

From: Connolly, Samuel
To: [Mayock, Martin](#)
Cc: [Burgess, Kerri](#); [Ewing, Gary](#)
Subject: Renewable Heat Incentive - methodology
Date: 16 November 2012 15:31:00

Martin,

At the last sub group meeting, you asked for a brief explanation of the methodology used to calculate the carbon savings associated with the Renewable Heat Incentive.

Please see below an extract from the completed economic appraisal which provides an overview of how the deployment of renewable technologies was determined, which resulted in the carbon savings I had previously submitted. I appreciate that this is pitched at quite a high level, however given the complexities of what was a very sophisticated model, hopefully this will provide you with sufficient information regarding how the carbon savings were derived.

Regarding your point on double counting, it is my understanding that the carbon savings i.e. the difference between oil and a renewable source that uses some electricity e.g. GSHP does not factor in an increasing level of renewable electricity (resulting in a higher carbon saving over time). Indeed a conversion factor of 0.3939kgCO₂/kWh was used in the analysis, which is for electricity from a Combined Cycle Gas Turbine meaning that no renewable electricity was assumed to be used with e.g. a GSHP resulting in no double counting.

In relation to the 1:1 displacement of fossil fuel based generation, I attended a meeting this morning with the System Operator for Northern Ireland during which this was discussed. Given the complexities of electricity market operation they weren't entirely sure whether a more appropriate assumption could be derived, however they have promised to get back to me on this issue once they have made some enquiries.

Happy to provide further information as required.

Regards
Sam

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