

POST PROJECT EVALUATION

Title of Consultancy Assignment:

Economic Appraisal of a Northern Ireland Renewable Heat Incentive

Name of Consultant Appointed:

CEPA in conjunction with AEA

Cost of Consultancy:

Sensitive commercial information redacted by the RHI Inquiry

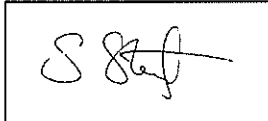
Prepared By:

Susan Stewart

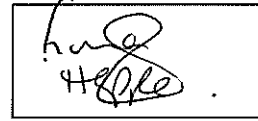
Approved By:

Fiona Hepper

Signed:



Signed:



Date:

23 August 2011

Date:

25/8/11

Section 1: Background*Provide a brief description of the assignment including:*

- What was the purpose of the assignment?
- What was the need for the assignment?
- Who was the appointed consultant and when were they appointed?

Purpose of the assignment

The purpose of the assignment was to appoint external consultants to carry out an economic appraisal for a Northern Ireland Renewable Heat Incentive (RHI). An RHI is an incentive scheme that will reward those who install eligible renewable heat technology with a set tariff to be paid over a number of years, the level of tariff and length of payment is determined by the size and type of technology involved. The tariffs are set in order to cover the capital, operating and other non-financial costs of installing such technologies. This required the advice of specialist heat economists as the skills needed to deliver this project were not available within DETI. The assignment also had to give consideration to the alternative methods of support to ensure that the heat market is encouraged in the most cost-effective way possible.

Need for the assignment

The Department of Energy and Climate Change (DECC) in GB announced in July 2009 that it intended to introduce a RHI to support the deployment of renewable heat technologies. The RHI is the main UK policy driver to satisfy obligations under the EU Renewable Energy Directive and to support the achievement of their renewable heat target of 12% by 2020, and as such Northern Ireland is expected to contribute to this target. The RHI, as it stands, only applies to England, Scotland and Wales and not Northern Ireland. The significant differences between the heat markets here and Great Britain meant that a separate assessment on the nature and growth potential of the Northern Ireland market was needed.

In December 2009, DETI appointed AECOM Ltd and Pöry Energy Consulting to carry out a significant piece of research into the nature of the heat market heat, the current levels of renewable energy, the potential development of the market and potential support measures to assist the reaching of a 10% renewable heat target.

The report produced by AECOM and Pöry showed that whilst the current level of renewable heat in Northern Ireland is relatively low (1.7%) that 10% renewable heat by 2020 was achievable; however substantial Government support, in terms of policy and financial incentives, would be required. The research also highlighted that the GB RHI, as it stood, could be ineffective in Northern Ireland as it did not take account of the specific elements of the heat market here and therefore to effectively incentivise the local market a Northern Ireland RHI should be developed.

In order for the RHI to be designed and implemented it was necessary to carry out an Economic Appraisal to determine the most cost-effective structure for the scheme. This work would assess the RHI in comparison to other support measures, would develop possible scenarios for tariff levels, advise on the potential uptake and overall cost of a scheme and allow for a decision to be taken on the future design.

Appointed Consultants

DETI conducted a competitive tender process and contracted external consultants, Cambridge Economic Policy Associates Limited (CEPA), in conjunction with AEA to carry out this work in February 2011 with the aim for completion by May 2011.

Section 2: Assessment of Costs

This section should provide a comparison of the actual costs of the external consultancy with the agreed contract value.

Where the variation between contract value and actual costs is greater than 10%, an explanation for the variation must be provided. [Note where actual costs exceed the cost approved by DFP by more than 10%, then DFP must be informed].

Expected Cost	Sensitive commercial information redacted by the RHI Inquiry	Actual Cost	Sensitive commercial information redacted by the RHI Inquiry
Percentage variation between expected cost and actual cost			- 0.07%

Explanation of variation in costs

The Department initially estimated that the cost of this project was to be between £ [redacted] Grade 5 approval for external consultants to undertake an economic appraisal was obtained on 11 November 2010.

However, in the tendering process, 4 bids from external consultants were submitted ranging between £ [redacted] and £ [redacted]. Only one of the proposed service providers was within the expected price range. The higher than expected prices were due to the specialist technical nature of the project. In December 2010, representatives from Sustainable Energy Branch and Economics Branch met to evaluate the tenders and award the contract. Following an assessment of each of the tender applications based on methodology, resource allocation and contract management, the contract was awarded to CEPA, partnering with AEA. CEPA's estimated costs of carrying out the work were around £80k plus expenses. This was higher than the Department's initial estimated cost of between £40-50k.

As the expected cost of this piece of work was higher than anticipated, Ministerial and DFP approvals were obtained and received on 10 January and 18 January 2011 respectively. The price quoted by CEPA/AEA for this work was valid until 28 February 2011. The project was part-financed (50%) by the European Regional Development Fund under the European Sustainable Competitiveness Programme for Northern Ireland and the necessary approval to obtain the extra financing was obtained on 22 December 2010.

CEPA's costs of carrying out the economic appraisal were estimated at £ [redacted] (excl. VAT). CEPA also estimated proposed expenses for the project at £2,310 (excl. VAT). CEPA undertook and completed the economic appraisal for £ [redacted] (excl. VAT). Expenses included travel (flights and other transportation for 2 day trips to Belfast for 4 people); video and phone conferencing; and some subsistence. This came to a total of £2,251.51 (excl. VAT).

The economic appraisal was estimated and costed correctly. Expenses were slightly less expensive than estimated. Final overall costs were therefore slightly less than the original estimates.

Section 3: Assessment of Deliverables

This section should provide detail on what was delivered by the consultants. The extent to which projected deliverables, as outlined in the Terms of Reference, were met by the consultants, and the quality should be assessed.

The project deliverables, as specified in the Terms of Reference, were as follows;

- i. Identify the strategic context within which this policy sits, specifically identifying the particular EU, UK and NI policy that is relevant.
- ii. Determine the need for Government intervention in the renewable heat industry in Northern Ireland.
- iii. Outline the objectives of Government's support of the renewable heat industry and the associated benefits.
- iv. Identify a full list of potential options for future delivery of a Northern Ireland Renewable Heat Incentive.
- v. Provide a detailed analysis of the economic cost/benefit of implementing a renewable heat incentive in domestic, non-domestic and the large industrial sector in NI.
- vi. Identify and quantify the monetary costs and benefits for each option.
- vii. Assess and identify the potential risks in delivery in a future support scheme.
- viii. Outline the non-monetary costs and benefits of delivering a RHI support scheme and increasing renewable heat levels to 10% by 2020.
- ix. Calculate net present values and assess uncertainty.

- x. Make recommendations, based on the evidence gathered and the economic analysis carried out, on the most cost effective structure of a Northern Ireland RHI to increase the level of renewable heat to 10%.

The terms of reference stipulated that the successful consultant would provide a draft report for consideration by Sustainable Energy Branch followed by submission of a final report. These reports were delivered to agreed timescales and to a good standard. Some changes were required but these were incorporated into the final report. CEPA/AEA worked closely with Sustainable Energy Branch staff, providing regular updates on their research throughout the contract and were also available to answer questions or discuss certain issues further.

The economic appraisal considered various options for incentivising the local renewable heat market, and has advised on appropriate tariff levels. It has also considered the costs/benefits and the impact of each of the options. CEPA and AEA also considered high-level options which included specific targeted support for the heavy industrial sector, the roll-out of capital grants, adopting the GB RHI scheme, the introduction of a Renewable Heat Obligation, the introduction of a NI RHI scheme, as well as others. Under each of these scenarios various funding options were also considered.

The external consultant's work was deemed to be consistent, sufficiently detailed, and in keeping with what was asked for in the tender document.

Section 4: Assessment of Benefits

This section should provide detail on the benefits provided by the consultancy assignment. For example:

- *Were the deliverables achieved within the timescale specified in the contract?*
- *Reasons for any delays and the impact on expected benefits should be explained.*
- *Was the consultancy assignment used for the purpose originally intended?*
- *How were the outputs delivered by the assignment used?*

The contract was originally meant to begin in December 2010 and was expected to be completed within a 12 week timescale. However, as there was a requirement to seek approval for extra money to fund the economic appraisal, the contract was not awarded until 18 January 2011. The project did not officially begin until early February 2011 due to the delay by the consultants in submitting necessary contractual documentation. Timescales were revised following discussions between Sustainable Energy Branch and the consultants. This had limited impact and the final report is of a good standard with excellent detail.

The project provided a detailed economic analysis of the options for developing renewable heat in Northern Ireland which included specific targeted support for the heavy industrial sector, the roll-out of capital grants, adopting the GB RHI scheme, the introduction of a Renewable Heat Obligation and the introduction of a Northern Ireland RHI scheme. Under each of these scenarios various funding options were also considered. The appraisal assessed the cost/benefit of each policy option to ensure that the most appropriate scheme for Northern Ireland and so that funding secured will be sufficient for the expected demand.

The appraisal has informed decisions on future renewable heat strategy and has formed the basis of the Department's consultation exercise that was launched on 22

July 2011. The economic appraisal was placed on the Departmental website along with the consultation for more detailed information.

Section 5: Division of Work

This section should provide details of the division of work between in-house staff and the consultants. Evidence should be provided of whether the in-house assistance provided matched what was in the business case.

The business case for the economic appraisal stated that in-house staff would be used to manage the delivery of the project, assisting consultants with minor queries if appropriate and providing the consultants with full and supporting background documentation to give contextual awareness of renewable heat in Northern Ireland. In addition, the business case estimated that 2-3 meetings would be held with G7/Deputy Principal throughout the project and that the Departmental economists would provide a quality assurance check before the EA was signed off.

Several meetings were held throughout the project, as well as continual communication via telephone and email. Regular update reports were submitted throughout the project, with a draft outline report and final draft submitted and considered in advance of a final draft being agreed. Progress meetings were held on 22 February 2011, 21 March 2011 and 14 April 2011 with the external consultants. These meetings were useful to discuss progress, assess options and quality assure of findings. In addition, the 14 April meeting was used to present findings to appropriate Government stakeholders in order to gather initial views on the appraisal.

Section 6: Skills Transfer

- *What mechanisms were put in place to allow the transfer of skills and knowledge to happen?*
- *Assess the extent to which transfer of skill and knowledge to in-house staff has taken place and what impact has this had on in-house capability?*
- *Has the need for future consultancy support diminished as a result of skills transfer?*

The economic appraisal required specialist and technical skills within the field of energy economics. There has been some opportunity for the transfer of knowledge within the Department, as the final assessment has been made available to other staff. However, it must be recognised that research at this level was completed by technical consultants, and opportunity for transfer of much of the technical knowledge must therefore be somewhat limited within the general Civil Service. However it is envisaged that the study conclusions will benefit many key sustainable energy industry players and policy makers in relation to the recommendations.

It is envisaged that future detailed technical work for large energy projects or studies would be carried out by external consultants due to a lack of Departmental staff, qualified to a sufficient level in specialist energy economics related fields.

Section 7: Assessment of Project Management Arrangements

This section should provide an assessment of the project management arrangements. For example:

- *Were the monitoring arrangements put in place to manage the consultant's satisfactory?*
- *Was there an opportunity to influence performance interim stages?*

- *Was the project managed effectively?*

The Department managed the progress, objectives, and financial monitoring of the RHI economic appraisal. The consultants, CEPA/AEA, reported to the Department on progress and provision of the appraisal reports. Representatives from DETI were engaged in monitoring progress of the economic appraisal report through e-mail and telephone correspondence with the consultants and contract progress meetings to ensure that the work was completed in accordance with the study terms of reference and to try to ensure that the economic appraisal would be completed on schedule. This system worked well and the Department was kept informed of progress, advised of difficulties and were able to offer appropriate support and advice as appropriate. Departmental staff also kept senior officials informed about the study progress.

There were no issues with project management – appropriate levels of staff from CEPA and AEA were made available to work on the project and good contingency arrangements were in place where required.

The final Study report was deemed to be comprehensive, consistent and sufficiently detailed and was accepted by Sustainable Energy Branch and the Departmental Economics Branch.

Section 8: Conclusions and Recommendations

Conclusions

Provide a summary of what value was added by this assignment and assess whether, on balance, value for money was achieved.

The economic appraisal has been used by the Department to consider how best to take forward future Northern Ireland renewable heat strategy and has formed the basis of the Department's consultation exercise that was launched on 22 July 2011. The appraisal recommendations were provided to the Minister and the Departmental Committee and have been relayed to key representatives from the sustainable energy industry and the wider public through the consultation. The report has also been placed on the Departmental website along with the consultation to provide more detailed information to stakeholders.

The procurement was completed through a competitive tendering exercise and assessed by representatives from the Department, with a representative from Central Procurement Directorate overseeing the procurement exercise. CEPA and AEA had the most competitive and value for money bid which met the requirements of the tender document and, specifically, the study Terms of Reference.

Utilising external consultants was deemed to be the only feasible option as there was no sufficient expertise within either the Department or the Utility Regulator to successfully undertake and complete the economic appraisal. Therefore, the necessary skills could not be engaged within the Department, the Utility Regulator or the wider Civil Service in Northern Ireland.

In July 2011, the Department confirmed that the RHI economic appraisal was completed to their satisfaction with sufficiently detailed costs and benefits for each of the policy options and recommendations. As noted above, the Department has since disseminated the findings of the report to the Minister, the Departmental Committee, and through consultation with sustainable energy industry stakeholders, and the wider public.

The RHI economic appraisal report is helping to advise on policy for the Department. The report will be used to identify how best to develop renewable heat in Northern Ireland. Therefore it is considered that the project has been successfully concluded and will form a solid basis for further consultation by the Department into developing renewable heat technologies in Northern Ireland.

Recommendations

Provide a summary of the lessons learnt and provide details on how these will be disseminated within the Department/Agency.

CEPA's and AEA's work in completing the economic appraisal was deemed to be consistent, sufficiently detailed, and in keeping with what was asked for in the Study Terms of Reference.

The RHI economic appraisal report is helping to advise on policy for the Department and has been used to identify how best to develop renewable heat in Northern Ireland.

The lesson learnt from the assignment is when initially costing a project, to discuss what the costs would be with colleagues who have been involved in similar projects or contacting Central Procurement Directorate to obtain advice on the estimated costs of this type of project. However, on this occasion, previous experience had formulated Sustainable Energy Branch's initial costing for this project.

The lessons learnt will be disseminated through Divisional Heads of Branch meetings and through interaction with Departmental colleagues.