2. Undertakings entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly shall be subject to the rules contained in the Treaties, in particular to the rules on competition, in so far as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them. The development of trade must not be affected to such an extent as would be contrary to the interests of the Union.

3. The Commission shall ensure the application of the provisions of this Article and shall, where necessary, address appropriate directives or decisions to Member States.

SECTION 2
AIDS GRANTED BY STATES

Article 107
(ex Article 87 TEC)

1. Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market.

2. The following shall be compatible with the internal market:

(a) aid having a social character, granted to individual consumers, provided that such aid is granted without discrimination related to the origin of the products concerned;

(b) aid to make good the damage caused by natural disasters or exceptional occurrences;

(c) aid granted to the economy of certain areas of the Federal Republic of Germany affected by the division of Germany, in so far as such aid is required in order to compensate for the economic disadvantages caused by that division. Five years after the entry into force of the Treaty of Lisbon, the Council, acting on a proposal from the Commission, may adopt a decision repealing this point.

3. The following may be considered to be compatible with the internal market:

(a) aid to promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment, and of the regions referred to in Article 349, in view of their structural, economic and social situation;

(b) aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State;
(c) aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest;

(d) aid to promote culture and heritage conservation where such aid does not affect trading conditions and competition in the Union to an extent that is contrary to the common interest;

(e) such other categories of aid as may be specified by decision of the Council on a proposal from the Commission.

Article 108
(ex Article 88 TEC)

1. The Commission shall, in cooperation with Member States, keep under constant review all systems of aid existing in those States. It shall propose to the latter any appropriate measures required by the progressive development or by the functioning of the internal market.

2. If, after giving notice to the parties concerned to submit their comments, the Commission finds that aid granted by a State or through State resources is not compatible with the internal market having regard to Article 107, or that such aid is being misused, it shall decide that the State concerned shall abolish or alter such aid within a period of time to be determined by the Commission.

If the State concerned does not comply with this decision within the prescribed time, the Commission or any other interested State may, in derogation from the provisions of Articles 258 and 259, refer the matter to the Court of Justice of the European Union direct.

On application by a Member State, the Council may, acting unanimously, decide that aid which that State is granting or intends to grant shall be considered to be compatible with the internal market, in derogation from the provisions of Article 107 or from the regulations provided for in Article 109, if such a decision is justified by exceptional circumstances. If, as regards the aid in question, the Commission has already initiated the procedure provided for in the first subparagraph of this paragraph, the fact that the State concerned has made its application to the Council shall have the effect of suspending that procedure until the Council has made its attitude known.

If, however, the Council has not made its attitude known within three months of the said application being made, the Commission shall give its decision on the case.

3. The Commission shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid. If it considers that any such plan is not compatible with the internal market having regard to Article 107, it shall without delay initiate the procedure provided for in paragraph 2. The Member State concerned shall not put its proposed measures into effect until this procedure has resulted in a final decision.
b) the aid is subject to a limited duration of five years.

(100) In the case of aid which is gradually reduced, the aid intensity must not exceed 100 % of the extra costs in the first year but must have fallen in a linear fashion to zero by the end of the fifth year. In the case of aid which does not decrease gradually, the aid intensity must not exceed 50 % of the extra costs.

3.1.6. Aid for renewable energy sources

(101) Environmental investment and operating aid for the promotion of energy from renewable sources will be considered compatible with the common market within the meaning of Article 87(3)(c) of the EC Treaty, if the conditions in points 102 to 111 are fulfilled. State aid may be justified if there is no mandatory Community standard concerning the share of energy from renewable sources for individual undertakings. Aid for investment and/or operating aid for the production of biofuels shall be allowed only with regard to sustainable biofuels.

3.1.6.1. Investment aid

Aid intensity

(102) The aid intensity must not exceed 60 % of the eligible investment costs.

(103) Where the investment aid for renewable energy sources is to be given to SMEs, the aid intensity may be increased by 10 percentage points for medium-sized enterprises and by 20 percentage points for small enterprises, as set out in the table.

<table>
<thead>
<tr>
<th>Enterprise Type</th>
<th>Aid intensity for renewable energy sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small enterprises</td>
<td>80 %</td>
</tr>
<tr>
<td>Medium-sized enterprises</td>
<td>70 %</td>
</tr>
<tr>
<td>Large enterprises</td>
<td>60 %</td>
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(104) Where the investment aid is granted in a genuinely competitive bidding process on the basis of clear, transparent and non-discriminatory criteria, effectively ensuring that the aid is limited to the minimum necessary for delivering maximum renewable energy, the aid intensity may amount to up to 100 % of the eligible investment cost as defined in points 105 and 106. Such a bidding process must be non-discriminatory and must provide for the participation of a sufficient number of undertakings. In addition, the budget related to the bidding process must be a binding constraint in the sense that not all participants can receive aid. Finally, the aid must be granted on the basis of the initial bid submitted by the bidder, thus excluding subsequent negotiations.

Eligible costs

(105) For renewable energy, eligible investment costs must be limited to the extra investment costs borne by the beneficiary compared with a conventional power plant or with a conventional heating system with the same capacity in terms of the effective production of energy.

(106) Eligible costs must be calculated net of any operating benefits and operating costs related to the extra investment for renewable sources of energy and arising during the first five years of the life of this investment, as set out in points 81, 82 and 83.

3.1.6.2. Operating aid

(107) Operating aid for the production of renewable energy may be justified in order to cover the difference between the cost of producing energy from renewable energy sources and the market price of the form of energy concerned. That applies to the production of renewable energy for the purposes of subsequently selling it on the market as well as for the purposes of the undertaking’s own consumption.

(108) Member States may grant aid for renewable energy sources as follows:

(109) Option 1

a) Member States may grant operating aid to compensate for the difference between the cost of producing energy from renewable sources, including depreciation of extra investments for environmental protection, and the market price of the form of energy concerned. Operating aid may then be granted until the plant has been fully depreciated according to normal accounting rules. Any further energy produced by the plant will not qualify for any assistance. However, the aid may also cover a normal return on capital.

b) Where aid is granted in accordance with point (a) any investment aid granted to the undertaking in question in respect of the new plant must be deducted from production costs when determining the amount of operating aid. When notifying aid schemes to the Commission, Member States must state the precise support mechanisms and in particular the methods of calculating the amount of aid.

c) Unlike most other renewable sources of energy, biomass requires relatively low investment costs, but higher operating costs. The Commission will, therefore, be amenable to operating aid for the production of renewable energy from biomass exceeding the amount of investment where Member States can show that the aggregate costs borne by the undertakings after plant depreciation are still higher than the market prices of the energy.
(110) **Option 2**

a) Member States may also grant support for renewable energy sources by using market mechanisms such as green certificates or tenders. These market mechanisms allow all renewable energy producers to benefit indirectly from guaranteed demand for their energy, at a price above the market price for conventional power. The price of these green certificates is not fixed in advance but depends on supply and demand.

b) Where the market mechanisms constitute State aid, they may be authorised by the Commission if Member States can show that support is essential to ensure the viability of the renewable energy sources concerned, does not in the aggregate result in overcompensation and does not dissuade renewable energy producers from becoming more competitive. The Commission will authorise such aid systems for a period of ten years.

(111) **Option 3**

Furthermore, Member States may grant operating aid in accordance with the provisions set out in point 100.

3.1.7. **Aid for cogeneration**

(112) Environmental investment and operating aid for cogeneration will be considered compatible with the common market within the meaning of Article 87(3)(c) of the EC Treaty, provided that the cogeneration unit satisfies the definition of high-efficiency cogeneration set out in point 70(11), and provided that for investment aid:

(a) a new cogeneration unit will overall make primary energy savings compared to separate production as defined by Directive 2004/8/EC and Decision 2007/74/EC;

(b) improvement of an existing cogeneration unit or conversion of an existing power generation unit into a cogeneration unit will result in primary energy savings compared to the original situation.

(113) For operating aid, an existing cogeneration must satisfy both the definition of high-efficiency cogeneration set out in point 70(11) and the requirement that there are overall primary energy savings compared to separate production as defined by Directive 2004/8/EC and Decision 2007/74/EC.

3.1.7.1. **Investment aid**

**Aid intensity**

(114) The aid intensity must not exceed 60 % of the eligible investment costs.

(115) Where the investment aid for cogeneration is to be given to SMEs, the aid intensity may be increased by 10 percentage points for medium-sized enterprises and by 20 percentage points for small enterprises, as set out in the table.

<table>
<thead>
<tr>
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<th>Aid intensity for high-efficiency cogeneration</th>
</tr>
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<td>70 %</td>
</tr>
<tr>
<td>Large enterprises</td>
<td>60 %</td>
</tr>
</tbody>
</table>

(116) Where the investment aid is granted in a genuinely competitive bidding process on the basis of clear, transparent and non-discriminatory criteria, effectively ensuring that the aid is limited to the minimum necessary for achieving the maximum energy saving, the aid intensity may amount to up to 100 % of the eligible investment cost as defined in points 117 and 118. Such a bidding process must be non-discriminatory and must provide for the participation of a sufficient number of companies. In addition, the budget related to the bidding process must be a binding constraint in a sense that not all participants can receive aid. Finally, the aid must be granted on the basis of the initial bid submitted by the bidder, thus excluding subsequent negotiations.

**Eligible costs**

(117) Eligible costs must be limited to the extra investment costs necessary to realise a high-efficiency cogeneration plant as compared to the reference investment.

(118) Eligible costs must be calculated net of any operating benefits and operating costs related to the extra investment and arising during the first five years of the life of this investment, as set out in points 81 to 83.

3.1.7.2. **Operating aid**

(119) Operating aid for high-efficiency cogeneration may be granted in accordance with the rules for operating aid for renewable energy laid down in section 3.1.6.2:

a) to undertakings distributing electric power and heat to the public where the costs of producing such electric power or heat exceed its market price. The decision as to whether the aid is necessary will take account of the costs and revenue resulting from the production and sale of the electric power or heat;

b) for the industrial use of the combined production of electric power and heat where it can be shown that the production cost of one unit of energy using that technique exceeds the market price of one unit of conventional energy. The production cost may include the plant's normal return on capital, but any gains by the undertaking in terms of heat production must be deducted from production costs.
Dr MacLean: Sorry, just while they’re both there on the screen — the operating aid and the investment aid on the other side — most of the renewable energy schemes tended to go down the operating aid route. Is that correct? Because there was a greater flexibility in how much reward could be provided compared to investment aid where there were sort of fairly strict limitations on the percentages of aid that could be provided to different sized organisations.

Mr Moore: I think, from the Commission’s perspective, they would hope that the guidelines were such that it comes back to this point about proportionality; that whether it went down the investment aid route or the operating aid route, the amount of aid should be effectively the same. But the advantage of, obviously, an investment aid approach is that it’s relatively simple to understand and to manage. Most of our aid schemes would be investment aid schemes. We don’t actually have that many schemes which are operating aid. The main area where you would see operating aid is in the energy area.

Dr MacLean: Yes, sorry, I should’ve qualified that, that it was with regard to energy and, in particular, renewable energy where the quantum of aid that was available through operating aid tended to be above what would’ve been possible in operating aid.

The reason for asking here is just to understand whether there was a mindset in any way in your dealings with energy division whereby there was a preference for operating aid rather than investment aid because it would be an easier route to go down, one with fewer restrictions.

Mr Moore: I never had a conversation like that with anybody in energy division or actually a design as to — or there was a discussion about whether investment aid or operating aid would be preferable or a mix of the two. So that discussion never took place at the time.

Dr MacLean: I don’t know if you were aware, but one of the things that the Inquiry’s been looking at is the decision between the challenge fund, which would’ve been a form of
investment aid, as opposed to the RHI, which was operating aid. So, you’re not aware of any discussions which favoured one route rather than the other or the RHI route rather than the other that would’ve been justified on the basis of state aid.

Mr Moore: Obviously, with the evidence that’s now been presented, I’m aware that there was some discussion, but I wasn’t party to those discussions or involved in them in any way.

Dr MacLean: OK. Thank you.

Mr Lunny: Just before I go on and look at the operating aid provisions, maybe to take up the point that Dr MacLean has made, if we look at the left-hand column and scroll down the page slightly, we’ll see that investment aid is obviously addressed from point 102 onwards. And one of the first provisions — if we could just pause there — at 102, we’ll see that:

“The aid intensity must not exceed 60% of the eligible investment costs.”

Mr Moore: Yes, that’s correct.

Mr Lunny: And there are then some quite specific rules in relation to that, but there are also —. If we could turn very briefly to WIT-24675, we’ll see an annex, which deals with aid intensity and the level that they will permit for different types of investment aid as part of the eligible costs. And we can see towards the bottom of the page, “Aid for renewable energies” there, and each of the columns — they split the enterprise size up from small to medium to large enterprise. That’s the recipient. But we can see that the aid that’s available for renewable energies, the percentage of the eligible costs that can be covered by the aid, that varies depending upon whether it’s a competitive bidding process or not a competitive bidding —

Mr Moore: Or it’s a scheme, yes.

10:30 am

Mr Lunny: And you may or may not have been aware that the challenge fund that was being recommended as the most cost-effective option by CEPA in 2011 was a competitively
Mr Moore: Currently, in my role, I’m splitting my time between Brexit issues and state aid, so, very much, state aid would be the lesser part of my work. I would probably be spending around about two thirds to three quarters of my time on Brexit issues.

Mr Lunny: OK. So, that’s the position now. Before Brexit reared its head, in the period after you got the staff officer resource in 2015 and before we had the Brexit referendum, how did your ability to deal with cases compare in that period to what it was when you —

Mr Moore: Oh, I think we’d be —. We were in quite a nice position; we were well able to handle the work coming in. During most of that period, er, sort of, I have been effectively training the two staff officers, because it takes a long time to train somebody up to be fully competent in state aid —

Dr Keith MacLean (Technical Assessor to the Inquiry): Sorry, is that a job-sharer that you’re talking about or why would it be between two —

Mr Moore: No, no. Sorry, I had —. The original staff officer decided for family reasons — she’d a young daughter and she wanted to relocate to —

Dr MacLean: Right.

Mr Moore: — a position closer to home, so she asked for a transfer and then —

Mr Lunny: So you —

Mr Moore: — she was replaced by —

Dr MacLean: OK.

Mr Moore: Um, yes.

Dr MacLean: Thank you.

Mr Lunny: One staff officer after the other, not two at the same time.

Mr Moore: Yes. Not two at the same time, no.

Mr Lunny: You’ve mentioned, very briefly just in relation to your role, about providing advice and assistance and you’ve indicated in your statement that that’s advice and
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assistance not — it’s not legal advice.

Mr Moore: No, definitely not legal advice.

Mr Lunny: No, it’s advice and assistance in relation to the state aid rules and the notification process and the procedures and whatever guidelines exist.

Mr Moore: Uh-huh. That’s correct. Yes.

10:00 am

Mr Lunny: Something the Inquiry will want to explore is the extent to which you would get involved in the detail of an aid measure or an aid scheme. For example, do you comb the scheme documents searching for potential state aid issues? Or, are you reliant upon the sponsor Department or the aid provider to do that?

Mr Moore: It depends on the case and how it’s presented and how it comes about. Yes, we would comb, if you like, if that phrase is correct, to determine whether or not state aid was present in a measure, if we’re asked to do so. Or, if it’s drawn to our attention, or we spot something, we would be proactive in going back to the Department or, if it’s in the Department, the relative [sic] sort of division and say, “We think state aid is in this”. It would tend to be the norm within DFE, DETI as it was then, that most of the measures we engage in would be state aid or, potentially, involving state aid, and I would tend to be aware of things coming up or would be alerted to things coming up and would then provide advice as appropriate in terms of, normally, if it was fully accepted and acknowledged at the outset that it was state aid, advice on the relative [sic] rules or the respective rules that would apply. If it wasn’t state aid, or if there was a question mark about whether it would or not be state aid, we would generally give our opinion on how this might be approached and how it would be assessed and provide advice that way, and then take it from there.

The Chairman: I’m interested to hear you say that you advised on the rules and procedures but not on a legal basis. State aid is, of course, a subdivision of European
competition law —

Mr Moore: Absolutely.

The Chairman: — and I don’t think I’m doing it any injustice to say that it’s fairly complicated.

Mr Moore: It is; absolutely complicated, yes.

The Chairman: Yes. So, whenever you came across, for example, an issue as to whether or not there was a breach of one of the rules or regulations, did you refer that to a legal department, or —?

Mr Moore: Yes, I would be —. If there’s any suggestion or any doubt about the legality of something like that, I would work very closely with my colleagues in DSO.

The Chairman: I see.

Mr Moore: I have a very close and ongoing relationship with them on state aid matters, and we would be in regular contact. So, if there’s any doubt at all, I would always recommend seeking the opinion of DSO. And it’s quite a specialised area, as I’m sure you are aware.

The Chairman: It is, yes. Thank you.

Mr Lunny: And, although we won’t see examples of that in phase 1 —

Mr Moore: No.

Mr Lunny: — there are examples of that when you’re looking at, for example, the issue of the Carbon Trust loan —

Mr Moore: Yes, that would be a good example, because, yes, there —

Mr Lunny: — where DSO get involved to give some legal advice about, for example, the regulations —

Mr Moore: We had a lot of discussions with DSO about that, yes.

Mr Lunny: And at a later stage, I think, as well, in one of the later phases there’s some
engagement with DSO, but not in relation to phase 1.

Mr Moore: No, no, no. I would —. I have had quite a few conversations with DSO about various matters, yes.

Mr Lunny: And, so, if it’s clear that the measure is a type of state aid, and there’s no dispute about that, which I think is the case in relation to RHI, you would then give advice about which set of guidelines or which part of the guidelines the Commission will be —

Mr Moore: Assessing it against; absolutely.

Mr Lunny: — assessing the measure against.

Mr Moore: That’s exactly right.

Mr Lunny: And you’ve mentioned then it would largely be for the Department or the aid provider to draft documents in the first instance.

Mr Moore: Yes, it would be. We do not take ownership of state aid for the policy branch or even Departments. It’s their responsibility to comply with the state aid rules, and it’s our role to help them do so.

Mr Lunny: So, is it more in the nature of a role of providing a scrutiny or checking function and providing advice about how they need to alter their drafts or what they need to focus upon?

Mr Moore: Yes, we would tend to provide — I would describe it as a “first-order sanity check”. Essentially, I’m reading it, hopefully, from the point of view of somebody in the Commission, trying to ensure that what we send in to the Commission will be understood by the case handler, that the language in the notification document is clear and understandable. And I’m particularly conscious that, very often, case handlers in the Commission will be reading something and English will be their second — possibly even their third — language. So it’s important that documents are clear. I’m also checking to see that everything that the Commission should be looking for in terms of the procedural aspects
have been covered off and any particular points from within the guidelines that need to be covered are fully addressed.

Mr Lunny: And all of that obviously requires at least some understanding of what the aid measure is on your part?

Mr Moore: It does, yes; it does.

Mr Lunny: And, prior to RHI coming onto your desk, had you dealt with many renewable energy incentive schemes in your state aid unit?

Mr Moore: The main one in the Department would be the NIRO — the Northern Ireland renewables obligation — which is the green certificate system for encouraging renewable generation of electricity.

Mr Lunny: And you had dealt with that before RHI?

Mr Moore: Yes.

Mr Lunny: And had it been an involvement that was closer to the light-touch end of the spectrum or the more detailed involvement?

Mr Moore: When I started in the role, NIRO was already up and running, so it was actually a relatively light touch because my colleagues in energy division had a very good understanding of what they needed to do, and they were essentially re-notifying whenever changes were needed to be made to the NIRO. So my role actually was quite light touch because they knew what they were doing and they’d a pretty good understanding of what they needed to do to satisfy the Commission. They were also following on from GB.

Mr Lunny: So those would’ve been re-notifications following reviews of the scheme, for example?

Mr Moore: Yes, where they were changing the ROC banding levels for example, and they were required to re-notify whenever they did that.

Mr Lunny: One of the points you have made in your witness statement in relation to the
Peter

I am sure you are aware that there are a number of State Aid rules in relation to renewable energy.

Will the economic appraisal be assessing whether the Renewable Heat Incentive is likely to comply with these rules?

Happy to discuss.

Stephen

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

Thanks for coming round earlier.

As discussed, it looks like the GB RHI scheme is State Aid and therefore you should expect that State Aid approval will also be required for the NI scheme.

However, obtaining State Aid approval for our scheme in time for the scheme going live on 1 April 2012 will probably be struggle.

You will see I have asked for a copy of the GB State Aid notification and I would be grateful if you (and colleagues) could also encourage DECC to send us a copy ASAP.

Once we have the GB State Aid notification, Energy Division needs to start drafting the NI notification, with a view to submitting this ASAP - if possible even before the consultation period ends.

I would also be keen to find out what questions the Commission has asked DECC about the GB scheme and when a Commission decision is likely.

In respect of the NI scheme, if the GB scheme is approved we can expect our scheme will also be approved, but, we should expect to have to explain (and justify) the differences between our scheme and the GB scheme. For example:

1. The treatment of large companies / ETS sites - how will we assess each case to ensure no overcompensation;
2. The measures to protect the development of the NI natural gas industry 'may' be seen by the Commission as further State Aid to that industry. Id so, hopefully they will agree that such further aid is necessary, proportionate and the minimum necessary; &
3.How and why we have set / will set our tariff levels.

We will also have to address issues such as 'Private' Landlords and the de minimis regulation - as per GB.

Stephen
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Mr Lunny: And we’ll see, and you’re aware now, for example, that the CEPA appraisal from 2011, it does focus on some, what appear to be, key aspects of the state aid rules or the EAGs; for example, in relation to the RHI, the focus of the tariff is on the cost difference, and the rate of return that’s proposed is what they say is a normal rate within a —

Mr Moore: Certainly —

Mr Lunny: — range.

Mr Moore: — when you’re reading the CEPA reports, you would have the impression that they were familiar with the requirements, the state aid rules.

Mr Lunny: And you may not know this, but the process of creating that appraisal from the 28th of June 2011, started at the beginning of 2011 and it went through various drafts. And there was a process of communication, between energy division on the one side and CEPA, about what it would or wouldn’t include.

Mr Moore: I wasn’t, obviously, party to any of those discussions.

Mr Lunny: But certainly, when the state aid draft notification came to you with the CEPA report attached to it, it wasn’t one of those cases where you looked at it and thought, “Oh no; this doesn’t address the state aid issues. This hasn’t been created with state aid in mind”. It didn’t require you to go back and say they needed to go back to the drawing board or anything like that?

Mr Moore: That’s correct.

Mr Lunny: And do you recall what, if any, level of discussion or interaction there was between you and the energy division people dealing with RHI between your February email and then August when you engaged with them again?

Mr Moore: I don’t actually recall any discussions in that period, no.

Mr Lunny: I’ll take you to your August email. It’s just two pages further on at 24604, and
we’ll see, if we can zoom in on the bottom half of the page first. Apologies for the very small type, but we’ll see there on the 4th of August you were making contact with Kate Porter —

Mr Moore: That’s correct, yes.

Mr Lunny: — BIS, and you refer to the consultation that’s been launched during the summer in relation to the RHI. And you make a number of comments about that and an observation about what is said on DECC’s web pages, or DECC’s impact assessment about their RHI, and you ask her a number of questions.

Mr Moore: That’s correct, yes.

Mr Lunny: If we scroll up the page, we’ll see then that she responds and gives you some contact details in DECC. And if we scroll further up on to 24603, we’ll see that you then reply to her and to the, I think, one of the people whose details she’s given you in the earlier email, and you ask him for a copy of their state aid notification.

Mr Moore: I do indeed, yes.

Mr Lunny: So that’s the notification that DECC prepared —

Mr Moore: Yes.

Mr Lunny: — for their RHI —

Mr Moore: Yes.

Mr Lunny: — so you’re actively seeking that out for the renewable heat branch. And if we scroll then on up a little bit, we’ll see then that you email Peter Hutchinson, copying in Joanne McCutcheon and Fiona Hepper, and then some of your own line managers —

Mr Moore: Yes.

Mr Lunny: — on the 4th of August as well. And it’s clear from the first couple of paragraphs that you’ve had a face-to-face discussion with Mr Hutchinson before the email. And you say:

“As discussed, it looks like the GB RHI scheme is State Aid and therefore you should expect that State Aid
approval will also be required for the NI scheme.”

You’ve said:

“However, obtaining State Aid approval for our scheme in time for the scheme going live on 1 April 2012 will probably be a struggle.”

And you tell him what you’ve done in the emails below; that you’ve sought a copy of the GB state aid notification. And you ask him to encourage DECC to send him a copy, and then you say:

“Once we have the GB State Aid notification, Energy Division needs to start drafting the NI notification, with a view to submitting this ASAP - if possible even before the consultation period ends.

I would also be keen to find out what questions the Commission has asked DECC about the GB scheme and when a Commission decision is likely.”

And then you go on to raise a number of specific points.

The Chairman: Mr Moore, in the second sentence there, you talk about concern about time and you’ve referred us earlier on to the sufficient time that the regulations require. Is there or was there a relevant practical time period that they adopted? I don’t think there is. I don’t think there’s one specified in the regulations but was there one — a rule of practice — that everybody knew about?

Mr Moore: Yes, it would be generally the understanding that, if you were putting through a state aid notification to DG Competition, you needed to allow six to 12 months to get it through the system, to get to a decision. And, at that particular time, the energy unit within DG Competition was very heavily loaded, and we knew from —. We have a regular — biannual as it is now — sort of getting together of the state aid units in England, Scotland and Wales and I was aware that there were delays in getting notifications through that particular energy and environmental unit and that there was a queue of UK cases that were in the system and it was going to be a struggle to get it through the Commission and get to a
The Chairman: I take it that’s six months — six or 12 months — from the date of filing the notification?

Mr Moore: The pre-notification, yes. Uh-huh.

The Chairman: Did that drop over time to; I have a recollection somewhere of three months; maybe that’s for a different aspect of it.

Mr Moore: No, no. When we eventually — we pre-notified this in December and it’s fairly evident that we were trying to encourage BIS and UKRep to push it through as quickly as possible. And, generally, what happens is, to be fair to the Commission, they usually ask us, “When do you need a decision?”, and we were quite clear that we needed to launch the scheme because our Minister wanted the scheme launched. So, they knew that there was — we were under pressure to launch the scheme and they themselves would know that there would be people asking, you know, “When is the Commission going to approve it?” So, I think, in this case — and we have had situations obviously in the past with the Commission where they have been able to push things through very quickly for us.

The Chairman: Well, they would’ve had the sort of previous example of the UK — or GB application. To some extent, it will helpful.

Mr Moore: That is an important point, because we were coming in hard on the heels of them having recently adopted the GB RHI decision.

The Chairman: Yes, but the point being — the point you’re making, which I understand, is that, at this time, when you were suddenly really told or you’re drawing to their attention that they ought to be looking at state aid, it was a matter of conservative advice that you’re going to need six to 12 months here. Yes?

Mr Moore: Yes. No, that was clear, yes.

The Chairman: Thank you very much.
(68% of heat is produced from gas in 2008), and the Commission considers that it is the most likely counterfactual in the majority of situations.

- For solar thermal: the UK authorities have also explained that for there is no counterfactual to solar thermal, as it does not generally correspond to primary heat production. Therefore the eligible costs correspond to the full installation costs of a solar thermal system. However, the UK authorities also provided information on an potential counterfactual for these systems upon Commission request. Therefore the Commission will assess below the overcompensation for solar thermal based on its comparison with a counterfactual installation.

51. As for the selection of cost data:

- As for all technologies but large biomass, the Commission notes that the UK authorities have presented ranges of extra costs (as compared to the counterfactual scenario) and positioned the tariff at the mid-point of extra cost calculations for every installation concerned by a given tariff level. Even if it may result in over- or underestimating the actual production costs of some individual beneficiaries, the Commission considers that in the aggregate this is a fair approach that avoids systematic overcompensation.

- As for large biomass, the Commission considered that the initial choice by the UK of a higher tariff level does not correspond to mid-range extra cost estimate, but to the most favourable end for the investor, presents risks of overcompensation. Therefore the Commission welcomes the decision of the UK authorities to set the support level at 10 GBP/MWh, so that the tariff covers extra costs for 50% of the heat potential of large biomass, in order to eliminate the risk of overcompensation. The Commission considers that this support level is in line with the approach retained for other subcategories and avoids systematic overcompensation.

52. As regards the discount rate of 12% applied in the calculations of levelised production costs for biomass, biogas and ground-source heat production, the Commission notes that the UK authorities submitted a detailed report from an independent consultant; the report concludes that the necessary rate of return to incentivise renewable heat production ranges between 8 and 22%. As for the solar thermal, the rate of return resulting from the methodology proposed by the UK authorities is significantly lower. In the light of the above, the Commission considers the discount rate applied in the production costs calculations as a reasonable profit margin, as it is located within the lower range of the rates of return accepted by investors, based on the information provided above. It also notes that the non-financial barriers described above could be integrated to the rate of return (as remuneration of risks undergone and possible delays in installing a renewable boiler, which may involve more uncertainties than installing conventional one). If the rate of return was only calculated on the financial costs, considering the non-financial barriers as part of the profit margin, the rate of return would only be slightly above 12% (as the non-financial costs mentioned are not significant as compared to total costs, see in annex), which in the view of the Commission would still be a reasonable remuneration of the project risks.

53. The Commission welcomes the two-tier approach for the small and medium biomass installations, which indeed are likely to reduce the perverse incentives to increase heat
production beyond reasonable use in order to claim the RHI tariffs. It also notes that according to the information submitted by UK, most biomass installations are above the reasonable use load factor, and therefore it is unlikely that the two-tier system would lead to overcompensation, especially when considered in the aggregate. The Commission also considers that limiting the two-tier system to small and medium biomass is justified in view of the explanations provided by the UK authorities.

54. With respect to the absence of overcompensation in time, the UK authorities confirmed that the production costs will be monitored on a four-year basis (scheduled reviews), or even subject to early reviews in case of significant changes in production costs. The UK authorities also confirmed that the support levels for new beneficiaries will be adapted in case a risk of overcompensation is identified.

55. Moreover, the operating aid is limited to the depreciation time of the installations concerned (20 years), which corresponds to their lifetime.

56. Therefore, the Commission considers that the methodology used by the UK authorities to present overcompensation calculations is equivalent to or not more favourable than the methodology presented in point 109(a) of the Environmental Aid Guidelines.

Compensation levels

57. The Commission refers to the table 1 above, which compares production costs (over the period of 20 years, which represents approximately the lifetime of the installations concerned) with the revenues of the beneficiaries stemming from the tariff levels. The data presented show that the total tariff payments do not exceed the difference between renewable and heat production costs.

58. In the light of the above mentioned considerations, including the commitment of the UK authorities to adapt the notified measure in time in order to avoid overcompensation (see paragraph 25 to 27 above) the Commission finds that the notified measure is in line with the condition of absence of overcompensation.

Other compatibility criteria

59. As regards the two other conditions of point 109 (letters (b) and (c)), the Commission notes that no RHI tariff can be cumulated with investment grants, and that for biomass operating aid does not exceed the investment costs of a biomass installation.

60. In addition, in line with the condition regarding the limitation of Commission authorisation, the duration of the notified measure does not exceed 10 years.

61. The UK authorities also confirmed that in case the renewable electricity generation capacity of an installation will exceed the individual notification thresholds, the aid will be notified individually to the Commission. Furthermore, the UK authorities confirmed the respect of annual reporting and monitoring provisions of the Environmental aid guidelines as laid down in Sections 7.1 and 7.3.

62. The Commission notes that the calculations provided by the UK authorities show that the production costs of heat from renewable energy sources are higher than heat
Mr Lunny: Chairman, we were just about to complete the GB scheme documents, and the last one of those is the Commission’s decision approving the GB RHI scheme. And we can find that, I hope, at DFE-76672. And we’ll see it’s a letter dated the 28th of September 2011. And if you recall, when we looked at the email that sent through the Commission’s questions and DECC’s answers, it also enclosed the Commission’s decision. So that went to you on the 15th of November as well. And, again, you may not recognise the document, but do you recall reading that at some point?

Mr Moore: I probably would’ve paid more attention to the Commission document, the Commission decision letter, because that’s the key thing.

The Chairman: Sorry, you would’ve paid more attention to this —

Mr Moore: The Commission’s decision letter, yes.

The Chairman: — than to the notification?

Mr Moore: No, to the questions and answers. I probably would’ve —. My focus would’ve been immediately on what exactly, in the form and structure, because that guides how you would draft a notification document.

Mr Lunny: And it tells you what they’re content with. If there’s a measure to mitigate the risk —

Mr Moore: Yes.

Mr Lunny: — of something, they’re content with it.

Mr Moore: Yes.

Mr Lunny: And, if we look just on that particular point and to follow through a point about tiering, we’ll see, if we could scroll down to 76675, that there they deal with the form of support and its levels, so the levels of the tariffs. And, at paragraph 22, they address the tariff levels and they say:

“The tariff levels are presented below. According to the UK authorities, they indicate that there is no
overcompensation as the extra costs for producing from renewables as compared to fossil fuel are still higher than the RHI tariff for every category. For small and medium biomass, the UK authorities introduced two tiers instead of a single tariff: this is meant to reduce incentives to overgenerate (and possibly waste) renewable heat in order to secure more payments from the RHI.”

And then they go on to explain the two-tier system. Do you see that?

Mr Moore: Oh, yes, uh-huh.

Mr Lunny: But, certainly, they seem to be looking at the tiering of a number of tariffs in the context of overcompensation —

Mr Moore: Absolutely.

Mr Lunny: — and avoiding overcompensation.

Mr Moore: Yes.

Mr Lunny: And reading a paragraph like that, would that have struck you that, “Tiering is something I, then, need to look out for in the Northern Ireland scheme. Are we doing that to address the risk of overcompensation?”

Mr Moore: Yes. That would’ve registered with me, yes.

Mr Lunny: And we’ll see, then, you got that in November. You don’t have any Northern Ireland draft notification to look at —

Mr Moore: No.

Mr Lunny: — at that point. And we’ll see, then, you have another and further engagement by email with Peter Hutchinson, and if we could leave that GB approval document and go to —

Dr MacLean: Mr Lunny, sorry; can I just ask a question on that ’cause there had been some —. Was that after the large biomass tariff had been reduced? There had been — in the GB scheme, there had been an initial rejection, I think —

Mr Lunny: There had; that’s right.
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Mr Moore: Yes.

Mr Lunny: They’re the ones who’ve mentioned April 12 as their, the date at which they want to have the scheme in place. So this is another example of you going back and, if we could call it, “prodding” them to get them to move on?

Mr Moore: Yes.

Mr Lunny: And if we scroll up again to 24606, we’ll see, on the bottom half of the page, an email, the following day, the 29th of November, from you to Paul Carr, and he was —.

Was he your line manager at the time?

Mr Moore: At that point Paul was my line manager, yes.

Mr Lunny: And you’re saying:

“Paul

Further to our discussion earlier. I bumped into Peter in the corridor.”—

pausing there, that’s Peter Hutchinson —

Mr Moore: Yes.

Mr Lunny: And you say:

“He is well aware of the urgency and said he hopes to get me a draft of the notification within the next couple of days.”

And then you record:

“I made it clear that even if we are able to get this into the Commission before Christmas, a decision before 1 April 2012 now looks very unlikely and he indicated that he and others in Energy Division are aware of this.”

Mr Moore: Yes.

Mr Lunny: So, it’s a record of the conversation that you had with Mr Hutchinson.

Mr Moore: Yes.

Mr Lunny: And we’ll see that was the end of November. It’s another three weeks before a
Commission needs the information it needs to adopt the decision, and certainly supporting
information can be provided with it, in terms of, like, the CEPA economic appraisal and
various other legal things. But most — I sorta have a 30-page rule that if it’s longer than 30
pages, it’s probably starting to get too long, and, um, we like them to be tight and concise to
help the Commission to adopt the decision.

**Mr Lunny:** The draft does finally come to you, I think we said, three weeks after your
“Tempus fugit” email, and that’s the email that’s on screen at the minute. It’s the 19\textsuperscript{th} of
December at 29 minutes past three in the afternoon, and it’s from Peter Hutchinson. And he
says:

> “Please see attached draft State Aid application ... Northern Ireland RHI.”

He then goes on to stress energy division’s desire to get it lodged before Christmas rather
than in the new year.

**Mr Moore:** Uh-huh.

**Mr Lunny:** And if we scroll up to 24609, we’ll see you respond very quickly on the 19\textsuperscript{th}
December to say that you’re going to be out of the office for most of Tuesday the 20\textsuperscript{th} of
December and that Wednesday is your last day until the new year and that you suspect it’ll
be January before you can have a proper discussion with him about the draft.

**Mr Moore:** Yes.

**Mr Lunny:** That’s perhaps not an unexpected response, given it’s almost Christmas and
everybody’s off over Christmas, but it elicits then a reply, not from Mr Hutchinson but from
Mrs Hepper. If we scroll up the page, we’ll see that, less than an hour later, she emails you
and copies in a number of people. She copies in Mr Hutchinson and Mrs McCutcheon and Mr
Connolly, who’s the economist, and Ms Stewart, who’s another energy division official.
We’ve got two other people, Damien Ryan and Paul Carr. Paul is your line manager; I think
you’ve indicated.
**Mr Moore:** Yes.

**Mr Lunny:** And who’s Damien Ryan?

**Mr Moore:** Damien, unfortunately, had been given the task at that stage of shadowing me, in case I walked under a bus. Since I was the only person in the Department at that stage who was dealing with state aid, it’s part of the measures we were taking in place to ensure that we actually had some sort of cover. Damien had been asked to, sort of, see what I was doing, and we were actually sharing an office at that point so that he had a rough idea of what I was doing on a day-to-day basis, in case I wasn’t available, for whatever reason.

**Mr Lunny:** But one of the people — Paul Carr, obviously — is your line manager, and Mrs Hepper’s email says:

> “Stephen

> I want this submitted before Christmas – so, if you cant [sic] look at it now, we will proceed and pick up any points you may have if we have to add further information re the tariffs.

> Thanks

> Fiona”.

And then she goes on:

> “Peter and Joanne - please proceed.”

**Mr Moore:** Yes.

**Mr Lunny:** So, did you understand that she was indicating to them, “Proceed and file this notification”?

**Mr Moore:** That’s —. Yes, that’s what I understood, yes.

**Mr Lunny:** And did — what was your reaction to that email? How did you —? Was it a surprising email?

**Mr Moore:** I wouldn’t say it was a surprising email. I understood the concerns about getting it into the Commission’s system. I had been stressing from the outset the need to get
And the notification document itself, it — if we could leave the WIT bundle — it’s at DFE-00784. This is the document that goes through to BIS the following day, but we’ll see it’s dated the 20th of December, and that suggests you’d very little time to look through it and analyse it.

Mr Moore: That’s correct, yes.

Mr Lunny: And —.

Dame Una O’Brien: If any.

Mr Lunny: Well, if we — we’ll take a look at what you say about it, I think on the 21st. You make it clear —. If we could look at DFE-77756. So this is just one email in your exchange with Ms Porter. But if we could scroll down to the very bottom of this page, and, again, the text is very small, but it’s your email the next morning, the 21st of December, to Kate Porter in BIS, and it’s part of a sequence of emails. You’ve told her it’s ready, and you send it through to her, first of all, and she gives you some drafting suggestions. But you say:

“I agree there is a lot of information for the Commission to consider and I have done my best to cross reference between the documents, but, like you, yesterday was the first time I saw any of these documents.”

So, clearly you’ve been given the notification and its annexes with very little time to look at them in any, in any detail. Is that fair?

Mr Moore: Uh-huh. Yes. Uh-huh.

Mr Lunny: And if we scroll down to 77758 — so the following page — we’ll see, just to understand that sequence of emails, at the very bottom of the page, that was when you first, I think, made contact with Kate Porter about the notification. So, it was the day before; it was the 20th of December, again in the morning. And you tell her that the notification was being pulled together by your colleagues and that the requisite documents are now ready to be uploaded to SANI. So it rather looks like you had received it on the afternoon of the 19th; you must have looked at it that evening or early the following morning, or perhaps both. And
Northern Ireland’s allocation. I think I would’ve been clear on that particular point.

Mr Lunny: Is that the sort of thing that, in your experience, would have made any difference to how the Commission dealt with it?

Mr Moore: I wouldn’t’ve thought so. I wouldn’t’ve thought so.

Mr Lunny: And you enclose, if we scroll down to paragraph 13, various documents with this. You can see there are various attachments. And, obviously, the first one is the notification paper that we’ve just looked at and, amongst other attachments, there is the economic appraisal and the draft RHI regulations.

Mr Moore: Uh-huh.

Mr Lunny: And the — what appears to be maybe the file name for those regulations is: “Annex D - Draft RHI Regulations - December 2011”.

And I know you’ve considered this, but in your exhibits — the documents you’ve provided that you had at the time—

Mr Moore: Yes.

Mr Lunny: — the regulations are headed 4th of October 2011.

Mr Moore: That’s right. Uh-huh.

Mr Lunny: Do you think that’s the version that was sent through with the notification?

Mr Moore: I know that’s the version that was sent through with the notification, yes.

Mr Lunny: And they — and I can take you to the relevant parts —. But at regulation 37(9) and at schedule 3, they provide for a tiered biomass tariff.

Mr Moore: Yes. Uh-huh.

Mr Lunny: So, they’re quite an old version of the Northern Ireland RHI draft regulations. Would you have read those regulations and noticed that at the time or not?

Mr Moore: I wouldn’t’ve thought I would. I’m —. I think I probably would’ve received those because, probably around the 20th, from Peter or Joanne. One of the requirements of
the state aid rules is that we have to demonstrate to the Commission there’s a legal basis for
the scheme. So, normally, we would make an explicit reference in the notification
documents to the legislation that applied to the scheme or, as in this case, the regulations
that were going to be brought in to govern the scheme. So, I think probably what I was
thinking at that stage is to show the Commission the legislation was in hand and would be
there in time and in place, that we would share the draft regulations with the Commission to
demonstrate to them that there would be a legal basis for the scheme by the time the
Commission adopt, or shortly after the Commission had adopted, its decision.

Mr Lunny: The detail of the regulations wouldn’t have been something that you had to
concern yourself with?

Mr Moore: No, it would have been to dem— just purely to demonstrate to the
Commission that this was going to be a legal scheme.

Mr Lunny: Yes, and in fairness, just on that legality or vires point, we can see that annex c,
one of the other documents being attached, were the provisions in the Energy Act of 2011

—

Mr Moore: Yes.

Mr Lunny: — which were the enabling powers.

Mr Moore: That’s right. Yes. Uh-huh.

Mr Lunny: So, to satisfy the Commission that there was that legal basis.

And there’s one final document just in relation to the notification that I want to take you
to, but can you tell me whether, when I take you to it, whether it is the annex that’s
described there as:

“Part Ill.10 supplementary information sheet”?

I’ll take you to it. It’s at 25 — WIT-25348.

Mr Moore: Yes.
Mr Lunny: That’s the document Part III.10?

Mr Moore: Uh-huh.

Mr Lunny: And is that another document that you completed and —

Mr Moore: Yes, that would’ve been one I would’ve completed again, probably with help from — from Peter.

Mr Lunny: And we can see just a couple of points from it, but that at WIT-25373 —. I should say this is a document with a number of standard questions —

Mr Moore: Yes. Uh-huh.

Mr Lunny: — that the Commission ask about the scheme. And there is a question asked about — at B) at the top of the page:

“Please demonstrate that the aid will be granted only until the plant has been fully depreciated ... and provide a detailed analysis of the depreciation”.

A further question within that is:

“For aid schemes, please specify how the compliance with this condition will be ensured”.

And there’s a very clear commitment then made in the answer by energy division, and that is:

“The tariffs have been established ex-ante and there will also be regular reviews every four years. The first review is scheduled for 2014 with any changes or revisions implemented by 2015.”

That’s a clear commitment to the Commission, or a representation to the Commission, that that will occur.

Mr Moore: Yes. The Commission uses the supplementary information sheets as effectively their checklist for the starting point for their assessment of the notification. So, hem —

Mr Lunny: It’s a very important document.

Mr Moore: It’s an important document, and every notification will have a supplementary
So, again, it’s an example of you pressing energy division to provide the documents they need to provide to the Commission. And we know, then, that they get the CEPA addendum report on the 16th of February and that that, along with notification addendum, is sent to you on the 20th. It’s at DFE-239227. So we can there, 20th of February, just after midday, the addendum to the state aid application is sent to you by Peter Hutchinson. And if we scroll up the page to 226 or 239226, we’ll see that you respond later that afternoon with a number of queries and drafting suggestions.

So, can we take it that you read the note — the addendum document that he had prepared for the Commission?

Mr Moore: I think I did exactly as I said in the email there: I had a quick look at the paper, and through definition of “reads”, then, I think, yes, I read it.

Mr Lunny: And we know that that paper had attached to it the CEPA addendum. Would you have read the CEPA addendum report as well or just the notification addendum?

Mr Moore: Again, given the time, I think I probably would have focused on the paper, not the CEPA analysis. I would have assumed that there was a large degree of repetition between what CEPA were saying in their analysis and also in the notification paper.

Mr Lunny: And we can see —. I’ll ask you just a couple of questions about that in a moment, but if we follow that chain just through to its conclusion. It’s at DFE-78036. You’ll hopefully see an email, the bottom half of this page, from you to Kate Porter and Rebecca Ireland, and you’re sending them the final proposed tariffs for the Northern Ireland RHI scheme. So, that’s the following day, the day after your interaction with Peter Hutchinson with your queries and drafting suggestions.

Mr Moore: Uh-huh.

Mr Lunny: So, again, you have received it after some prompting and prodding and looked at it in a very short period of time before sending it on to the BIS and UK rep.
Mr Moore: That’s correct, yes.

Mr Lunny: Again, I’m going to ask you: do you think you had sufficient time to look at it in the type of detailed way that you would like to have or not?

Mr Moore: Well, no, obviously. I think —. Again, the reference point I would have had for this was the GB RHI notification and decision. I think my approach to this one was very much this was — should’ve been, obviously — a relatively straightforward case. I certainly thought that energy division would’ve understood what was required, and therefore, from my risk assessment perspective, I thought this was a low-risk notification to the Commission and it didn’t contain any significant anomalies that I should be looking for.

1:00 pm

Mr Lunny: We know that one possible anomaly in both the notification — the addendum notification — and then the CEPA addendum is one that has been much rehearsed before the Inquiry, and that is that, for what was then described as a small commercial biomass boiler, the tariff was 5·9p and the recorded cost in the tariff calculation paper of the fuel was 4·39p, and that that fact meant that tiering was required for that tariff, because you had the tariff exceeding the cost of generating heat.

Mr Moore: Yes.

Mr Lunny: Is that something you noticed at the time or something you didn’t notice?

Mr Moore: Hem, well, it’s fairly evident. If I had noticed at the time, I would’ve said and I would’ve queried it. I clearly didn’t have time to look for it, and, importantly, I didn’t think I would’ve had to look for it, which is an important consideration. I do think that I would’ve had the capability to understand it and spot it if I had been looking back to what had been said back in August and reading all the documents. So, I would’ve logically gone through it.

I think, though, the issue for me was my focus is probably on the notification paper. The notification paper just simply mentions the 5·9p. You need to go to annex C of the CEPA
addendum, and, within that, if I remember rightly, there were eight tariffs, and the small
biomass tariff was the fifth of the eight. And, within that, you would’ve needed to have
worked your way right the way through to spot that particular anomaly.

Mr Lunny: Well, we can look at both of those. If we could maybe just very briefly bring up
DFE-838. So, this is the table you’ve just mentioned. So, that’s a table within the addendum,
not within the CEPA report, but it’s clearly been taken from the CEPA report. And if we scroll
back up in that document a page, we’ll see, yes, each one of the tariffs has been set out in
just the same way as it was in the CEPA report. But you don’t have to go to the CEPA report
itself —

Mr Moore: No, no —

Mr Lunny: — to look for it.

Mr Moore: — you don’t have to do that, but it’s there that you would need to obviously
have been looking at each individual tariff and checking it. I think the point was that that
wasn’t a part of my function, my role. I didn’t think this was —. There will be some
notifications that you will receive and you do check very closely, and you will go through
them because, um, there are — you’d know that the people putting the notification in are
very inexperienced. And there would be other people that you would, er, certainly have
concerns about some of the figures they’d be putting in, just because of their inexperience
or for some other reason. And you would check things a lot more diligently.

In this case, given that we were following on from GB, given energy division’s experience
in notifications, I thought that they would have done this type of checking and therefore I
didn’t need to be as forensic.

Mr Lunny: Yes. And, beyond, you’ve mentioned the fact that it was following behind —

Mr Moore: Yes. Absolutely, yes. Uh-huh.

Mr Lunny: — a very similar GB scheme. Energy division were —. It was a very discrete,
[The hearing was suspended at 1:11 pm]

[The hearing resumed at 2:01 pm]

Mr Lunny: So, Mr Moore, we had been discussing the addendum — gotten to February 2012 — and I want, very briefly, to look at just some of the interaction there is between you and energy division and the Commission —

Mr Moore: Yes.

Mr Lunny: — or the UKRep in the months after that. The first document I want to bring up is an email at DFE-239388, please. And this is the — a reply you get from Rebecca Ireland the day after the addendum for the pre-notification, is submitted. So we can see it’s an email, the 22\textsuperscript{nd} of February — I think that should be “Dear Stephen and Kate”. She confirms that she submitted it to the Commission that morning, and she then says:

“This just to be aware, I think the later submission of these tariffs will mean a later approval than the Commission may have indicated previously. I think you were previously hoping for approval by April; I think that is very unlikely now given the five weeks remaining, and think that approval by your later date of June is much more realistic! However the Commission are aware of our timescales and it could well be sooner than June; how soon is too early to say, it will depend on what the Commission make of these tariffs. I will leave you to manage Ministers’ expectations, but thought you should be warned!”

So, it’s quite a clear email.

Mr Moore: Yes. No surprise there.

Mr Lunny: Yes. It had, presumably, been conveyed to her by somebody at some point that there were ministerial expectations in the background and that they were related to the timescale.

Mr Moore: Oh yes. Almost certainly I would’ve spoken to Kate and also to Rebecca.

Mr Lunny: And you would’ve conveyed that the —

Mr Moore: Oh yes.
In the event that an installation exceeds the individual notification thresholds set in points 160(b)(iii) and (v) of the Environmental aid guidelines (125 MW or, for cogeneration installations, 200 MW), the aid will be notified individually to the Commission.

Cogeneration installations are not included in the scheme.

- I have been asked to clarify if there is any "scientific" evidence to support a distinct rate of return of 6% for solar thermal vs. 12% for other technologies.

For all the incentivised technologies, barring solar thermal, a rate of return of 12% is provided in addition to net costs of the renewable heat technology in comparison to the fossil fuel counterfactual, which is an oil boiler. This rate of return has been assessed by independent consultants (as detailed in the reports by Cambridge Economic Policy Associates and AEA Technologies that were previously supplied) and is in-line with the GB RHI scheme.

In regards to solar thermal, as there is no conventional investment as an alternative, as solar thermal do not usually replace a primary heating system, a separate calculation has to be made. Therefore, the proposed solar thermal tariff compensates the full cost of the solar thermal installation. DETI has taken the same approach as used within the GB RHI and set a tariff that is equivalent to the level allocated to offshore wind, which is the marginal cost-effective technology for reaching the 15% UK renewable target.

- I have been asked to clarify whether, as in the UK mainland scheme; there will be any two-tier approach to small and medium biomass installations.

The GB RHI scheme includes a tiering system within the rates for small and medium biomass installations. The tiered incentive rates were calculated to limit subsidy to any incremental fuel expense should the installation exceed a 15% load factor. In developing tariffs DETI also considered this issue however in all cases, the subsidy rates were found to be lower than the incremental fuel expense. Therefore no tiering is required within the NI RHI.

- Finally, I would need some more information on the transitional period – why is it needed, and why are transitional period installations included? As for para 62 of the RHI mainland UK decision.

The transitional period is defined as the 1 September 2010 up to the date on which the NI RHI is finally launched. This transitional period relates to installations that were installed following an announcement by the DETI Minister relating to the introduction of the RHI however in advance of the actual implementation of the scheme. Eligible applications installed during this time period will be able to avail of the new scheme and will be treated as a new installation from the actual start of the scheme.

It is DETI’s view that installations made between 1 September 2010 and the present day have been made on the assumption that RHI payments would be available and would not have been installed had no such expectation been present. Installations made previous to 1 September 2010 did so without the expectation of RHI payments and therefore are outside of the scheme.
Mr Lunny: Yes, they’re extracted from that by Peter Hutchinson and put into another
document. But one of those questions, we’ll see, is about tiering. If we could look, maybe, at
Mr Hutchinson’s email enclosing answers. It’s in the same bundle, DFE-78096. If we could
zoom in on the top half of the page, we’ll see that’s Mr Hutchinson’s email to Rebecca
Ireland of the 30th of May, and he says:

“Please see attached response to the questions asked by the Commission regarding the Northern Ireland
RHI”.

And that document is at 78084. So, he starts off with the hassle costs question, and then an
answer about that. And if we could scroll down within it to 78086, we’ll hopefully see the
question about tiering in the middle of the page, and Mr Hutchinson’s answer. So, the
question was:

“I have been asked to clarify whether, as in the UK mainland scheme; there will be any two-tier approach
to small and medium biomass installations.”

And the answer is:

“The GB RHI scheme includes a tiering system within the rates for small and medium biomass installations.
The tiered incentive rates were calculated to limit subsidy to any incremental fuel expense should the
installation exceed a 15% load factor. In developing tariffs DETI also considered this issue however in all
cases, the subsidy rates were found to be lower than the incremental fuel expense. Therefore no tiering is
required within the NI RHI.”

So there’s quite a clear explanation as to why there’s no tiering. Do you remember reading
these documents at the time?

Mr Moore: Yes.

Mr Lunny: And you would’ve understood that question —

Mr Moore: Uh-huh.

Mr Lunny: — and answer? And we know, obviously, you had received the addendum
are very different”. And certainly, when it was pointed out to me — whenever this all came
to a head and it was pointed out to me by Michael Woods in internal audit, it was fairly
obvious to me, and immediately I was thinking to myself, “Well, how on earth did I miss
this?”. I think time is a factor in it. Undoubtedly, time is a factor in it. Um, but it —.

Dame Una O’Brien: And you were working on your own at this time?

Mr Moore: Yes, I was. I was working on my own. Yes, uh-huh. But I accept that, you know,
this —. You know, ultimately there was a question asked, as, I’m sure Mr Lunny will bring up,
by the Commission. And the Commission did query the fact that there was no tiering.

Mr Lunny: And we’ll come on to that after lunch.

Mr Moore: So —. Yes. So, we’ll probably deal with that later on, but, yes that’s fair
enough.

Dame Una O’Brien: Thank you for expanding on that.

Mr Lunny: Very, very, very briefly, to close off that point before we leave it, and casting
your mind back to the point in time went you weren’t dealing with Brexit; when your state
aid unit was fully complemented with you as the DP and your staff officer, do you think that
that resource is adequate to allow you to do the type of checking that you’ve just mentioned
should be done?

Mr Moore: I’m pretty sure that if this came in now — in fact, anything like this would
come in now, generally what I would do is, I would immediately send it on to my staff officer,
and we would both read through it.

Mr Lunny: All right. I see the time. Sorry, it’s 10 past one. I think I’ve got about
approximately 45 minutes left with Mr Moore.

The Chairman: Well, shall we try and aim for between one and five — sorry, between two
and five past?

Mr Lunny: If that’s convenient. Please.
notification and the CEPA addendum with it, and that within those there was evidence that
that statement —

Mr Moore: There was — there was — is incorrect. Yes.

Mr Lunny: — was incorrect. But can we take it you wouldn’t have seen any need to go
back and scrutinise those documents when you saw that document?

Mr Moore: At no stage did anybody ever sort of highlight there might be an issue with
the CEPA addendum; and there were no reasons to do anything other than accept what
Peter was responding with on face value.

Mr Lunny: You would’ve have taken that at face value?

Mr Moore: Yes. Uh-huh.

Mr Lunny: And we know then that was submitted on the 30th of May —

Mr Moore: [Coughs.] Excuse me.

Mr Lunny: — and then you’re advised, I think informally first of all, that your scheme is
compatible and that that decision has been made. And, I think, if we could go to DFE-78151,
we’ll see that, on the 12th of June, Rebecca Ireland emailed Kate Porter to say:

“Kate,

*Under the table copy of the NI RHI decision – it hasn’t arrived yet.*”

And so she’s attaching an under the table copy.

Mr Moore: Uh-huh.

2:30 pm

Mr Lunny: And then at the top, we’ll see that Kate Porter passes that on to you. She says:

“*Advance unofficial and unfinal [sic] copy of decision for your information - please don’t circulate too widely
and make sure people are aware that it’s not final!”*

So that’s the good news on the 12th of June. And, that approval document — if we could
leave the DFE bundle, please — it’s one of your appendices to your witness statement. It’s at
Subject: State aid SA.34140 (2012/N) – United Kingdom
Renewable Heat Incentive (RHI) scheme (Northern Ireland)

Sir,

The Commission wishes to inform you that the aid scheme in support of the renewable heat market in Northern Ireland, UK, is compatible with the common market in accordance with Article 107(3)(c) of the Treaty for the Functioning of the European Union (hereinafter "TFEU") and has therefore decided not to raise objections to the notified measure.

1. PROCEDURE

1. Following pre-notification contacts, the UK authorities notified the above mentioned measure, in accordance with Article 108(3) of the Treaty on the Functioning of the European Union (thereinafter "TFEU"), by electronic notification on 10 May 2012, registered by the Commission on the same day.

2. DESCRIPTION

2.1. Background and objective

2. The Renewable Energy Directive (Directive 2009/28/EC)\(^1\) set a binding target for energy consumption coming from renewable sources, establishing that 20% of overall EU’s energy consumption should come from such sources by 2020. The UK’s share of this target is 15%, and UK authorities plan to achieve this by a combination of 12% renewable heat and 30% renewable electricity by 2020. Northern Ireland ("NI"), as part of the Member State, is expected to contribute to the UK targets and therefore must consider measures to increase the levels of renewable energy.

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\(^1\) OJ L 140/16, 5.6.2009.

The Rt Hon William HAGUE
Secretary of State for Foreign Affairs
Foreign and Commonwealth Office
King Charles Street
London SW1A 2AH
United Kingdom
3. Based on this objective, as well as on the share of the heat market represented by renewables sources, which was 1.5% in 2009, the UK developed a Renewable Heat Incentive ("RHI") scheme, which supports specific heat technologies through tariff payments to users who choose to install those technologies. The UK RHI was notified to the Commission and found to be compatible with EU law under case SA.32125 (2011/N).²

4. The RHI applies however only to Great Britain, i.e. England, Scotland and Wales. A similar scheme needs to be adopted also for Northern Ireland, which is expected to contribute to the achievement of the UK’s objectives through a gradual switch to renewable heat. Currently no scheme for renewable heat is in place in Northern Ireland.

5. The NI Executive set a target of 10% for renewable heat, which is going to be its contribution to the UK objective. The current heat demand in Northern Ireland is estimated to be 17,362 GWh per year, of which around 1.7%, or 300 GWh comes from renewable sources. Factoring into the assessment a drop in NI’s overall heat demand, which is forecasted to about 16.7 TWh per year in 2020 (based on the fact that rises in demand will be outweighed by efficiency improvements), the 10% target is estimated to translate into 1.6T Wh. This means an increase of 1.3 TWh compared to existing levels.

6. In order to achieve these targets the UK intends to introduce financial incentives in NI in order to remove barriers to the deployment of renewable heat and allow renewable heat technologies to compete with the existing fossil fuel alternatives, similar to what had already been done in the UK except for NI. The measures considered are a range of tariffs, in pence per kWh, to incentivise the utilisation of a range of renewable heat technologies by covering the cost difference between heat generated from renewable technologies and heat generated from fossil fuels.

7. Therefore, the primary objective of the notified measure is environmental protection, and, in particular, to increase the uptake of renewable heat to 10% in NI by 2020, or an increase of 1.3TWh compared to current levels. The UK estimates that such increase in renewable heat would help it reach its mandatory target of 15% of energy generated from renewable sources by 2020 set by Directive 2009/28/EC³ on the promotion of the use of energy from renewable sources (thereinafter "the Renewable Energy Directive")⁴.

8. Moreover, NI is currently dependent on oil for about 77% of total heating demand, hence oil is the primary heating fuel, as opposed to gas, which is the opposite situation compared to mainland UK. Therefore, the NI Executives also aims, among other things, to support the displacement of oil through the introduction of renewable heating sources.

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² Public version not yet available at the time of writing.
³ This 15% target breaks down into 12% renewable heat, around 30% renewable electricity and 10% renewable energy in transport.
Figure 1 – Estimated 2010 heating fuel mix in NI

Source: UK authorities.

9. The UK estimates that the RHI scheme in NI would lead to the displacement of about 6.86 million tonnes of CO₂ emissions and to the production of about 17,440 additional GWh of heat from renewable sources over a period of 29 year, from 2012 to 2040.

2.2. Scope of the notification, legal basis, granting authority

10. The current notification covers the four following renewable energy sources:
   − Biomass (including solid municipal waste).
   − Ground source (deep geothermal, ground source and water source heat pumps).
   − Biogas production (biomethane injection and biogas combustion, except from landfill gas).
   − Solar (solar thermal up to 200kw).

11. These sources are defined as renewable in the Renewable Energy Directive. Further technologies may be added at a later stage through *ad hoc* reviews. The UK committed to notify the introduction of such measures if they were to be decided upon. Size restrictions apply to the eligible technologies, as can be seen from the tariff levels set in Table 1.

12. The legal basis is Part 3 of the Energy Act 2011,\(^5\) as well as the Renewable Heat Incentive Regulations (Northern Ireland) 2011.\(^6\)

13. The scheme is developed and maintained by the NI Department of Enterprise, Trade and Industry (DETI) but will be administered by the UK regulatory authority for energy, gas and electricity, Ofgem. In particular, Ofgem will register and accredit installations,


\(^6\) A draft version of the secondary legislation instrument, dated 04.10.2011, was submitted to the Commission in the notification process.
wcalculate and make payments, and monitor compliance. Ofgem is also responsible for the implementation of the mainland UK RHI.

2.3. Duration, budget

14. The RHI scheme will be open to new installations until 2020 and payments will be made quarterly for the lifetime of each technology, which is 20 years. Therefore, the final payment under the scheme will be in 2040. These features are consistent with the mainland UK RHI scheme.

15. The UK authorities are minded to review the scheme periodically, including renewed analyses of tariffs, technologies and the overall results achieved. Upon the need to commence such reviews, UK authorities committed to re-notify the scheme to the Commission.

16. The scheme is intended to be put into effect as soon as possible after the Commission approval, but no aid will be granted before the date of the present Commission decision.

17. As regards the budget of the notified measure, the UK authorities have allocated a budget of GBP 25 million from 2011 to 2015 specifically to renewable heat in NI. The budget is expected to increase by GBP 5 million per year from 2015 until 2020, which would imply approximately a total of about GBP 184 million in funds from the scheme to be paid until 2020. After 2020, the UK authorities expect to continue to provide funding only as necessary based on the on-going stream of payments for the installed technologies, in which case they would notify the Commission of any such measures. The overall subsidy is estimated by the UK authorities to be about GBP 157 million in net present value terms.

18. The RHI in NI will be funded from the UK general Government spending, as a pro rata share of the funding allocated to the mainland UK scheme.

2.4. Beneficiaries

19. The UK authorities believe that in order to be able to reach the overall objectives set in their energy plan, renewable heat will have to be deployed extensively and include all types of users. However, consistent with their RHI scheme in mainland UK, the scheme will be initially open only to non-domestic consumers, since the deployment of the scheme in the domestic sector would require a more in-depth analysis. In case an extension of the scheme to include households involving State aid is envisaged, the latter will be notified to the Commission.

20. The scheme will therefore be open to all NI non-domestic consumers which build new installations, commissioned after the introduction of the scheme. The scheme will also be accessible by non-domestic consumers who have built an installation in a transitional period, which the UK defines as the period from 1 September 2010 to the first day of operations of the scheme.
21. In addition, small-scale installations, which are defined as those installations producing less than 45kWth, will be subject to the specifications set out in the Microgeneration Certification Scheme\(^7\) ("MCS") and will have to be installed by a MCS accredited installer. MCS is an independent certification scheme which was notified to the Commission in August 2007\(^8\) under the European Technical Standards Directive\(^9\), and has been accredited under the European standard EN 45011 by the United Kingdom Accreditation Service (UKAS). Products and installers certified under an equivalent scheme accredited under EN 45011 are also eligible. Only heat meters specified under the Annex MI-004 of the Directive of the European Parliament on measuring instruments\(^10\) (2004/22/EC) will be eligible under the scheme.

22. The UK expects about 25,000 installations in the NI to be eligible under the notified RHI scheme by 2020, for a total of about GBP 184 million in funds from the scheme to be paid in the same period. In the longer term the UK authorities estimate about 580,000 installations may be funded through the scheme overall, from 2012 to 2040. As mentioned above, any measures that foresee funding to be granted after 2020 will be notified to the Commission.

2.5. Form of support and levels

23. The tariffs under the RHI scheme are designed to cover the difference in cost between the renewable heat alternative chosen for the installation and a traditional fossil fuel heating system. As such, they incorporate the differences in capital costs, operating costs, as well as "hassle" (i.e. non-financial) costs which represent a barrier to the adoption of renewable heat (e.g. administrative costs). As for the latter category of costs, the UK authorities explained that according to the evidence provided by independent consultants, if such additional costs were not compensated, the fossil fuel alternative would still be more attractive from a financial point of view, undermining the uptake of renewable heat technologies.

24. The tariffs have been set based on economic advice from external consultants, who also advised on more fundamental issues, such as the most efficient and cost effective approach when supporting the deployment of renewable heat installations.\(^11\)

25. The beneficiaries will receive payments on a quarterly basis based on the multiplication of the installation's metered output by the relevant tariff level. Only "useful heat" is eligible for payment under the RHI scheme, that is, heat which would otherwise have to

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\(^7\) See [http://www.microgenerationcertification.org/](http://www.microgenerationcertification.org/).
\(^8\) Notification 2007/0458/UK.
\(^10\) OJ L 71 of 18.03.2011, p. 1.
\(^11\) The UK authorities provided two comprehensive economic assessments of the renewable heat incentive scheme, both by Cambridge Economic Policy Associates Ltd and AEA Technology. The first, "Renewable Heat Incentive for Northern Ireland – A Report for the Department of Enterprise, Trade and Industry (DETI)," was published in June 2011 and was meant to address the general question of what the most appropriate form of heat incentive would be for Northern Ireland. The second, "A Renewable Heat Incentive for Northern Ireland – Addendum,", was published on 16 February 2012 and provided an updated analysis following the closing of the public consultation on 3 October 2011 and a new set of proposed tariffs based on updated assumptions. The consultation documents are accessible at the following address: [http://www.detini.gov.uk/consultation_on_the_development_of_the_northern_ireland_renewable_heat_incentive](http://www.detini.gov.uk/consultation_on_the_development_of_the_northern_ireland_renewable_heat_incentive).
be met by fossil fuels. This eliminates any incentive for deliberately wasting heat to receive payments.\textsuperscript{12}

26. All renewable heat installations will be required to have a heat meter, which is going to be used to determine heat output. Payments will be made for a maximum of 20 year, which is the maximum lifetime of the relevant technologies.

27. The tariff levels have the following features:
   – They consist of periodic payments per unit of heat, paid in GBP per kWh;
   – They are calculated for reference installations;
   – They are differentiated by band; and
   – They entail a subsidy level which would make up to half the heat output within the specific band economically viable.

28. The subsidy is calculated as follows. A given renewable technology is considered economically viable if its overall discounted cost of heat over the relevant time period is lower than the non-renewable counterfactual. In the discounted cost calculation, the UK authorities have considered upfront capital costs, further costs represented by barriers to the adoption of non-renewable heat ("hassle costs"), on-going operational expenses and a forecast of the yearly fuel expenditure.\textsuperscript{13}

29. When the renewable heat technology is economically non-viable, the difference between the calculated discounted costs of the non-renewable technology and the discounted costs of the renewable technology provides the per unit subsidy required to make the potential investor indifferent between the two technologies. In all instances, the relevant non-renewable counterfactual is based on oil.

30. Bands are then designed so as to pool together investors with similar costs per unit of heat. This is meant to allow technologies to be supported by a range of investors, thus becoming more economically viable, while at the same time to minimise the need for subsidies for specific investors. At the moment, the bands pool together small commercial and small public sector installations on the one hand, and medium commercial and medium public sector installations on the other.

31. The incentive is provided for a reference installation within each specific band. Similarly to the mainland UK RHI scheme, a reference installation is the one having the median cost for the specific technology size, taking into account all the sites where it would be technically feasible to install that technology. The reference installation is based on data for the year 2011/12.

32. The average lifetime cost of the reference installation is calculated by determining the yearly operating and fuel costs, to which the annuitized cost of the upfront capital, the installation cost and the barrier costs are added. The overall result is a cost per year of

\textsuperscript{12} DETI has the power to investigate claims of heat waste or other forms of fraudulent behaviour. The UK authorities however believe that wasting heat should in principle be less of a concern in the non-domestic sector, as commercial entities are likely to base their decision to use renewable heat on a range of reasons and not only due to the payments under the RHI scheme.

\textsuperscript{13} The costs of the different technologies, as well as their performance, were provided by external consultants AEA. The fuel projections were provided by the UK government's Department for the Environment and Climate Change (DECC).
the reference installation, which is then divided by the average annual heat to produce a cost per unit of heat.

33. The cost of capital used in the calculations is 12% for all technologies, except for solar thermal, which has a rate of return of 6%, based on the fact that this technology cannot meet a building’s entire heating demand but only provide hot water. Also, the UK authorities submit that solar thermal is currently the most expensive of the technologies considered, and that a higher cost of capital would risk diverting investors to this technology at the expense of other more cost-effective options.

34. In order not to provide perverse incentives to waste heat, each reference installation is calibrated to have a specific load factor and the tariff is calculated with reference to that load factor. For example, a load factor of 15% means that the installation is used at full capacity for 15% of the time.

35. The original tariffs and bands were submitted for public consultation on 20 July 2011. The consultation closed on 3 October 2011, having received 78 responses. Tariff levels and bands were then modified to take account of the responses received. The tariff levels and the size of the installations are shown in Table 1 below. Detailed calculations of the extra costs for producing from renewables as compared to fossil fuel for every category are provided in Annex.

36. In general, all the tariffs are lower than their closest counterpart in the mainland UK scheme (when available). This is due to the choice of oil as counterfactual, given that oil has on average a lower price than gas, which was the counterfactual used in the mainland UK scheme.

<table>
<thead>
<tr>
<th>Table 1 – Tariff levels for the RHI scheme in NI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariff name</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>Biogas injection</td>
</tr>
<tr>
<td>Biomass boilers</td>
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<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

14 The responses to the consultation are publicly accessible and can be found at the following address: [http://www.detini.gov.uk/consultation_on_the_development_of_the_northern_ireland_renewable_heat_incentive](http://www.detini.gov.uk/consultation_on_the_development_of_the_northern_ireland_renewable_heat_incentive)

15 The range should be read as including the lower end, but not the upper end. For example, the range 20-100 includes 20kW boilers but not 100kW boilers – the latter are covered by the 100-500 range.

16 The 0-20kw band for biomass and Ground Source Heat Pump is primarily a domestic banding, is not included in the scheme and is not subject to this decision.
<table>
<thead>
<tr>
<th>Tariff name</th>
<th>Eligible Technologies</th>
<th>Size range (kW)</th>
<th>Tariff (pence/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground source</td>
<td>Including water source heat pumps and deep geothermal</td>
<td>20-100</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100+</td>
<td>1.3</td>
</tr>
<tr>
<td>Solar Thermal</td>
<td></td>
<td>0 - 200</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Source: UK authorities.

2.6. Functioning of the system

37. As mentioned above, the tariffs above are based on 2011/12 prices and will be adjusted automatically each year to account for inflation based on the Retail Price Index (RPI), in line with the mainland UK RHI scheme.

38. The UK authorities intend to hold the first review of the scheme in 2014, with changes to be implemented in 2015. After that, the reviews will take place periodically according to a programmed schedule. Reviews will in particular be used to monitor the performance of the scheme and the development of the underlying costs for each technology, so as to ensure that overcompensation is going to be prevented.

39. The UK authorities intend to carry out early reviews in all cases where they become aware of significant changes in the production costs, again to ensure that overcompensation will not take place.

40. When incentive levels are modified in future reviews, the revised levels only apply to the new installations entering the RHI scheme. This 'grandfathering' principle, whereby levels are guaranteed for existing installations, is intended to provide investor certainty and is consistent with the mainland UK scheme.

2.7. No overcompensation

41. The UK authorities compare the cost of producing heat from renewables to the cost of producing heat from oil (reference cost). They considered production costs as the reference scenario as there is no heat market price.

42. A detailed economic model has been designed by external consultants to take account of all the factors needed in the calculation. In particular, for each technology and for each band, or class of users, detailed data are provided in relation to capital cost, operating expenditure, size of the installation, lifetime and reference load factor. For fuels costs, the data refer to different classes of users within each band and project costs up to 2040. The logical process which leads from the input data to the tariffs is set in Figure 2 below.
43. The methodology followed for setting the tariffs is the same one used for the mainland UK scheme, with the exception that in the NI scheme uniform discount rates are used to value costs in future years, so that upfront costs are recovered during the entire lifetime of the installation.

44. The UK authorities submitted cost and performance data, as well as the resulting tariffs, for each technology and each band, in order to demonstrate that the tariffs do not overcompensate renewable over conventional heat production.

45. The detailed calculation underlying each tariff, which, among other things, shows the absence of overcompensation, is in the Annex to this decision.

2.8. Cumulation

46. The UK authorities clarified that it is not possible for any new installations benefiting from the RHI to receive a grant contributing to the direct costs of a heat production. From the launch of the scheme it will not be possible to receive grant funding that contributes to the direct costs of a heat production installation and to receive RHI tariffs as well, and any installation which is already receiving direct grants in the transitional period would be smoothly transferred to the new RHI scheme. In particular, no new installation will be allowed to receive both types of support, and those installations
which have been commissioned during the transitional period and are already receiving grants from other Department schemes will have to either repay the grant or agree to reduce the payment, either in the size of the tariff or the duration, consistent with the limits set in the RHI scheme. No installation commissioned before 1 September 2010 will be eligible under the RHI scheme.

47. For what relates to combined heat and power (CHP) installations, the UK authorities explained that those installations that are eligible both under the RHI scheme and under the Renewable Obligation (RO) scheme will have to choose one of the two support schemes and will not be able to access both at the same time.

48. More specifically, CHP installations completed between 1 April 2014 until 31 March 2016 can choose either to receive the basic RO level (which corresponds to the electricity generation) plus the RHI tariff (for the heat generation) or the higher RO level for CHP (heat and electricity generation together) and no RHI tariff. Only new accreditations and new additional capacity added between those dates will be eligible to make this choice. This will give developers and investors time to understand the support available under the RHI, and the interaction with the RO, while preventing them from receiving a double subsidy of CHP plus and RHI. Generating capacity which chooses to receive the CHP plus will be ineligible for the RHI. This is in line with the mainland UK scheme.

49. Under the Northern Ireland scheme, Anaerobic Digestion sites that are in receipt of NI Renewable Obligation Certificates for electricity generation will not be able to avail of a RHI tariff.

2.9. Other information

50. The UK authorities confirm that they will comply with the annual reporting and monitoring obligations as laid down in Sections 7.1 and 7.3 of the Environmental aid guidelines.

51. Furthermore, the UK authorities confirmed that in case the resulting renewable electricity generation capacity of an installation exceeds the individual notification thresholds set in points 160(b)(iii) and (v) of the Environmental aid guidelines (125 MW), the aid will be notified individually to the Commission. Cogeneration installations are not included in the scheme.

3. ASSESSMENT

3.1. Existence of aid within the meaning of Article 107(1) TFEU

52. State aid is defined in Article 107(1) TFEU as any aid granted by a Member State or through State resources in any form whatsoever, which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods in so far as it affects trade between Member States.

53. In the case at hand, the measure is funded from the general Government budget and therefore involves State resources. It selects only certain technologies for heat production, as opposed to conventional or other renewable heat production technologies. Through the tariffs, it provides renewable heat producers with an advantage that they would not enjoy under normal market conditions. Finally, as the beneficiaries include
undertakings involved in intra-EU operations, the RHI object of this decision threatens to distort competition and affect trade between Member States.

54. The Commission therefore concludes that the notified measure does involve State aid within the meaning of Article 107(1) TFEU.

3.2. Lawfulness of the aid

55. By notifying the aid measure before its implementation, the UK authorities fulfilled their obligation according to Article 108(3) TFEU.

Compatibility of the aid

56. The Commission has assessed the compatibility of the notified scheme according to Article 107(3) (c) TFEU and in the light of the 2008 Community Guidelines on State Aid for Environmental Protection currently applicable (hereinafter referred to as "the EAGs")17.

57. Given the fact that the notified measure concerns operating aid for heat produced from renewable energy sources, based on the difference between renewable and conventional heat production costs, the compatibility conditions laid down in point 109 (Option 1 for operating aid to renewable energy sources) of the EAGs apply.

58. Firstly, the Commission notes that the supported energy sources comply with the definition of renewable energy sources and biomass as laid down in point 70(5) and 70(6) of the EAGs.

59. Point 109 of the EAGs lays down three conditions for the compatibility of operating aid, notably, (i) absence of overcompensation, (ii) no cumulation with investment aid and (iii) an exception on biomass (in particular, Member States must show that the aggregate costs borne by the undertakings after the depreciation of the plant are higher than the market price of energy). Each of these points will be addressed below.

3.2.1. Absence of overcompensation

60. As regards the absence of overcompensation, the Commission considers that there is no relevant market price for heat. Therefore, the Commission takes the view that the relevant comparison is between the renewable and conventional heat production prices.

61. As for the selection of the counterfactual installation, the Commission notes that the choice of oil results in a higher production cost for the non-renewable counterfactual, which then translates into a lower tariff level than the one which would have been derived if gas or coal had been selected. As a result, all of the tariffs presented are lower to their closest equivalent ones in the mainland UK scheme, with exception of ground heat small pumps, for which the tariff is the same. As oil is currently by far the main fuel used for the production of heat, being responsible for 77% of overall heat produced, the Commission considers the use of this counterfactual as appropriate.

62. The Commission also notes that the UK authorities have presented cost ranges and a mid-point of cost calculations for all installations concerned by a given tariff level. Even if it may result in over- or underestimating the actual production costs, the Commission

considers that in the aggregate this is a fair approach, and it avoids systematic overcompensation.

63. As regards the discount rate of 12% applied in the calculations of levelised production costs for biomass, biogas and ground source heat production, the Commission notes that this is the same rate used in the mainland UK scheme. Under the assessment of that scheme, the UK authorities submitted a detailed report from an independent consultant which concluded that the necessary rate of return to incentivise renewable heat production ranges between 8 and 22%. The chosen rate of 12% is at the lower end of that range and it can be considered reasonable. The so-called barrier costs represent a minimal part of the overall cost and their inclusion or exclusion from the discount calculation does not alter the final tariff – or, conversely, considering the non-financial costs as part of the profit, the rate of return becomes only slightly higher than 12%.

64. The rate for solar thermal, set at 6%, is justified by the fact that the technology is only to be suitable in specific situations, as it can only provide hot water. In particular, as there is no conventional investment as an alternative, due to the fact that solar thermal do not usually replace a primary heating system, a separate calculation has to be made. DETI has taken the same approach as used within the mainland UK RHI and set a tariff that is equivalent to the level allocated to offshore wind, which is the marginal cost-effective technology for reaching the 15% UK renewable target. Therefore, the proposed solar thermal tariff compensates the full cost of the solar thermal installation.

65. In the light of the above, the Commission considers that the discount rates applied in the calculations are reasonable.

66. The Commission notes that large industrial biomass projects are not going to receive any support. The justification provided by the UK authorities, based on the relative costs of oil and biomass, is sound.

67. With respect to the absence of overcompensation in time, the UK authorities confirmed that the production costs will be monitored over time through the scheduled reviews, and may be subject to early reviews in case of significant changes in production costs. Moreover, the operating aid is limited to the depreciation time of the installations concerned (i.e., 20 years), which corresponds to their lifetime.

68. In the light of the above mentioned considerations, the Commission finds that the notified measure is in line with the condition of absence of overcompensation. In particular, the Commission considers that the methodology used by the UK authorities to present overcompensation calculations is equivalent to, or not more favourable than, the methodology presented in point 109(a) of the EAGs.

69. Finally, having assessed all the information related to production costs (over the period of 20 years, which represents approximately the lifetime of the installations concerned) and the revenues of the beneficiaries stemming from the tariff levels, the Commission is satisfied that total tariff payments do not exceed the difference between renewable and heat production costs.

70. In the light of the above mentioned considerations, including the commitment of the UK authorities to adapt the notified measure in time in order to avoid overcompensation, the Commission finds that the notified measure is in line with the condition of absence of overcompensation.
3.2.2. Other compatibility criteria

71. As regards the two other conditions of point 109, the Commission notes that no RHI tariff can be cumulated with investment grants, and that biomass operating aid does not exceed the investment costs of a biomass installation.

72. The UK authorities also confirmed that in case the renewable electricity generation capacity of an installation will exceed the individual notification thresholds, the aid will be notified individually to the Commission. Furthermore, the UK authorities confirmed the respect of annual reporting and monitoring provisions of the EAGs as laid down in Sections 7.1 and 7.3.

73. The Commission notes that the calculations provided by the UK authorities show that the production costs of heat from renewable energy sources are higher than heat production costs from conventional sources, and that market mechanisms such as the Emission Trading System will not suffice to develop heat in the range foreseen by the UK authorities. Hence, without the notified aid, there would be an insufficient incentive to undertake the generation of heat from renewable energy sources, as such activity would be unlikely to be economically viable.

74. The transitional period is defined as the period between 1 September 2010 and the date on which the NI RHI is finally launched. This transitional period relates to installations that were installed following an announcement by the DETI Minister relating to the introduction of the RHI. Eligible applications installed during this time period will be able to avail of the new scheme and will be treated as a new installation from the actual start of the scheme.

75. It is DETI’s view that installations made between 1 September 2010 and the present day have been made on the assumption that RHI payments would be available and would not have been installed had no such expectation been present. Installations made previous to 1 September 2010 did so without the expectation of RHI payments and therefore are outside of the scheme.

76. This scenario is similar to the one in mainland UK, which deemed installations commissioned since 15 July 2009 as eligible (as per paragraph 62 of the Commission decision in case SA.32125).

77. It is therefore appropriate to deem installations commissioned since 1 September 2010 as eligible as a guarantee was made by the DETI Minister to this effect to ensure the renewable heat market would not be effectively stalled by installers adopting a ‘wait-and-see’ approach. The adoption of a transitional period to ensure continued interest and to prevent against the market stalling is consistent with the approach taken for the mainland UK scheme.

78. Accordingly, the Commission comes to the conclusion that the notified scheme complies with the EAGs and is therefore compatible with the internal market in accordance with Article 107(3) (c) TFEU.

4. Decision

79. The Commission finds that the aid scheme object of this decision is compatible with the internal market in accordance with Article 107(3) (c) TFEU and has therefore decided not to raise objections to the notified measures.
80. The Commission reminds the UK authorities that, in accordance with Article 108(3) of the TFEU, plans to refinance, alter or change this scheme have to be notified to the Commission pursuant to the provisions of Commission Regulation (EC) No 794/2004 implementing Council Regulation (EC) No 659/1999 laying down detailed rules for the application of Article 93 of the EC Treaty.\textsuperscript{18}

If this letter contains confidential information, which should not be disclosed to third parties, please inform the Commission within 15 working days of the date of receipt. If the Commission does not receive a reasoned request by that deadline, you will be deemed to agree to the disclosure to third parties and to the publication of the full text of the letter in the authentic language on the Internet site:  
http://ec.europa.eu/eu_law/state_aids/state_aids_texts_en.htm

Your request should be sent by registered letter or fax to:

European Commission  
Directorate-General for Competition  
State Aid Registry  
B-1049 Brussels  
Fax No: +32-2-296 12 42

Yours faithfully,

For the Commission

Joaquin ALMUNIA  
Vice-President

## ANNEX

### TARIFF TABLES

#### Ground Source Heat Pumps – Small Commercial

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Capex (£/kW)</th>
<th>Opex (£/kW/year)</th>
<th>Efficiency (%)</th>
<th>Load Factor (%)</th>
<th>Size (kW)</th>
<th>Lifetime (years)</th>
<th>Fuel cost (p/kWh)</th>
<th>Upfront barrier costs (£)</th>
<th>Ongoing barrier costs (£/year)</th>
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</thead>
<tbody>
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<td>29%</td>
<td>30</td>
<td>20</td>
<td>12.14</td>
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<tr>
<td>Oil</td>
<td>97</td>
<td>3.45</td>
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<td>17%</td>
<td>50</td>
<td>15</td>
<td>4.86</td>
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### Costs (GBP per year)

<table>
<thead>
<tr>
<th></th>
<th>Annuitised Capital cost at 12%</th>
<th>Annual operating costs</th>
<th>Annual fuel costs</th>
<th>Annuitised Upfront barrier costs</th>
<th>Ongoing barrier costs</th>
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<td>2,526</td>
<td>529</td>
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<tr>
<td>Oil</td>
<td>710</td>
<td>173</td>
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<td>-</td>
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<tr>
<td>Difference</td>
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### Tariff Breakdown (pence per kWh)

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<td>Annualised capital and barrier costs</td>
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</tr>
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<td>Operating costs</td>
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<tr>
<td>Fuel costs</td>
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<tr>
<td>TOTAL</td>
<td>4.3</td>
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**19** All figures provided by the UK authorities.
Ground Source Heat Pumps – Large Commercial

**Parameters**

<table>
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<tr>
<th></th>
<th>Capex (£/kW)</th>
<th>Opex (£/kW/year)</th>
<th>Efficiency (%)</th>
<th>Load Factor (%)</th>
<th>Size (kW)</th>
<th>Lifetime (years)</th>
<th>Fuel cost (p/kWh)</th>
<th>Upfront barrier costs (£)</th>
<th>Ongoing barrier costs (£/year)</th>
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<td>36%</td>
<td>200</td>
<td>20</td>
<td>12.14</td>
<td>3,951</td>
<td>66</td>
</tr>
<tr>
<td>Oil</td>
<td>68</td>
<td>1.47</td>
<td>89%</td>
<td>20%</td>
<td>360</td>
<td>15</td>
<td>4.86</td>
<td>0</td>
<td>0</td>
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</table>

**Costs (GBP per year)**

<table>
<thead>
<tr>
<th></th>
<th>Annuitised Capital cost at 12%</th>
<th>Annual operating costs</th>
<th>Annual fuel costs</th>
<th>Annuitised Upfront barrier costs</th>
<th>Ongoing barrier costs</th>
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<td>-13,203</td>
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<td>Sum of difference</td>
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**Tariff Breakdown (pence per kWh)**

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<tr>
<td>Convert to quarterly basis</td>
<td>1.2</td>
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## Biomass – Small Commercial

### Parameters

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<th></th>
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<th>Load Factor (%)</th>
<th>Size (kW)</th>
<th>Lifetime (years)</th>
<th>Fuel cost (p/kWh)</th>
<th>Upfront barrier costs (£)</th>
<th>Ongoing barrier costs (£/year)</th>
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</thead>
<tbody>
<tr>
<td>Biomass</td>
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<td>85%</td>
<td>17%</td>
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<td>20</td>
<td>4.39</td>
<td>3,951</td>
<td>828</td>
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<tr>
<td>Oil</td>
<td>97</td>
<td>3.45</td>
<td>93%</td>
<td>17%</td>
<td>50</td>
<td>15</td>
<td>4.86</td>
<td>0</td>
<td>0</td>
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### Costs (GBP per year)

<table>
<thead>
<tr>
<th></th>
<th>Annuitised Capital cost at 12%</th>
<th>Annual operating costs</th>
<th>Annual fuel costs</th>
<th>Annuitised Upfront barrier costs</th>
<th>Ongoing barrier costs</th>
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<td>718</td>
<td>828</td>
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### Tariff Breakdown (pence per kWh)

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<th>Subsidy for</th>
<th>Amount</th>
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### Biomass – Large Commercial

#### Parameters

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<th>Efficiency (%)</th>
<th>Load Factor (%)</th>
<th>Size (kW)</th>
<th>Lifetime (years)</th>
<th>Fuel cost (p/kWh)</th>
<th>Upfront barrier costs (£)</th>
<th>Ongoing barrier costs (£/year)</th>
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</thead>
<tbody>
<tr>
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<td>486</td>
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<td>81%</td>
<td>36%</td>
<td>200</td>
<td>20</td>
<td>4.4</td>
<td>5,364</td>
<td>878</td>
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<tr>
<td>Oil</td>
<td>68</td>
<td>1.47</td>
<td>89%</td>
<td>20%</td>
<td>360</td>
<td>15</td>
<td>4.86</td>
<td>0</td>
<td>0</td>
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#### Costs (GBP per year)

<table>
<thead>
<tr>
<th></th>
<th>Annuitised Capital cost at 12%</th>
<th>Annual operating costs</th>
<th>Annual fuel costs</th>
<th>Annuitised Upfront barrier costs</th>
<th>Ongoing barrier costs</th>
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</thead>
<tbody>
<tr>
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<td>34,185</td>
<td>718</td>
<td>878</td>
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<tr>
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<td>529</td>
<td>34,479</td>
<td>-</td>
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<tr>
<td>Difference</td>
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<td>391</td>
<td>-486</td>
<td>718</td>
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#### Tariff Breakdown (pence per kWh)

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<tr>
<td>Fuel costs</td>
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Biomass – Industrial

### Parameters

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<th>Load Factor (%)</th>
<th>Size (kW)</th>
<th>Lifetime (years)</th>
<th>Fuel cost (p/kWh)</th>
<th>Upfront barrier costs (£)</th>
<th>Ongoing barrier costs (£/year)</th>
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</thead>
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<tr>
<td>Biomass</td>
<td>316</td>
<td>14,38</td>
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<td>82%</td>
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<td>20</td>
<td>2.52</td>
<td>5,364</td>
<td>878</td>
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<tr>
<td>Oil</td>
<td>31</td>
<td>0.23</td>
<td>89%</td>
<td>82%</td>
<td>16,086</td>
<td>20</td>
<td>4.77</td>
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### Costs (GBP per year)

<table>
<thead>
<tr>
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<th>Annual operating costs</th>
<th>Annual fuel costs</th>
<th>Annuitised Upfront barrier costs</th>
<th>Ongoing barrier costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomass</td>
<td>681,375</td>
<td>231,341</td>
<td>3,613,079</td>
<td>718</td>
<td>878</td>
</tr>
<tr>
<td>Oil</td>
<td>67,574</td>
<td>3,701</td>
<td>6,226,764</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Difference</td>
<td>613,801</td>
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<td>718</td>
<td>878</td>
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<tr>
<td>Sum of difference</td>
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### Tariff Breakdown (pence per kWh)

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## Biomethane

### Parameters

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<th>Load Factor (%)</th>
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<th>Fuel cost (p/kWh)</th>
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</thead>
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<td>85%</td>
<td>93%</td>
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<td>20</td>
<td>-4.1</td>
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<tr>
<td>Wholesale gas</td>
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### Costs (GBP per year)

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<th>Annual fuel costs</th>
<th>Annuitised Upfront barrier costs</th>
<th>Ongoing barrier costs</th>
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</thead>
<tbody>
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<td>231,341</td>
<td>3,613,079</td>
<td>718</td>
<td>878</td>
</tr>
<tr>
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<td>3,701</td>
<td>6,226,764</td>
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<td>0</td>
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<tr>
<td>Difference</td>
<td>613,801</td>
<td>227,639</td>
<td>-2,613,686</td>
<td>718</td>
<td>878</td>
</tr>
<tr>
<td>Sum of difference</td>
<td>-1,770,650</td>
<td></td>
<td></td>
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### Tariff Breakdown (pence per kWh)

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