

Department for the Economy (DfE)

Domestic Renewable Heat Incentive (RHI) and Renewable Heat Premium Payments (RHPP)

Internal Audit Service Report

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Introduction, Purpose and Scope, Control Objectives and Background

Introduction

Internal Audit Service (IAS) has completed a review of the System of Control over the Domestic Renewable Heat Incentive (RHI) and Domestic Renewable Heat Premium Payment (RHPP) scheme within the Department for the Economy (DfE) formerly Department for Enterprise, Trade and Investment (DETI) (until May 2016) in accordance with the agreed terms of reference. The review forms part of the overall Audit Plan for 2015/16 which was agreed by the DfE Accounting Officer and endorsed by the DfE Audit Committee. The audit fieldwork was undertaken during the period March 2016 to April 2016.

Purpose and Scope

The purpose of the review was to provide an independent professional opinion on the adequacy and effectiveness of risk management, control and governance over the Non Domestic Renewable Heat Incentive Scheme.

The scope of the audit included reviewing control, governance and risk management arrangements in respect of the following areas:

- Expenditure Appraisal and Evaluation;
- Project Management & Budgetary Control;
- Payments including Verification of Claims; and
- Interim & Post-project Evaluations

Control Objectives

The following objectives were used as a basis for our evaluations and opinion about the adequacy and effectiveness of risk management, control and governance:

- Business cases / economic appraisals have been developed to an appropriate standard in accordance with NIGEAE and relevant DFP guidance and have been approved at the correct delegated authority.
- Adequate and effective project management and budgetary control arrangements have been put in place for management information, governance and reporting purposes.
- All payments are sufficiently vouched to original supporting documentation to confirm that the expenditure claimed is eligible and is in accordance with the terms and conditions of the relevant Domestic Energy scheme.
- Interim & post project evaluations are carried out on a timely basis and lessons learned are fed back into the decision making process.

Background

The Domestic RHI and its predecessor Domestic RHPP schemes were developed as part of the NI RHI Programme. The programme was introduced as a result of the 2009 EU Renewable Energy Directive's target for all EU member states to collectively produce 20% of their energy requirement from renewable sources by 2020. Each EU member state was subsequently set a target for their domestic contribution to this target, based on, amongst other factors, their current renewable energy consumption. The UK made a commitment to achieve a total of 15% energy consumption from renewable sources by 2020 via providing incentives to the Domestic and Non Domestic customers to take up renewable heating.

Domestic Renewable Heat Premium Payment (RHPP) scheme

The Domestic RHPP scheme was designed as a one off grant provided to eligible domestic renewable heat installations. For the levels of the grant approved see Table 1. The scheme was launched in May 2012 and superseded by the introduction of the Domestic RHI scheme in December 2014 where the RHPP applicants were migrated to the new RHI scheme. A similar approach involving the introduction of a grant scheme before implementation of the full Domestic RHI scheme was taken by DECC (Department of Energy and Climate Change) when launching a similar scheme in GB.

Table 1 NI Domestic RHPP rates

Eligible Technology	RHPP Level Offered
Air Source Heat Pump	£1,700
Ground Source Heat Pump	£3,500
Biomass	£2,500
Solar Thermal Heating	£320

The administration of the RHPP scheme, unlike the Non Domestic RHI which was administrated by Ofgem, was undertaken by an in-house team of DETI Energy staff.

Throughout the RHPP scheme a total of 2168 applications were received of which 144 (7%) were rejected by the RHPP administration team due to missing information and other reasons. Under the scheme 2024 grant vouchers were issued of which 1224 (60%) were redeemed¹ and of this 1224 1164 (95%) were subsequently migrated to RHI.

¹ Vouchers were not redeemed for different reasons and mainly because the customers did not progress with the installation.

Domestic RHI scheme

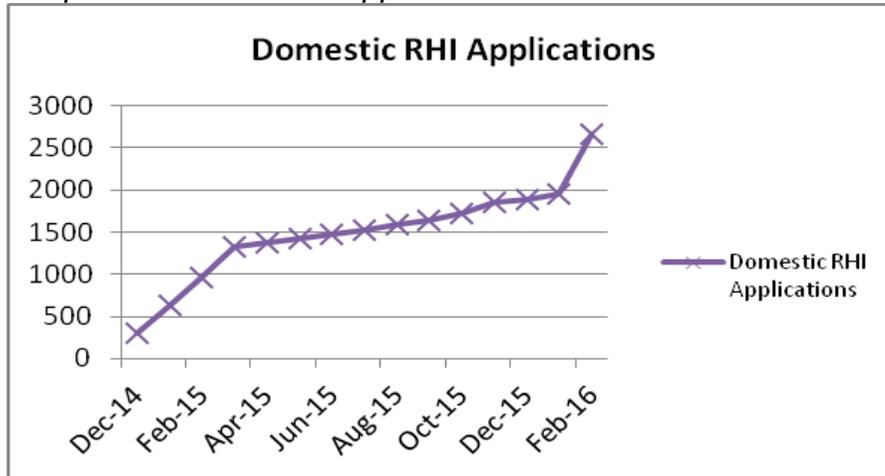
The NI Domestic RHI scheme was introduced in December 2014 to replace the Domestic RHPP scheme. The NI Domestic RHI scheme was designed to offer an upfront payment (at a similar level to the RHPP rates) followed by 7 annual incentive payments at a reduced tariff level to reflect the upfront payment. In addition, a cap of £2,500 was introduced to limit the annual incentive payments. A similar scheme was designed by DECC with no upfront payment offered but higher tariffs provided for all types of technologies in comparison to the NI scheme. Table 2 below provides detail of NI Domestic RHI incentives.

Table 2 NI Domestic RHI rates

Technology	Upfront payment	Annual Incentive
Air Source Heat Pump (ASHP)	£1,700	3.5p
Ground Source Heat Pump (GSHP)	£3,500	8.2p
Biomass	£2,500	5.6p
Solar Thermal	£320	13.5p

At the time of internal audit fieldwork there were a total of 2659 Domestic RHI applications registered of which 1164 installations were migrated from the former RHPP scheme. There was a spike in applications after the Department's announcement of the intention to close the NIRHI programme for new applications (Graph 1 refers). 1495 applications were received before the scheme was closed for new applications on 29 February 2016.

Graph 1 Domestic RHI Applications²



At the time of audit fieldwork 602 of the new applications were assessed and accredited (21 unsuccessful, 80 – sent back to for more information), 792 applications were still due to be assessed and accredited. RHI administrative team anticipated that it would take until October 2016 before all applications were assessed and accreditations issued.

The NI Domestic RHI scheme, like its predecessor Domestic RHPP scheme, is administered by an in-house team in DETI.

NI RHI Programme Funding Issues

The issues of funding and irregular expenditure reported in the Internal Audit Report on the NI Non Domestic RHI (IA06/DETI/15) issued 4 August 2016 and the NIAO report on DETI Resource Accounts 2015/16 issued 5 July 2016 are NIRHI programme wide issues which also affect the NI Domestic RHI scheme. However, IAS acknowledges that the overall share of the funding for the

² The spike from December 2014 to April 2015 represents the 1,164 applications migrated from Domestic RHPP scheme.

Domestic RHI scheme is significantly smaller in comparison to the funding required for the Non Domestic RHI scheme. Table 3 below refers. The Domestic RHI scheme commitments equate to around 6% of the overall annual expenditure for the NI RHI programme up to 2022/2023 at which point financial commitments for Domestic RHI ends.

Table 3 Forecasted Commitments- Domestic RHI

Apps Received/ Cost	No's of appl	£ up to Mar 15	2015-16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL
Capital (RHPP/ upfront payments)	2721	£2,590,000	£2,713,062	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£5,303,062
Domestic RHI	2669	£245,085	£1,866,469	£3,122,259	£3,231,089	£3,295,434	£3,360,364	£3,425,780	£3,180,695	£1,314,226	£23,041,401
Totals		£2,835,085	£4,579,531	£3,122,259	£3,231,089	£3,295,434	£3,360,364	£3,425,780	£3,180,695	£1,314,226	£28,344,463

Acknowledgement

IAS would like to thank management and staff for their assistance and co-operation throughout this review.

Overall Findings and Audit Opinion

Overall Findings

IAS findings and recommendations have been prioritised using the following, as per HIA (DFP) 1/12:

Priority	Definition
1	An issue which requires urgent management decision and action without which there is a substantial risk to the achievement of key business/system objectives, to the reputation of the organisation, or to the regularity and propriety of public funds.
2	An issue which requires prompt attention, as failure to do so could lead to a more serious risk exposure.
3	Improvements that will enhance the existing control framework and/or represent best practice.

The number of findings and recommendations (by risk priority) is summarised as follows:

Priority 1	Priority 2	Priority 3
2	2	0

Overall Audit Opinion (see Annex I for Definitions of Internal Audit Opinions as per DAO (DFP) 07/13).

Internal Audit considers that the system of risk management, control and governance established by management over NI Domestic RHI is **limited** (see Annex 1 for a definition of Internal Audit opinions as per DAO (DFP) 07/13). The NI RHI programme wide issues were discussed in the Internal Audit Review of the NI Non Domestic RHI Report (IA06/DETI/15) issued 4 August 2016 and while a number of these issues affect both Non Domestic and Domestic RHI schemes, specifically the availability of funding for the overall RHI scheme impacts on the Domestic scheme. However, the commitments for the Domestic RHI scheme represent only

2.5% of the overall projected costs of the RHI Scheme. We have therefore focused in this review and report on those additional issues related specifically to the administration of the Domestic RHI scheme.

Domestic RHI Specific Issues

One priority 1 recommendation has been made in this report incorporating the VFM issues concerning the overall rate of return received by applicants, the effectiveness of the £2,500 cap in ensuring the scheme remained within the rates of return intended and the adequacy of the methodology for calculating the annual incentive payments. Internal Audit considers that a Value for Money Study/Review of the scheme needs to be undertaken to assess whether or not the current level of incentivising of the scheme is appropriate and that the assumptions made at the design stage of the scheme are still valid. A further priority 1 recommendation has been made in relation to the absence of inspection visits carried out on the sites of new Domestic RHI applicants. IAS further noted the absence of an agreed methodology, documented procedures and processes to ensure continuous compliance with the requirements of the scheme. In addition, two priority 2 recommendations have been made in relation to improving and enhancing scheme risk management processes and requiring management to consider making formal re-notification to EU State Aid which includes the Energy Saving Companies (ESCO's).

Detailed Findings and Recommendations

Finding and Recommendation Number	1
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1. Value for Money Issues (VFM) of the NI Domestic RHI Scheme Design

Finding:

IAS carried out a detailed review of all Domestic RHI scheme design and background documents including economic appraisals (CEPA (Cambridge Economics Policy Associates) reports). IAS analysed the assumptions behind the key components of the levels of incentives provided by the scheme and their calculation. As a result some significant VFM issues were identified with the design of the Domestic RHI scheme:

1. Rate of Return Provided

The review and economic appraisal by CEPA Ricardo AEA recommended that the NI Domestic RHI scheme provides an upfront payment (set at the levels previously provided by RHPP) to all accredited installations followed by 7 annual incentive payments depending on the technology installed. (For details on RHPP and domestic RHI incentives see Tables 1 and 2 above). Overall the recommended levels of incentive per kWh were designed to provide the accredited installations with a 7.5% rate of return on their investment over the 7 year life of the scheme.

IAS carried out testing involving inputting actual information from a sample of applicants (including capital spend, actual incentive levels received and etc.) into the calculation methodologies and assumptions used by CEPA. Testing identified that the rate of return received by a number of applicants with biomass renewable heating technology may be substantially higher than the intended 7.5% return while at the same time other types of more capital intensive technologies, such as ground source and air source heat pumps, do not appear to provide any incentive at all.

2. Effectiveness of the £2,500 Cap

The maximum annual incentive payment was designed to include a payment cap of £2,500 per annum (p/a). The cap was introduced as a means of controlling cost to the Department to assist with more effective budget management. IAS acknowledges this enhancement to the design of the scheme in comparison with the Non Domestic RHI scheme where

there was no intention to introduce caps to annual payments from the outset of the scheme. However, it is not clear how effective the level of the cap currently set at £2,500 has been and will continue to be in ensuring that the rate of the annual incentive is maintained at the intended level of return.

For example, if reference is taken from the CEPA review 2013 the average annual payment for the most generous of the technologies was considered to be approximately £1,000 p/a. IAS would therefore be concerned with the rationale for introducing the £2,500 cap which, whilst approved at required levels within the Department, does not seem to be based on clear evidence based calculations demonstrating that it is an effective control to ensure that applicants are not over incentivised and that the incentives provided are kept within the intended rate of return.

3. Calculation of the Annual Incentive Payment

By design of the scheme the annual incentive payment for the property is calculated using deemed annual heating and hot water requirement in kWh p/a using the information provided on the Energy Performance Certificate (EPC). A similar approach is applied by the GB scheme. However the NI EPC provides the heating and hot water requirement expressed in pounds sterling which, in order to calculate the annual heat incentive, has to be converted to kWh p/a by the Department.

A spreadsheet calculator tool was designed for this purpose for use by the administrative team to convert the information as required in order to determine the annual incentive for each applicant. In accordance with the methodology for the conversion the Department used comparative fuel prices from The Government's Standard Assessment Procedure (SAP) for Energy Rating of Dwellings 2009.

IAS understands that Departmental Economists or other staff with relevant expertise were not consulted by management to confirm that the methodology of calculation is accurate, delivers the results and the VFM intended and that calculator tool is fit for purpose.

Risk: The scheme is not providing value for money as a result of issues identified with the design of the scheme.

2. Recommendation:

IAS recommend that management carry out a Value for Money review of the NI Domestic RHI scheme which concludes on the issues raised by IAS and advises on action required in relation to:

- the current levels of rate of return provided and to establish whether it is kept within the levels intended (i.e. circa 7.5%) for all types of technology.
- the effectiveness of the £2,500 cap in ensuring that the rate of return provided to the accredited installations is maintained at approximately 7.5%,and
- the annual incentive calculation methodology and calculator tool to ensure it delivers the results including the VFM intended accurately.

3. Priority	1	4. Time scale:	As soon as possible
5. Management Response: Do not agree that the revised heat calculation methodology needs further validation given it was developed and agreed by those with the relevant expertise (energy professionals and DfP Building Standards Branch). All other findings and recommendations are agreed and planned. DfE Economist is currently carrying a VFM study on the non-domestic RHI scheme. Once this is completed, work will begin on the domestic RHI scheme establishing the effectiveness of the cap and the incentive levels on the rates of return.			
6. Management's Planned Implementation Date: March 2017			
7. Officer Responsible (name and grade) for Ensuring that the Recommendation is Implemented: Stuart Wightman, Gd 6/Lucy Marten, Gd 7.			

Finding and Recommendation Number	2
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1. Site Inspections and Compliance

Finding:

In accordance with the Domestic RHI scheme model, site inspections provide assurance to the Department over the validity of payments and applicants' compliance with the requirements and conditions of the scheme. However, at the time of IAS fieldwork there had been no site inspections of the new accredited Domestic RHI installations. Moreover, the methodology of how and by whom these inspections will be carried out including how the sites will be selected had not been developed. In addition, the Department has yet to develop the methodology and associated procedural guidance by which it can satisfy itself that all applicants are continuing to comply with the conditions and requirements of the NI Domestic RHI scheme.

IAS can confirm that at the RHPP stage, prior to the introduction of the Domestic RHI scheme, 25% of the RHPP sites had been inspected as planned and that all instances of non compliance identified were addressed and resolved by management. IAS also understands that some targeted inspection visits were carried out in May 2016. However we still consider that the absence of the approved programme of site visits, and in particular absence of the clear methodology for selecting sites for these visits, and absence of other control activities to ensure compliance with scheme requirements are considerable weaknesses in the control environment.

Risk: The absence of fundamental controls which ensure continuous compliance with the requirements of the scheme may lead to instances of abuse and/or fraud.

2. Recommendation:

IAS recommends that management establish and document a comprehensive risk based methodology and procedure for the selection of the sample for site inspections and develop a detailed process for site inspections to enable the programme of site visits to be carried out as soon as possible.

IAS also recommend that management carry out a risk assessment and document the methodology and procedural guidance

for the annual scheme compliance desk top audits.		
3. Priority	1	4. Time scale: As soon as possible
5. Management Response: Agreed. To date, the priority has been to process the applications for the domestic scheme. A limited number of site visits have taken place and a comprehensive site visit plan is currently being developed. Management is happy to work with Internal Audit to develop a risk assessment and methodology for site inspections and desk top audits.		
6. Management's Planned Implementation Date: January 2017		
7. Officer Responsible (name and grade) for Ensuring that the Recommendation is Implemented: Stuart Wightman, Gd 6/Lucy Marten, Gd 7.		

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Finding and Recommendation Number	3
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1. Risk Management. Identification of Relevant Risks			
Finding:			
<p>Risk Registers for the NI Renewable Heat schemes were developed at different business planning stages to accompany Business Cases and Economic Appraisals. An issue has already been raised in the review of the Non Domestic RHI scheme (IA06/DETI/15) issued 4 August 2016 where it was noted that although Risk Registers were established they were not reviewed or updated as the scheme developed leading to failure to identify and evaluate significant risks and consequently failure to adequately mitigate against these risks materialising. An associated recommendation which is also applicable to the Domestic RHI scheme was made by IAS and accepted by management.</p> <p>Specifically in relation to the NI Domestic RHI scheme, IAS analysed two Risk Registers – one for the scheme in general (developed for the purposes of the Business Case) and another developed for scheme operations and administration. IAS identified that a range of relevant operational risks had not been identified, including a potential risk of scamming the scheme, i.e. for example, a request by phone or email to change the bank details or etc., and the expected controls which should be in place to ensure that such risks are appropriately managed.</p> <p>Risk: The absence of robust risk management arrangements reduces the ability of staff to effectively identify, assess and manage risks to an acceptable level.</p>			
2. Recommendation:			
<p>IAS recommends that a risk assessment is carried out to identify all current significant risks to the scheme and to agree relevant mitigation strategies to address those risks.</p> <p>IAS also recommends that the Risk Registers are reviewed and updated regularly in order to identify any new and emerging risks in a timely manner and to enable management to respond appropriately to these risks.</p>			
3. Priority	2	4. Time scale:	As soon as possible
5. Management Response: Agreed. There is currently a risk register in place and this will be reviewed and updated as			

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necessary. Mitigation strategies will also be developed as required and documented. Formal project management structures will also be put in place.

6. Management's Planned Implementation Date: January 2017

7. Officer Responsible (name and grade) for Ensuring that the Recommendation is Implemented: Lucy Marten, Gd7

Finding and Recommendation Number	4
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1. Energy Saving Companies (ESCO's)			
Finding:			
<p>An Energy Savings Company (ESCO) is a commercial or non-profit business providing a broad range of energy solutions including designs and implementation of energy savings projects, retrofitting, energy conservation, energy infrastructure outsourcing, power generation and energy supply, and risk management.</p> <p>ESCO's were not considered for inclusion in the Domestic RHI scheme operating in GB because of the need to obtain EU State Aid approval and the associated time this process would take. Correspondence from DECC confirmed that GB were planning to include ESCO's in their re-notification to the EU State Aid documents at a later date. However, despite the approach adopted by DECC DETI took a decision to include ESCO's in their Domestic RHI scheme at the outset.</p> <p>Management advised that ESCO's can be included in the Domestic Renewable Heat Incentive as the beneficiary is the homeowner. The current arrangement is that an ESCO supplies and installs the renewable heating equipment in their clients' domestic properties. Although the upfront and annual incentive payments are made to the ESCO's, management have advised that this arrangement is permitted under the scheme as the homeowners are benefiting from the increased energy efficiency and are permitted to keep the heating equipment.</p> <p>IAS understands that currently only a very small percent (approx 2%) of all Domestic RHI accreditations are from ESCO's.</p> <p>Risk: Non compliance with EU State Aid regulations may lead to the funding being recouped with the resultant financial loss to the Department.</p>			
2. Recommendation:			
IAS recommend management review their current position regarding the inclusion of ESCO's in the NI Domestic RHI scheme and, if required, make the necessary application for EU State Aid approval.			
3. Priority	2	4. Time scale:	As soon as possible

5. Management Response: Partly agreed. As the scheme is closed to new applications, there will be no new ESCOs, therefore there is no need to review the position on these. When we are in the process of re-notifying the Commission of changes to the non-domestic RHI scheme we will use that opportunity to notify the Commission about ESCOs under the domestic scheme.

6. Management's Planned Implementation Date: February 2017

7. Officer Responsible (name and grade) for Ensuring that the Recommendation is Implemented: Stuart Wightman, Gd 6/Lucy Marten, Gd 7.

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Annex 1

INTERNAL AUDIT OPINIONS

Opinion	Definition
Substantial	There is a robust system of governance, risk management and control which should ensure that objectives are fully achieved.
Satisfactory	Overall there is an adequate and effective system of governance, risk management and control. While there is some residual risk identified this should not significantly impact on the achievement of objectives. Some improvements are required to enhance the adequacy and / or effectiveness of governance, risk management and control.
Limited	There is an inadequate and/or ineffective system of governance, risk management and control in place. Therefore there is significant risk that the system will fail to meet its objectives. Prompt action is required to improve the adequacy and/or effectiveness of governance, risk management and control.
Unacceptable	The system of governance, risk management and control has failed or there is a real and substantial risk that the system will fail to meet its objectives. Urgent action is required to improve the adequacy and/or effectiveness of governance, risk management and control.