

From: [Hutchinson, Peter](#)
To: [Connolly, Samuel](#); [Clydesdale, Alison](#)
Subject: RE: Our conversation on gas distribution charges
Date: 03 March 2011 10:19:00

Sam,

In response to the comments;

1. Agree
2. Agree
- 3a. Agree
- 3b. Agree with your comments
- 3c. Agree with your comments. Important to note that there will never be 100% gas coverage because of the rural nature of NI, though I'm not sure what the maximum potential would be (the maximum could possibly assumed from the gas study, already provided).
4. Agree with your comments
5. Agree that this needs to be considered with the costs, technical issues and resource potential factored in. Dr Elaine Groom, QUB, (contact provided) will be in a good place to advise.
6. Agree with your comments - Brian McHugh (NIAUR) may be best person to advise. It might be useful to circulate the section on the impact on gas and the relevant assumptions to some selected colleagues within DETI and NIAUR to consider before the report is finalised.

Alison may have further comments.

Thanks,

Peter

Peter Hutchinson

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From: Connolly, Samuel
Sent: 02 March 2011 14:44
To: Clydesdale, Alison; Hutchinson, Peter
Subject: RE: Our conversation on gas distribution charges

Peter/Alison,

See below suggested comments for Iain

Happy to take on board any additional comments/to discuss further

Sam

Samuel Connolly

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

From: Iain Morrow [mailto:Iain.Morrow@cepa.co.uk]
Sent: 02 March 2011 10:05
To: Connolly, Samuel
Cc: Hutchinson, Peter; Paget Fulcher
Subject: Our conversation on gas distribution charges

Sam

Thanks for the useful discussion yesterday. As promised, here is my understanding of what we discussed, and what it means for the project. Let me know if this is ok (or not!).

1. The most important thing is to get an idea of the materiality of the impact of renewable heat on the gas network. The impact will be different in the two scenarios outlined in Peter's note (one with £25m funding, one with additional funding). [Agreed](#)
2. We should make "worst case" assumptions in our assessment of the materiality, on the basis that if the impact isn't material in that case, it shouldn't be material in any other. [Agreed](#)
3. There are various ways we could do this, but one way would be to look at what the funding delivers (in terms of number of renewable heat installations) and see what level of gas that might displace. There are three assumptions you need to make to do this:
 - a. What's the level of funding in scenario 2? My suggestion here would be that we assume that the funding is sufficient to achieve the 10% target for 2020, since for gas that is in some sense the "worst case". [Agreed](#)
 - b. How many installations do you get for your money? My suggestion here would be that we assume the most efficient use of the money – focused on the technologies that need the least subsidy – since this gives us the most installations and so shows the highest impact. [Agree that this would provide the worst case scenario when examining the impact on the gas market, however we may still wish to provide funding to incentivise all technologies as a matter of policy.](#)

- c. What does renewable heat displace – gas, oil or electric heating? The absolute worst case here is “all gas”, but that’s not realistic. That said, if DETI’s ambition is to have potentially everyone on the gas network, in the long run this is what is being displaced (either you are moving people off gas, or you are reducing the pool of potential future gas customers). The licences run for decades, which suggests we should consider the long run, but then how much impact does a possible displacement in say 2025 have in reality on business plans today? In any case, we are only concerned with targets to 2020. **I think that it would be appropriate to have 2020 as our cut off point. (incidentally i checked the gas conveyance licences - firmus timeline is 2035 and Phoenix is 2046 i.e. this is the period over which D charges are calculated.**
4. Assumption (c) seems to be the most difficult to come to a clear view on. How about this as a way forward? In conversations with Fred Frazer and the utility regulator, it sounds like there are clear plans for growing the network in areas already served by it, but that questions remain about the economics of extending the transmission network to new areas. So, for our assessment of the impact, we would assume that any renewable heat in urban areas displaces gas, but that any in rural areas does not. **Is this OK?** The reality of this assumption is that it will favour options that show renewable heat concentrated in rural areas. This may be sensible for many reasons (e.g. local air quality issues with biomass in towns, support for the rural economy) but I know it won’t help with the desire to have a policy that works for all heat consumers. **Might it be possible for each year, to pro rata displaced volumes based on the current forecast market share of oil & gas? Therefore e.g. in 2013 if gas was assumed to represent 25% of total heating and oil 75% we could assume that if the funding permitted 1000 installations, 250 would displace gas and 750 would displace oil. The impact could then be calculated accordingly? I understand that this would represent a crude assumption, as actual displacement will ultimately depend on the available incentive and to what extent this makes renewables attractive relative to gas. However do you think this could be a way forward?**
5. A possible resolution here is biomethane injection into the gas grid. If that takes off, there might be no conflict between extending the gas grid and renewable heat. Risky though to rely on this option, not least because of engineering issues. **I think we would be keen to examine this technology as a potential solution within the overall mix to be examined in the economic appraisal.**
6. In any case, it seems like the absolute maximum impact on gas prices should be of the order of 10%, since my understanding is that allowed revenues are set by price times volume, so if you move 10% of heating to renewables, volume shouldn’t drop by more than 10%, and a price rise of 10% would (roughly) compensate for that. **Would that meet your materiality threshold? My feeling is that this would not be an insignificant amount. However perhaps the regulator would be better placed to comment - ultimately it will depend on whether it makes gas uncompetitive against oil and hampers the gas distribution companies' ability to develop the network.**

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