

FROM THE PERMANENT SECRETARY

Noel Lavery



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Dear Dr Murrison

I have been asked to assist the Committee with its Inquiry into changes to the Northern Ireland Renewable Heat Incentive payments and am due to provide oral evidence on 8 May 2019.

Please be assured that I am committed to providing as much information as I possibly can to assist the Committee and I look forward to discussing the work that underpinned the new tariffs provided for by the Northern Ireland (Regional Rates and Energy) (No. 2) Act 2019. I attach to this letter a summary note outlining the work, which I hope Committee members find useful.

I look forward to providing further detail in person on 8 May, however, I hope the Committee will understand that I will not be able to comment on matters within the remit of the ongoing RHI Inquiry or disclose the advice regarding the various legal challenges that the Department for the Economy is currently facing. In particular, you may be aware that the Department successfully defended a challenge against the legislation which brought in the 2017 tariff changes although this is now before the Court of Appeal, while leave has recently been granted to challenge the 2019 Act.

I know that you have written to the Chair of the RHI Public Inquiry to highlight the NIAC Inquiry and I am grateful for that. In the event that I am unable to comment on a particular issue during the evidence session, I will, if the position changes, submit written evidence to the Committee. I wanted, however, to mention the above matters in advance of the session, to ensure the Committee understand the position, should I be unable to comment on some matters during the evidence session.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Noel Lavery'.

NOEL LAVERY
Permanent Secretary

Written submission to the Northern Ireland Affairs Committee – Northern Ireland Non-Domestic Renewable Heat Incentive Scheme

1. This note provides detail of the key steps taken by the Department for the Economy (DfE) in arriving at the long-term policy for the Northern Ireland Non-Domestic Renewable Heat Incentive Scheme (NIRHI).

Scheme background

2. The Renewable Heat Incentive Scheme Regulations (Northern Ireland) 2012 (the "Principal Regulations") provided for the establishment of the NIRHI. The NIRHI is sponsored by DfE and the Principal Regulations also confer functions on DfE with regard to the NIRHI's general administration. The NIRHI was designed to contribute to a reduction in carbon emissions by increasing the uptake of renewable heat technologies. This was to be achieved by providing ongoing payments to cover the projected difference in cost between renewable heating and fossil fuel, as well as a 12% rate of return on the additional capital cost of a renewable heat boiler.
3. The NIRHI was intended to be similar to the Scheme which operated in Great Britain (GBRHI). However the GBRHI had some important controls, which were not included in the NIRHI. These were:
 - Tiering of payments – a reduced rate (tier rate 2) applied in GB after the equipment had been operated for 1,314 hours. Because the reduced tier 2 rate was significantly lower than the cost of fuel, the incentive to overproduce heat simply to receive incentive payments did not exist in the GB scheme; and
 - Degression – this was a means by which the tariff in Great Britain reduced quarterly in response to changes in demand. This was introduced in the GB Scheme in May 2013 and helped to ensure the scheme remained within its allocated budget.
4. In early 2015 the projections of the cost of NIRHI rose above the available budget for 2015/16 and future years. This led to an urgent review of the level of support for new applications to the NIRHI and a review of the relevant legislation. Tiering, similar to that in the GBRHI, and an annual heat cap were introduced for new NIRHI participants on 18 November 2015 (the Renewable Heat Incentive Schemes (Amendment) Regulations (Northern Ireland) 2015 refer). However, there was a significant spike in applications prior to the introduction of the new tariff structure, putting further pressure on the budget.
5. In view of the significant financial risk to the Northern Ireland budget, the NIRHI was suspended to new applicants on 29 February 2016 (the Renewable Heat Incentive Schemes (Amendment) Regulations (Northern Ireland) 2016 refer).
6. After the suspension of the NIRHI, expenditure was still expected to breach the available budget by a total of £700m. Therefore in January 2017, legislation was approved by the NI Assembly, which extended the 2015 revisions to the NIRHI

Regulations to all small and medium biomass installations, regardless of when they joined the Scheme (the Renewable Heat Incentive Scheme (Amendment) Regulations (Northern Ireland) 2017 refer). This was an interim measure, to last for one year while a long-term policy solution could be developed.

7. In March 2018 Parliament approved the extension of the interim tariff structure (with an inflationary uplift) for a further 12 months through the Northern Ireland (Regional Rates and Energy) Act 2018 to allow further time for the completion of an independent review and identification of the long-term solution. The tariffs included in the Act were specifically sunsetted to 31 March 2019. This meant that should further legislation not be passed to establish tariffs for small- and medium-sized biomass installations from 1 April 2019, DfE would have no statutory basis to make payments for those (c. 1,800) installations.

Ricardo Tariff Review

8. In September 2017, DfE commissioned an independent consultancy, Ricardo Energy and Environment ('Ricardo'), to undertake a comprehensive review of all the main elements of the tariff for small and medium sized biomass installations. A full, independent review was a Ministerial commitment by Minister Hamilton given to the Northern Ireland Assembly in January 2017.
9. Ricardo is a global engineering, environmental and strategic consultancy which has extensive experience in the renewable energy sectors in the UK and Republic of Ireland. For example, Ricardo contributed to the supporting analysis (as AEA) which informed the initial GB RHI tariffs and Ofgem have appointed Ricardo to audit and inspect GB RHI sites. Ricardo has also worked with the Sustainable Energy Authority of Ireland (SEAI) in developing the RoI renewable energy policy.
10. As the NIRHI Scheme was already in force, Ricardo was able to review actual installation level data (including installation and capital costs), as provided by participants in their original applications. In addition to this, information on the level of heat generated by those installations and the associated incentive payments made was also available. Following analysis of this data, and additional information flowing from the ongoing NIRHI site inspection programme, Ricardo prepared a revised set of assumptions from which new tariffs could be derived.
11. Ricardo reviewed other factors impacting on the tariffs as the basis for a set of recommendations on the most appropriate structure for the remainder of the lifetime of the Scheme. These factors included: reference fossil fuel costs; boiler efficiency; load factor; inflationary uplifts; and the impact of behavioural changes of participants.
12. The majority of installations accredited under the NIRHI Scheme are 99kW solid biomass boilers (some 64%). Some key findings from the Ricardo Tariff Review with respect to 99kW boilers are listed below:

Capital expenditure

	£	£/kW
Median biomass boiler capital expenditure (99kW)	£35,873	£362
Median kerosene boiler capital expenditure (99kW)	£11,286	£114
Additional capital expenditure associated with a biomass boiler	£24,587	£248

Operating costs

	£
Biomass boiler servicing and maintenance p.a.*	£893
Kerosene boiler servicing and maintenance p.a.	£196
Additional servicing and maintenance costs p.a. associated with a biomass boiler*	£697
Biomass boiler barrier (hassle) costs upfront	£987
Biomass barrier costs ongoing, pa	£619

* Based on 430MWh heat requirement (median)

Fuel price differential

Wood pellet price, p/kWh (Net Calorific Value)	3.26
Kerosene price, p/kWh (Net Calorific Value)	4.14
Fuel saving p/kWh	0.88
Potential annual fuel savings - 130MWh p.a. (15% load factor)	£1,144
Potential annual fuel savings - 320MWh p.a. (NIRHI typical usage to date)	£2,816
Potential annual fuel savings – 400MWh p.a. (previous cap)	£3,520

13. In summary, these figures show that:

- investing in biomass technology cost participants approximately £24,000 more than if they had bought an equivalent oil boiler;
- servicing and maintenance is more expensive for biomass boilers and carries additional hassle costs; however
- biomass fuel (in the form of wood pellets) is cheaper than kerosene therefore biomass users are making savings on their fuel bills by using biomass. Depending on how much they use their boiler, these savings can range from approximately one thousand pounds to several thousand pounds per annum. While fuel prices have shifted since Ricardo's work was carried out, evidence collected through the operation of the Scheme has continued to demonstrate that biomass remains cheaper than the fossil fuel alternatives.

14. The full report produced by Ricardo, including the evidence base and methodology behind the revised tariff calculations was published a part of the public consultation exercise.

Public Consultation

15. On 14 June 2018 DfE launched a twelve-week public consultation on the future of the Non-Domestic NIRHI. Prior to launch, DfE held pre-consultation events for stakeholders including local political parties, and key representative groups including the Ulster Farmers Union and the Renewable Heat Association.

16. The consultation was announced by a press release and on social media and was directly distributed to key stakeholders, including all NIRHI participants. The consultation period closed on 6 September 2018.

17. The options on which DfE consulted on are set out in the table below along with the estimated lifetime cost to the public purse and the prospective rate of return (i.e. from April 2019, not taking account of any previous RHI payments):

Tariff Option	Estimated Total Cost (£m)	Prospective Rate of Return (%)
1. Tariff structure under the 2017 and 2018 legislation is not continued	0	0.1
2. Retain tariff structure under 2017 and 2018 legislation	480	50
3. Revert to tariff structure under 2012 Regulations	1,040	100
4. Adopt the base case tariff structure from the Ricardo Tariff Review	75	12
5. Adopt the base case tariff structure excluding fuel costs	185	25
6. Adopt the hybrid tariff structure from the Ricardo Tariff Review	140	19
7. Adopt the current GB Scheme tariff structure	390	40
8. Adopt the tariff structure for entrants to the GB Scheme in autumn 2015	345	35

18. The consultation also considered a compulsory buy-out option whilst a voluntary buy-out element was included as part of Options 4-8. In addition, the consultation document set out options in respect of the annual inflationary uplift to tariffs as well as the approach to CHP installations.

Consultation Report & Policy Summary

19. On 31 January DfE published a Consultation Report which provided analysis of the responses received and next steps.
20. A total of 258 responses were received, the majority of which came from RHI participants.
21. Responses to the consultation were received from the following NI political parties: Alliance, Green Party, SDLP, Sinn Fein and UUP.
22. The majority of respondents to the consultation indicated a preference for reversion to the original tariff structure under the 2012 Regulations;
23. As well as consideration of consultation responses the Department provided an analysis of each of the options against a number of criteria including: affordability; compliance with State aid rules; impact on Scheme participants; supporting the generation of renewable heat; and operability.
24. All of the options considered were anticipated to be affordable within the budget allocation with the exception of reversion to the tariff structure under the 2012

Regulations. If the Scheme were to revert to the 2012 tariff structure, it would require substantial funding from the NI Executive block grant.

25. Three of the eight options considered would have enabled the projected rate of return to be brought within the 8-22% range previously specified by the European Commission but only closure of the scheme or the “Base case” tariff would bring the prospective return for the typical installation within the maximum 12% allowable under State aid rules.
26. The preferred option final policy proposal was published on the DfE website on 26 February 2019. In terms of affordability and to bring the prospective returns on the Scheme into line with the 12% allowed by State aid the preferred option was assessed as being a variant of the Base Case tariff structure from the Ricardo Tariff Review. There were administrative issues with the Base Case tariff as it included a negative tier 2 tariff so the variant was developed with the Tier 2 tariff set at zero and the Tier 1 tariff adjusted so that a typical installation is expected to achieve a prospective 12% rate of return.
27. The preferred option also provided the Department with the power to offer a voluntary buy-out scheme to participants. Whilst almost 90% of installations are expected to achieve a prospective return of at least 12% under the revised tariffs, the Department recognises that there will be a small group of participants that may have higher capital costs or lower ongoing usage who will therefore see a lower return. The voluntary buy-out will offer participants a payment that would be calculated to provide a sum equivalent to a 12% return.

State aid

Previous State aid decisions

28. As the NIRHI provides support to undertakings, the Scheme falls within the scope of the European Union’s State aid rules and had to be notified to the European Commission for its approval, as the scheme did not fit within the scope of any of the exemption regulations.
29. State aid approval for the scheme was obtained in 2012 (State aid reference number is SA.34140).
30. Importantly, as detailed in section 3.2.1 of the Decision, the scheme was approved because the 12% rate of return was at the lower end of the 8 and 22% range that was needed to incentivise renewable heat production and it could therefore be considered reasonable.
31. In 2016, prior to the introduction of the 2017 legislation that extended the 2015 revisions to the NIRHI Regulations to all small and medium biomass installations, the EC advised that it considered the proposed revisions to the scheme to be an alteration of aid and the Department was therefore required to notify the proposed revisions for the EC’s approval. This was done and the EC subsequently adopted a one year no objection decision on 31 March 2017 (SA.47501).
32. As the independent review could not be completed and the long-term policy developed before 31 March 2018, the Department sought a further 12 month extension from the EC, this was obtained on 16 February 2018 (SA.49865).

Long-term policy proposals

33. The Department has engaged with the European Commission (EC) throughout the development of the long-term policy. This has included formal written communication, telephone calls and face-to-face meetings.
34. Following the closure of the public consultation phase and preliminary analysis of the options, DfE pre-notified the EC of its intention to implement the “hybrid tariff” which was anticipated to deliver a prospective rate of return of 19%. This pre-notification paper is attached as **Annex A** to this note.
35. This was on the basis that the original State aid decision on NIRHI in 2012 made reference to a range of 8-22% with regards to returns. In response to the pre-notification paper and in subsequent dialogue, the EC has made it clear that in its decisions to date on NIRHI it has authorised a scheme that provides an average rate of return of 12%, rather than the tariffs themselves or a range.
36. It is now clear from the work of Ricardo, that the assumptions which underpinned the previous tariffs notified to the EC were deeply flawed and ultimately meant that returns on the NIRHI would greatly exceed the approved 12% rate of return.
37. On 30 November 2018, the Commission declined to approve a higher rate of return than the 12% authorised in the 2012, 2017 and 2018 decisions. The response from the EC went on to suggest that the Department could look at recovering past overpayments made to beneficiaries and then reinstating a forward tariff. In other words, separating clawback from the future tariff. This response is attached at **Annex B**.
38. From this point on, DfE had to consider only those options which would bring the prospective rate of return on NIRHI into line with the 12% approved. A variant of the base case tariff was developed, as detailed in paragraph 26 of this paper.
39. In a letter dated 25 January 2019 the European Commission again emphasised that the initial 2012 decision authorised an average project rate of return of 12% and that this, rather than the tariffs themselves, was the basis for the EC’s approval. The letter also confirmed that unless DfE wished to seek authorisation for a higher rate of return (i.e. an increased level of aid), it did not appear that a new notification nor a new decision was required. This letter is attached at **Annex C**.
40. Breaching the State aid rules can lead to severe consequences not just for Government but also the beneficiaries of an aid scheme. If the Department was required to bring forward any tariffs higher than those in the current legislation, this would almost certainly trigger a formal EC State aid investigation, which, based on discussions with the EC to date, may ultimately lead to a ‘negative decision’, which would revoke the original State aid approval and could even lead to the Department being ordered to claw back RHI payments from scheme participants, when the participant has exceeded a 12% lifetime rate of return.

Great Britain (GB) vs Northern Ireland (NI)

41. As noted above, the RHI Scheme in operation in GB has some important differences to the NIRHI. Furthermore, a number of differences in the underlying markets in GB and NI, means that, while both schemes target a 12% for typical installations, the tariffs for the NIRHI would not be expected to parallel those on the GBRHI. Two key differences relate to the typical capital costs and the fuel differentials across both schemes. These are summarised below.

Capital costs

42. The capital costs underpinning the tariffs are significantly different. For NIRHI the typical capital cost, as have been tested and verified in the Ricardo analysis, is £383 per kW (including indirect costs) whereas in GB the costs, as provided by participants on applications to the scheme have averaged £590 per kW.
43. Biomass boilers, as a new technology, have fallen significantly in price since they became available to consumers. This is demonstrated in the National Audit Office report *Low-carbon heating of homes and businesses and the Renewable Heat Incentive* which found that the cost of a biomass boilers was 46% lower in 2016 compared with 2010¹.
44. Three quarters of the total number of biomass installations on GBRHI joined before the end of 2014. This compares with only 19% on the NIRHI scheme at the same point – the majority of NIRHI biomass installations were accredited in autumn 2015 (984 accreditations took place between September and November 2015). In the context of rapidly falling boiler prices this implies that the capital cost of a boiler on NIRHI would be expected to be lower than on GBRHI.

Biomass and counterfactual fuel costs

45. Fuel prices across jurisdictions varies. The table at paragraph 12 above demonstrates that, at the time of Ricardo's work on the NIRHI Tariff Review, NIRHI participants are making savings by using biomass fuel as opposed to kerosene. Kerosene is the predominant fuel used in Northern Ireland, particularly in rural areas and as such is recommended by Ricardo as the appropriate counterfactual to be used in calculating NIRHI tariffs. Information collected through NIRHI inspections has demonstrated more recently that while fuel prices have changed in the intervening period, biomass remains the cheapest fuel source in Northern Ireland.
46. Consumers and businesses in GB however have greater access to natural gas. The counterfactual fuel cost used in calculating GBRHI tariffs is therefore a mixture of natural gas and kerosene. Natural gas tends to be cheaper than kerosene or liquefied petroleum gas (LPG) while the price of wood pellets has been observed to be higher in GB than in NI². This indicates that GBRHI participants are incurring

¹ <https://www.nao.org.uk/wp-content/uploads/2018/02/Low-carbon-heating-of-homes-and-businesses-and-the-Renewable-Heat-Incentive.pdf>

² <https://www.seai.ie/resources/publications/Advice-on-biomass-price-Final-Issue-5-25-Oct-20-2017.pdf>

additional costs by using biomass, rather than the savings observed for NIRHI participants.

The Legislation

47. The Northern Ireland (Regional Rates and Energy) (No.2) Act 2019 received Royal Assent on 26 March 2019. In summary, the Act does two key things:

- a. It provides for the implementation of a long-term tariff structure for the NIRHI to replace the interim arrangements for small and medium biomass installations introduced on 1 April 2018. These tariffs are contained in a schedule to the Act and are reproduced here:

Tariff name	Installation capacity	Tariff Pence/kWh
Small Biomass	Less than 20kWth	Tier 1: 7.4
		Tier 2: 1.8
Medium Biomass (lower capacity)	20kWth and above up to but not including 100kWth	1.7
Medium Biomass (upper capacity)	100kWth and above up to but not including 200kWth	1.2

- b. The Act makes provision for DfE to operate voluntary buy-out arrangements in respect of the financial year beginning on 1 April 2019 and each of the two financial years immediately following, under which participants can apply to receive a “buy-out” payment in respect of an accredited RHI installation after which the installation will cease to be accredited to the scheme (and will receive no further payments).
48. The voluntary buy out will now only be introduced after consideration of the Northern Ireland Affairs Committee report following its inquiry.
49. Although not contained in the legislation, during Parliamentary passage DfE committed to establishing a unit, under an independent chair which will examine the cases of any NIRHI participant who feels they experience hardship due to their participation in NIRHI. Work is ongoing to establish this unit and to identify and appoint the independent chair.

**PRE-NOTIFICATION OF THE OPTIONS FOR THE NON-DOMESTIC
RENEWABLE HEAT INCENTIVE SCHEME FROM 1 APRIL 2019**

Subject: Revision of State aid SA.34140, SA.47501 & SA.49865 – United Kingdom, Renewable Heat Incentive Scheme (Northern Ireland)

1. In accordance with Article 108(3) of the Treaty on the Functioning of the European Union, the United Kingdom wishes to inform the European Commission that it intends to further amend the operating rules of the Renewable Heat Incentive Scheme in Northern Ireland, last approved by the Commission on 16 February 2018.
2. Since the UK received the Commission decision SA. 49865 it has undertaken a comprehensive policy review, including a review of tariffs, to inform the development of future policy and ensure value for money and financial stability of the Scheme.
3. The UK recently consulted on a range of options developed from the tariff review and has now identified a preferred option. This paper seeks to ascertain the Commission's view on whether or not this option would be acceptable so that the UK can finalise its policy position.
4. Once a final policy decision is taken, the UK will submit a formal notification for consideration by the Commission and, subject to the Commission's agreement, the UK would intend that the revised operating rules come into operation on 1 April 2019.
5. In summary, this option is intended to ensure that:
 - The Scheme expenditure remains within budget limits;
 - The potential for fraud and abuse is reduced compared with the opportunities provided by the original tariff structure on the Scheme;
 - The potential for overcompensation is reduced compared with the opportunities provided by the original tariff structure on the Scheme; and
 - The Scheme continues to deliver its key policy intention, that is, to support the production of heat through renewable sources rather than through fossil fuels.
6. As new UK legislation is required by 31 March 2019 to enable Scheme participants to be able to continue to be paid, it would be very helpful to know the views of the Commission on the proposed option as soon as possible.

Impact of the Renewable Heat Incentive Scheme (Amendment) Regulations (Northern Ireland) 2017 and its extension in 2018

7. The 2017 amendment to the Renewable Heat Incentive Scheme Regulations was an interim measure, which extended the tiered tariff, introduced in November 2015 for new participants, to all participants.
8. The tiered tariff system, with a reduced rate commencing once an installation had been used for 1,314 hours each year, was designed to remove the perverse incentive to generate excess heat in order to generate incentive payments. After 1,314 hours (and below the annual payment cap of 400,000kWh) the rate of tariff is below the cost of the heat production, thereby encouraging the Scheme participant only to produce heat for their needs.
9. The introduction of the 2017 Regulations brought the Scheme expenditure back within the budget for the Scheme provided by UK Government. The projected cost of the Non-Domestic element of the Scheme, without the tariff change, would have been £50 million per annum by 2019-20 compared with a budget of £29 million per annum. Under the 2017 Regulations it would be projected to cost £24 million in 2019-20.
10. The UK extended the tariffs introduced under the 2017 Regulations for a further 12-month period through the Northern Ireland (Regional Rates and Energy) Act 2018, following Commission approval. This allowed the Department for the Economy (the Department) to undertake further analysis of evidence and a public consultation process on the future of the Scheme.

Tariff Review

11. Prior to the public consultation, an external energy consultancy, Ricardo Energy & Environment (Ricardo), was appointed to undertake a review of the existing tariff structure for small and medium sized biomass boilers (0-19kW and 20-199kW) and Combined Heat & Power (CHP) plants.

This included a comprehensive review of the latest available information in respect of each of the constituent elements of the current tariffs

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12. The review also included a review of the tier threshold for small and medium sized biomass boilers and the approach to the annual inflationary uplift to tariff levels.
13. In conducting the review, Ricardo examined the approach and evidence base adopted by the consultants who had advised on the original tariff structure, and obtained a range of evidence including:
 - Data from ongoing inspections - as part of its complementary work inspecting installations Ricardo collected information on the capital, fuel and maintenance costs of Scheme participants;
 - Data held by the Department - this includes data per installation on capital costs (direct and indirect), boiler size, heat generated to date and payments to date; and
 - Empirical research - including the latest market data on fuel costs as well as industry benchmarks on costs.
14. The findings of the Ricardo Tariff Review³ have fed directly into the development of the longer term policy for the Department's approach to supporting the uptake of renewable heat in Northern Ireland.
15. In particular, Ricardo showed that the current tariff levels for biomass installations generate a higher financial rate of return than originally intended whilst there is no need for an incentive in respect of the two large CHP plants. On this basis, with reference to paragraph 11 of SA.47501, it is not the intention of the UK to seek approval for a tariff in respect of CHP plants.

³ <https://www.economy-ni.gov.uk/sites/default/files/consultations/economy/9.NIRHI-Biomass-Tariff-Review-Final-Report-22-May-2018-FINAL-for-publication.pdf>

Public consultation exercise

16. On 14 June 2018, the Department for the Economy in Northern Ireland launched a formal public consultation on the future of the Northern Ireland Non-Domestic Renewable Heat Incentive Scheme⁴. The consultation ran for 12 weeks and ended on 6 September 2018.
17. The purpose of the consultation was to take views on a range of issues relating to the future of the non-domestic RHI Scheme. The primary focus of the consultation was on small and medium sized biomass boilers, which account for 98% of the applications to the Scheme. The tariffs for other technologies will be reviewed during the course of 2019-20 whilst no change is being considered in respect of the tariffs for the Domestic element of the Scheme. The consultation identified eight tariff options.
18. These eight tariff options (for biomass boilers up to 199kW) were:
 - Option 1: Tariff structure under the 2017 and 2018 legislation is not continued;
 - Option 2: Retain tariff structure under the 2017 and 2018 legislation;
 - Option 3: Revert to original tariff structure under 2012 Regulations (for all installations);
 - Option 4: Adopt the base case tariff structure proposed in the Ricardo Tariff Review (the 'Tariff Review');
 - Option 5: Adopt the tariff structure from the Tariff Review excluding fuel costs (that is, transfer the risk of fuel costs to the Scheme participant);
 - Option 6: Adopt the hybrid tariff structure from the Tariff Review;
 - Option 7: Adopt the current GB tariff structure; and
 - Option 8: Adopt the tariff structure for entrants to the GB Scheme in autumn 2015.
19. Table 1 below sets out the proposed tariff rates and size bands for each of the eight options. The consultation also covered a range of other issues, including

⁴ https://www.economy-ni.gov.uk/sites/default/files/consultations/economy/1.Consultation-document-The-Future-of-the-Northern-Ireland-Non-Domestic-Renewable-Heat-Incentive-Scheme_0.pdf

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annual inflationary uplift, compulsory and voluntary buy-out options, banding options, usage limit options, technologies other than biomass, and CHP options.

Table 1: Summary of Ongoing Payment Options for NI RHI Scheme (2019-20 prices)

Tariff Option	Bands	Tier1 (p/kWh)	Tier 2 (p/kWh)	Tier 1 Threshold (hours)
1. Tariff structure under the 2017 and 2018 legislation is not continued	0-19kW, 20-199kW	0.0/0.0	0.0/0.0	-
2. Retain tariff structure under 2017 and 2018 legislation	0-19kW, 20-199kW	7.5/7.2	1.6/1.6	1,314
3. Revert to tariff structure under 2012 Regulations (all installations)	0-19kW, 20-199kW	7.5/7.2		None
4. Adopt the base case tariff structure from the Ricardo Tariff Review	0-19kW,20-99kW, 100-199kW	7.4/2.3/1.2	1.8/-0.4/-0.7	1,314
5. Adopt the tariff structure from the Ricardo Tariff Review excluding fuel costs	0-19kW,20-99kW, 100-199kW	7.5/3.4/2.1	1.9/0.5/0.3	1,314
6. Adopt the hybrid tariff structure from the Ricardo Tariff Review	0-19kW,20-99kW, 100-199kW	7.4/2.8/1.8	1.9/0.0/0.0	1,314
7. Adopt the current GB tariff structure	0-199kW	3.14	2.20	3,066
8. Adopt the tariff structure for entrants to the GB Scheme in autumn 2015	0-199kW	4.66	1.24	1,314

20. The Department received a total of 258 responses to the public consultation. These responses were analysed to ascertain the views and key concerns raised by respondents. Specific information on costs associated with biomass installations and the impact of tariff changes on businesses has been identified and used to inform the development of the long-term policy.
21. Over four-fifths of respondents supported Option 3: revert to the original tariff structure under the 2012 Regulations. Key reasons cited included:
- Concerns that operation and maintenance costs under other options could make it unaffordable to operate biomass boilers compared to LPG and had already led or could lead to reversion to the use of fossil fuels;
 - Concerns about the financial impact of a reduction in the tariff rate on capital investments for individual businesses, job security and on the wider rural economy; and

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- The belief of participants that they had acted in good faith and that the Government should adhere to the principle of grandfathering i.e. that tariffs would only change in line with inflation over the 20-year period.
22. It was to be expected that a high proportion of respondents to the public consultation would support Option 3, the highest cost option, as most responses came from Scheme participants.

Inspections and compliance

23. The Department is also undertaking a comprehensive programme of inspections to assess compliance with the Scheme's Regulations and Guidelines.
24. The first phase involved the inspection of 33 sites (65 installations) over the period September 2017 to January 2018. Compliance and enforcement action is being taken forward as appropriate on the findings from each site inspection. To date 7 installations have been revoked from the Scheme due to non-compliance with the Scheme regulations; 15 installations have had new specific conditions applied to their ongoing accreditation; the remaining compliance actions are ongoing and include claw-back of previous payments.
25. Already 90 installations have been inspected under Phase 2 of the inspections programme. It is intended that up to 720 'higher risk' installations (out of a total of around 2,100 'live' participants on the Scheme) will be inspected by the end of June 2019. Compliance action may include clawing back payments made in cases of identified scheme exploitation.

Judicial Reviews

26. Since the State aid decision was first adopted in 2012 (SA.34140,) three applications have been lodged seeking judicial reviews of the decisions relating to tariffs and accreditation made by the Department.
27. On the 21 December, the High Court in Belfast issued a judgement on the outcome of the Judicial Review (JR) of the 2017 Regulations taken by the

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Renewable Heat Association Northern Ireland (RHANI), which represents a number of installation owners.

28. The JR challenged whether the Department had the powers to apply the new tiered tariff to previously accredited installations (that is, the power to set tariffs that breached the 'grandfathering principle').
29. The High Court Judgment of 21 December 2017 found that the 2017 Regulations are not ultra vires and were necessary to achieve the following legitimate aims:
 - Ensuring that the RHI Scheme was operating in accordance with the UK's obligations under the Renewable Heat Directive;
 - Ensuring that the Scheme operated in a manner consistent with the objectives of the Scheme;
 - Ensuring that the Scheme operated in a manner consistent with State aid approval; and
 - Protection of the Northern Ireland budget.
30. However, while the Judgment confirmed that the Department had the legal authority to change the tariffs, the outcome was finely balanced between the participants' legitimate expectation to payments granted under the 2012 Regulations and the public interest in protecting the scarce resources within the Northern Ireland budget available to fund the delivery of other public services.
31. The 2017 Regulations brought the Scheme expenditure back within budget. Legal advice received by the Department states that, any further significant revision to the tariff below the 2017 Regulations level would need to show strong evidence that demonstrates the public interest rationale with respect to value for money. The legal advice also states that "value for money will be a relevant but not a decisive factor in determining whether a departure from the 2012 Scheme is justified". The legal advice states that the key other factors will be the legitimate interests of the Scheme participants and the view of the European Commission with respect to State aid.

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32. RHANI has appealed the outcome of the Judicial Review and that appeal is ongoing. The 'finely balanced' nature of the Court's decision (and the ongoing appeal of that decision) indicates the challenging environment for any further change to the tariffs set under the 2017 Regulations.
33. The second application for a judicial review relates to Ofgem's decision to not accredit a CHP installation. The hearing took place in October 2018, but was adjourned.
34. The third application relates to a challenge to the Department's decision to uphold an accreditation rejection made by Ofgem in respect of Greenbelt (NI) Ltd. This hearing is scheduled for November 2018.

Assessment of the options

35. The Department is assessing each of the options set out in the public consultation against a range of criteria before determining which is the most appropriate with which to proceed. The criteria include:
 - Policy intent (generating heat from renewable sources);
 - Affordability (ongoing Scheme cost against available budget);
 - Rate of return expected to be achieved by participants;
 - Consultation responses (taking into account any new evidence presented);
 - State aid compatibility; and
 - UK legislative timescale
36. The objective of the original Scheme was to support the generation of renewable heat by providing a reasonable incentive for operators to switch from fossil fuels in order to help the UK meet its obligations under the 2009 Renewable Energy Directive (2009/28/EC).
37. As detailed in paragraph 63 of the original State aid approval decision (SA.34140) the tariff levels over a 20-year period were based on the additional cost of the renewable heat installation over the cost of the typical fossil fuel solution.

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In order to encourage the uptake of renewable heat technologies a target 12% rate of return on the additional capital investment was considered reasonable and was used in the original tariff calculations.

38. In particular, paragraph 63 states: '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'.
39. The budget for the non-domestic element of the Scheme is projected to be £25.9m, £25.8m, £26m and £27.6m per annum from 2019-20 to 2022-23.

Table 2: Summary of analysis of biomass tariff options

Option	Affordable (AME budget for 2019-20 = £25.9 m)	Estimated Rate of Return for typical installation (target 12%)	Meets policy intent to support generation of renewable heat?
Tariff option 1 – Tariff structure under the 2017 and 2018 legislation not continued	Yes (£0 m)	0.1%	No
Tariff option 2 – Retain tariff structure under the 2017 and 2018 legislation	Yes (£23m)	50%	Yes
Tariff option 3 – Revert to tariff structure under 2012 Regulations (all installations)	No (£49m)	100%	No
Tariff option 4 – Adopt the base case tariff structure from the Ricardo Tariff Review	Yes (£6m*)	12%	No
Tariff option 5 – Adopt the tariff structure from the Ricardo Tariff Review excluding fuel costs	Yes (£11m*)	25%	Yes
Tariff option 6 – Adopt the hybrid tariff structure from the Ricardo Tariff Review	Yes (£9m*)	19%	Yes
Tariff option 7 – Adopt the current GB tariff structure	Yes (£20m*)	40%	No
Tariff option 8 – Adopt the tariff structure for entrants to the GB Scheme in autumn 2015	Yes (£18m*)	35%	No

*Includes funding for voluntary buy-out

Hybrid tariff

40. Table 2 above sets out a summary of the assessment of each of the tariff options. The options based on the current or previous tariff structures on the NI and GB RHI Schemes are considered to be either; unaffordable, inconsistent with the original policy intent, or would be expected to deliver an excess rate of return to Scheme participants.
41. In respect of the other tariff options, the Base Case tariff structure (Option 4) was developed by Ricardo as part of the tariff review to take account of the most recent information regarding capital costs (both biomass and oil), barrier costs, maintenance costs (biomass and oil) and fuel costs (biomass and oil).
42. As a result of the significant variations in the capital cost of biomass boilers and heat generation levels between NI RHI participants, whilst the typical installation on the Scheme would be expected to achieve a 12% rate of return under Option 4, almost one fifth were projected by Ricardo to achieve a rate of return less than 8%. In addition, as the ongoing operating costs of a biomass boiler are lower than for an oil boiler the Tier 2 tariff was set at a negative value which would be impractical to implement.
43. In the context that the main element of ongoing operating costs is fuel costs, which are highly volatile, Option 5 was developed by Ricardo as the Base Case tariff scenario but with fuel costs excluded, transferring the fuel cost risk to Scheme participants. However, it is estimated that this would result in the typical installation achieving a rate of return of approximately 25%. This option is not currently being considered because the rate of return is above the 22% upper limit identified by the UK and acknowledged by the European Commission in the original State aid decision (SA.34140). As the final policy position is being developed for the NI RHI Scheme, the UK would be grateful if the Commission could confirm that it would not normally provide approval for an environmental Scheme which delivered a rate of return for the typical installation in excess of 22%?

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44. A hybrid option (Option 6) was developed which sets the Tier 2 tariff at 0p/kWh and the Tier 1 tariff set at the mid-point between Options 4 and 5 (as set out in Table 1 above). This is expected to provide a projected return of 19%, that is, within the 8% to 22% range.
45. Ricardo calculates that for this option approximate 7.5% of boilers might achieve a rate of return lower than 8%, probably due to a higher capital cost and low annual heat usage. This option, therefore also includes an option for voluntary buy out at a rate which would ensure a 12% rate of return on capital. The voluntary buy out has a budget of £2 million per annum for three years.
46. Under the current Regulations, the Department is committed to providing a reasonable rate of return over 20 years under the principle of grandfathering. This option, whilst considerably reducing the payments received by boiler owners, maintains this commitment. A higher rate of return than the original 12% target for the Scheme is justified on the basis that the tariff is being applied to existing participants, rather than new entrants, and is within the expected 8-22% range.
47. The rate of return calculations set out above are based on the assumption that participants are only accredited from 1 April 2019 for a period of 20 years. Adjusting for previous payments to Scheme participants would be expected to increase the rate of return significantly above the upper limit previously referred to by the European Commission as being reasonable. However, the Commission should note that through its current inspections and compliance process, that the Department's approach is to claw back any past payments relating to a breach of Regulation 33(p) – that is, the over production of heat for the purpose of generating incentive payments.
48. It is on this basis that the hybrid tariff option is considered to represent the optimal balance between substantially reducing the potential for overcompensation going forward whilst also ensuring that continued use of biomass boiler is still sustainable.

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49. In particular, as participants will receive a fair amount of compensation it is expected that the level of renewable heat supported by the NI RHI Scheme will be in line with the GB RHI Scheme on a per head of population basis whilst there is limited evidence to date of a significant economic impact from the reduction in the level of overcompensation under the 2017 Regulations.
50. There is strong public interest in ensuring that the future RHI Scheme achieves value for money. The hybrid option, whilst clearly within budget, also provides the best value for money option as it provides a rate of return within the range considered to be acceptable at the inception of the Scheme.

Conclusion

51. Following full consideration the Department has determined that the hybrid option (Option 6) is the most suitable to maintain the objectives of the Scheme, abide by participants' legitimate expectations, protect the public interest and provide value for money to the taxpayer. However, this is subject to confirmation from the Commission that it considers this an acceptable approach and that a rate of return for a typical installation above 19% would be unsupportable.
52. In order to progress the policy development within the required timeframe, allow time for the adoption of a State aid decision, secure the required approvals for the associated expenditure and pass the necessary UK legislation, the Department for the Economy would be grateful for the urgent views of the European Commission on the policy option outlined above. We look forward to meeting on 9 November 2018 to discuss.

ANNEX B – European Commission response to pre-notification of hybrid tariff

From: [email address omitted]
Sent: 30 November 2018 17:01
To: [email address omitted]
Cc: [email address omitted]
Subject: SA.52345 - UK (NI) RES heat 2019 revision

Dear [name omitted],

Thanks to you and your colleagues for the additional information you provided on 22 November.

Having discussed this internally we consider that there is insufficient evidence at this stage to approve a higher rate of return than the 12% authorised in the 2012, 2017 and 2018 decisions. If in practice beneficiaries have received / are receiving a higher rate of return than this, you will need to consider action to bring the compensation in line with the rate of return authorised by the previous decisions (in particular given the commitments in the 2017 decision SA.47501 – see recitals 30-32).

We understand the concerns about ensuring the beneficiaries have an incentive to continue using their renewable heat sources rather than reverting or switching to fossil fuel based heating. We can also see that Ofgem would be concerned about administering a negative tariff and the incentives this creates for participants. We would therefore wish to discuss with you options to ensure an appropriate incentive effect combined with an appropriate lifetime rate of return, eg. recovering past overpayments made to beneficiaries and then reinstating a forward tariff that provides compensation and an appropriate incentive for the continued use of the renewable heat installations. In other words, separating the clawback from the future tariff.

We appreciate that significant work has been done on your side over many months to reach this stage and understand that this case is extremely sensitive in Northern Ireland, so are available for further discussions – please let me know if the any of the dates we discussed this afternoon work.

Thanks,
[name omitted]

ANNEX C – letter from European Commission

Attached separately



EUROPEAN COMMISSION

Competition DG

Market and cases I: Energy and environment
State Aid

Brussels, 25.01.2019
COMP.B2/MW/mz*/2019/9934

UK Permanent Representation
to the EU
10 Avenue d'Auderghem
1040 Brussels
Belgium

E-mail: Steven.mcgregor@fco.gov.uk

Subject: Case SA.52345 (2018/PN) – Northern Ireland Renewable Heat Incentive Scheme - 2019 tariff revision

Dear Mr McGregor,

I am writing regarding the UK's pre-notification submissions of 5 November 2018, 22 November 2018 and 20 December 2018 explaining potential changes to tariffs for projects benefitting from the Northern Ireland Renewable Heat Incentive (SA.52345). We also discussed the way forward on this case on the basis of the existing State aid decisions, in particular relating to the rate of return for beneficiaries, in our meeting on 11 December 2018.

The initial 2012 decision authorising the scheme (SA.34140) authorised an average project rate of return of 12% (recitals 63-65).¹ This, rather than the tariffs themselves, were the basis for the conclusion in the decision that the measure was proportionate. The 2017 decision (SA.47501) confirmed the proportionality of this 12% rate of return. It referred to a 12% rate of return on a levelised basis for the 2017-2018 financial year as well as the need for appropriate action by the UK authorities to ensure any overcompensation resulting from non-compliance with the scheme was remedied.²

The 2012 decision was amended in the relevant parts but was not revoked by the subsequent decisions and therefore continues to apply. Therefore it can be concluded that the 2012 decision provides cover for a rate of return for the average benefitting project of 12%, as also confirmed in the subsequent 2017 decision.

Unless the UK authorities wish to seek authorisation for increasing the level of aid average projects receive, or for granting new aid under the scheme in a different form to that approved in the 2012 decision, it does not appear that a new notification nor new decision is required.

¹ http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=3_SA_34140

² http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=3_SA_47501

Please specify the name of the case and the case number in all correspondence.

We note that at this stage it is unclear what basis there would be for authorising a higher rate of return than 12% given all required investments have already taken place.

This is a preliminary view of the services of DG Competition and not a formal view of the European Commission.

Yours sincerely,

[e-signed]
Johannes LUEBKING
Acting Director

Contact person:

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