



Department for the

Economy

www.economy-ni.gov.uk

The Future of the Northern Ireland Non-Domestic Renewable Heat Incentive Scheme

Consultation Report
January 2019

Contents

1. Introduction
2. The consultation process
3. Overview of responses
4. Summary of responses and comments
5. Analysis of options and next steps

1. Introduction

- 1.1. The Northern Ireland Non-Domestic Renewable Heat Incentive Scheme (NIRHI) was introduced in November 2012. The Scheme was designed to increase the uptake of renewable heating technologies by providing ongoing payments to cover the projected difference in cost between renewable heating and fossil fuels. The NIRHI was based on the GB Renewable Heat Incentive Scheme but with different tariff rates and the absence of important cost control measures, including a tiered tariff structure.
- 1.2. In early 2015, the cost of NIRHI was projected to be much more than the available budget for 2015-2016 and future years. This led to the introduction of tiering and a heat generation cap for small and medium biomass installations for new participants on 18 November 2015. However, an unprecedented spike in applications immediately prior to the introduction of the new tariff structure resulted in a further increase in the projected cost of the Scheme. Therefore further action was required and, as a result, the Scheme was suspended to new applicants on 29 February 2016.
- 1.3. However, after the NIRHI closed to new applicants in February 2016, expenditure on the Scheme was still expected to breach the available budget. In response, the Department for the Economy (DfE) introduced the Renewable Heat Incentive Scheme (Amendment) Regulations 2017 as an interim measure to extend the tiered tariff and cap to all participants with small and medium biomass installations whilst a long term policy was being developed. DfE then extended the tariff structure introduced under the 2017 Regulations for a further 12 months through the Northern Ireland (Regional Rates and Energy) Act 2018.

Judicial Review

- 1.4. On 21 December 2017, the High Court issued a judgment on the Judicial Review of the 2017 Regulations. The judgment confirmed that DfE had the legal authority to change the tariffs in light of the public interest in respect of the cost to the NI Executive, value for money and State aid compliance.
- 1.5. DfE undertook two major steps to achieve its responsibility to develop and implement a long-term policy to replace the current interim arrangements – a review of the current biomass tariff structure for small and medium sized biomass boilers and a public consultation exercise undertaken in fulfilment of a commitment to the NI Assembly Committee for the Economy.

Tariff review

- 1.6. DfE commissioned an independent consultant, Ricardo Energy and Environment ('Ricardo'), to undertake a comprehensive review of all the main elements of the tariff for small and medium sized biomass boilers and Combined Heat and Power (CHP) plants. In its report, published as part of the public consultation, Ricardo suggested three main tariff scenarios which were included as biomass tariff options in the consultation exercise.

Consultation

- 1.7. On 14 June 2018, DfE launched its public consultation on the Future of the Non-Domestic Renewable Heat Incentive (NIRHI) Scheme in Northern Ireland. The consultation ran for 12 weeks and ended on 6 September 2018.
- 1.8. The purpose of the consultation process was to take views on a range of issues relating to the future of the RHI Scheme. The primary focus of the consultation was on small and medium sized biomass boilers, which account for the majority of the projected expenditure on the Non-Domestic RHI Scheme. The consultation also covered a range of other options in respect of; the annual inflationary uplift of tariffs, the alternative approach of a buy-out, the annual usage limit, and the tariff for Combined Heat and Power (CHP) plants.
- 1.9. This report summarises the responses to the public consultation. The Department is grateful to those who took the time to respond.

2. The consultation process

Pre-consultation meetings

- 2.1. Prior to the launch of the consultation, the Department held meetings with key representative groups to outline the Department's approach in developing the consultation, to provide an opportunity to seek early views and allow them to begin to develop an evidence base to inform their responses to the consultation. Attendees at these meetings included, among others, representatives from academia, the Ulster Farmers' Union and the Renewable Heat Association Northern Ireland (RHANI).
- 2.2. The presentation given by the Department at these meetings is available on the Department's website¹.

Public consultation

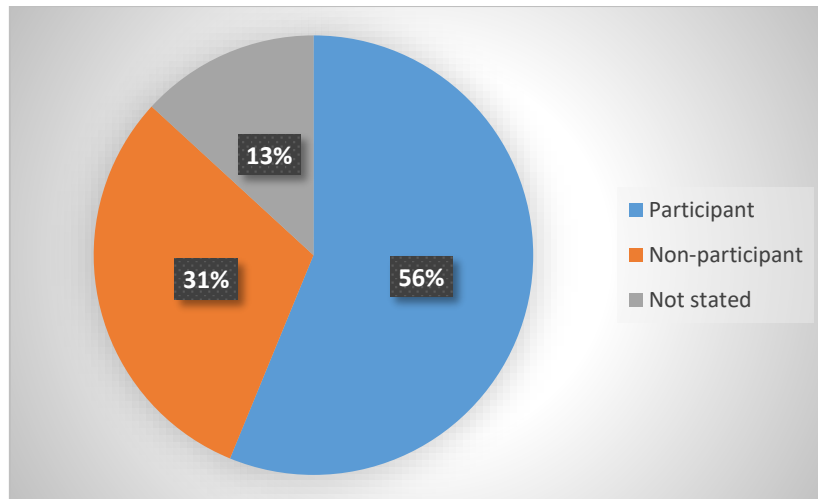
- 2.3. The consultation document was published on 14 June 2018 on the Department's website. The Department published a number of supporting documents along with the main consultation document, including:
 - A 'Key Facts' document which provided a summary of the options set out in the consultation;
 - A glossary of key terms used in the consultation, a FAQ document and a response template;
 - A copy of the Ricardo report 'Review of the biomass tariff structure for the Northern Ireland RHI Scheme'; and
 - Draft impact assessments.
- 2.4. The consultation exercise was announced by a press release and on social media. These were followed up with reminders on 20 July, 6 August, 14 August and 3 September inviting the public to respond to the consultation. A link to the consultation was distributed by email to key stakeholders, including Scheme participants, at noon on 14 June 2018.
- 2.5. Stakeholders were given the option to either respond online, by email or in hard copy. Responses to the consultation were invited by 6 September 2018.

¹ <https://www.economy-ni.gov.uk/publications/future-northern-ireland-rhi-scheme>

3. Overview of responses

Who responded?

3.1. A total of 258 responses were received. Respondents were asked to identify whether or not they were participants in the Scheme. 145 indicated they were and 79 indicated they were not participants. 34 respondents did not respond, and no assumptions were made as to whether these respondents were participants or not.



3.2. The consultation document did not ask for any further detail on the status of non-participants who responded, i.e. whether they had any link to the Scheme. However, some of those who indicated they were non-participants stated in their responses that they had links to the Scheme; for example they are employed by a business in receipt of RHI payments or have friends or family whose businesses are in receipt of payments.

Format of responses

3.3. Of the 258 responses received:

- 133 responded via the online consultation form
- 79 responded using the answer template provided with the consultation document
- 46 responded but did not use the answer template or online consultation form.

Online responses

3.4. Slightly over half of the consultation responses received were through Citizen Space, the online survey tool used by the Northern Ireland Civil Service.

3.5. The online consultation form included 12 numbered questions. Of these, six were mandatory questions requiring a response before the respondent was able progress to the next question. The remaining six numbered questions were optional.

Answer template

- 3.6. An answer template setting out the questions in the consultation was published by the Department along with the consultation document. This is available on the [consultation page on the Department's website](#)². 79 respondents used this template to submit their responses. These responses were manually uploaded to Citizen Space and included in the analysis.
- 3.7. While the answer template indicated which questions were mandatory, some responses using the template did not provide responses to some or all of the questions marked as mandatory.
- 3.8. There were 212 responses received that were either completed on the online consultation form or on the answer template. The analysis of these responses is set out in sections 4.1 to 4.5 of this report.

Other responses

- 3.9. Only 46 responses were received which were not completed on the online consultation form or the answer template. These responses did not necessarily address all of the specific issues set out in the consultation document, but provided views on the future financial support to encourage the switch to renewable heat in Northern Ireland.

Note to Reader

- 3.10. The Department's analysis accurately summarises and reflects the responses that were received. However, the presentation of the comments and views within this document does not constitute agreement with the views expressed.

² www.economy-ni.gov.uk/consultations/future-northern-ireland-non-domestic-renewable-heat-incentive-scheme

4. Summary of responses and comments

4.1. The consultation document set out 12 questions on a range of issues relating to the RHI Scheme. However, the document made it clear that respondents were not restricted to these issues and were assured that the Department would welcome comments in relation to relevant issues that were important to them. Many respondents took advantage of this and made specific points in their responses. The questions in the consultation were split into four broad areas:

- **Questions 1 - 4** (Section 5 of consultation document) were in relation to the rationale for government support for renewable heat, the reasonable rate of return to encourage investment in the technology, the funding principles and the impact of previous tariff changes.
- **Question 5** (Section 6 of the consultation document) was in relation to respondents preferred option for the biomass tariff structure.
- **Questions 6 – 11** (Section 7 of consultation document) were in relation to other elements of the options for tariff structure, including annual inflationary uplift, compulsory and voluntary buy-out, banding options, usage limit options and other technologies.
- **Question 12** (Section 8 of the consultation document) was in relation to the tariff options for Combined Heat and Power (CHP) plants.

4.2. This chapter sets out quantitative summaries of responses where appropriate, and summaries of comments in relation to each question.

Background questions (Questions 1 – 4)

Question 1 - Do you believe that it is the Department's responsibility to encourage investment in renewable heat? If so, in what form should that encouragement take?

Yes	No	Not sure	Not answered	Total
205 (97%)	4 (2%)	2 (1%)	1 (0%)	212

Summary of responses

4.3. The majority of respondents to this question felt that it was the Department's responsibility to encourage investment in renewable heat. They suggested that financial incentives, grants or subsidies were the most effective form of encouragement.

4.4. Most respondents felt that the financial support should include payments to RHI participants in line with the original tariffs introduced under the RHI Scheme in 2012. Many respondents suggested that the level of support should be equal to the generally lower tariffs available in the rest of the UK in order to prevent a competitive disadvantage for renewable heat users in Northern Ireland. Many responses also suggested that any new schemes incentivising renewable heat may not be successful due to a loss of confidence in the Department over its handling of the RHI Scheme.

- 4.5. Several respondents felt that renewable heat should be promoted, through advertising, education and advice, to increase awareness of the issues associated with fossil fuel use.
- 4.6. Other suggestions for increasing the use of renewable heat included:
- stopping grants for new oil boilers;
 - requiring the installation of renewable heating in new build domestic and non-domestic properties possibly by imposing requirements in Planning and Building Control Regulations;
 - working with companies to reduce the price of renewable heating technologies;
 - increasing the price of oil and coal;
 - promoting early adoption of new technologies;
 - linking financial incentives to actual costs based on concrete evidence; and
 - imposing a carbon tax on the use of fossil fuels.

There were six responses from people who did not agree that it is the Department's responsibility to promote renewable heating, or were not sure.

Question 2 - What rate of return on capital investment in biomass boilers do you think is a reasonable rate of return for installation owners?

Comments on rate of return

- 4.7. Respondents were generally in favour of staying within the range of 8 – 22% return on capital investment, as referred to by the European Commission when providing the original State aid decision for the Scheme. There was a consensus that the only rate of return which should be considered was the tariff the boiler owners signed up to when the Scheme was launched. Many respondents said that costs associated with running a biomass heating system are higher than indicated in the consultation document or in the Ricardo Tariff Review and that this should be factored into calculation of rates of return.
- 4.8. A small number of respondents indicated that participants should receive either a smaller rate of return (3% - 5%) or be paid for their capital costs only.

Question 3 - Should funding for the NIRHI Scheme be limited to, at most, funding available from the UK Government without impacting on the Northern Ireland block grant? Please give reasons and any supporting evidence for your answer.

Yes	No	Not sure	Not answered	Total
23 (11%)	164 (77%)	23 (11%)	2 (1%)	212

Yes

- 4.9. Those who responded 'Yes' to limiting NIRHI Scheme funding to funding available from the Government without impacting on the NI Executive block grant commented that, as this Scheme was introduced to meet UK targets funding, the UK government should provide support for the Scheme without impacting the NI block grant. One respondent suggested that the Scheme should be stopped.

No

- 4.10. The majority of respondents answered 'No' to limiting NIRHI Scheme funding to funding available from the Government without impacting on the NI Executive block grant. The majority of these respondents indicated that this question should be directed to the NI Executive. The other main comments included that the Scheme was a failure on the Department's part and that it was not right to limit payments to participants who signed up to the Scheme in good faith. Others stated that it was not appropriate to comment given the ongoing Public Inquiry.

Not sure

- 4.11. Respondents who selected 'Not Sure' mainly commented that they did not know enough facts about the funding to comment, with some commenting that it was probably a matter for NI Executive/government to decide.

Question 4 - Please outline the impacts on your business of the tiered tariff and cap under the 2017 and 2018 legislation.

Responses from pre-November 2015 participants

- 4.12. 199 respondents answered this question of whom 134 indicated that they were Scheme participants. Many respondents said that the 2017 and 2018 legislation had created cash flow problems within their business, and that loans were originally taken out on the strength of income projections based on the original tariff. Most said that they were having difficulty in meeting financial commitments under the tiered tariff and some were concerned that their business may not survive if the original tariffs were not reinstated. The measures taken in order to be able to meet loan repayments include:
- Sale of assets;
 - Laying off staff;
 - Postponing maintenance or investment in the business;
 - Diverting funds from other parts of the business; and
 - Restructuring of loans
- 4.13. Most of these respondents said that they would not have installed a biomass heating system under the tiered tariffs. Some said that the tariffs are unfair on participants with a genuine high heat requirement. Many respondents said that the financial pressures created by the 2017 and 2018 legislation have led to health problems, for example stress and mental health problems.
- 4.14. Some of these respondents said that they have turned the heating down as a result of the tiered tariffs and that this has resulted in a lower level of thermal comfort for staff and customers. Some respondents reported supplementing their heating with fossil fuel, and many said they will consider switching back to fossil fuels if the tiered tariff remains. Participants in the poultry sector who said they have had to reduce the running hours of their biomass boilers or supplement with fossil fuels said that this has a negative impact on animal welfare and productivity.

- 4.15. Many respondents felt that the tiered tariff has made their business uncompetitive in comparison to their counterparts in other parts of the UK. Some participants running 99kW boilers felt that, locally, the tiered tariffs give a competitive advantage to businesses with 199kW boilers installed.

Responses from post November 2015 participants

- 4.16. Some responses were received from individuals who indicated they had installed biomass boilers after November 2015, and were therefore already on the tiered and capped Scheme. While the 2017 and 2018 legislation had no impact, some of these individuals indicated that closing the Scheme would have a severe financial impact on their businesses.

Responses from installers

- 4.17. Several responses were received from biomass installation companies, most of whom said that there has been a major loss of jobs in their companies. Some said that many of their former competitors are no longer operating.

Options for tariff structure – biomass tariffs

- 4.18. The consultation document outlined eight tariff options which examined the current payment levels under the non-domestic RHI Scheme for small and medium sized biomass installations. Three of these options were based on findings from the analysis by Ricardo, and were aimed at bringing the expected rate of return for beneficiaries closer to the original objective of the Scheme. The options were:
1. Tariff structure under the 2017 and 2018 legislation is not continued;
 2. Retain tariff structure under the 2017 and 2018 legislation;
 3. Revert to original tariff structure under 2012 Regulations (including post 18 November 2015 installations);
 4. Adopt the base case tariff structure proposed in the Ricardo Tariff Review (the 'Tariff Review');
 5. Adopt the tariff structure from the Tariff Review excluding fuel costs;
 6. Adopt the hybrid tariff structure from the Tariff Review;
 7. Adopt the current GB tariff structure; or
 8. Adopt the tariff structure for entrants to the GB Scheme in autumn 2015.
- 4.19. The consultation document considered the financial cost of each option. Based on the latest projections, all but one of the options (Option 3) is expected to be within the available funding provided by the Government.
- 4.20. The consultation document also gave consideration to the issue of the rates of return on investment expected to be achieved by the typical participant on the Scheme for each option. Only Options 1, 4 and 6 would return the projected rate of return within the 8-22% range previously specified by the European Commission.
- 4.21. However, this excludes the impact of payments received to date. The Ricardo analysis had suggested that 75% of beneficiaries were projected to achieve a rate of return higher than 22% if the impact of previous payments was taken into account, even with no future payments under Option 1.

Question 5 - Which biomass tariff option do you support for the long-term future of the NIRHI Scheme? Please give reasons and any supporting evidence for your answer including any anticipated economic impact and, where appropriate, the effect on your business as a participant.

Option:									
1	2	3	4	5	6	7	8	Not answered	Total
7 (3%)	14 (7%)	174 (82%)	6 (3%)	0 (0%)	0 (0%)	6 (3%)	1 (0%)	4 (2%)	212

Option 1: Tariff Structure under the 2017 and 2018 legislation is not continued

- 4.22. The majority of respondents who selected Option 1 for no replacement tariff structure from 1 April 2019 felt that the other tariff options were complex, expensive and did not take account of monies already received. Others argued that no more public funds should be committed to the Scheme.
- 4.23. Other comments included the need to remove participants generating excessive heat from the Scheme.

Option 2: Retain tariff structure under the 2017 and 2018 legislation

- 4.24. Respondents who selected Option 2 to retain the tariff structure under the 2017 and 2018 legislation felt it was the most balanced option having already achieved the objective of bringing the Scheme back in line with the available budget and had the minimum impact on Scheme participants and maintained current payments. Some provided data relating to the potential impact on the long term sustainability of their businesses and/or their ability to deliver services to the community.
- 4.25. Others felt that participants had entered into a contractual arrangement in good faith and should not be penalised for the failings in the design of the Scheme. One respondent queried why the rate of return was being used as a reason to reduce tariffs as it was 'not a stated outcome of the scheme' and suggested that rates should be varied for new entrants (similar to degression in GB). Another argued that businesses had based their investment on this tariff structure.

Option 3: Revert to original tariff structure under 2012 Regulations (including post 18 November 2015 installations)

- 4.26. Respondents who provided comments in support of reverting to the original tariff structure under the 2012 Regulations cited a number of reasons for their preferred option including:
- Concerns that operation, maintenance, service costs and the financing of boilers made it unaffordable to operate biomass boilers beyond the existing tier 1 threshold when compared to LPG and had already led or could lead to participants reverting to the use of fossil fuels. Another common theme was that any of the other seven options would necessitate a return to 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. Respondents argued that investment decisions, borrowings and other costs should be factored into the rate of return.
 - The perceived advantage of LPG being supplied under a collective purchase contract with 60-day credit terms and payment being taken from pre-tax income compared to the purchase of wood pellets which had 28-day credit.
 - Disagreement with the stated price of wood pellets in the Ricardo Tariff Review (£150 per tonne) compared to the current costs indicated by respondents ranging from £175 and £185 per tonne.
 - The view that the price of wood pellets could increase given that a large percentage come from within the Euro Zone and may be impacted by Brexit. It was also felt that the establishment of an RHI scheme in the Republic of Ireland could increase the demand for wood pellets and result in further cost rises.
- 4.27. Some respondents highlighted their concerns about the tariff options proposed to cap 99kWh boilers at 1,314 hours in line with the 199kWh boilers. These respondents believed that, in order to ensure fair treatment, the 99 kWh boilers needed a 2,624-hr tier 1 cap or the tariff paid to operators of 199 kWh boilers to be halved.

Option 4: Adopt the base case tariff structure proposed in the Ricardo Tariff Review (the 'Tariff Review')

- 4.28. Respondents who preferred Option 4, which adopts the base case tariff structure proposed in the Ricardo Tariff Review, stated that a rate of return of 12% was reasonable and in line with the EU approval rates. They noted that the European Commission would not approve a Scheme which over-compensated participants. Unlike Option 1 which could damage the credibility of future Government financial incentive schemes, Option 4 would be within the expected available budget without impacting the NI Block Grant. They felt Option 4 was fair and would deliver the rate of return originally intended for Scheme participants to receive when the policy was being developed.

Option 5: Adopt the tariff structure from the Tariff Review excluding fuel costs

- 4.29. No responses were received in support of Option 5.

Option 6: Adopt the hybrid tariff structure from the Tariff Review

- 4.30. No responses were received in support of Option 6.

Option 7: Adopt the current GB tariff structure

- 4.31. Comments from respondents who preferred Option 7 (adopt the current GB tariff structure) included that it is a tried and tested structure, which would allow participants to pay for biomass boilers and continue to use wood pellets. Respondents also felt that being on the same tariff would allow participants to compete with poultry farmers in GB.

Option 8. Adopt the tariff structure for entrants to the GB Scheme in autumn 2015

- 4.32. One respondent commented in support of Option 8 stating that it was the fairest payment structure to allow for a 22% overall return and that it allowed for barrier hassle costs, maintenance costs and the difference between wood pellets and oil prices.

Options for tariff structure – other elements

- 4.33. In addition to biomass tariff levels, the consultation invited views on tariff banding, options for the annual inflationary uplift and the introduction of a voluntary buyout payment. This section of the consultation document also invited any views on the tariff for other technologies and large biomass boilers on the Scheme as well as the potential for a one-off compulsory buy-out payment.

Annual inflationary uplift

- 4.34. Tariff levels on the non-domestic RHI Scheme have been adjusted on 1 April each year in line with the Retail Price Index (RPI). The consultation stated that the overall effect of this has been to increase payments to participants, while costs to participants are unlikely to have risen to the same extent. The Ricardo report indicated that the Consumer Prices Index (CPI), which is applied to new entrants to the GB RHI Scheme, would be a more appropriate measure of inflation. The consultation therefore considered three options for the Annual Inflationary Uplift:

Option 1: Continue uplifting in line with RPI (no change);

Option 2: Uplift tariffs annually in line with CPI; or

Option 3: Remove the Annual Inflationary Uplift.

Question 6 - What measure, if any, should the Department use for inflationary uplifts? Please give reasons and any supporting evidence for your answer.

Option 1	Option 2	Option 3	Not answered	Total
165 (78%)	34 (16%)	8 (4%)	5 (2%)	212

Option 1

- 4.35. The majority of respondents were in favour of Option 1 that no changes should be made to the inflationary uplift method. Many stated that the RPI method was originally set out in the 2012 Regulations and that the 2015, 2016 and 2017 Regulations had made no change to this arrangement. Others expressed their opinion that participants had signed contracts with RPI inflationary measure and these should be honoured.

- 4.36. Other reasons given for no change included:
- RPI inflationary measure is the most commonly/widely used in other industries;
 - Some stated that there was a contractual arrangement and that it would be very unfair and unethical to change that, given the major commitments based on the incentives agreed; and, as presented
 - Without RPI being added annually at today's RPI rate of 3.2%, after 10 years the worth of money could be reduced by between 35% and 40%.

Option 2

- 4.37. The respondents who chose Option 2 (CPI) mainly did so because they believed it to be the fairest and most accurate method. In addition, some viewed it as an accepted and transparent measure, used as best practice.

Option 3

- 4.38. A small number of respondents selected Option 3 where no inflationary uplift was required. The reasons for this were that they believed owners could achieve a 12% rate of return without such adjustments.

Compulsory buy-out

- 4.39. The consultation sought views on the option of making a one-off payment to participants, equivalent to a 12% rate of return on their initial capital investment on a biomass boiler, in return for the cessation of ongoing payments.

Question 7 - What are your views on a compulsory buy-out of the Scheme?

- 4.40. The most common view expressed by respondents was that any compulsory buy-out must take account of all the costs and benefits relating to the installation, maintenance and financing of small and medium-sized biomass boilers. For many of these respondents this included loan repayments and associated interest charges. Others felt that any compensation should be calculated using the original 2012 tariff. Respondents within this category generally also argued that reaching agreement on an equitable buy-out would be complex and expensive. On a related theme, respondents queried whether there was an existing legislative basis or framework to introduce compulsory buy-out.
- 4.41. The next most common view expressed by respondents was to reject the idea of compulsory buy-out. Most stated that a compulsory buy-out was not in line with the original 2012 tariff structure or their original agreement with the Department. Others felt that it would encourage a return to the use of fossil fuel and so fail to deliver the policy objective of encouraging renewable heat and put at risk achieving environmental objectives. A small number of respondents did not totally reject a buy-out option but felt that it should be on a voluntary basis only.

- 4.42. A small number of respondents rejected a compulsory buy-out as they felt that no more public money should be spent on the Scheme. Conversely others supported the compulsory buy-out option arguing that closure could prevent public money being spent on the Scheme in the long-term.

Voluntary buy-out

- 4.43. The consultation also considered the option of a voluntary buy-out, which, subject to available budget, would provide a means for participants in receipt of a relatively low rate of return of exiting the Scheme in return for a one-off payment. This option was proposed in relation to biomass tariff options 4, 5, 6, 7 and 8.

Question 8 - Do you support the principle of a voluntary buy-out? Please give reasons and any supporting evidence for your answer.

Yes	No	Not sure	Not answered	Total
48 (23%)	144 (68%)	19 (9%)	1 (0%)	212

Yes

- 4.44. The most common responses from those who supported the principle of a voluntary buy-out were that it needed to be fair. Many responses said that the amount payable under a voluntary buy-out should be negotiable. Several respondents stated that it would only be reasonable if it provided payment which equals the full value of the Scheme for its whole length, otherwise it would be unfair and would not live up to what participants were promised.
- 4.45. One respondent was in favour of a voluntary buy-out but thought there should be a financial penalty for abuse of the Scheme. Another was in favour of a buy-out because of the stigma attached to the Scheme due to media coverage.

No

- 4.46. The majority of respondents did not support the principle of a voluntary buy-out. The main reason for this was that, in the view of respondents, the buy-out amount would not be likely to cover the initial set up costs. Other respondents felt that participants had signed a 20 year contract for the Scheme and this should be honoured.
- 4.47. Some respondents suggested this was a reversal of progress made on renewable energy projects and the Scheme would not deliver the policy objective of increasing the use of renewable heat. Some responses said that a voluntary buy-out would lead to people switching back to fossil fuel heating, and several said that this may lead to fines for not meeting European targets. One respondent felt that a voluntary buy-out would indicate that the Scheme had failed.

Not sure

- 4.48. Around 10% of respondents were unsure about the principle of a voluntary buy-out with insufficient knowledge/not enough information of how a voluntary buy-out would work being the main reason. Others stated that their decision would be dependent on payment amounts.

Banding options

- 4.49. The consultation also looked at the possibility of further amendments to the banding within the 0 - 199kW range. Views were sought from participants with boilers in the range 20-90kW, in particular, to identify any evidence of benefits that a further tariff band within this range might provide.

Question 9 - Would you support the introduction of a further tariff band within the 20 - 90 kW range? Please give reasons and any supporting evidence for your answer including any experience relevant to other boiler sizes within the 20 – 90 kW range of boiler sizes.

Yes	No	Not sure	Not answered	Total
7 (3%)	137 (65%)	45 (21%)	23 (11%)	212

- 4.50. The majority of respondents would not support the introduction of a further tariff band within the 20 – 90 kW range. Many said that they did not understand the reasoning behind the inclusion of a further tariff band.

- 4.51. The small number who said yes mostly did so with the caveat that the payment was equal to the original RHI agreement.

- 4.52. Many respondents suggested that there should be no change to the original contracts entered into. Some respondents would be content for the further tariff band for new entrants only.

Usage limit options

- 4.53. The current small and medium biomass tariffs under the scheme are subject to an annual usage limit of 400,000kWh. No RHI payments are made in respect of heat generated above this level. The consultation explored the possibility of reducing the usage limit to 300,000kWh to cap rates of return for installations with a very high load factor. The 300,000kWh cap would apply in relation to all of the biomass tariff options, except tariff options 4 and 6, which do not require usage limits.

Question 10 - Do you support the principle of a cap being set at 300,000 kWh? Please give reasons and any supporting evidence for your answer including any additional information to inform annual usage levels.

Yes	No	Not sure	Not answered	Total
12 (6%)	175 (82%)	14 (7%)	11 (5%)	212

Responses not in favour of an annual usage limit

- 4.54. The majority of respondents would not support the principle of a limit being set at any level for existing participants, but some of these respondents thought an annual usage limit may be appropriate for new entrants to the Scheme. The main reasons given for this were:
- the 2012 Regulations did not include a usage limit;
 - There is no usage limit within the comparator GB scheme; and
 - Many felt that any usage limit discriminates against a participant with a high heat requirement.
- 4.55. Some responses suggested that an 'arbitrary' limit would not work as heat requirements differ from building to building and that topographical and metrological factors would need to apply. One respondent said that a limit would need to be determined and pre-set for each industry type based on industry heat use information/standards. Several responses did not agree with a cap at 300,000kWh as they felt it was too high.

Responses in favour of a limit at 300,000kWh

- 4.56. The main comment made by people who agreed with a cap at 300,000kWh was that this should be a sufficient amount of heat for most businesses. One participant commented that the limit under the 2017 and 2018 legislation had encouraged them to watch their fuel use more closely.

Other technologies

- 4.57. The key focus of the consultation was in relation to biomass, and options for revision of tariffs in relation to other technologies were not included. The consultation advised that the Department would evaluate these tariffs at a later stage. It invited comments specifically on the principle of the inclusion of a tier in respect of smaller heat pumps in a future tariff review, and more broadly on issues affecting any of the other eligible technologies

Question 11 - Please identify any other issues relating to other technologies which would be relevant in any tariff evaluation.

Comments on other RHI technologies

- 4.58. Several comments were received indicating that support should be provided for biomethane injection. Other individual responses indicated there should be support for all of the technologies currently eligible under the Scheme; that it was unfair to review the rate of return for biomass installations without considering the rate of return for other technologies; that heat pumps and anaerobic digesters, like biomass boilers, are expensive to repair; and that heat pumps increase the carbon footprint, due to higher electrical consumption and are not the best option for renewables.
- 4.59. Many respondents suggested the introduction of smart meters, third party meter readings and a better audit procedure.

Proposals for Combined Heat and Power (CHP) plants

- 4.60. There are currently no CHP plants accredited on the Non-Domestic NI RHI scheme, whilst the analysis undertaken by Ricardo suggested that no public subsidy was required. The consultation invited comments on whether CHP plants should be included under the scheme.

Question 12a - Do you consider that a public subsidy is required for CHP plants? Please give reasons and any supporting evidence for your answer.

Yes	No	Not answered	Total
145 (68%)	39 (19%)	28 (13%)	212

Question 12b - If your answer to 12a is 'yes', please provide any additional comments or supporting evidence that you feel may be useful to the development of a long term tariff structure for support for CHP.

Summary of responses

- 4.61. The majority of respondents considered that a public subsidy is required for CHP Plants. Many commented that CHP is an established, energy efficient technology. Some highlighted press articles that associated a proposed CHP plant with an expansion of local wood pellet production.

Additional information

- 4.62. Respondents were given the opportunity to comment or provide additional evidence in any other aspects of the Scheme.

Question - Please provide any additional information or evidence that you believe may be relevant for determining the future of the Northern Ireland Renewable Heat Incentive Scheme.

- 4.63. Most respondents who took the opportunity to provide additional information or evidence said that the tariffs should not be changed retrospectively. Reasons given for this included:
- Participants are not to blame for flaws in the original scheme
 - Retrospective tariffs imposed upon the genuine, early adopters in NI are unfair, (discriminatory when compared to the GB participants) and unlawful
 - Participants were offered a guaranteed level of support and many based business decisions on this guarantee
 - Any reduction in tariffs would lead to people switching from renewables back to fossil fuels

- The view that the overspend is not as high as the figures used in the consultation document
 - The opinion that, if State aid approval was received for both the 2012 and the 2015 tariffs, there would be no issue with the rates of return provided by these tariffs
 - Any reduction in tariff would have a disproportionate impact on the rural economy and could have the potential to bring a halt to poultry production in the medium term due to significant negative cash flows
 - Concerns that a reduced tariff would put Northern Ireland at a disadvantage with GB and Europe
- 4.64. Several responses also noted that using biomass heating had a strong positive impact on the welfare of the livestock, was economically beneficial and was much more environmentally friendly compared to other alternatives such as heating by oil.
- 4.65. Several responses suggested that two additional options should have been included in the consultation document:
- The option to adjust the format of the Tier 1 threshold (currently 1,314 hours) so that the same amount of heat was eligible for payment at the higher Tier 1 tariff regardless of the size of the installation; and
 - The option to align the tariff for each boiler in the NI RHI Scheme with the tariff available to the GB participants on the date of accreditation.
- 4.66. A common area of criticism related to the fact that DfE annual accounts have been 'qualified' by the Comptroller and Auditor General because of the non-domestic RHI scheme and will remain so until changes to the tariff rates have been made.
- 4.67. Some respondents suggested that expert energy advice should be obtained in developing future schemes, or that they should be run independent of government.
- 4.68. Respondents also said that the setting up and handling of the Scheme has led to a lack of certainty for businesses.
- 4.69. Several responses said that participants who are abusing the Scheme should be identified and removed. One respondent said that audits of the non-domestic NIRHI should include fuel sourcing, checking that boilers are being used appropriately and that buildings are adequately insulated.
- 4.70. Many responses said that the consultation document should have given consideration to:
- The importance of renewable heat targets and obligations under European directives in meeting the original policy objectives of the RHI scheme
 - Future review of the option taken forward to take account of future fluctuations in fuel prices and capital costs
 - The Domestic RHI Scheme
 - splitting the total cost into AME and funding from the block grant

Other comments received throughout the consultation

4.71. In response to most of the questions asked in the consultation, respondents provided comments which did not directly relate to the question, but which related to the future of renewable heat. These general comments included:

- Broader concerns relating to climate change. Respondents said that 80% of the fossil fuels used in Northern Ireland are used for generating heat, and that the heating sector therefore presents the biggest opportunity for reducing fossil fuel use. Specific issues raised included:
 - The impact of carbon emissions on climate change, including extreme weather and air quality
 - Targets and obligations under European Directives, the Programme for Government and Sustainable Energy Framework and potential fines if these targets are not met;
- Issues relating to the current amendments to the tariff level and proposals for any further changes including:
 - The view that the Department should adhere to the principle of 'grandfathering'
 - The arguments that amendments already introduced to the RHI Scheme had resulted in heat users switching away from renewables and that the options set out in the consultation would result in more people moving back to fossil fuels
 - The opinion that there had been a negative economic impact through job losses and cash flow issues due to amendments to the RHI Scheme, and that less than 30% of installers are still operating.
 - The benefits of the RHI, as introduced in 2012, have been understated.
 - Claims that there has been stigma and attempted vandalism due to negative media coverage of the Scheme.
 - The view that a business should not be profiting from its heating system
 - The perception that new participants would be not interested in joining the scheme due to Government 'incompetence'. In particular, retrospective changes undermine public confidence in Government.
- The perception that biomass systems have disadvantages over fossil fuel heating systems, including higher maintenance costs (which many said increase over time), lower reliability compared to oil, higher electricity costs and hassle (e.g. cleaning, pellet delivery, fewer engineers, the boiler takes up more physical space on property).

- Concerns about uncertainty of fuel supply and prices due to Brexit and the dependence on imported fuel.
 - The view that any 'new' RHI Scheme' should draw on lessons from the Public Inquiry
 - The suggestions that advice on how to run biomass boilers to save heat would be invaluable
- 4.72. The Department also received 22 letters or emails which did not specifically answer the consultation questions but provided information on costs associated with their installations and comment on issues including:
- The need for an overarching renewables strategy which promotes all energy efficiency measures including heat and electricity generation, energy efficiency and renewable transport
 - Future opportunities to promote biomethane injection into the grid and anaerobic digestion
 - Concerns that a reduced tariff would put Northern Ireland at a disadvantage with GB and Europe
 - The potential impact of Brexit and how it affects the need for State aid approval
 - The belief that the Scheme in its present form runs contrary to its original policy intention and could be environmentally harmful
 - The view that closing the Scheme would result in participants reverting to fossil fuels and so risk environmental targets
 - The opinion that participants had entered into the Scheme in good faith and were being penalised through no fault of their own
 - Concerns that smaller biomass boilers could be at a disadvantage compared to 100kw boilers
 - The need to prioritise progress on the ongoing inspections process and to take appropriate enforcement action
 - The legislative authority to introduce a buy-out payment
- 4.73. 11 of these 22 respondents stated a clear preference for the long-term future of the scheme as follows - close the Scheme (including a form of buy-out) (3), revert to the original 2012 tariff structure (5), adopt the GB tariff structure (3).
- 4.74. A further 24 correspondents submitted identical letters seeking a new independent inquiry into all sources of renewable energy generation. The letters also called for the closure of the Non-Domestic RHI Scheme.

5. ANALYSIS OF OPTIONS AND NEXT STEPS

5.1. The consultation asked a series of questions about the operation of the Non-Domestic RHI Scheme, grouped into two key areas:

- The future payment structure for small and medium-sized biomass boilers; and
- Proposals for Combined Heat and Power plants.

5.2. This section outlines the key considerations for both areas before going on to outline the anticipated next steps.

Future payment structure for small and medium-sized biomass boilers

5.3. With regards to the questions asked on the future payment structure for accredited small and medium-sized biomass boilers on the Scheme, the majority of respondents to the consultation indicated a preference for:

- reverting to the original tariff structure under the 2012 Regulations (Biomass Tariff Option 3);
- maintaining an annual uplift adjusted in line with the Retail Prices Index;
- maintaining the usage limit at 400,000kWh; and
- maintaining the current banding structure (i.e. not introducing a 20 – 90kW band).

5.4. Respondents' preferences, views and concerns raised throughout the consultation along with all documentary evidence received (detailed throughout section 4) will be carefully considered by the Department in coming to a preferred future payment structure.

5.5. As well as consideration of consultation responses, the Department must consider the available options against a number of key criteria:

- Affordability;
- Rate of return (including State aid compliance);
- Impact on scheme participants;
- Supporting the generation of renewable heat; and
- Operability

Affordability

5.6. A key consideration when setting the future payment structure is whether it is affordable within the NI Non-Domestic Scheme allocated budget from HM Treasury. The projected total cost for each tariff option is shown in the following table:

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

Source: Ricardo Energy & Environment

- 5.7. The estimated total budget AME budget available for the lifetime of the Scheme is approximately £500m. As the table demonstrates, Option 3 above would cost far in excess of this amount. If the Scheme were to revert to the 2012 tariff structure, it would require substantial funding from the NI Executive block grant, in the region of £500m based on current estimates. This does not include the cost of other elements of the Scheme and previous overspends. In practice this would mean depriving other crucial public services of funds and there are well documented pressures in for example, health and education services. With the information available from the consultation responses and in particular the ongoing Public Inquiry into the Scheme it would not be possible to justify reversion to the 2012 tariffs as being in the public interest in respect of the use of the NI Executive budget, value for money and State aid.
- 5.8. All other options contained in the consultation are anticipated to be affordable within the allocated budget.

Rate of return (including State aid compliance)

- 5.9. In identifying a preferred option, the Department must consider all of the evidence carefully and ensure that it does not provide over compensation to participants and that State aid rules are adhered to. Breaching State aid rules can have serious consequences for both policymakers and for businesses in receipt of State aid including for example recovery of aid, suspension or withdrawal of aid schemes and penalties or fines.
- 5.10. The Department has been in regular contact with the European Commission throughout the policy development process in an effort to ensure the future payment structure is compliant with State aid rules. Although the original State aid decision made reference to a range of 8-22%, in recent months the Commission has made it clear that its decisions adopted to date on the Scheme authorised an average rate of return of 12% rather than the tariffs themselves or the wider range of 8-22%.

5.11. The table below sets out the prospective rate of return for each of the tariff options. It shows that all of the options other than Options 1 or 4 are anticipated to deliver a rate of return above 12%.

Option	Internal Rate of Return (%)
1. Tariff structure under the 2017 and 2018 legislation is not continued	0.1
2. Retain tariff structure under 2017 and 2018 legislation	50
3. Revert to tariff structure under 2012 Regulations	100
4. Adopt the base case tariff structure from the Ricardo Tariff Review	12
5. Adopt the tariff structure from the Ricardo Tariff Review excluding fuel costs	25
6. Adopt the hybrid tariff structure from the Ricardo Tariff Review	19
7. Adopt the current GB tariff structure	40
8. Adopt the tariff structure for entrants to the GB Scheme in autumn 2015	35

Source: RHI Taskforce Calculations

5.12. The Department recognises that there are potential issues in respect of the negative Tier 2 tariff under Option 4. In this context, consideration is being given to a variant which provides a prospective 12% rate of return, but without the need for a negative Tier 2 tariff.

5.13. Although Option 4 would be expected to provide a 12% rate of return on a prospective basis, if previous over compensation was taken into account the rate of return would be significantly higher. Another option outlined in the Consultation exercise, to address this issue, was closure of the Scheme accompanied by a compulsory buy-out of participants. As described in the consultation document, under a compulsory buy out mechanism, payments would be calculated to provide participants with a sum equivalent to a 12% return on the additional capital cost of a biomass boiler, less the amount of RHI payments received.

5.14. In order to ensure payments made under a buy-out are consistent with a 12% rate of return over 20 years, a discount factor must be applied to account for payment being received earlier than if payments were made every quarter. An appropriate adjustment would also need to be applied to any previous overcompensation when calculating buy-out payments as well as including only the capital element of previous payments. The net effect of this would be to reduce the level of one-off payment compared with the example set out in the Consultation Document.

5.15. As payments for the compulsory buy out will be specifically calculated to achieve a 12% rate of return, including the impact of over compensation to date, this option is considered to be compliant with State aid rules.

5.16. However, the extent of previous and ongoing over compensation to Scheme participants means that a significant number of participants would have already achieved a 12% rate of return and would therefore receive no further payments under a compulsory buy-out.

Impact on Scheme participants

5.17. The majority of this paper has been given over to setting out the views of respondents to the consultation exercise. Where specific information, particularly on costs associated with biomass installations and the impact of tariff changes on businesses, has been identified through the consultation exercise, it has been used to inform the development of the long-term policy in conjunction with data collected via the running of the Scheme, the Ricardo Tariff Review, and other information that has come into the public domain, for example, through court proceedings and the Public Inquiry into the RHI Scheme. In particular, whilst concerns have been expressed in the public consultation about the analysis undertaken by Ricardo, insufficient supporting evidence was presented to justify a change in the tariff calculations.

5.18. Subject to affordability constraints and compliance with State aid rules, outlined above, the Department will consider carefully how to implement a future payment structure which takes account of the impact on Scheme participants. Some key considerations are:

- Scheme participants prefer an ongoing tariff payment structure rather than closure and buy out. The Department will endeavour to deliver an ongoing tariff structure.
- Scheme participants with very small load factors or higher-than-average capital costs would see negative or very low rates of return under any of the options. This could be mitigated by the inclusion of a voluntary buy out option alongside an ongoing tariff to allow those participants to exit the scheme with a reasonable rate of return.
- Participants did not support an additional band for 20 – 90kW boilers. The Department therefore does not anticipate including this in a future payment structure.

5.19. The consultation also sought views on whether an inflationary uplift should continue to be applied to ongoing tariffs and if so, whether the Retail Price Index (RPI) or the Consumer Prices Index (CPI) should apply. This is in the context that, following an independent review by the Institute for Fiscal Studies highlighting its flaws, the RPI has been de-designated as a National Statistic.

5.20. While the majority of consultation respondents stated a preference for maintaining inflationary uplifts based on RPI, it is not apparent that maintenance or barrier costs rise in line with RPI while fuel price trends remain uncorrelated with general price inflation.

5.21. In light of this, the Department is minded that future tariff payments should rise in line with CPI as the more statistically robust instrument.

Supporting the generation of renewable heat

5.22. The critical policy objective of the RHI Scheme is to support the generation of renewable heat and in doing so contribute towards achieving the target of 10%

renewable heat by 2020 set out in the Executive's Strategic Energy Framework. The Department will give consideration as to how any preferred future payment structure for the Scheme will affect the generation of renewable heat.

- 5.23. The Scheme is currently suspended to new applicants. Therefore considerations on the support of renewable heat is limited here to the effect that each option is likely to have on the behaviour of participants currently on the Scheme.
- 5.24. Many respondents to the public consultation referred to a 16.7% increase in the price of wood pellets since the Ricardo analysis was undertaken. However, this is in the context of a 21% increase in the price of oil over the same time period which would suggest that there should be no widespread reversion to the use of fossil fuel following the introduction of a reduced tier 1 and zero tier 2 tariff. This is in the context that the Ricardo analysis showed that the additional hassle cost of using a biomass boiler was significantly lower than originally estimated.

Operability

- 5.25. Any future payment structure must be able to be implemented by the Department and its delivery partner, Ofgem. For instance, it has come to light that the introduction of a negative tier 2 tariff as described at Option 4 in the consultation documents could prove very difficult to administer. It would require users with higher load factors to receive incentive payments early in the year before then making payments back to the Department/Ofgem as they move onto the second (negative) tier. The additional time and expense of this, to both the Department and Scheme participants, is considered sub-optimal. This could be mitigated by, for instance, a shift towards an annual payment cycle or an adjustment of the tiered tariffs in such a way that would deliver the same overall return without the need for a negative tier 2.
- 5.26. The Department will consider this and any other implementation issues in coming to a preferred option for the future payment structure of the Scheme.

Combined Heat and Power (CHP) Plants

- 5.27. The Ricardo Tariff Review concluded that no public subsidy was required in respect of CHP plants as the lifetime cost of this technology is lower than the fossil fuel alternative and would deliver an estimated return on investment of 30%.
- 5.28. While respondents were in favour of subsidising CHP Plants, there was no evidence provided as to why that would be justified, in the context of the high return on investment identified in the Ricardo analysis. There are currently no CHP plants accredited on the Non-Domestic NI RHI scheme and the Scheme is currently not open to new applicants. Without robust evidence to suggest that a public subsidy is required to encourage uptake of the technology, the Department is not minded to open the Scheme to new CHP applications.

Next Steps

5.29. The Department will now proceed to identify a preferred option for the long-term payment structure. The Secretary of State for Northern Ireland will then be asked to sponsor legislation in Westminster which would give effect to that option (in the absence of a Northern Ireland Assembly). This will ensure the preferred option is subject to Parliamentary scrutiny.