

FINAL VERSION

Annex A

BUSINESS CASE FOR PROPOSAL FOR ADDITIONAL AUDITS FOR THE RENEWABLE HEAT SCHEME

- [1] Include Audit Office picked up and NI Audit Office picked up issues.
 2) Justification of sample size]

Comment [AW1]: 1) Include Audit Office picked up and NI Audit Office picked up issues.
 2) Justification of sample size

Project Title: PROPOSAL TO ENGAGE EXTERNAL RESOURCE TO UNDERTAKE ADDITIONAL AUDITS AND IMPROVE QUALITY ASSURANCE

Prepared By: STUART WIGHTMAN Date: ~~JANUARY~~JUNE 2016

Approved By: Alison Clydesdale
 (Director of DFE **Energy Division**)

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Section 1: NEED FOR THE ASSIGNMENT

Background - Purpose of the assignment

- 1.1 This paper is prepared in line with the DFP Guidance for the use of external consultants (20 April 2012).
- 1.2 The purpose of this assignment is to appoint an external resource to carry out quality assurance and audits for the Renewable Heat Incentive schemes for domestic and non-domestic.

Strategic / policy context

- 1.3 The EU Renewable Energy Directive (2009/28/EC) set a binding target that 20% of the EU's energy consumption should come from renewable sources by 2020. The UK share of this target commits the UK to increasing the share of renewable energy to 15% by 2020 and Northern Ireland is expected to contribute to this share. The Department of Energy and Climate Change (DECC) has indicated that renewable heat levels of around 12%, coupled with 30% renewable electricity consumption are required for the UK to meet its requirements.
- 1.4 Heating energy accounts for around half of all total energy consumed within Northern Ireland with over 98% of our heating fuels coming from imported fossil fuels.

Renewable heat is heat produced from renewable sources such as solar radiation, biomass materials, heat pumps, geothermal energy and waste materials. The Executive's 2010 Strategic Energy Framework (SEF) includes a target of 10% renewable heat by 2020 against a 2010 base of 1.7%.

- 1.5 In order to achieve the UK renewable heat target, DECC introduced a GB Renewable Heat Incentive for the non-domestic market in November 2011. Northern Ireland (NI) was not included within that scheme because of the differences in the two heat markets. In GB the natural gas market is prevalent and accounts for 68.8% of heating demand with oil only accounting for 10%. This is very different from the NI situation where refined oil products account for over 70% of the overall heat demand.
- 1.6 The final business case for NI RHI was approved by DFP in April 2012 and the interim RHPP (domestic) and Non Domestic RHI schemes were introduced in May and November 2012 respectively. This was informed by an [economic assessment](#) completed by Cambridge Economic Policy Associates (CEPA) in 2011. A [revised assessment](#) was also completed by CEPA in 2013 to inform the Phase 2 Review of the RHI.
- 1.7 The NI Non Domestic Scheme commenced 1 year after the GB scheme. But unlike the experience with the GB scheme where considerably higher tariffs triggered high levels of uptake from the outset, the performance of the NI scheme was poor. The high uptake on the GB scheme led DECC to consult on cost control measures in Spring 2012 by which point the GB scheme had already received 533 applications (in 6 months) and forecast expenditure for 2012/13 was £42m. The NI scheme on the other hand had only received 21 applications in its first 7 months. There was therefore no immediate need to follow DECC's proposals for budgetary control. In any event the "budgetary controls" only related to deferral of applications and the measures were subsequently withdrawn by DECC.
- 1.8 After two years DECC did introduce expenditure control measures in the form of digression arrangements. In the interim DFE had consulted on cost control measures but, with continued under use of the budget available and no evidence to suggest that this trend of underperformance would not continue, Ministers prioritised introduction of the domestic RHI including deferring other measures which would have slowed down its introduction. Not only does DFE not have the resources to match DECC's but it also, unlike DECC, administers the domestic scheme. The GB domestic scheme is administered by Ofgem on DECC's behalf.
- 1.9 £860 million was made available from central Government funding to support the introduction of a Renewable Heat Incentive (RHI) in GB over the period 2011-2015.

£25 million of funding was made available by HMT for a NI RHI over the same period. However, due to the poor levels of uptake with the NI RHI schemes, only £2m of this funding was spent during the first 3 years. The priority was therefore to try and improve uptake. This led to [DFE's 2013 Phase 2 RHI consultation](#) which included proposals for a new Domestic Scheme, new tariffs and technologies for the Non Domestic Scheme and proposals for cost control (similar to DECC's 2012 proposals).

- 1.10 Uptake of the Non Domestic Scheme improved in 2014/15 and a further £8m was spent, leaving an under spend of £15m against the 4 year allocation. A further allocation of £11.6m was made available for 2015/16 in line with the Department's AME forecast submitted in November 2014. However due to a significant increase in uptake of the NI Non Domestic RHI scheme over the past 12 months, an increased 2015/16 AME forecast requirement of £30m was submitted in October 2015 and was confirmed in the AME profile.
- 1.11 The Non Domestic RHI supports the uptake of renewable heat technologies (biomass, heat pumps, solar thermal) by providing regular incentive payments over the lifetime (20 years) of the technology for actual heat energy generated. The level of tariff is dependent on the size and type of technology and is calculated to cover capital costs, operating costs and non-financial 'hassle' costs over the lifetime of the technology. To date, the NI RHI schemes have increased renewable heating to around 6% and the Executive's interim target to achieve 4% by 2015 has been exceeded.
- 1.12 Unfortunately this success has come at a price and increasing demand put significant pressure on RHI budgets. In response to this cost control measures were brought forward in November 2015 to introduce a tiered tariff for the most popular biomass technology coupled with a change in biomass banding and an annual kWh cap on RHI payments on the non domestic scheme. At the same time a new Combined Heat and Power, (CHP), tariff was introduced to coincide with changes in the Northern Ireland Renewable Obligation, (NIRO). However, despite these actions a reduction in RHI budgets announced in the Chancellor's autumn 2015 statement, together with confirmation from Treasury that any expenditure above the 3% Barnett formula Northern Ireland RHI allocation would have to be met from the NI Block Grant meant that budgetary pressures increased. In effect this meant that the budget available for new RHI installations was exhausted and reluctantly legislation had to be brought forward in February 2016 to suspend both RHI schemes to new applications with effect from midnight on 29 February 2016.

What is the need for the assignment

- 1.13 The non domestic RHI scheme administered by Ofgem has received 2128 applications at the point of scheme suspension and a considerable number of these

still await processing, with some 13~~38~~77 accredited to date. In the run up to the non domestic scheme changes in November 2015 over 900 applications were received and again in the run up to suspension in February 2016 there was a further spike of 318 applications. The domestic RHI scheme administered by DfE has received in the order of 2660 applications with some 1900 accredited. In the run up to suspension there was a spike of some 700 domestic applications.

Comment [SH2]: Update with current position.

DFE

~~1.14~~ Due to insufficient resources DFE has carried out no domestic audits/site visits since 14 November 2014. There have been no allegations of abuse of the domestic RHI scheme.

~~1.15~~ DFE identified the need for increased auditing on the non-domestic applicants and secured additional funding for financial year 2015/16 to get the number of audits on increased from 6 to 12 targeted site audits. Ofgem has arranged this site visits through the third party, Ricardo-AEA. Ricardo-AEA carry out audit checks for the non-domestic RHI scheme for United Kingdom at a cost per audit of £1000.

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~~1.14~~ The number of audits carried out against the number of applications received has been identified as a risk and to reduce this it has been decided to investigate engaging a third technically qualified party to carry out and increase the number of audit checks to 1 in 10 for domestic, non-domestic ~~and any future energy efficiency schemes~~. In addition an anonymous letter was received in the Office of First Minister claiming that the non-domestic RHI scheme was being abused. To investigate the claims raised in the letter we increased the number of audits to be undertaken by Ricardo for RHI installations in Northern Ireland- and secured additional funding for financial year 2015/16 to get the number of audits increased from 6 to 12 targeted site audits. Ofgem has arranged these site visits through the third party, Ricardo-AEA. Ricardo-AEA carry out audit checks for the non-domestic RHI scheme for United Kingdom at a cost per audit of £1000.

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~~1.16~~

~~1.17~~~~1.15~~ If any of the outsourced audit checks for non-domestic RHI recipients highlight any areas of concern these will be forwarded to Ofgem for a more comprehensive audit inspection to be undertaken by Ricardo this will result in approximately 6 targeted audits per year.

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What is the scope of the assignment, i.e. tasks anticipated to provide desired outcomes?

1.19 The external resource must physically inspect a proportion, approximately 1 in 10 of installed technologies in both domestic and non-domestic properties across Northern Ireland against the audit checklists that will be provided. They will then be required to forward the audit inspection reports alongside photographic evidence via electronic format to the Department on a regular basis highlighting any relevant issues.

1.20 Over the duration of the contract the scope of the audits could be amended to reflect changes in government policies and legislation.

Comment [SH3]: I think we should provide for this otherwise a change in policy or legislation would mean revisiting the business case mid contract.

Comment [AW4]: Do we want to include this line?

Timing of assignment – when is the information required and is there any possibility of deferring the assignment?

1.21 The services of the external resource will be required from Spring/autumn 2016 for 21 years with an option to extend by a further two periods of 2 years.

Their initial task will be to draw up a timetable of audits and advise the Department.

The auditors will be required to complete audit reports against the relevant audit templates for domestic, and non-domestic RHI recipients. These reports will be

forwarded by the external resource via electronic format along with picture evidence on a regular basis. Any issues flagged by the auditors on non domestic site visits may

be referred to Ofgem to undertake a more comprehensive audit. There is no possibility of deferring the assignment.

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Description of previous similar consultancy assignments, including an analysis of past expenditures (corresponding evaluations must be appended)

1.22 DFE is not aware of any previous similar government led studies on the need for audits in the energy services market in Northern Ireland.

Section 2: BENEFITS AND THEIR TIMING

The technical verification provided by the external audits will contribute towards effective governance of the schemes, thus reducing the risks for DFE.

It is estimated that the audits and associated reports would require approximately 300 person-days of work for 2 people.

Comment [SH5]: Would 2 days be reasonable, 1 prep and inspection and 1 for review and writing up the report?

It is envisaged that the services of the external auditing consultant will be required from autumn 2016 for 1 year with an option to extend by a further year.

What are the projected outputs from the assignment?

- 2.1 The immediate output of the external consultancy exercise is the outsourcing of audits to increase the number undertaken, improved quality assurance and improved governance of the schemes.

What are the expected benefits to be delivered from the assignment and give an indication of when they are likely to accrue?

- 2.2 The outsourcing of this work to an external (technically qualified) resource will increase the number of audit checks undertaken, improving quality assurance and governance of the RHI schemes. This will reduce risks to the Department including the potential of 'gaming', i.e. were installations are operated over and above the required kilowatt hours just to generate RHI income.

What are the implications of the assignment not going ahead?

- 2.3 If the assignment does not proceed, the number of audit checks would remain the same and therefore the expected benefits would not be realised and the risks including the potential of 'gaming' would not be addressed.

~~2.4~~ To increase the number of audits either F further additional funding would need secured to increase the number of audit checks arranged on the non-domestic side by Ofgem and carried out by Ricardo-AEA; or-

~~2.5~~ 2.4 F the department would have to obtain additional in house resource to carry out audit checks, however as there is not the technical experience in the Department the audits would not be undertaken to the same standard as an external resource.

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Section 3: ASSESSMENT OF ALTERNATIVES OPTIONS

- 3.1 A number of alternative options have been considered;

i) Option 1 – Do nothing

Ofgem continue with the current percentage based audit programme (6 targeted audits in 2015/16) for non-domestic RHI and existing DFE staff carry out audits for domestic RHI recipients as time/resource permits. This would

entail an unacceptable level of risk for DfE given the large volume of RHI installations, particularly given the budget involved for the non domestic scheme. The 'Do Nothing' option is therefore rejected.

ii) Option 2 – ~~Pay more money~~Secure additional funds to increase Ofgem audits on non-domestic and secure additional resource for domestic audits

Secure additional funds to increase the number of audits Ofgem arrange to be undertaken by their external audit resource Ricardo-AEA. This option does not allow the department scope for negotiation on the price per audit, presently £1000 per audit.

Existing staff are fully utilised at present, therefore the department would need to recruit an additional internal resource. These audits entail DfE **Energy Division** officials carrying out some form of technical verification of installed renewable technologies in domestic RHI premises. These audits would be carried out by administrative staff with no technical expertise. Staff are fully utilised and additional trained staff would be required. A long period would be needed to develop in-house expertise to the level required to progress this task effectively as opposed to employing an industry expert.

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This has been considered and rejected as there is insufficient resource or expertise on the technical side within the department to carry out this task effectively. The cost per audit from Ofgem for their outsourced audits by Ricardo AEA is £1000 per visit, there is not much room for negotiation on this cost. The option is therefore rejected.

iii) Option 3 – DfE carry out all audit functions for domestic and non-domestic

Secure additional resource for DfE in house to carry out audits. This would entail DfE **Energy Division** officials carrying out some form of technical verification of installed renewable technologies in domestic and non-domestic premises. The technical expertise does not ~~currently~~ exist in-house in **Energy Division**. Staff are fully utilised and additional staff would need recruited.

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We anticipate that to undertake these audits the appropriate staff would be one Deputy Principal and one Staff Officer who would require technical training. A long period would be needed to develop and train this in-house

expertise to the level required to progress this task as effectively as an outside resource.

The cost for two additional staff, one Deputy Principal and one Staff Officer would be approx £88,846 based on figures provided by DFE, Finance Branch for average FTE Annual Salaries position at 23 January 2015. The technical training required to enable the newly recruited staff to perform the audits to an effective standard is not available in house and therefore the associated costs are unquantifiable. Technical training would need to be sourced externally.

Comment [AW6]: can we be more specific?

This has been considered and rejected as there is insufficient resource or expertise on the technical side within the department to carry out this task effectively and the necessary training does not exist. The option is therefore rejected.

iii) Option 4 – Outsource for non-domestic audits alone

Secure an external resource to carry out audits on non-domestic RHI applicants and recipients.

This has been considered and rejected as being impractical. It would make no sense to outsource for one scheme only and not take advantage of external expertise and potential economies of scale and potential resource savings.

The option is therefore rejected.

iv) Option 5 – Outsource audit provision services for domestic and non-domestic RHI and other Government lead energy schemes, e.g. Energywise

Secure an external resource to carry out audits on non-domestic and domestic RHI applicants and recipients, as well as for any future energy efficiency schemes.

For the non domestic and domestic RHI schemes approximately 500 audits will be required each year. This equates to around 1 in 10 audits per annum for the present level of RHI recipients/applicants. The breakdown for non-domestic is 230 audits per annum and for domestic 270 audits per annum. It

is anticipated that the external resource will need to carry out 1/3 audits per day, mixed between the more comprehensive non-domestic and less complex domestic audits. This along with write up time for each audit report should equate to 1 day per non-domestic audit and 1 day for 3 domestic audits including write up time for each report

~~For the other anticipated Government lead scheme it is anticipated that there will be no more than 10 Ad Hoc Audits per annum with approximately 5 resource days per Audit. This contract is likely to be awarded by Autumn 2016.~~

The estimated cost per audit would be £500 for non-domestic RHI and £150 for domestic RHI. This would equate to £40,500 for 270 domestic audits and £115,000 for 230 non domestic audits per year. Therefore the estimated total cost per annum would be £155,500.

Comment [AW7]: Further discussion necessary re: costs and number of audits

The benefits of this approach would include the requirement for only one procurement exercise, improved management of the schemes by placing the audit processes under the external resource managed by the department and the ability to utilise the external expertise of those carrying out the audits.

Section 4: EXPECTED DELIVERABLES

Please provide details on the deliverables expected from consultancy. If available, a copy of the draft terms of reference for the proposed consultancy should be attached.

- 4.1 The external resource will be expected to carry out comprehensive audit checks on non-domestic and domestic RHI applicants / recipients ~~as well as other future energy efficiency schemes.~~
- 4.2 The external resource will be expected to provide audit reports electronically ~~in both word and pdf format.~~
- 4.3 The audit reports should provide assurance of compliance with the scheme regulations where this is the outcome, or in cases of non compliance details of deficiencies and recommended actions.

Section 5: SKILLS TRANSFER

- 5.1 This is a specialist task that requires the advice of a specialist technically qualified external resource with technical experience in both energy efficiency and the renewable energy industry. This piece of work requires technical energy expertise in this field and the ability to identify and ensure the correctly indicated technology has been installed in line with the correct standards.
- 5.2 Due to the technical nature of the task, particularly for non-domestic audits there will be little opportunity for the transfer of skills to staff in the department.

Section 6: PROPOSED DIVISION OF WORK

What in-house support will be given to the consultants e.g. technical/specialist inputs, accommodation, photocopying and typing services etc?

- 6.1 The external resource will be required to provide the delivery of specific objectives as described in the specification within the tender documentation.
- 6.2 Departmental staff will manage the external resource, receive audit reports and query information if necessary. The consultants will be provided with full and supporting background documentation by the department prior to undertaking audits.

Provide indicative estimates of the number of consultancy days by consultancy grade.

- 6.3 The assignment is estimated to take up to 300 consultancy days per annum as follows:- approximately 500 audits per annum between 2-3 audits per day including the write up and submission of reports.

Provide indicative estimates of the expected number of in-house staff days by staff grade.

- 6.4 The assignment is estimated to take up to 300 in-house staff days, estimated at two staff one Deputy Principal and one **Staff Officer** carrying out 2-3 audits per day including write up of reports, but as previously advised this option is not viable as the in house expertise does not exist.

Section 7: EXPECTED COSTS OF THE ASSIGNMENT

External Consultancy Costs

7 The anticipated external resource cost per audit would be £500 for non-domestic RHI and £150 for domestic RHI. This would equate to £40,500 for 270 domestic audits and £115,000 for 230 non domestic audits per year.

7.1 It is expected that the external resource costs for this project should not exceed **£155,500**. Budget is available from the **Energy Renewables Division Budget**.

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In-House Costs

7.2 The in-house cost is based on one Deputy Principal and one Staff Officer per year at a cost of £88,846. However as stated previously there is not the in-house expertise to carry out these audits to the same technical standard as outside.

Section 8: PROJECT MANAGEMENT / PERFORMANCE REVIEW ARRANGEMENTS

8.1 The project will be managed by the DP with supervision by the Grade 7, both from **Energy Renewables Division**. The successful external resource will be expected to liaise closely with designated members on a regular basis. The successful tenderer will be required to present the key points of reports to DFE, if appropriate.

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8.2 Regular meetings, either in person or via conference call, will take place throughout the contract with the consultants obliged to submit regular update reports (at agreed intervals) to enable the review of progress. An electronic report will be required for each audit visit.

8.3 The progress of the assignment will be monitored closely by the designated members of **Energy Renewables Division** to ensure that the number of audits is completed on time and within budget.

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What are the performance review arrangements for the assignment, e.g. the quality assurance employed from Departmental specialists?

8.4 The designated members of **Energy Renewables Division** will meet the external resources on a regular basis to outline key issues. **[DN need to identify performance review mechanism]**

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8.5 The appointed external resource will be expected to attend meetings, provide regular update reports and be contactable throughout the contract. If required the external resource will be expected to explain the analysis carried out and the evidence gathered.

Section 9: IMPLEMENTATION AND EVALUATION PLAN

How will the results of the consultancy be implemented?

9.1 The findings from each audit report will be cross referenced and recorded against the relevant with each RHI applicant/ recipient information ensuring that the information provided is accurate.

Proposed arrangements for evaluating the outputs delivered by the consultancy assignment. This should include information on who is the responsible officer for ensuring the evaluation takes place and also information on when it is proposed to carry out the evaluation. Whilst ideally the evaluation should be independent of the project promoters, in most instances, evaluations should be carried out by internal resources, i.e. in-house staff or internal consultancy.

9.2 The external resource will be required to provide the department with a timetable for scheduled visits and return their audit reports/findings from their inspections within 2 weeks of the site visits whilst flagging any areas of concern with the department.

9.3 The designated members of **Energy Renewables Division** will closely monitor outputs of the external resource ensuring audit reports are adequately detailed, that all queries are comprehensively responded to, received in time and in the correct format with relevant supporting information.

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