including those classified as having simple or standard metering arrangements, we will require auditors with the following skills or knowledge:

- Water supply operations
- Energy and mass balances
- Data handling
- Comparing records
- Fluid mechanics
- Thermodynamics
- Understanding of eligible heat use
- Heat metering
- Metering installation and calibration

10.4. For larger installations, including those classified as having complex or multiple metering arrangements, we will require auditors with the same skills and knowledge as for smaller installations, and in addition:

DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/17 – updated (highlights in yellow) for discussion in line with PwC recommendations.

**Deleted:** DRAFT Non- Domestic Renewable Heat Incentive NI Audit Strategy 2016/

- Steam system operations
- Steam metering
- Biomass/biogas handling
- Statistics (sampling theory, errors and uncertainty)
- Process engineering experience
- Interpreting system schematics

### *Internal Audit Team*

10.5. The internal audit team are responsible for the development and implementation of the audit programme, including management of the external contractor undertaking site audits on our behalf.

10.6. The team are responsible for specific tasks that include:

- Planning and monitoring the audit programme
- Managing the external contractor(s)
- Administration of the audit programme
- Developing and refining audit checks
- Approving site audit reports including assurance ratings
- Compiling management information and reporting to senior management
- Assisting with E-Serve audit contract procurement processes

10.7. We will recruit staff with the necessary skills and knowledge to undertake the duties and functions of their respective roles. This will include:

- Strong numerical and analytical skills paying particular attention to detail
- Excellent written and verbal communication skills including reporting to senior management
- Experience of applying the principles and practices of risk management
- Experience of contract monitoring and management

10.8. We will maintain standard operating procedures that are updated periodically, in particular where process improvements are made. These will provide detailed descriptions of processes, roles and responsibilities and timescales for when tasks are required to be carried out. These will be used as the basis for induction training so that new starters can become productive as quickly as possible.

10.9. We will monitor resource requirements taking into account variations in application volumes, audit findings and other factors that have an impact on the audit sample size. The current audit team consists of 4 FTE's.

10.10. The team's work will be carefully monitored using internal KPIs and performance will be reviewed using the 'Internal Monitoring Log'.

### *Budget*

10.11. The budget required to conduct the audit programme will be requested as part of Ofgem's business planning submission to DfE, with spend controlled in line with agreed procedures.

## **11. Appendix**



DRAFT Non- Domestic Renewable Heat  
Incentive NI Audit Strategy 2016/17 -  
updated (highlights in yellow) for discussion  
in line with PWC recommendations.

**Deleted:** DRAFT Non- Domestic Renewa  
Heat Incentive NI Audit Strategy 2016/

# ofgem e-serve

| Ofgem E-Serve Technical Audit Assurance Categories |   |  |  |
|--|---|--|--|
| Assurance Rating                                   | General Description   | Trigger Point(s)*  | Description**  |
| Unsatisfactory                                     | Audit found <b>major</b> issues of non-compliance.                                | General: Major issue with eligibility.<br><br>OR<br><br>Financial: Impact on scheme considered to be in excess of £50,000 or 5% of lifetime payments.<br><br>OR<br><br>Fraud: There are suspicions of abuse, misuse or fraud | This assurance category will indicate that an audit has found one of the following; <ol style="list-style-type: none"> <li>The audited station has been incorrectly accredited for scheme participation resulting in the receipt of incorrect payments which will need to be recovered and an assessment made on the possible removal of accreditation. This will include issues that have a significant impact on the wider scheme and/or Ofgem.</li> <li>The impact of the audit findings indicates a large potential loss to the scheme (in excess of £50,000 or 5% of lifetime payments.)</li> <li>There is a suspicion of abuse, misuse, or fraud.</li> </ol> |
| Weak   | Audit found <b>moderate</b> issues of non-compliance.                             | General: Moderate issue with eligibility.<br><br>OR<br><br>Financial: Impact on scheme considered to be in excess of £1,000 or 2% of lifetime payments, but not exceeding £50,000 or 5% of lifetime payments.                | This assurance category will indicate that an audit has found one of the following; <ol style="list-style-type: none"> <li>The audited station has issues with eligibility which can be rectified within a reasonable timescale to ensure compliance with scheme legislation. This may result in payments being suspended or withheld until this happens.</li> <li>The impact of the audit findings indicates a moderate potential loss to the scheme (in excess of £1,000 or 2% of lifetime payments, but not exceeding £50,000 or 5% of lifetime payments).</li> </ol>   |
| Satisfactory                                       | Audit found <b>minor</b> issues or has recommended introduction of best practice. | General: Minor issues found on site.<br><br>OR<br><br>Financial: Impact on scheme considered to be less than £1,000 or 2% of lifetime payments.  | This assurance category will indicate that an audit has found one of the following; <ol style="list-style-type: none"> <li>The audit has identified areas of poor practice and/or the station has not complied with certain on-going obligations. The impact of this will have a minor or no impact on the wider scheme and/or Ofgem.</li> <li>The impact of the audit findings indicates a minor potential loss to the scheme (less than £1,000 or 2% of lifetime payments).</li> </ol>   |
| Good   | No issues found during audit.   | N/A  | There were no issues noted during the audit.   |

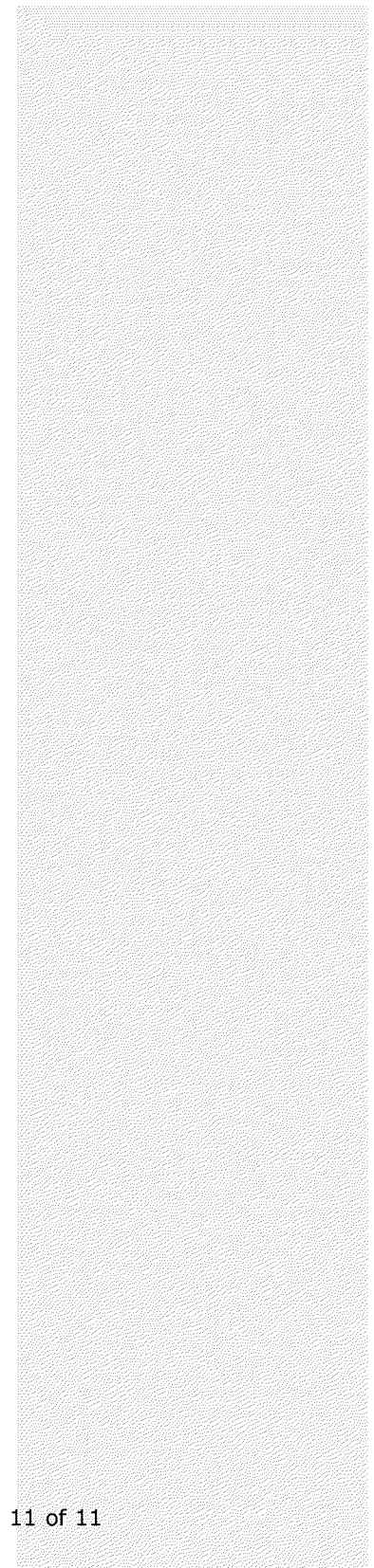
**Table 2: Ofgem Assurance categories**

\* Potential financial losses are calculated over the total lifetime of the scheme.

aa60a00c-07ad-4e3c-a9a3-1072872b38f0\_load7100502147722793758

10 of 11

**ofgem e-serve**



aa60a00c-07ad-4e3c-a9a3-1072872b38f0\_load7100502147722793758

11 of 11