## Appendix I

**POST PROJECT EVALUATION**

| | |
|---|---|
| **Title of Consultancy Assignment:** | ASSESSMENT OF THE POTENTIAL FOR DEVELOPMENT OF RENEWABLE HEAT IN NORTHERN IRELAND |
| **Name of Consultant Appointed:** | AECOM Ltd and Pöyry Energy Consulting |
| **Cost of Consultancy:** | Sensitive commercial information redacted by the RHI Inquiry |

| | | | |
|---|---|---|---|
| **Prepared By:** | Peter Hutchinson | **Approved By:** | F. Hoppar |
| **Signed:** | | **Signed:** | |
| **Date:** | 8 November 2010 | **Date:** | 8 Nov. 2010 |

---

**Section 1: Background**

***Provide a brief description of the assignment including:***

- ***What was the purpose of the assignment?***

The assignment was expected to cover the following;

a. undertake an independent assessment to identify and quantify the current scale, future sustainable growth potential and optimum size and scale of the renewable heat sector in Northern Ireland. The successful consultant will be required to provide a statistical evidence base to verify their findings;

b. make recommendations as to the options for encouraging the deployment of renewable heat technologies in Northern Ireland. The successful consultants must examine the appropriateness of a RHI for NI and will be expected to provide an analysis of the needs or otherwise for any short term incentive that may be required in the absence of anticipated legislation for a RHI in NI in the short term; and

c. make recommendations for an appropriate evidence-based renewable heat target and to consider how this target might impact on existing energy markets in NI.

- ***What was the need for the assignment?***

Following developments in renewable heat policy in both the EU and Great Britain, namely the renewable energy directive and the introduction of the Renewable Heat Incentive (RHI)

respectively, DETI commissioned a piece of research in order to gather up to date information on Northern Ireland heat market and assess the potential for developing renewable heat.

This piece of research was essential to provide the evidence required to inform future policy development in this area and to establish how the renewable heat sector in Northern Ireland could be most effectively supported and developed. With the introduction of binding EU targets in respect of renewable heat (the UK is expected to that 15% of its energy consumption, including heat, comes from renewable sources by 2020, Northern Ireland is expected to contribute to this target) and the introduction of the RHI in Great Britain but not in Northern Ireland, evidence needed to be gathered to inform future policy decisions so the market here would not be disadvantaged.

- ***Who was the appointed consultant and when were they appointed?***

AECOM Ltd and Pöyry Energy Consulting were appointed in December 2009 following a competitive tender.

---

**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% |
| **Explanation of variation in costs** | n/a | | |

---

**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. To provide up to date and accurate statistics on the current heat and renewable heat usage in Northern Ireland.

ii. To produce a base heat map for Northern Ireland in a Geographic Information Systems format that identifies, as a minimum, high-level heat users and their location; highlights heat demand and resource in NI; and identifies locations which offer the best potential for developing renewable heat technologies.

iii. To benchmark Northern Ireland's renewable heat potential against Renewable Heat markets in GB, RoI and at least 2 other European regions.

iv. To consider and present options on how the Renewable Heat market in Northern Ireland could be encouraged / incentivised.

v. To make an evidence based assessment of the need for an interim measure in Northern Ireland to stimulate the Renewable Heat market in light of the introduction of the Renewable Heat Incentive in Great Britain, and present options for any short term incentivisation.

vi. To make projections as to evidence-based target for renewable heat to 2020 for Northern Ireland, setting out clearly the potential impact of any target on other existing energy markets (i.e electricity, gas, coal and oil).

On the whole the deliverables as outlined in the ToR were met, quality was consistently good throughout with minimal supervision required.

The terms of reference stipulated that the successful consultant would provide a draft report for consideration by Sustainable Energy Branch (SEB) 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. AECOM and Pöyry both worked closely with SEB staff, providing regular updates on their research throughout the contract and were also available to answer questions or discuss certain issues further.

The final report is a substantial piece of research and includes detailed analysis of the current status of both the heat and renewable heat markets in Northern Ireland. It provides information on Northern Ireland's position in comparison to other EU states and regions and presents various evidence based options on how the market could be developed. Recommendations are made about how DETI should proceed with this policy area and how a 10% target of renewable heat by 2020 could be achieved. GIS maps have also been provided for DETI's use.

The consultants demonstrated throughout an in-depth knowledge of renewable heat, and wider issues that would affect the rollout of heat policies.

---

**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?***

The deliverables of the project, as detailed in the terms of reference, were achieved with the final report covering all aspects required in great detail. This work has informed decisions take on renewable heat policy as it was intended. There was some delay in completing the project.

- ***Reasons for any delays and the impact on expected benefits should be explained.***

The project was delivered with some delay, largely due to a delayed start and the amount of data collection that was required. Timescales were revised following discussions between SEB and the consultants. This had limited impact and the final report is of a good standard with excellent detail.

- ***Was the consultancy assignment used for the purpose originally intended?***

The consultancy assignment was used for the purpose originally intended.

- ***How were the outputs delivered by the assignment used?***

The project provided a detailed analysis of the current status of the renewable heat market, the potential for growth and the possible support measures (both policy and financial) that would be required. The report has informed decisions on future renewable heat policy, detailed in a statement by the Minister on 20th September 2010. The Executive Summary of the report was also circulated to interested parties and placed on the DETI website for information.

SEB now plan to carry out a short piece of economic work aimed at developing a RHI specifically for Northern Ireland, as advised in the report. This work will assess the cost/benefit of such a policy to ensure that it is the most appropriate scheme for Northern Ireland and so that funding secured will be sufficient for the expected demand.

---

**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 this assignment stated that a project steering group would be set up to monitor progress of the consultants and that this group would include representatives from the public sector, private sector, academia and others. This group was established in January 2010 and chaired by Jenny Pyper, Head of Energy Division. Project Steering Group meetings were held on 19 January 2010, 11 March 2010 and 26 April with members of the PSG invited to comment on progress, advise on work areas and quality assure findings.

In addition, the business case stated that there would be regular meetings between the consultants and officials from SEB (G7/DP) and update reports would be submitted at agreed intervals.

An inception meeting between SEB and AECOM and Pöyry was held on 1 December 2009 to discuss the project and the expectations and deliverables. Further meetings were held throughout the project, as well as continual communication via telephone and email. Regular update reports were submitted during the data gathering element of the assignment, with a draft outline report and final draft submitted and considered in advance of a final draft being agreed.

---

**Section 6: Skills Transfer**

- ***What mechanisms were put in place to allow the transfer of skills and knowledge to happen?***

As a result of the close contact with AECOM and Pöyry throughout the project staff in SEB have a significantly increased understanding of the heat market in Northern Ireland and a better knowledge of the various renewable heat technologies and the economics in comparison to existing fossil fuels. Skills transfer was largely through learning and development gained on a day to day basis working with the AECOM / Pöyry team.

- ***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?***

This knowledge has been very useful in developing policy options to support the Northern Ireland market and has informed this policy area's work plan for the next 12-18 months.

- ***Has the need for future consultancy support diminished as a result of skills transfer?***

Despite the increased understanding there will still be a need to employ experienced energy economists to carry out an economic appraisal of a renewable heat incentive because of the level of technical expertise required.

---

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?*

From the outset of the project it was agreed that regular detailed update reports would be provided by the consultant, specifically in terms of progress of data collection, and that informal contact in the form of phone calls and email would be expected. This system worked well and SEB were kept informed of progress, advised of difficulties and were able to offer appropriate support and advice as appropriate. AECOM and Pöyry were also able to advise of development in renewable heat policy in GB which benefited the project as a whole.

- *Was there an opportunity to influence performance interim stages?*

There were opportunities to influence performance at interim stages, and this was utilized most between the draft and final report stages.

- *Was the project managed effectively?*

There were no issues with project management – appropriate levels of staff from AECOM and Pöyry were made available to work on the project and good contingency arrangements were in place where required. The project was managed effectively by AECOM.

---

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 assignment provided SEB with a sound evidence base to make policy decisions on renewable heat, namely an appropriate target for 2020 and a view on how this could be achieved. It also provided up to date accurate information on the heat and renewable heat markets in Northern Ireland for the first time. The final report is a detailed document which will be of significant value to SEB as this work progresses and policy is developed and legislation drafted.

The assignment was viewed as the first step in the development of the local renewable heat market, by developing this sector there are significant opportunities to reduce carbon emissions, increase fuel security and realize the potential for new 'green jobs'.

On balance Value for Money was achieved.

Recommendations

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

The report allowed the adoption of a 10% target for renewable heat in the Strategic Energy Framework which has been agreed by the Executive as part of Northern Ireland's vision for energy policy.

One lesson learnt from this assignment is that in future more time is required for an assignment that requires so much data collection. The use of a Project Steering Group to manage the process was also useful and worked well.

This PPE will be circulated to energy division to highlight the lessons learned.