From: Mark Cockburn
To: Coyne, Terence; McCann, Brendan
Cc: McCormick, Andrew (DFE); McFarlane, Iain
Subject: RE: PwC Report
Date: 23 December 2016 12:11:23
Attachments: image001.png
image002.gif
PwC response.docx

Brendan / Terry

With apologies in getting this to you, please find attached a short critique of Chapter 3 of the PwC report which I would be grateful if you could share with them. I would of course be happy to discuss any issues that it raises.

Have a good Christmas!

Kind regards

Mark

From: Coyne, Terence [mailto:Terence.Coyne@economy-ni.gov.uk]
Sent: 24 November 2016 09:54
To: Mark Cockburn <mark.cockburn@cepa.co.uk>
Cc: McCormick, Andrew (DFE) <Andrew.McCormick@economy-ni.gov.uk>; McCann, Brendan <Brendan.McCann@economy-ni.gov.uk>; McFarlane, Iain <Iain.McFarlane@economy-ni.gov.uk>
Subject: PwC Report

Good morning Mark.

It was good to meet you and your colleagues yesterday in advance of the Public Accounts Committee Evidence Session. I hope you had a good journey home.

At the meeting you mentioned that you had issues with some parts of the PwC Report on the operation of the Non Domestic RHI Scheme. I mentioned this to my colleague Brendan McCann, who managed the PwC assignment on behalf of the Department and is the key point of contact with PwC. Could you let Brendan have a note of the parts of the PwC report with which you have issues and he will raise the matter with PwC.

I have copied Brendan into this e mail, but his e mail address is Brendan.McCann@economy-ni.gov.uk

Regards

Terry

Terence Coyne
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NI Year of Food & Drink 2016

Please consider the environment - do you really need to print this e-mail?

Main / general concerns

Whilst we have no issue with the main findings of the report we feel strongly that in some instances CEPA's work has been misrepresented by PwC. Moreover it is clear that the NAIO relied on this report extensively in putting together its July report. Whilst we are not mentioned by name it is our concern that in the likely event that this report was FOIAed it would not be too difficult for us to be identified. It is therefore in the interest of everyone that the facts are correct. Our most significant concerns are:

- Omitting to recognise the nature of the 2012 report as an addendum to the initial 2011 report and as such, representing it as a document that can be read without reference to the full 2011 report, which contains much on the need for constant monitoring and periodic review.
- Conflating the bandings in the 2011 report with those in the 2012 Addendum.
- Ignoring a specific statement in the 2012 Addendum that we made on the need to periodically review biomass prices.

More generally, although we do not know the content of PwC's terms of reference, knowledge of key developments within the GB scheme and its underlying assumptions could have been stronger, which would have enabled more informative comparisons with the GB scheme. In particular there does not seem to have been a consideration of the guidance on multiple installations and how this compared to GB.

Specific points

3.17 *"When first considering support payment levels for the NI scheme in June 2011…the recommended tariff for small biomass boilers (<100kWth) (the most common technology installed in Northern Ireland) was 4.5p per kWh."*

This statement is incorrect. The recommended tariff for biomass boilers <45kW was 4.5p/kWh. For 45kW+ it was 1.3p/kWh. A 99kW boilers would have received a tariff of 1.3p/kWh under the initial bandings which went out to consultation.

3.18. The principle role of the second, lower tariff is to disincentives heat production just for the sake of it – **<u>where the tariff is above variable costs</u>**. (see DECC's March 2011 regulatory impact report). At the time tiering was not introduced where this condition did not hold.

Whether or not the first tier up to a 15% threshold is a contribution is largely a contribution of capital costs is debateable. The first part of the tariff would also have covered variable costs. The level of compensation was modelled to compensate for the additional levelised capital and operating costs of biomass over oil up to the modelled load factor. This difference determines the tariff. Tiering takes the tariff at the load estimated load factor, say 17%, reduces it above 15% and then increases it at loads below this amount such that the revenue received through two tiers would be equal with that of a flat tariff at load factors of 17%.

3.19 It is worth noting that in GB DECC had no tiered tariff in its >1MW band where these conditions applied. Again, at the time tiered tariffs were only introduced where the tariffs were in excess of the costs of fuel.

The extent to which the cost of fuel is lower depends upon the fuel in question. Although there is no single price for each, wood chips tend to be much cheaper than pellets. Wood chips were seen to have limited availability in NI.

3.20 It is important to note that the 2012 report was an Addendum – ie something that should have been read in conjunction with 2011 which makes extensive reference to the need for monitoring and reviews of tariff. It also sets out the uncertainty surrounding biomass prices.

The 2012 Addendum also explicitly states:

"It is recommended that DETI reassess biomass prices at review points to determine whether the overall tariff level is still appropriate"

3.22. The 4.01p looks like an input price. All or part of it needs to be grossed up to account for the boiler efficiency factor in converting fuel inputs to heat outputs.

3.23. In itself this creates an incentive, but the scale of incentive also depends on the difference between the level of tariff and variable costs. For instance, the 4.39p / kWh input estimated at the time needed to be grossed up to 5.16p / kWh to take account of an 85% fuel input to output efficiency. Other variable costs would have likely reduced the gap with the 5.9p per kWh further. This could potentially explain the initially much lower realised average loading factor at the time.

In GB DECC found that higher Tier 1 tariff was likely to have incentivised heat production up to the tier threshold – irrespective of whether or not it was needed / eligible. At the tier 1 threshold, given the 8.94p per kWh tariff in GB this would have resulted in annual revenues of over £23,000 for a 199kW boiler which was the installation size that most installed in GB given the small band ceiling of <200kW. By means of comparison, the revenue received would have been equivalent to an NI 99kW boiler with a load factor of c45%.

Whilst an incentive would have been created, it is not clear that everyone suddenly started generating heat just for the sake of it. In fact, apart from a few specific instances PwC's own analysis shows that on the whole some of the highest load factors were generated by activities such as poultry and mushroom farms which at least prima facie needed to run at such high levels.

3.24 Viewed on a stand-alone basis from an audit perspective it is possible to see why this view might be taken. However, except for the lack of tiering, the scheme replicated that in GB, which has never had caps at an individual installation level. The logic for this would have been that as long as the heat was eligible, it would have counted towards the UK's renewable energy and carbon reduction targets, which was the policy objective for introducing the incentive in the first place.

DECC certainly now does not see tiering as a "control" but rather, together with the level of the tariff, as an incentive. Budgetary management is through degression and overall scheme caps (see March 2016 impact assessment).

"*Based on the documentation made available it is not clear why such a control was not implemented by the department*; *such criteria were recommended to the Department during its public consultation process"* Were they? There was certainly one reference in the consultation responses made available to us which did so in the context of a higher Tier 1 tariff to address "fuel poverty". In this consultation the <45kW tariff combined domestic and smaller commercial. Out of the total of 78 – most of which we did not see – tiering did not rank highly as an issue.

The other significant difference with the NI 2012 regulations and what now exist for GB is the much more favourable treatment of installations accredited after the first twelve months.

3.25 *"the tariff rates have over-subsidized participants since the <u>start of the scheme".</u>* Is there evidence to support that this happened extensively for early accreditations? As set out, the average load factors were relatively modest in the scheme's early years and were not necessarily more generous than those operating in GB. Of course, it is arguable that the GB scheme was over generous, as its higher subsidy was driven by a gas counterfactual whereas most accreditations were, as in Northern Ireland, off grid.

3.26 No controls were introduced to the GB scheme until 2012 when an interim measure which allowed the scheme to be closed for the rest of the year immediately if annual costs were projected to exceed the available budget. This was replaced by degression in 2013.

3.28 Yes – but check rules on multiple installations.