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Department of
**Enterprise, Trade
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From: Peter Hutchinson

Date: 23 April 2010

To: Jenny Pyper

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RENEWABLE HEAT OVERSIGHT GROUP – MONDAY 26th APRIL, 10.30, NETHERLEIGH CONFERENCE ROOM A

BACKGROUND

1. You have agreed to chair the third meeting of the renewable heat oversight group on 26th April at 10.30am in Netherleigh Conference Room A. The purpose of this meeting is for AECOM and Pöyry to present their final draft report, explain their findings and present their recommendations. This is intended to stimulate some discussion as to how the renewable heat market should be encouraged in NI and the next steps needed to take this work forward.
2. AECOM and Pöyry have now submitted their final draft report. This will be finalised after this group meeting and following a separate meeting we intend to hold with the consultants. The final report is not expected to differ greatly from the current draft and should be available by 30th April.
3. This is intended to be the final meeting of this group however as this work continues it may be necessary to form a more strategic group. This group would advise on policy decisions relating to incentivisation and assist in the development of a wider renewable heat strategy, already it is clear that there would be roles for DARD, DOE, DSD, DFP and OFMDFM, as well as others.

FINDINGS

4. Some of the key findings of AECOM's work are;

- ***NI Heat Demand***

- The overall heat demand in NI has been calculated at 17,362 GWh.

- The domestic sector accounts for 61% of heat demand; industrial is 22%, commercial 12% and public 4%.
- The existing level of renewable heat has been calculated at 1.7%, most of which is through biomass boilers.
- Taking into account additional thermal demand and expected reduction in energy requirements through energy efficiency the expected heat demand in 2020 for NI is 16,704 GWh.
- **Resource potential**
 - Currently home grown biomass is limited to 4-5% of overall heat demand. An increase in potential from biomass would require extensive growth of energy crops with potentially an additional 5% of heat provided by 2020.
 - There appears to be significant potential to develop biogas, with around 2.9 TWh available per year corresponding to around 15% of 2020 heat demand.
 - There are a number of geothermal opportunities which could provide localised district heating.
 - Heat pumps could be used where appropriate, cost-effective and efficient.
- **Potential of various technologies and schemes**
 - There are opportunities in developing building scale technologies in the domestic sector through a RHI scheme and through new builds.
 - Community scale district heating should also be further analysed, this report suggests that 30% of heat demand in Belfast and other towns could be met by such schemes.
 - Significant potential for biogas AD plants and injection onto grid.
- **Targets**
 - A 10% target is achievable through policy and/or financial support. In order to show long term support a target to 2050 should also be considered.

- Assuming a heat load of around 16.8TWh by 2020 that would mean that a 10% equates to 1.6TWh. As there is already 300GWh renewable heat an additional 1.3TWh needs to be generated by 2020 to meet the target.
- A strategy to meet this target would need to include supporting the uptake of technologies in the large industrial sector, building scale technologies and new developments. The support of district heating schemes, geothermal and biogas should also be considered.
- **Incentives**
 - An incentive scheme is required to encourage renewable heat deployment and achieve a 10% target.
 - A simple RHI scheme may be far more expensive than the net additional cost and a capital grant scheme has limited impact.
 - The GB scheme appears to give the potential to pay higher incentives than required as it allows all consumers access to all technologies, a more efficient scheme may only reward certain technologies in certain areas or by consumer group.
 - The most important element of any incentive scheme is that the Executive should commit to a consistent long term approach.

KEY RECOMMENDATIONS

5. Some of AECOM / Poyry's initial recommendations include;
 - i) **A 10% target for 2020 seems to be appropriate**, though in order for it to be achieved there will need to be policy or financial support. A higher target could be achieved but at increased cost.
 - ii) 17 large industrial sites in NI account for 22% of overall heat demand, with 2 sites alone accounting 14% of NI's overall heat demand. Therefore, **there is significant potential in exploring how/if these large industrial sites could utilise renewable heat technologies.**

- iii) **A RHI would be an effective route to support small and medium sized renewable heat systems**, though any RHI should be formed to ensure maximum energy and incentive efficiency.
- iv) **Larger schemes will also require some form of incentive though this may be through more direct intervention.** It is important that **DETI signal long term support for renewable heat to instil confidence** in the domestic and commercial markets.
- v) Any future heat incentives or **proposals should be accompanied by a guarantee that all installations from a set date will receive support** providing that the scheme meets the suitable criteria.
- vi) Consideration needs to be given as to how biomass resource can be increased in NI, though as this will be significantly limited **a policy on the importation of biomass and securing resource in the future needs to be developed.**
- vii) **Biogas generation and biogas injection has significant potential in NI** and therefore needs further analysis.
- viii) The development of a **quality standard for wood pellets** should be considered.
- ix) **Further analysis is required of the potential and costs for district heating** though research has suggested there may be significant potential in NI. If a further study demonstrates potential then consideration should be given to the development of “strategic district heating zones”.
- x) The use of geothermal heat should be examined. **If viable, the support for geothermal energy should be prioritised over conflicting technologies in the relevant areas.**
- xi) **There is the need to examine in more detail the impact of biomass boilers on air quality** and whether the regulations on the use of biomass boilers need to be modified.
- xii) **All future power generation facilities should be required to be located in areas where the waste heat can be used.**
- xiii) **Planning policy should act on new development with spatial policies to ensure that the most appropriate technologies are used in selected areas**, such as connection to district heating schemes.

- xiv) Heat pumps can provide cost and CO2 reductions but need to be installed in efficient buildings with low temperature heating systems to maximise efficiencies. **There is potential for an incentive scheme to be linked to mandatory efficiency standards.**

FORMAT

- 6. A brief agenda is attached at **Annex A**. The aim of the meeting is to seek discussion from the group on the findings, recommendations and appropriate next steps.
- 7. You will be required to open the meeting. Bullet point speaking notes are attached at **Annex B** for your consideration.
- 8. I attach therefore for your information:
 - (i) Agenda (**Annex A**);
 - (ii) Draft speaking notes (**Annex B**)
 - (iii) List of attendees (**Annex C**);
 - (iv) Final draft report (attached separately)

Peter Hutchinson
Sustainable Energy
Ext 29532

cc Alison Clydesdale
Dan Sinton
Davina McCay
Seamus Fitzsimons

AGENDA

**RENEWABLE HEAT OVERSIGHT GROUP
26th APRIL 2010, NETHERLEIGH**

- | | |
|-----------------|---|
| 10.30 am | Welcome and Introduction
<i>Jenny Pyper</i> |
| 10:35 am | Interim Findings
<i>Presentation by Aecom and Pöyry</i> |
| 11.30 am | Discussion
<i>All</i> |
| 12 pm | Discussion on the appropriate next steps
<i>All</i> |
| 12.30 pm | Close |

ANNEX B

DRAFT SPEAKING NOTES

- Thank all those in attendance for coming along (**NB:** *Michael Doran, Elaine Groom and Neil Hewitt have offered apologies, Leanne Rice, Ciaran Prunty and Mark Anderson are attending in their place*).

- Welcome the representatives from AECOM and Pöyry.
 - Andrew Turton – Project Manager, AECOM
 - Andy McCrea – Project Director, AECOM
 - Andrew Cripps – Technical Advisor, AECOM
 - Ruairi Dempsey – Consultant, AECOM
 - Gareth Davies – Director, Pöyry Energy

- The main focus of the meeting today is to hear the final report from AECOM, the findings and the recommendations. AECOM and Poyry have done a lot of work over the next number of months and their report includes a lot of information and some interesting recommendations. These include;
 - Final figures regarding NI heat demand.
 - The appropriateness of the 10% target and how this could be achieved.
 - How NI's indigenous resource could be best used and the need to increase resource.
 - Specific schemes that should be considered in NI.
 - Methods of support / incentivisation.

- It would be useful to have a general discussion / Q&A on these findings to ensure that any outstanding issues are covered.

- It will also be important to have a discussion on the next steps in taking this work forward. This scoping study is the first piece on work on Renewable Heat in NI and it is likely that there will need to be further work, including a Renewable Heat Strategy for NI.
- Therefore, your thoughts on how AECOM's recommendations should be taken forward and this work developed would be useful, as well as consideration of the key partners in delivering a Renewable Heat Strategy.

ANNEX CConfirmed attendees – 26/04/10

Name	Organisation
Jenny Pyper (Chair)	Head of Energy Division, DETI
Alison Clydesdale	Sustainable Energy Branch, DETI
Dan Sinton	Sustainable Energy Branch, DETI
Peter Hutchinson	Sustainable Energy Branch, DETI
Damien McDonnell	Chair of MATRIX
Tim Irwin	DOE
Joyce Rutherford	Central Policy, DARD
Alan Maitland	OFMDFM
Derek Reay	GSNI
David Bell	Invest NI
Geoff Smyth	Carbon Trust
Ciaran Prunty	Queen's University Belfast
Mark Anderson	University of Ulster
Chris Osborne	Ulster Farmer's Union
Leanne Rice	Action Renewables