



Northern Ireland
Assembly

Public Accounts Committee

OFFICIAL REPORT (Hansard)

Inquiry into the Non-domestic Renewable
Heat Incentive Scheme:
Cambridge Economic Policy Associates

23 November 2016

NORTHERN IRELAND ASSEMBLY

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Members present for all or part of the proceedings:

Mr Robin Swann (Chairperson)
Mr Daniel McCrossan (Deputy Chairperson)
Mr Robbie Butler
Mr Trevor Clarke
Mr Gordon Dunne
Mr Alex Easton
Ms Michelle Gildernew
Mr Declan Kearney
Ms Carla Lockhart
Mr Trevor Lunn
Mr Oliver McMullan

Witnesses:

Mr Mark Cockburn	Cambridge Economic Policy Associates
Mr Paget Fulcher	Cambridge Economic Policy Associates
Mr Paul Grimal	Cambridge Economic Policy Associates
Ms Alison Caldwell	Department of Finance
Mr Kieran Donnelly	Northern Ireland Audit Office

The Chairperson (Mr Swann): I welcome Mr Mark Cockburn, managing director; Paget Fulcher, managing consultant; and Paul Grimal, consultant. Gentlemen, you are very welcome. Mark, do you have an opening statement for us?

Mr Mark Cockburn (Cambridge Economic Policy Associates): I do. Thank you, Mr Chairman. I would like to summarise the role that my firm played in the creation of the Northern Ireland renewable heat incentive (RHI) and make some brief remarks about subsequent events.

We were engaged in December 2010, together with AEA Technology to advise on the most cost-effective structure for renewable heat incentive to increase the level of renewable heat in Northern Ireland to 10% by 2020 to help to meet the UK's legally binding renewable energy target. Our final report was delivered in June 2011. Briefly, we advised that the competitive allocation of capital grants through a challenge fund would be the most cost-effective option and the most suitable for the budgetary profile that Northern Ireland faced. However, we also noted that there were reasons why a stream of payments for renewable heat, along the lines of proposals for GB, might be preferred.

We also made recommendations on the rate of subsidy to be used in an RHI. We made the obvious point that an RHI had not been tried before and so was subject to considerable uncertainty, especially

the risks of setting the subsidy too high or too low. Given that, we recommended that there should be regular monitoring of a sample of installations to ensure that scheme rules were followed, that flows of subsidy to particular technology should be specially looked out for and that there should be a periodic review to ensure that it was meeting its objectives with a first formal review after two to three years.

Following our report, DETI launched a public consultation in July 2011 on the implementation of an RHI in Northern Ireland, which included the recommendations that we had made. Six months later, after the consultation and together with AEA, we were asked by DETI to address a number of points that had been raised by it. In particular, respondents and DETI were concerned about the much greater generosity of the GB scheme relative to Northern Ireland, given the tariff rates that we had estimated. As a limited addendum to our main report, we agreed to undertake several specific inseparable actions, including revisiting the technology bands, reviewing biomass costs, recalculating tariffs and breaking out the different drivers of each tariff into a requested table format. Amongst other things, that led to a changed banding for biomass boilers. We repeated our recommendation that biomass prices and subsidy rates should be regularly reviewed and specifically pointed to the risk of a new 20 kW to just less than 100 kW biomass band being gamed.

I would now like to turn to the issue of tiering specifically. As I know you are aware, tiering should be introduced when a level of a tariff calculated is greater than the variable cost of heat production. In the absence of other constraining factors, tiering will typically incentivise production up to the tiering threshold and disincentivise use at levels above, thus reducing the risk of overproduction purely for the purpose of receiving subsidies. However, the strength of the incentives created will depend on the level of the tiers relative to variable cost: the greater the difference, the greater the incentive. In our initial report, the need for tiering was actively considered in line with the approach that had been recently proposed by the Department of Energy and Climate Change (DECC).

As the variable cost of production in both initial bands was above proposed tariff levels, tiering was not required. It is worth noting that DECC had not introduced a tiered tariff for large-scale biomass in GB for the same reasons. In terms of the addendum, I can find no evidence that we revisited the tiering of biomass, although it was specifically considered in the case of domestic heat pumps. While it was agreed that we would look at the tariff levels and bands, we were not explicitly asked to revisit tiering. Despite that, after adjusting for efficiency, the tariff was above the cost of fuel by roughly 0.7p per kWh, and, therefore, tiering should have been applied. Notwithstanding the need for regular monitoring and reviews, we obviously regret that we did not raise that point, especially given what has happened.

As you have heard from other witnesses, however, there was no immediate rush to exploit this opportunity. We have seen that a growing margin between tariff and fuel costs, together with the ability to install multiple boilers at the same site, was responsible for a significant proportion of the gaming that occurred. The latter was, at least, in breach of the spirit of the scheme rules. It is also the case that, irrespective of the initial tariff and structure, there were many opportunities between the submission of our addendum in early 2012 and what ultimately occurred in the second half of 2015 to review both the level and structure of the tariff, as DECC did for different technologies; to introduce effective monitoring and audit; and to take powers to close the scheme to applications at short notice when required.

In the addendum, we should definitely have raised the need for tiering of the small-scale commercial biomass band where subsidy exceeded the marginal fuel costs. This has negatively impacted on the value for money of the scheme, especially when combined with other contributing factors. However, in similar schemes, over time, a degree of incentive has been substantially reduced by regular intervention. We drew attention to the risks of setting the subsidy at the wrong level and the need for active monitoring and review.

Finally, it is the case that the only secure way of controlling expenditure on a demand-led cash-limited scheme is to take powers to close the scheme to new applicants at short notice once a potential overspend has been projected.

The Chairperson (Mr Swann): Thanks, Mark. I want to reflect on your opening comments before I open it up to members. In your reports by Cambridge Economic Policy Associates, you refer to a number of times when you drew attention to and raised the issue. Who with?

Mr Cockburn: It is in the report. I do not know whether you have looked at the 2011 report. It is rather long, so perhaps you have not all had time to look through it. Perhaps I could read some statements from it. I obviously will not —

The Chairperson (Mr Swann): You produced the report. I am asking who you gave it to, Mark.

Mr Cockburn: The report was provided to the Department; it is also in the public domain.

The Chairperson (Mr Swann): Yes. We have seen the report. I am trying to ascertain who you were engaging with in the Department. I am not looking for names at this minute, because we cannot go down that route. Was that with the Department at a personal level, or was it simply a paper document that you handed over?

Mr Cockburn: There was a lot of engagement with the task manager, so to speak, in the Department.

The Chairperson (Mr Swann): There was engagement.

Mr Cockburn: Yes. What I would put on record here is that the Department was very engaged with the work that we were doing. It was a very engaged client and commented extensively on different drafts that we produced. If issues came up or officials did not understand something, they would come to us a lot of the time and we would try to explain it to them.

The Chairperson (Mr Swann): You referred to a number of drafts. A draft implies that changes were made. At whose request were changes made? Was it at the Department's request, or was it because of a mutual conversation?

Mr Cockburn: Maybe I could explain how the process works. Our initial report — an interim report — was produced, I think, at the end of March 2011 or certainly early April. In response to it, there were comments from the Department, and we had a meeting with the Department at which the points that had been raised were discussed. We went away, addressed those issues and then submitted our final report.

The Chairperson (Mr Swann): To put things into context, how much was Cambridge paid for this work?

Mr Cockburn: We had a consortium partner. The overall fee was about £80,000, of which Cambridge Economic Policy Associates took about £55,000.

The Chairperson (Mr Swann): And your consortium partner?

Mr Cockburn: It took the residual amount. It was AEA Technology, who were the engineers. That was funded, I understand, largely by the European fund.

Mr Clarke: In your opening remarks, you gave us a bit of the background to your organisation and the stage at which it was brought in, so I will not ask you about how you were engaged or what your role was. Clearly, we heard what your role was in your introduction. However, you said — the Chair picked up one point of what you said, but I have picked up something else — at one stage that you regretted that you had not flagged something up.

Mr Cockburn: We produced the main report —

Mr Clarke: Sorry, did I pick you up right about that regret?

Mr Cockburn: Yes. As I said, we did the main report, which was extensive. It is in the public domain; you can take any view you like as to whether it represents value for money. Subsequent to that, DETI asked us to consider specific points that had arisen during the consultation exercise that it had pursued. We were asked to look at banding again and at the level of the tariff. Several consultation responses said, "Actually, the costs of biomass fuel are much more expensive in Northern Ireland than your report is saying", so we recalculated the tariffs on that basis. However, what we did not notice when we recalculated the tariff, which, as I said, we regret, was that the tariff was above what was likely to be the cost of production. So we missed it.

Mr Clarke: So, your company are professional consultants who were charged with doing a specific piece of work, a consultation was done by someone else, they flagged up a possible issue, it was brought to you, as the consultants responsible, and you did not —

Mr Cockburn: No. May I correct you? Tiering was not brought up as an issue for us. We were asked to look at banding specifically — not tiering — and at the level of the tariff. What I am saying is that, even though we were not specifically asked to look at it when we recalculated the tariffs, it should have come to our attention that the level of the tariff was such that it increased in such a way that tiering was applicable.

Mr Clarke: If you had noticed it at that stage, would you not have suggested that that could have prevented some of the difficulties? It goes without saying that it took time to close down the scheme, but there had been an opportunity much earlier, if you had not missed it or had made a recommendation at the time

Mr Cockburn: I have said that we missed it. I cannot say it any other way.

Mr Clarke: And I have said that you are professional consultants who were engaged and paid to do a piece of work, and you missed it.

Mr Cockburn: We missed it, and I have admitted that. If you are talking about impact, this was sitting for three years or so and was never noticed. When it comes to blowing budgets, tiering and the margin of attractiveness, as it increased over time — we are talking about 0.7p a kilowatt marginal difference — did not seem to have much of an impact then. Downstream, that grew. Other factors came in, such as multiple installations, a combination of those factors, and a lack of active monitoring, and, basically, the value for money was much reduced. Blowing the budget is about budgetary control and being able to close the scheme down very quickly. Even if you are looking at digression, which did not come in until much later, you will notice that digression in the UK could be enacted within a month or so. Here, it seemed to take three months even for a tariff review to take place. There were many, many opportunities. We have put our hands up; we have said that we missed it. However, after that, there were many other opportunities to pick up that point.

Mr Clarke: So, you are saying, "It wasn't really our fault. Someone else should've picked it up after we missed it".

Mr Cockburn: No, I am not saying that.

Mr Clarke: That is how it is coming across.

Mr Cockburn: You can take your view on it. That is not what I am saying.

Mr Clarke: That is how I am taking it.

Mr Cockburn: Anybody here and in the public domain can listen to what I am saying.

Mr Clarke: Had you a role in the GB system?

Mr Cockburn: No, we have never had a role in the GB system, but our partners, AEA Technology, have. We worked here on the Northern Ireland renewables obligation certificates (NIROCs) on the electricity side and on the subsidy mechanism there. AEA Technology worked on renewable heat in the GB scheme. That was the reason why we came together to bid for this work. We were awarded this first piece of work through a competition in which 65% of our score was on technical and 35% on price. Anybody could have applied to undertake that work.

The Chairperson (Mr Swann): Mark, when you were talking to me, you referred to the intensive report that you did in 2011 — a report of 145 pages. I have not had a chance to look at it yet. You have told the Committee a number of times that you missed tiering, you did not declare tiering, and you did not notice tiering, and you apologise for that.

Mr Cockburn: Yes.

The Chairperson (Mr Swann): OK. Do you have that report in front of you?

Mr Cockburn: The 2011 report?

The Chairperson (Mr Swann): Look at page 65.

Mr Cockburn: I think that tiering is mentioned.

The Chairperson (Mr Swann): You think that tiering is mentioned.

Mr Cockburn: As I said, in the context —

The Chairperson (Mr Swann): Page 65 of your 2011 report states:

"the incremental fuel cost was higher than the subsidy rates in all cases. Therefore no tiering is provided in the rates in this report."

So, you did take notice of tiering.

Mr Cockburn: Yes. Let me clarify. In the 2011 report we considered the issue of tiering and applied the methodology that DECC had applied in GB. You introduce tiering when the level of tariff is higher than the cost of fuel. When we looked at the numbers that we had run from our model in the case of the 2011 report, in all cases the costs of fuel were more than the tariff. However, in the 2012 addendum it was a limited exercise to look at banding and the level of tariffs again. In the case of biomass, as I said, given the results of what that calculation showed, we missed the opportunity to bring up tiering, although we were specifically asked about tiering in the context of other technologies, and that is also in the 2012 addendum.

The Chairperson (Mr Swann): Those three lines from your 2011 report were cut and pasted directly into the Department's business case, and that is where the scheme starts to go wrong.

You mentioned the rates a number of times. The rate that you suggested at the time was 4.5 pence per kilowatt hour for small boilers. Is that correct from that report?

Mr Cockburn: The 4.5p was for a 45-kilowatt boiler and below. We had only two bands at that time in the case of that report. Above 45 kilowatts, the kilowatt price was 1.3p.

The Chairperson (Mr Swann): Page 13 of your 2012 addendum quotes the lower price of 3.4p. Would you agree that you had commented on tiering in 2011?

Mr Cockburn: We looked at biomass pricing. It is not like electricity, where there is one rate; there is a range of rates for chips or pellets. The engineers, AEA Technology, consulted a number of suppliers. You are right in that the input cost rate that came from that, a central scenario was, I think, 4.39p.

What you have to adjust for is efficiencies. With a biomass boiler, you will lose a certain proportion of your input just through a lack of efficiency.

Mr Clarke: As you do with oil.

Mr Cockburn: When you adjusted for that, it was more like a 5.2p. However, as I said, that 5.2p was still below the 5.9p tariff that was calculated.

Mr Clarke: There was a comparison between pellets and oil as well, was there not?

Mr Cockburn: Yes, so —

Mr Clarke: And in terms of the figure for efficiency, the same factor would apply there.

Mr Cockburn: It depends on how efficient. I am not an engineer —

Mr Clarke: You are bringing in the efficiency argument; that is why I am coming back at you on the same argument.

Mr Cockburn: I do not know the difference between the efficiency of an oil boiler and a biomass boiler.

Mr Clarke: Surely, if you are using two figures in a comparison to see whether something needs tiering, banding or whatever, and you cite efficiency on one boiler, to use Mark's analogy, to get the comparison, you should have the same figures to know whether the oil boiler was efficient in what it was burning. So how can you get a fair —

We are talking about the consultants who are looking at the scheme, and you are talking about the difference between two types of fuel, but we will talk about the efficiency of one type of boiler, because, on Mark's admission, they know about that boiler, but we will not talk about the efficiency of the other one because we know nothing about it.

Mr Paget Fulcher (Cambridge Economic Policy Associates): In annex A of the addendum report we set out the basis for the calculation of the smaller commercial and public boiler. We set it out against the comparison with an oil boiler. In the table on page 34 of the 2012 addendum report, we set out the efficiency of the biomass boiler and the oil boiler. The oil boiler is efficient at 93%.

However, the concept of tiering in this case is someone's fuel cost once they have installed a biomass boiler. That person does not have an oil boiler at that point. They will decide what the benefit is of running this boiler for another hour and comparing the costs of biomass with the tariff that they face.

Mr Cockburn: Would it be helpful if we summarised the analysis that we were doing and what it was trying to achieve?

The Chairperson (Mr Swann): If you can be brief in your summary, Mark.

Mr Cockburn: The idea of a scheme is to incentivise people who would otherwise have used oil —

The Chairperson (Mr Swann): Sorry, Mark. I did not think that you were going back to the start. We have been at this inquiry for nearly three months; I think that we understand the precepts of the scheme. Sorry, but I thought that you were going to go into the detail of the figures that you were talking about rather than why we are here.

Mr Lunn: Can you clarify for me whether you did or did not recommend tiering in your 2011 report?

Mr Cockburn: We did not recommend tiering.

Mr Lunn: That is OK. You were not involved with the English version of this scheme, which was already under way at that time, but you did appear to draw from it because you referred to it. It did have tiering. Why would you not, even as a safeguard for the future, have recommended some reference to tiering?

Mr Cockburn: First, the GB scheme had not been implemented at that time. DECC was still going through the process of putting together its recommendations.

Mr Lunn: But did you draw from it even at that stage?

Mr Cockburn: Yes. In March 2011, DECC produced a paper setting out the approach that it had used to decide whether to apply tiering. We took that and applied the same principles in the case here. So, as I said, DECC had introduced tiering to its bands of 0 kW to 200 kW and 200 kW to one MW, but, above that, it had introduced no tiering whatsoever.

Mr Lunn: You are talking about fluctuating prices and costs here. As we can see, the thing got out of kilter and you did not notice. It seems strange that you could not have included something in your initial report as a safeguard, drawing on what the English were doing.

Mr Cockburn: In our main tariff here, we had a rate above 45 kW in the band of 1-3p, which was well below any biomass price from any supplier of any type. DECC had taken the same approach when it looked at the tariff for its largest band, and, again, the costs of the biomass had been much above the tariff that it had come up with.

Mr Lunn: The reason why DECC introduced tiering and had it in its original scheme was to protect the scheme against a possible fluctuation that might allow people to make profit from it. You must have seen and recognised that, but you discounted it for Northern Ireland.

Mr Cockburn: Because the conditions did not exist for it in the case of the 2011 report. What you are trying to avoid is a perverse incentive to generate heat just to pick up the tariff when the tariff is well in excess of your variable costs of production.

Mr Lunn: Yes, and the UK scheme recognised that and —

Mr Cockburn: Would it be helpful if we provided you with the relevant part of the DECC report that we drew on for that?

Mr Lunn: If you could provide me with an explanation that I could understand, that would be just as handy. I do not understand why you could not have caveated your report with a mention that there was at least the risk of this happening.

Mr Cockburn: The thing about tiering is that a lot of it is about incentives. Take what happened in GB, for instance, and this is what DECC found when it reviewed its scheme after it had been in operation for a number of years: just by the way that you calculate the tariff for the two tiers, what tends to happen is that, up to the initial 15% of hours of production, your tariff goes above your costs of production, whereas, afterwards, it comes down. Remember, in GB the equivalent ultimate boiler size was 199 kW, not 99 kW as it was in Northern Ireland. DECC found that everyone was over-incentivised to produce heat to maximise the subsidy they would get. It was 15% that people were producing at because that is where they got most of their revenue from. That was worth about £23,000.

Mr Kearney: If I could just move in on this to stay on tiering. You are economic consultants, yes?

Mr Cockburn: Yes.

Mr Kearney: So you are very familiar with different types of economic modelling and mathematical models, and you then apply those to any scheme or project you are assigned, yes?

Mr Cockburn: In this case, the model we used was based substantively on the model DECC applied in GB.

Mr Kearney: That is helpful. The DECC model included tiering, is that not the case?

Mr Cockburn: The DECC model —

Mr Kearney: What I am trying to clarify is this: you paid attention to the DECC model, yes?

Mr Cockburn: Yes.

Mr Kearney: Which included tiering. Tiering was included because it was applying a particular economic and financial model to its scheme, yes?

Mr Cockburn: What I do not know is whether the DECC model had a tiering function from the beginning or whether that was done afterwards as a side calculation.

Mr Kearney: OK. We can set aside the figures for a moment, because we could get blinded by the science of all of this. Tiering is not an unfamiliar concept to you. Is that right?

Mr Cockburn: When it was first introduced —

Mr Kearney: Is it or is it not a familiar concept?

Mr Cockburn: It is certainly not an unfamiliar concept now. At the time, it was not clear.

Mr Kearney: In the context of it being an instrument that had some purpose and utility in setting economic models etc and given that you were looking at how the scheme could be incentivised, I assume — correct me if I am wrong — that would also have included the need to protect the integrity of the scheme to ensure good value for money.

Mr Cockburn: Ultimately, any model, however sophisticated, can be only a certain representation of reality, and unless you end up with big black boxes, you tend to try to simplify it as much as possible. This was already quite a complex model. It worked within a budgetary cap; we assumed there would be a cap. The model was developed to tell you how much heat output you can get from the amount of subsidy provided, given some of the specific assumptions you put into it on tariffs and what the engineers assume is the likely type of office or whatever in Northern Ireland that would be switching.

Mr Kearney: What, economically and intellectually, made you decide that tiering should not be used in the model you were using for the Northern scheme, given that you have conceded that you knew it was applied in the DECC scheme?

Mr Cockburn: Actually, when tiering was brought up as an issue after our interim report, we built it into the model.

Mr Kearney: I will come back to that. I want to know why it was not included from the get-go. I am going to come back to that point, and I listened carefully to your earlier remarks. Why did you decide to omit it?

Mr Cockburn: Sorry?

Mr Kearney: Why did you decide to omit the tiering from the beginning?

Mr Cockburn: I think that, when the initial calculations were done, it was not clear why DECC was using tiering.

Mr Kearney: Did you ask? Did you enquire, given that it was a model you were using as a reference?

Mr Cockburn: I think I need to make something else clear here. This was being done under quite large considerations of uncertainty, with a number of different technologies and a number of assumptions that had to be made. I know everybody is thinking that tiering has come up as a big issue, but I can tell you that, at the time, there were a lot of different considerations about the different technologies. It was not as though people were saying, "We must remember tiering". Tiering came into things, as I said, when we were halfway through developing the project. As a result of that, we looked at the issue, worked out from DECC's 2011 impact report why it was using tiering and applied the principles. As I said, at that time, tiering was not required. However, we adapted our model to have a tiering function. That model was provided to DETI along with a guide, which mentions that you can switch on a tiering function.

Mr Kearney: You said, Mark, that you were never asked to revisit tiering. Who never asked you?

Mr Cockburn: As I said, the way the addendum came about was because there had been a number of consultation responses. DETI was, I think, able to deal with a large number of those itself, but there were others based on biomass bands, which is partly an engineering judgement, and the rerunning of tariffs within the model, which involved actually changing the model, not just putting in different inputs. DETI was not in a position to do that itself. It then approached us. Our project manager and the person in DETI agreed what we would look at. As I said, we were asked to look specifically at the banding and the biomass price.

Mr Kearney: When was that?

Mr Cockburn: That was in the period from December to February. It was December 2011 to December 2012. Sorry, February 2012.

Mr Kearney: February 2012? OK.

Mr Cockburn: That is the addendum. We submitted the first report, I think, in June 2011. It was about six or seven months after the consultation had taken place that DETI came back to us and said, "Can you look at a number of specific points, please?".

Mr Kearney: Did DETI ask you to include tiering at that stage?

Mr Cockburn: No, DETI did not.

Mr Kearney: So, what is it you are saying?

Mr Cockburn: I am saying that DETI did not ask us to, but, when we ran the calculations, we should have noticed that that created a need for tiering.

Mr Kearney: You also said you raised the need for tiering afterwards.

Mr Cockburn: There are a number of iterations — I can share them with you if you want — of the report between us and DETI, and there are a number of comments made by DETI on the initial draft report that we provided. Within that, one of the questions was, "Can you look at the case for tiering in the context of domestic ground source heat pumps?". We went away — this is in the report — and produced a tier-1 and a tier-2 tariff. As regards biomass, we did actually have the fact that GB had tiering in a footnote, and we were asked to put that up into the main table. There could have been a discussion between our project manager and DETI, but I was not party to that. All I can give you is the evidence I have, which is based around the email correspondence and the —

Mr Kearney: Have you checked that out in —

Mr Cockburn: I have not been back to DETI; I have been to the project manager.

Mr Kearney: Just let me finish the question. Have you checked that out in advance of today's hearing?

Mr Cockburn: Yes. I have exhaustively gone through all our emails and all our reports to see what I can find.

Mr Kearney: Did you speak to the project manager? Is he or she still in your employment?

Mr Cockburn: He is not in our employment. I spoke to him and asked him repeatedly whether he had any recollection of any discussion. It would have been easier for us if he could have turned up and said, "We did bring up tiering, but DETI said it did not need it". There is no evidence of that. Our project manager cannot remember having any discussions about it. As I said, the context at the time was very much about people coming back saying, "This scheme is not generous enough". Essentially, I think a lot of the focus was on trying to make it more generous.

Mr Kearney: I have two final questions, Chair.

The Chairperson (Mr Swann): I want to come in there. Mark, a lot of people said the scheme was not generous enough. You said consultation responses said the fee was not high enough.

Mr Cockburn: Yes.

The Chairperson (Mr Swann): Did you investigate those, or did you just take the consultation responses and change your report?

Mr Cockburn: You need to remember that what was driving the big difference in fees between here and GB was that the GB scheme was done as an alternative to gas, whereas here we are doing it as an alternative to heating oil. As has been pointed out, the costs of heating oil and biomass are much closer, whereas in GB gas is much cheaper than biomass, so you need a bigger incentive to encourage people to switch. That is what was driving the difference in the level of incentive.

Mr Kearney: I know, Mark, you said a couple of times in your earlier submissions that we need to understand the context.

Mr Cockburn: Sorry, our NIAO submission?

Mr Kearney: In your earlier submissions — your earlier remarks — you said that we, as a Committee, need to understand the prevailing circumstances when you were first brought in to do your report and the different assumptions and factors that were in play. In saying now that you also said you should have raised the need for tiering in retrospect, from an economic point of view and your knowledge of how things have played out, how central is that omission now?

Mr Cockburn: Looking at the early years, I do not think it had much impact whatever. Even though the tariff was above the level of the cost of fuel, it was not a big factor.

You can talk about the impact of it in two areas. One is in budgetary control, and the other is value for money. Budgetary control, at the end of the day, is about being able to shut the scheme down. It is about saying, "Right, these are our projections for the cost of the scheme. It is too expensive. It is going to blow our budget. We need to shut it down." As for value for money, what was happening, or what began to happen, was that, whereas our assumptions had been that people would use their boilers for an average of about 28 or 29 hours per week across the year, suddenly people were coming in with 100% load factors. No one was looking at that and saying, "That is not what the assumptions were based on."

Mr Kearney: Do you know how the scheme has —

Mr Cockburn: Yes.

Mr Kearney: You do. So how central was the omission not to include tiering at the outset in the context of what you now know?

Mr Cockburn: From a value for money context, it was not reviewed. It is about not just tiering but the overall level of the incentive. If you have a rate of 5.9p or 6.4p and GB is now down to the pennies — 2 point whatever pence — the Northern Ireland scheme became increasingly attractive because it had not been reviewed. The fact that you could generate an awful lot of subsidy, even if you had ineligible activity, was bad enough in itself. However, when you combine that with things like multiple installations, you boost it even more. In itself it was bad, but when it was combined with other factors, we can see what happened with value for money.

Mr Kearney: To finish, I think there is a general view in the Committee that a tiered rate would have considerably offset the potential for abuse in the scheme. Do you agree with that?

Mr Cockburn: It would have protected you against high load factors and, potentially, from people who were generating just for the sake of recovering the tariff. It would not have protected you against 55% of your applications coming in after you said you were going to have a tariff review.

Mr Kearney: Do you agree that it could have reduced the risk of the scheme being abused?

Mr Cockburn: Yes, in certain circumstances.

Ms Lockhart: Just a couple of things before I move to my question. The fee for your services was £80,000. Do you think that was good value for money from our perspective?

Mr Cockburn: I do not know what your perspective is. You have to form your own judgement on that. All I can tell you is that an awful lot of effort was put into that report. People thought an awful lot about it. DETI put a lot of effort in. We put a lot of effort into it. On the 2011 report, which you are talking about, as I said, you can take your view of it. I think it stands up to external scrutiny. It is out there; it is in the public domain. Anybody can look at it and take a view on it.

Ms Lockhart: I will go back to the terminology you used earlier: you said that you "missed" something.

Mr Cockburn: We did not miss it. In the case of 2011, we applied the principles that DECC applied in the same way. If you do not believe us, fine; go and ask somebody else —

Ms Lockhart: I am just quoting back to you what you said; it is not that I am questioning —

Mr Cockburn: No, no. To clarify, we looked at it. We determined that, when we applied the DECC principles, it was not necessary. In the 2012 addendum, although we were not specifically asked to look at it, when we did our calculations, we should have seen a need for it.

Ms Lockhart: So, the addendum in 2012 —

Mr Cockburn: The addendum was separate.

Ms Lockhart: Was that part of the £80,000 work?

Mr Cockburn: No, that was a separate piece of work.

Ms Lockhart: How much did you get paid for that?

Mr Cockburn: The overall fee was £20,000. I think we got about £12,000 of that. A lot of the inputs to it were from the engineers.

Ms Lockhart: I suppose that, at the start, when you quoted the £80,000 figure, we thought that was what you got awarded, but now you are saying you also got awarded for the addendum. Ultimately, it was in the addendum piece you feel that there was a miss.

Mr Cockburn: Yes.

Ms Lockhart: Taking that addendum piece and the miss, how much do you think that has impacted? It probably follows on —

Mr Cockburn: If our recommendations had been followed and the scheme had been reviewed, there would not have been any loss. You are picking on a particular point about a recommendation on tiering. There are also a large number of recommendations about active monitoring and review. All these schemes have been changed massively. Basically, whatever you put out there, people will game it; they will find ways of maximising the benefit to themselves. You cannot just set something up and expect it to look after itself. You need to be on top of it. You need to react to the different things.

Ms Lockhart: Yes, you need to be on top of it. Surely, in that addendum, you should have been on top of it.

Mr Cockburn: It is an addendum. The fact that we did a 2012 report did not mean that people did not look at the 2011 report. As I said, it is an addendum; it is something at the end. It was some specific additional pieces that came about as a result of the consultation.

Ms Lockhart: Yes, but they were specific additional pieces that were fundamental to the scheme and to the loss that the Northern Ireland Government have —

Mr Cockburn: No, your loss is because you did not control the budget of the scheme. In terms of —

Mr Clarke: It was because you did not tier it.

Mr Cockburn: — value for money, your scheme went because you could not shut it down quickly enough.

Ms Lockhart: Because we could not shut it down quickly enough?

Mr Cockburn: Absolutely.

Ms Lockhart: But go back to the tiering. If tiering had been introduced, we would not —

Mr Cockburn: Where people came up with uses that had never been envisaged, tiering could have reduced the disincentive to overproduce heat, but —

Ms Lockhart: But tiering could —

Mr Cockburn: — a number of —

Ms Lockhart: Just —

Mr Cockburn: Could I just finish? A number of those activities, if you believe they are eligible — poultry farming and mushroom farming, for instance, where we are seeing 24/7 usage — are not about tiering; there is potentially an eligible use for it. The issue is that the overall level of the subsidy is too great. That is driven as much by the level of the tariff as it is by the absence of tiering.

Ms Lockhart: Honestly, I am really struggling here. I think you are contradicting yourself.

Mr Cockburn: If it is helpful to you, we could put this into a report and —

Ms Lockhart: To be quite honest, we have so many reports. I do not know whether I can trust any reports. What we are hearing today is that the report in 2011 was put in place and you stand over it, but the addendum, in my mind, is where it all went fundamentally wrong.

Mr Cockburn: As I said, the need for tiering was not identified in the 2012 report.

The Chairperson (Mr Swann): Mark, in some of your responses to Carla you stated on this was the Northern Ireland Government's fault or the Department's fault because you recommended there should have been periodic reviews, so, in your opinion, does the fault lie with the Department for not following what you recommended?

Mr Cockburn: I am saying that all these schemes have to be reviewed. If you leave them, people will find ways of gaming them and exploiting value from them. Look at electricity and the initial FITs in GB, for instance. Installers and ESCOs came along, and there was the whole rent-a-roof business. When DECC set up that scheme, I do not think it necessarily expected that to happen, but it started to happen, and therefore —

The Chairperson (Mr Swann): You referred to setting up a scheme and the gaming that becomes involved. Would you say that our Department was naive in regard to the potential of this system being gamed?

Mr Cockburn: You never know how something will be gamed until you put it out there. You can have a guess, but none of us has perfect foresight. We pointed out some potential gaming opportunities when the banding increased, for instance; that had been pointed out in GB. Our recommendation was very much that things needed to be monitored and kept on top of and that there needed to be a review. That clearly did not happen. It was my understanding that it was in the legislation that there would be a formal review at the beginning of 2014. My understanding is that that did not happen. A lot of the things we are talking about happened after that.

The Chairperson (Mr Swann): You volunteered your draft reports with comments that went back and forth to the Committee. Can you send us those as well?

Mr Cockburn: Yes, sure.

Mr Clarke: Mark, I think you are trying to mislead us. As the old adage goes, the devil is in the detail. Tiering is an instrumental part in all of this. One of the things you are right about — the Chairman picked up on it — is that there is gaming in all schemes. However, if the tiering had been there, there would have been less incentive for them to do that; there would have been fewer people. I think you underestimate the role that your organisation played in the opportunity that was missed. You are underplaying that entirely and trying to shift the blame. If there had been tiering, we would not be in the situation that we are in.

Mr Cockburn: I think you would be, because tiering would not protect you against multiple installations, for instance.

Mr Clarke: No, it would not, but the value of those multiple installations would be much less.

Mr Cockburn: It would be lower, but, at the same time —

Mr Clarke: It would be much less.

Mr Cockburn: From a budgetary perspective, if I had a need for 100% load factor, I would be getting my first 15% at whatever the tariff was. Over and above that, I would get it at a lower rate, sure, but I would still get a reasonable amount of money.

Mr Clarke: I would rather pay somebody 15% at the higher value than 100%. If you had introduced, suggested or recommended tiering, it would have been in the system and there would have been less incentive. The take-up would obviously have been much less because the incentive was not there.

Mr Cockburn: It would have been, but remember this: we have accepted the tiering point, OK? We are not disputing that. You can take a view that it was more important than perhaps I am saying it was, but it is just — sorry, I have forgotten what I was going to say. There are many ways in which these things can be gamed.

Mr Clarke: I think we all get that. Everyone around the table — they have been public representatives for a considerable time — understands that people will play the system, whether it be benefits, schemes like this or anything else, but your company as an organisation was charged with doing specific reports and looking at the scheme. By your own admission today, you missed an opportunity in terms of tiering. I do not know what you have been told or what you have been charged with in trying to deflect this today, but I think you should have been coming in here and putting your hands up at the start and saying that you had a major part in the responsibility and the blame for the roll-out of this scheme.

Mr Cockburn: That is why I disagree with you.

Mr Clarke: I thought you would.

Mr Cockburn: The lack of tiering has contributed. In the 2011 report, we set out why tiering was not used at that point. The 2012 is an addendum; it was not a separate document. They should be read together.

Ms Lockhart: You were tasked to give consultancy advice. Did your role finish as soon as you gave those reports and the addendum?

Mr Cockburn: In terms of the non-domestic renewable incentive scheme, yes.

Ms Lockhart: So you never had any further involvement with the Department.

Mr Cockburn: Yes, we did. We were involved in developing the domestic scheme, and we worked for the Department in the electricity space on reviewing tariffs for small-scale FITs.

Ms Lockhart: OK. So, you were still connected with the Department, yet this was just set to the side as a separate —

Mr Cockburn: Yes, it did not come up again.

Ms Lockhart: It did not come up again.

We have obviously looked into this in great detail, and the absences of a tiered tariff to discourage heat waste and of the suspension or digression mechanism to act as a cost-control measure were the two fundamental omissions that cost the Government this amount of money. You refute that and believe that it was more a case that we did not review —

Mr Cockburn: You still needed to review the scheme, because, a lot of the time with these schemes, the initial subsidy level is higher than subsequent levels. Essentially, that is what digression does. DECC's scheme, as I said, was much more generous than Northern Ireland's to begin with, but, over time, because digression was introduced in 2013, its attractiveness declined. DECC has never had caps on individual installations and the amount that you could earn from them, which has been a disincentive of having a second-tier tariff. What DECC introduced in 2012, before it introduced digression, was an interim measure that allowed it to close down a scheme at short notice if the number of applications and what that meant for spend meant that it was going to breach its budgetary limits. That did not happen here.

Ms Lockhart: I differ in my opinion: I think that those were critical omissions. I think that you have to take some of the blame, but you are not doing so.

Mr Cockburn: Sorry, we are. We are not saying that those things did not contribute, but there were a number of factors.

Ms Lockhart: In your last statement, you said to me that it was the Department's fault because we did not review it on an ongoing basis.

Mr Cockburn: The responsibility was on the Department to do the things that it said it was going to do in its business case submission, namely review the scheme. It was going to have a formal review of the scheme at the beginning of 2014, and it was going to monitor the tariffs.

Ms Lockhart: Yes, but it was depending on your consultancy advice being sound.

DETI asked you to review the results of its consultation in late 2011, and the Department told us that, in February 2012, you recommended an increase in the subsidy rate to 5.9p per kilowatt, which was a rise of almost one third on your previous recommendation. You have touched on that, but can you explain again why you recommended such a large increase in the rate?

Mr Cockburn: The comparison, particularly if you were looking at a 99 kW boiler, was not 4.5p to 5.9p. Our initial banding was below 45 kW and above 45 kW. The reference boiler that we initially used to calculate the tariff required was a 200 kW one, which meant that it generated a lot more heat and that the costs could be recovered over a larger number of units. When that reference boiler shifted to a 50 kW one, that capacity was reduced by a factor of four. So, a lot of the increase in the tariff was because of a change in the reference boiler.

There was also an adjustment for inflation. It was pointed out in the consultation that DECC had had some ongoing annual hassle costs, which we had not included in the initial subsidy rate. Those costs were about £828 per year, and we then included them. Taking all of that together, we moved from a 1.3p tariff to a 5.9p one.

The Chairperson (Mr Swann): In an earlier comment, in regard to those costs, you said that people came back in the consultation and said the scheme was not generous enough. Did you take that into consideration when you were increasing your tariff?

Mr Cockburn: As I said, we reiterate in the report, and the reason why the scheme was not as generous — this is in comparison with GB —

The Chairperson (Mr Swann): Sorry, I am referring to Carla's point about the pence per kilowatt-hour, which increased from 4.5p to 5.9p. That is what we have on page 8 of the Comptroller and Auditor General's report. You referred to a number of changes of reference boiler and all the rest of it, but, also in your contribution to this Committee, you said that people said it was not generous enough. I am asking whether that response in the consultation affected your change in the price per kilowatt-hour.

Mr Cockburn: We did not see all the consultation responses. I think we were given five of them to look through. We evaluated the evidence that they provided, and we were not, for instance, convinced on the fact that biomass prices were higher here and were going to increase in the way that people saw, so we did not change the biomass price.

The Chairperson (Mr Swann): OK, step back from there, Mark. You did not receive all the consultation responses.

Mr Cockburn: No, we were given about five or six of them.

The Chairperson (Mr Swann): Who by?

Mr Cockburn: By DETI.

The Chairperson (Mr Swann): Do you know how many consultation responses there were?

Mr Cockburn: Seventy-eight.

The Chairperson (Mr Swann): Did you question why you received only five of them?

Mr Cockburn: I know you think that £20,000 is a lot of money — I am not disputing that — but the idea was to limit the amount of work that we did. If we had to go through 78 responses rather than five, it would have cost more.

The Chairperson (Mr Swann): So there are 78 responses. You receive five or six of them to influence the change of price per kilowatt-hour, and you do not query the other 72 or 73 consultation responses or have a look at them.

Mr Cockburn: DETI had screened the responses, and from them it had picked out the main issues that were being raised by the responses, some of which it could have addressed itself. Other ones, they came to us and said, "Look, we can't handle this. Could you take a look at them?". As I said, a combination of us and AEA Technology, who were the engineers, reviewed what had been provided to us on their merits.

We looked at the biomass price. We thought that the biomass price that we initially had was pretty much in the right range. What we did find was that when it came to the hassle costs, which had been in a DECC report, we had not included those previously. Therefore, as a result of the responses, we did so.

The Chairperson (Mr Swann): Who supplied you with the biomass costs?

Mr Cockburn: AEA Technology went and, I think, approached different suppliers, so they had a range of costs for what you could get as a household, what you could get as a small business, what you could get —

The Chairperson (Mr Swann): In Northern Ireland.

Mr Cockburn: In Northern Ireland, yes.

Mr Easton: You mentioned a review, and you said it was ignored.

Mr Cockburn: There was a recommendation in our report to review after two to three years.

Mr Easton: Do you feel that what you said in the report about a review was ignored?

Mr Cockburn: It never happened, as far as I am aware.

Mr Easton: Did you raise this with anybody?

Mr Cockburn: No, because — I am sorry, but, you know, I know it sounds harsh —

Mr Easton: I am not having a go at you. I just want to know if you raised this. Did you follow up on it?

Mr Cockburn: No. This was 2014. We were not involved in this issue with DETI post-February 2012.

Mr Easton: So, apart from you mentioning the review, there was no follow-up on that in emails, letters or phone conversations, as far as you can recall.

Mr Cockburn: No.

Mr Easton: OK, that is all I needed to know. Thank you.

Mr McMullan: Are you happy with the report? Is there anything you think should be in the report that is not in there?

Mr Cockburn: If we are referring to the 2012 report, clearly I would like to have had the issue of tiering for biomass addressed.

Mr McMullan: Who were you talking to the whole time in DETI? Was this talking over the phone or were you here?

Mr Cockburn: It was a mix. It was a team of people.

Mr McMullan: Were the people you had here up to the standard of doing that job?

Mr Cockburn: I think that the manager who we dealt with in DETI was very engaged, yes. I do not think he —

Mr McMullan: I did not ask you that.

The Chairperson (Mr Swann): Oliver, be careful where you are going with this line of questioning.

Mr McMullan: Chair, nobody else has been pulled up today. I know where I am going with this —

The Chairperson (Mr Swann): That is OK.

Mr McMullan: — with respect, because —

The Chairperson (Mr Swann): I am asking you to be careful where you go with this.

Mr McMullan: Well, then, that is me finished.

Mr Clarke: Can I take you back, Mark, to your response to the Chair? We need to tie down this point about the 78 responses. You started to talk about your fee and workload. Did you request it to be filtered or was it on their submission to you that it was filtered?

Mr Cockburn: It was on their submission. When they got in touch with us, they said, "We want you to do certain things". There was then a discussion between our project manager and his counterpart at DETI to refine the scope of what it was that we were going to do. As a result of that, a price for the work was determined.

Mr Clarke: In the refining of that work, would there be email correspondence? Chairman, I think that it would be important to see —

Mr Cockburn: You can have the emails if you want them. We can show you them.

Mr Clarke: I am trying to establish whether it was the Department that was at fault. If it was, that is fine: that will be a day for us with the Department on filtering 78 responses. If it was something to do with the monetary value of the workload, that answers it for me. I really want to tie down here whether, because this was a £20,000 piece of work, you wanted to take less on or whether it was because the Department decided to filter it. I think that we need to see the paper correspondence in relation to that.

Mr Cockburn: You can see it. I can —

Mr Clarke: Can you read into the record today your understanding of that?

Mr Cockburn: Our role was to support DETI. It was not necessary to do DETI's job for it. Clearly, in pieces of advice that it asked for from us, we had a duty to make sure that that advice was correct. DETI was, on the whole, handling the response from the consultation. There were some specific pieces and points that it wanted us to take a look at, along with the engineers. There was an agreement — a negotiation, if you like. This was a single-tender action. It was not a competed piece of work. There was a negotiation between our manager and the DETI person responsible. There was correspondence there. I can share it with you, and you can see why we came to what we did.

Mr Clarke: This was additional work.

Mr Cockburn: This was the addendum that was the £20,000 piece of work, yes.

Mr Butler: My question is pretty simple, because I am trying to piece this together. We have so much information. Just for clarity for me: in the initial report in 2011, reference was made to tiering in three sentences, and what you are saying today is that the addendum did not supersede that — it did not negate the need for the Department to consider that as an ongoing issue — but you did not feel that it was important enough to raise it again. It did not negate the —

Mr Cockburn: It would be sheer conjecture to say why it was not looked at. It is an addendum, so they should be looked at together. That is correct, yes.

Mr Butler: OK. Thank you.

Mr Kearney: Going back, Mark, to five submissions out of 78, in your experience of research, how representative a sample is five from 78 to inform a piece of analysis?

Mr Cockburn: It depends on the nature of your sample and whether it is biased in any way whatsoever. In this instance, as I said, we were told, "Look, we think that you should review these five responses because these are basically the most informed. They actually get into the issues a lot more". I do not think that it was —

Mr Kearney: Someone else did that for you.

Mr Cockburn: Yes. That was DETI.

Mr Kearney: So you were taking that on good faith.

Mr Cockburn: Yes.

Mr Kearney: From a robust research and analytical perspective, is that an approach that you would commend to someone else?

Mr Cockburn: I think that it is the nature of these consultations: it is not, sort of, eight out of 10 cat owners prefer a certain brand of cat food. Some of these responses, I am sure, were not particularly informative. DETI looked through them and said that these ones seemed to capture the essence of what it thought were the key things that we should look at, and it sent those through. They were part of our workload —

Mr Kearney: OK. I will finish on this: just step back from that and take a global research perspective of this. In your experience, how representative a sample is five out of 78?

Mr Cockburn: It could be. If a lot of consultations were making the same point —

Mr Kearney: That is if you had seen them, but you did not.

Mr Cockburn: We did not, but we took it in good faith from DETI that these were the most appropriate consultations for us to review in detail.

Mr Kearney: Was it the cost of the work?

Mr Cockburn: You would have to ask DETI that.

Mr Kearney: No, I am asking you. Was it the cost of the job that allowed you to make the decision?

Mr Cockburn: There was already —. I am sorry, with consultants, especially London consultants — I am not defending us — the cost is the cost. The idea, though, was to try to focus —

Mr Kearney: You were only being paid enough to look at five. Is that what you are saying?

Mr Cockburn: I do not know. It was not European Commission money that was being used; this was the Department's budget. So, the idea was just to use us where the Department thought we could add most value —

Mr Kearney: Were you applying a billing scheme? Were you only paid to look at five according to the rate in London?

Mr Cockburn: No, there was a fixed-price budget. I will put it into perspective. Biomass accounted for something like 12.5% or an eighth of the different things we looked at. One of the key issues that people were most concerned about at the time was the impact on biomass from the extension of the gas network here. Clearly, there is a bit of a policy conflict there between promoting the gas network and promoting biomass at the same time. That took quite a lot of consideration. There were other points about particular technologies. There were a number of people in Northern Ireland who were very keen on geothermal, and engineers went and looked at what should happen there. We also looked at tariffs for different technologies. Biomass was an issue, and it was about an eighth of our budget. We can provide you with the details.

Mr Lunn: Still on the five out of the 78. It sounds to me that it might be fairly normal practice, when you are asked to assess the return on a consultation, for the organisation to filter the responses, but would it weight them for you? Would it say that out of 78, 60 made the same point? Would it point you towards which were the most important?

Mr Cockburn: People who use consultants know that they are expensive and, generally, unless they have a massive budget, they will try to use them to focus their work and to do the things that they cannot do themselves. They are plenty of people in DETI, I am sure, who reviewed a lot of the points in the consultations; went through them, screened them, came up with the key things that they needed to look at and said that they would like some consultancy support on them.

Mr Lunn: I am not being critical; I am trying to support you here.

Mr Cockburn: That would be strange.

Mr Lunn: It sounds as if there is nothing particularly abnormal about the practice.

Mr Cockburn: What we often find is that a client, such as Ofgem in other areas of work that we do, might have some consultation responses that it wants looking through. We will then second somebody to the organisation to do that.

The Chairperson (Mr Swann): I do not want to labour this, so this will be the last. Were the five you received different?

Mr Cockburn: Yes, they were not all about biomass. I looked at them. There was a long one about geothermal; there were pages of it. There were two or three on biomass, and they were very much stressing that they thought biomass prices would go up. One of the explanations for that was that the Republic was introducing a carbon tax, which was expected to push the price up. Tiering was mentioned in one of the responses that we saw, but it came up in the context of fuel poverty alleviation. People had noticed that the tiering in GB meant that the first number of hours, 15%, was a much higher rate. That was interpreted in a different way from what we subsequently have been looking at tiering in the context of.

Mr Easton: We have touched on this a bit, but I will have to go over it again, I am afraid. When you recommended the increased rate, why did you not recognise the need for tiering? You are the expert.

Mr Cockburn: When the work was done, the tariffs were recalculated, and nobody spotted that tiering should have fallen out of that analysis.

Mr Easton: When nobody spotted it, was it just you working on it or were there several people?

Mr Cockburn: My involvement was to review the final report. There was no budget for me within our proposal to do any detailed analysis. The project manager did a lot of the analysis and was in contact with DETI counterparts to do so.

Mr Easton: Did you or your staff come under any pressure about the recommended increase? Did anyone from DETI recommend it to you, or did you come to the conclusion by yourself?

Mr Cockburn: First and foremost, the need for tiering was missed. Contextually, it did come up. We were specifically prompted to look at it in the case of household heat pumps, which we did; it is in the report. We were asked to bring up the fact that GB had a tiering structure from a footnote into the main table. That table was a comparison between the tariffs on offer here and the tariffs offered in GB. You can interpret that.

Mr Easton: I need to get this a bit clearer. Were there any conversations between DETI and you or your staff pushing you in the direction of an increased rate?

Mr Cockburn: The Department had expressed its concern in its correspondence with us, which I am going to share with you. It was specifically concerned that, if the Northern Ireland scheme was less generous than the GB scheme, energy service companies would be more likely to invest in GB rather than Northern Ireland. The energy service companies were seen as being quite important to the roll-out of renewable heat, and particularly biomass, in Northern Ireland.

Mr Easton: Is it fair to say that you felt an encouragement to go for a higher level?

Mr Cockburn: That would be conjecture on my part. The emails are there; I was not involved in this detail of work. I will supply you with the emails, and the Committee can take a view on what they think.

Mr Easton: The revised subsidy rate was now well in excess of the cost of fuel, so it was clearly incentivised, using more fuel than required. Did you realise the considerable potential for abuse of the scheme because that happened?

Mr Cockburn: As I said, DECC's rationale for the introduction of tiering was clearly set out in the 2011 report. Basically they introduced it to provide a disincentive for people to burn biomass just for the sake of collecting the subsidy. We looked at that in the context of the 2011 report and thought that it would not impact because of the relative prices — the cost of fuel was well above the actual proposed tariff rates then. In 2011, we did the calculations and did not follow through on it. I do not know why that was the case. This was six months later, so there were some specific things that we were looking at, and it clearly fell through the gap. I have no evidence for it whatsoever, but there is a possibility that there could have been a discussion between our manager and the DETI counterpart. I have asked our manager, who has now left our employment, whether he can remember any such discussion, and he says that he cannot. The most likely thing is that it just fell through the gap.

Mr Easton: Do you have access to any emails between your former manager and DETI?

Mr Cockburn: Yes. When I was preparing for this meeting, I collected the relevant emails, reports and draft reports and gone through them to see what —

Mr Easton: So you have gone through all his emails with DETI.

Mr Cockburn: Yes — the ones I am aware of.

Mr Easton: Is there anything to suggest that question?

Mr Cockburn: If I was looking at those emails, I think there is a —

Mr Easton: Any suggestion?

Mr Cockburn: Certainly, there was no suggestion of, "Can we bring down the level of this incentive?".

Mr Easton: Was there anything to increase the level of the incentive?

Mr Cockburn: In one of the consultation responses, we had been told, "In GB, DECC has included ongoing hassle costs that you have not included in your calculation. Can you have a look at those?". And we did look at them, and that did increase the tariff.

Mr Easton: Are we able to have access to those emails?

Mr Cockburn: As I said, I will put together the different emails, and you can take a look.

Mr Easton: It will be interesting to see who was talking.

The Chairperson (Mr Swann): Mark, just to clarify, an official in the Department asked you to look at hassle costs, so you looked at those, and that increased —

Mr Cockburn: Yes, it was one of the factors. The re-banding, however, was really the big driver of the increase from 1.3p to 5.9p.

The Chairperson (Mr Swann): Oliver?

Mr McMullan: My question was asked.

The Chairperson (Mr Swann): OK. Gordon?

Mr Dunne: In carrying out your overall assessment, did you look at the possibility of a simpler scheme, such as just giving a capital grant?

Mr Cockburn: I like that question.

Mr Dunne: Do you like that? You have the answer.

Mr Cockburn: Basically, as we have seen, one of the big challenges in RHI is that you are trying to second-guess what the market will do. You do not know what level of subsidy you need to provide to make people do the thing that you want them to do. Initially, we looked at something called a challenge fund, which was a competitively bid capital grant scheme. We thought that there were a lot of merits in that, particularly because Northern Ireland had a particular budget limit, so on an annual or six-monthly basis, you could take that budget and say, "Right, we are going to compete this out. How many units of renewable energy are we going to get for it?". So, yes, we did consider that, and we liked a lot about it. When we ran our different numbers, we found that it was the most efficient. Why did we not pursue that?

Mr Dunne: If only.

Mr Cockburn: Absolutely. I think that the fundamental problem with it was that it would have been too different from the GB scheme, and I think that that would have worried people here; they certainly did express concern about it. One of the attractions of the GB scheme was obviously that, at the time, they were in discussion with Ofgem, and Ofgem could run the scheme for them.

Mr Dunne: It could run the RHI scheme.

Mr Cockburn: It could run the RHI scheme. It clearly would have cost less to run the RHI scheme because it was very similar to the GB scheme, whereas a competitively bid capital grant scheme would have had higher administration costs.

Mr Dunne: Initially?

Mr Cockburn: Initially, I think. In many ways, it would have been more appropriate for the budgetary constraint that Northern Ireland faced.

Mr Dunne: So you did look at that.

Mr Cockburn: We did.

Mr Dunne: Why was it ruled out then?

Mr Cockburn: One of the reasons was, as I say, that there was a perception that it was administratively more complex. In the short run, one of the advantages of an RHI is that people can borrow money against the future income stream, so you end up producing more renewable heat now, although it costs you more in the long run. I think that people need to remember, as well, that the whole reason why that was happening was that Northern Ireland was trying to meet its renewables target. Therefore, that was one of the key considerations. We were trying to find out what was the maximum renewable heat that could be produced for the budget that was available.

Mr Dunne: Did you work up a financial model for the capital scheme?

Mr Cockburn: We did. We used the same model, with some small changes. We ran that through the model as well, and our 2011 report basically showed comparisons between the two. I think that, on most of the evaluation criteria, the competitively bid capital grant model — we called it a challenge fund — came out better.

Mr Dunne: It came out better.

Mr Cockburn: On the basis of the amount of renewable heat that could be produced for the subsidy available.

Mr Dunne: It would have been better value for money.

Mr Cockburn: With the benefit of hindsight, yes.

Mr Dunne: I go back to the modelling on the RHI. Without going into all that has been covered, why was the risk not shown or highlighted? Why was the risk not discovered when you ran your model on the RHI at the extremities or the upper limits?

Mr Fulcher: The logic of the model looked at people meeting one representative heat load with a renewable technology or a conventional technology. In 2011, we looked at the incentive rates that were coming out and compared them to fuel costs, and saw that in those cases there was not an incentive to generate additional heat.

Mr Dunne: Because of the cost of fuel and alternative fuels at the time, the risk was not highlighted by the model — is that what you are saying?

Mr Fulcher: We considered the risk and found that the incentive was not there to behave in such a manner in 2011.

Mr Dunne: So the risk was not identified.

Mr Cockburn: It was identified, but when we evaluated the risk it was not seen as significant at the time, given the fuel costs and the level of tariff we were proposing.

Mr Dunne: There was a project manager in your organisation.

Mr Cockburn: That is correct.

Mr Dunne: Who did he report to in DETI?

Ms Gildernew: She.

Mr Dunne: Sorry, she.

Ms Gildernew: Or she — we do not know.

Mr Dunne: Sorry, yes.

The Chairperson (Mr Swann): Be careful with names, Gordon, at this point in time.

Mr Cockburn: My understanding is that I can provide the name in confidence.

Mr Dunne: Was there a project manager in DETI responsible?

Mr Cockburn: Yes — as I have said, a very actively engaged project manager. That should go on record.

The Chairperson (Mr Swann): We can receive that in correspondence, Gordon.

Mr Cockburn: I think that the correspondence will demonstrate —

Mr Dunne: So there was a clear owner in DETI of the scheme. We have used the term "project manager". You are clear that there was a project manager in DETI

Mr Cockburn: Absolutely.

Mr Dunne: Grand. Thank you.

Mr Lunn: In the 2013 report, you recommended that the Department consider applying the GB rates instead of specific Northern Ireland rates. Why was that included in the 2013 report, but not prior to that?

Mr Cockburn: Sorry, I think it was the 2011 report.

Mr Lunn: Sorry, was it the 2011 report?

Mr Cockburn: Yes.

Mr Lunn: In which report did you recommend that the Department apply Great Britain rates?

Mr Cockburn: I know that the convention is that we cannot criticise an NIAO report. However, it has to be said that we never saw the NIAO report before it was issued, and I am not aware that we actually did say that. We did compare using the DECC rates proposed at the time, but I do not know whether we ever recommended that they be used. Maybe I am incorrect.

Mr Fulcher: I think that, potentially in the 2013 report, we looked in the model at either applying specifically tailored Northern Ireland rates or simply using the rates that were prevalent in Great Britain. In that analysis, we found that that was more cost-effective in using those rates.

Mr Lunn: More cost-effective than using —?

Mr Fulcher: — the GB rates.

Mr Lunn: Did you recommend that to the Department?

Mr Fulcher: We recommended that it should be seriously considered as an option.

Mr Lunn: I do not want to act as referee.

Mr Cockburn: Sorry, I think I was confused. I thought that you were talking about the 2011 report. Paget has —

Mr Lunn: Did you discuss this with the Department actively, or was it just put into the report and forgotten about?

Mr Cockburn: In 2013? I cannot tell you. We will have to get back on that.

Mr Lunn: Did you get any feedback from the Department as to why it decided not to use that option?

Mr Cockburn: In 2013? As I say, I would have to go back and look. I have no idea.

Mr Lunn: It has been a long day. I will leave it at that. It might be interesting if you could get back to us on that.

The Chairperson (Mr Swann): Does the Comptroller and Auditor General wish to comment on that?

Mr Kieran Donnelly (Northern Ireland Audit Office): No, we are in agreement with the last point.

The Chairperson (Mr Swann): With the last point?

Mr Donnelly: That it was the 2013 report.

The Chairperson (Mr Swann): OK. So, for the record, your report is accurate.

Mr Donnelly: Yes.

Mr Clarke: There is another point just hanging there. In Mark's last response he was unclear about some of that communication. Can we get copies of that, in order to answer Trevor's last question?

Mr Lunn: I think Mark has agreed to look at the records.

Mr Cockburn: Yes, I will go back and look at when we were doing the 2013 project to see whether there is any correspondence or reports that contains comments on using GB or Northern Ireland rates.

Mr Lunn: I am interested in the Department's response to that suggestion. That is really what I would like to find out about.

Mr Butler: Most of the costs incurred in installing a renewable heat scheme are in relation to the initial capital —

The Chairperson (Mr Swann): Robbie —

Mr Lunn: That is my question.

Mr Butler: I am sorry; I was just following the next one. Did you understand the two main risks associated with the scheme — for instance, the potential for excessive returns through poorly set tariffs and the affordability risks of too many applications being received at once? Was that your understanding from the beginning?

Mr Cockburn: We were very clear that the key risk was over-subsidy — or even under-subsidy, because you can under-incentivise something and people do not do what you expect them to do. The question of risks to the overall scheme is a good one. We conducted our analysis with a budgetary cap and we just assumed that there would be budgetary control, so we never explicitly looked at that overspend risk.

Mr Butler: OK. Were these risks something that you should have looked at and made recommendations on, based on the discussions today? You have used the word "hindsight" on many occasions.

Mr Cockburn: What we do say is that with a challenge fund scheme — a competitively bid scheme — there would have been caps on the amount that could have been provided, both at scheme level and at individual bid level. That was one of the things we discussed in that context. Obviously, when we were providing our work, we were responding to a specific terms of reference, which you can see as well. I do not think that that was a specific risk. It was not a specific thing that we were asked to look at.

Ms Gildernew: It has been a long day, has it not? The permanent secretary of the Economy Department, Andrew McCormick, told us that the calculations that were done to support the proposed tariff rates were based on specific assumptions, such as boilers only being used for 17% of the time and a 500 kilowatt boiler being the most popular. However, it took only small movements in these assumptions for potential returns to increase to a much bigger number. When you were calculating the proposed tariffs, did you do a sensitivity analysis? Did you recognise the potential for the excessive returns that we have seen?

Mr Cockburn: We did say there was a risk. You can do certain sensitivities through the model. One of the sensitivities we were most concerned with in the model at that time — remember that the objective was to try to deliver on Northern Ireland's renewables target — was around what happens if there is less uptake and fewer people are interested in the scheme, or if households need a bigger return to actually install renewable technology. We did those sensitivity analyses.

We also looked at a range of different fuel costs and we had different scenarios in the model for those costs, so that is there. The 17% usage was an engineering assumption which we relied on, and that was related to what the engineers thought particular small commercial businesses would require in terms of boiler size. As I said, we noted elsewhere that there is always a risk that people can oversize their boilers, which will mean that they will get more in subsidy because there is a higher kilowatt production level. I do not think we did — was there a way that we could have recognised that from the model?

Mr Fulcher: In terms of the specific assumptions on load factor, it looks like the calculations on in 2012 were run based on the 17% assumption, which was selected as a representative technology for that technology band. We looked at different technology costs and usage at different scales. For example, for the large commercial and public band, we looked at a particular set-up with a 36% load factor. We also looked at an even higher level at an industrial scale, with an 88% load factor.

Ms Gildernew: OK. Mark, you mentioned that there could be variations. Did you, at any point, see the potential for abuse when you were looking at all of this?

Mr Cockburn: You know in a general sense that there can be gaming and abuse, but you will never know how it will play out until you put something out there. As I said, that is where we come back to the fact that it is very important to monitor and respond to what is happening. For instance, we made an assumption that the boilers would be used for 17% of the time. When applications then came showing that users wanted 24/7 use, which is clearly a lot more than that, ideally that would feed back into the system and people would say that the assumptions were not what they thought they would be initially and that they needed to do something about it. There are different ways of doing it. The banding could have been reduced, or you could have a slightly higher subsidy for the next band up so that people did not undersize their boilers in some way.

I am not an engineer, but, for most things, the engineering assumptions were saying that a 50 kilowatt boiler would be running for this number of hours for certain types of activities. When we suddenly find that they are running a lot more, that should raise issues. The boiler should be larger. Why is it not? Partly because — well, largely because — if you had a bigger boiler, it would take you into the next band and you would receive a lower level of subsidy.

Ms Gildernew: This is maybe not a fair question, but did you ever see a situation developing that would mean that this could cost the public purse in the North over £1 billion?

Mr Cockburn: Well, there is a question about whether it will cost you that, and this is quite an important point. I have looked at different subsidy schemes, and most of them are set up in law. They are not contracts; they are in law and, basically, laws can be changed. People out there who have installed those things and have gamed the system do not want to hear that. Sure, there is a legal question, but there are ways of reducing that potential liability.

Ms Gildernew: Would you be prepared to share some of those ideas with us?

Mr Cockburn: I would be happy to.

The Chairperson (Mr Swann): Mark, Paul, Paget, thank you very much for your time. You have offered some documentation to us. We would appreciate it if you could send that to us soon. That will be helpful. Thank you very much for your time and your comments.