

Notification paper

Subject: Revision of State aid SA.34140 – 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 it intends to revise the operating rules of the Renewable Heat Incentive scheme in Northern Ireland. Subject to the Commission's agreement, the UK would intend that new operating rules come into operation on either the 1st April 2017 or the day after the European Commission gives approval, whichever is the later date.

2. In summary, these revised rules are intended to ensure:
 - Expenditure is returned to and remains within budget limits;
 - The potential for fraud and abuse is reduced; &
 - The potential for overcompensation is eliminated.

3. The UK is content that the proposed changes to the scheme are consistent with the 2014-2020 Guidelines on State aid for environmental protection and energy and that the Commission should be able to conclude the revised scheme is still compatible with common market in accordance with Article 107(3)(c) of the TFEU.

4. However, the UK would ask the Commission to recognise that there is a very real need to take action quickly to bring the scheme budget under control and therefore, it would be grateful if the Commission would consider progressing a notification on the basis of the Simplified Procedure and if this procedural route is not possible, that the Commission engages as soon as possible with UK authorities on this pre-notification so that the Commission can adopt a decision no later than 31 March 2017.

5. The UK would also ask the Commission to note that while there is an immediate need to take action to reduce the net cost to the Northern Ireland Executive of the RHI scheme in the 2017-18 financial year, this is only the first stage of a comprehensive programme to ensure the value for money (VfM) and financial sustainability of the scheme going forward.
6. The UK is planning to conduct a more in-depth review of future expenditure projections, particularly underpinning assumptions, to determine whether an alternative approach would further improve VfM, financial sustainability in 2018-19 and beyond, deal with past overcompensation, whilst also ensuring a fair return on investment to scheme participants. It is anticipated that this review will, inform a set of options for consultation with scheme participants and wider stakeholders, before a final decision is taken by the Executive. That review will be informed by a comprehensive programme of inspections and related enforcement work.
7. If further changes to the scheme are considered necessary as a result of this process, the UK confirms it will notify these changes to the Commission, in good time, in accordance with its obligations under Article 108(3) of the Treaty on the Functioning of the European Union.
8. However, if the Commission feels it would be appropriate to only provide further State aid approval for the period up to 31 March 2018, the UK would be content with this approach.
9. Finally, the UK would ask the Commission to note that these changes have been agreed by the Ministers of the Departments of Economy (Simon Hamilton) and Finance (Máirtín Ó Muilleoir) as well as the Northern Ireland Assembly, which passed the Renewable Heat Incentive Scheme (Amendment) Regulations (Northern Ireland) 2017, in accordance with the Affirmative Resolution procedure¹. A copy of these Regulations is attached to

¹ In the Northern Ireland Assembly, the Affirmative Resolution procedure requires the Members of the Assembly to debate the proposed Regulations and then to approve these by a majority vote.

this pre-notification document and the UK would highlight that there is a sunset clause in these Regulations that means they expire on 31 March 2018.

10. This pre-notification paper is divided into two sections. The first section deals with the background to the need to re-notify the NI RHI scheme, details the revisions the UK plans to take and the rationale for the revised tariffs. The second section deals with the compatibility of the NI RHI scheme with the Commission's Guidelines on State aid for environmental protection and energy 2014-2020.

SECTION 1 – BACKGROUND and NI RHI SCHEME REVISIONS

Background

11. As was detailed at the informal meeting with the Commission on 7th December 2016, the (RHI) Scheme was introduced in November 2012 to support the UK objective of contributing to the Renewable Energy Directive target of 20% overall EC energy consumption from renewable sources by 2020.
12. The UK's share of this target is 15%, which the UK plans to achieve through a combination of 12% renewable heat and 30% renewable electricity by 2020.
13. In Northern Ireland, the specific target for renewable heat is 10% by 2020.
14. As detailed in paragraphs 3 to 8 of the Commission's decision letter (SA.34140), as the market for renewable heat in the UK and Northern Ireland was very small and underdeveloped, measures were required to stimulate the development of the market. However, as detailed in the original notification document, primarily because in Northern Ireland the primary heating fuel is oil (as opposed to natural gas in Great Britain), it was decided that Northern Ireland should develop a separate incentive scheme to that in Great Britain

and consequently two separate but similar renewable heating incentive schemes were developed.

15. The GB RHI scheme was approved on 28 September 2011² and has subsequently been amended a number of times.
16. The NI RHI scheme was approved by the Commission on 12 June 2012³ and was originally intended to provide aid for new installations, from one of four renewable energy sources⁴, until 2020, with payments being made quarterly for the lifetime of each technology for 20 years. The final payments under the scheme being made in 2040.
17. It should be noted that this revision of the NI RHI scheme does not impact in any way on the operation of the GB scheme.

Scheme Performance & Tariff Changes (November 2015)

18. The NI RHI Scheme has accredited 1,974 renewable heating installations to date.

Biogas injection	0
Biomass Boilers	1961
Ground Source	10
Solar Thermal	3

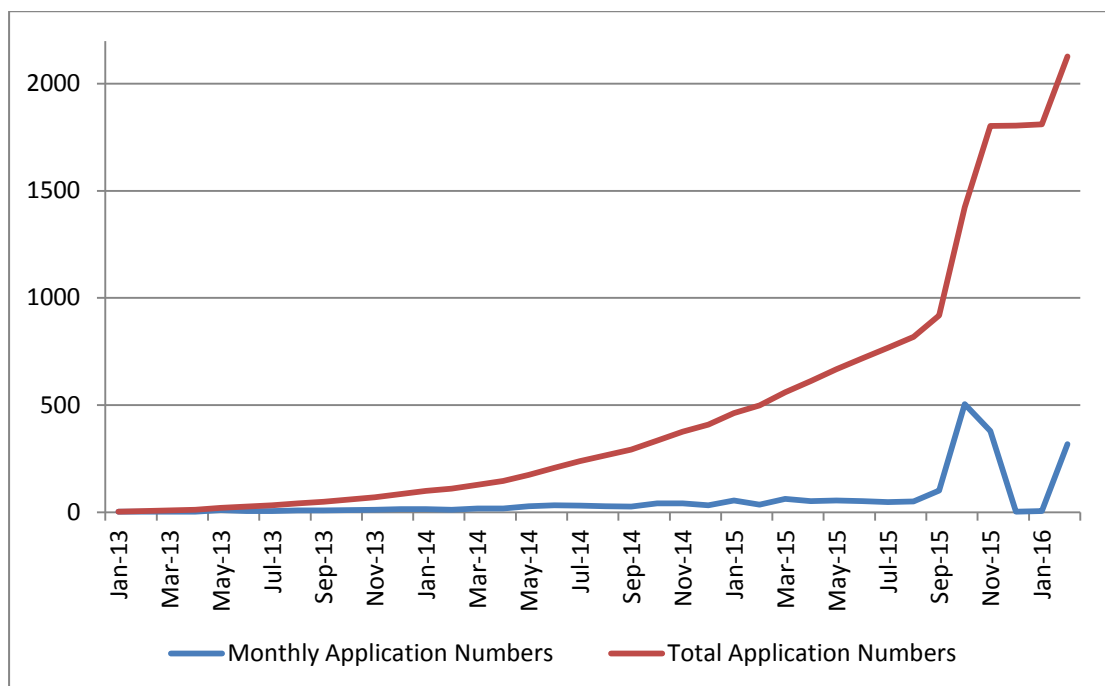
19. As was discussed at the meeting on 7th December 2016, scheme uptake was initially low in the first few years with only 409 applications received by the end of 2014 and, at that stage, the concern was how best to increase the uptake of the scheme.

² http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=3_SA_32125

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

⁴ Biomass (including solid waste), Ground source (deep geothermal, ground source and water source heat pumps), Biogas (biomethane injection and biogas combustion, except from landfill gas) and Solar (solar thermal up to 200kw).

20. However, in early summer 2015, it became apparent that the rate of applications was increasing rapidly.
21. This increase in applications also had automatic and unstoppable increased spending implications for the department, as the statutory nature of the scheme made it impossible to cease, suspend or otherwise delay applications without first making legislative changes via the affirmative resolution of the NI Assembly.
22. The Department started the processes needed to amend the RHI scheme and the requisite Regulations in summer 2015, but when the Minister announced the plans in early September there was a 985 spike in the number of applications in the September – November 2015.



23. On 18 November 2015, the following changes were made to the scheme rules for small and medium biomass boilers:

- An annual tiered tariff was introduced, in which the first 1,314 operating hours⁵ would be paid at the standard rate, reducing thereafter to 1.5 p per kWh;
 - The medium biomass band was widened from 20 – 100kW⁶ to 20 - 200kW⁷ (in line with the re-banding in the UK mainland scheme); and
 - An annual heat cap of 400,000kWh was imposed, after which no payments would be made.
24. In relation to the imposition of an annual heat cap, while the introduction of a tiered tariff reduces the risk of ‘gaming’ (i.e. the risk installations would be operated over and above the required kilowatt hours just to generate RHI income) it was also decided that an annual heat cap should be imposed as a further safeguard. Once this annual cap on eligible kilowatt hours is reached, the tariff reduces to zero.
25. Following discussions with the then Department for Agriculture and Rural Development in Northern Ireland (DARD)⁸, it was agreed this annual heat cap should be 400,000kWh. This equates to the maximum annual heat requirement for a typical poultry house (388,000 kWh) plus a small contingency (12,000 kWh) for the additional heat that might be required in an exceptionally cold year.
26. These changes were considered to be necessary and proportionate to ensure the policy objectives of the scheme would continue to be met (including compliance with the Renewable Energy Directive), whilst also ensuring that:
- the potential for overcompensation (stemming from an over-generous tariff) would be reduced;

⁵ Tier 1 aims to mainly cover the capital cost repayment and remove the incentive to game the RHI by over-producing heat. 1314 hours is the number of hours associated with a 15% load factor (i.e. 365 x 24 x 15%) and is an estimate of the lower-end of the range of possible load factors.

⁶ 20kWth and above up to but not including 100kWth

⁷ 20kWth and above up to but not including 200kWth

⁸ As a result of the departmental restructuring in 2016, DARD is now part of DAERA – the Department of Agriculture, Environment and Rural Affairs.

- expenditure would remain within budget limits; and
 - the potential for fraud and abuse would be reduced.
27. The Commission should note however that these changes impacted only on new installations after 18 November 2015 and did not apply to pre November installations.
28. The UK also acknowledges, with regret, that these changes should have been notified to the Commission in accordance the provisions of the Commission's Procedural and Implementing regulations.

Scheme Suspension

29. It soon became clear that the changes introduced in November 2015 were insufficient. In the 10 week period between the announcement of the changes and their implementation, there was an unprecedented spike in demand, with almost 1,000 applications being received in ten weeks. This more than doubled the total number of installations on the scheme, creating significant budgetary pressures.
30. This led to a decision to suspend the scheme to new applications from 29 February 2016. Following the announcement of this decision, there was another (smaller) spike in applications and a further 300 applications were received prior to the suspension of the scheme.

Scheme Issues

31. The scheme has been the subject of a number of highly critical reviews and allegations of potential scheme abuse. These reviews have highlighted that, while the original policy intentions of the scheme may have been laudable, significant failings in the design, oversight and control of the scheme have led

to the potential for over-compensation and renewable heat usage being supported that is not useful or useable.

Over-compensation

32. UK authorities are now aware that the initial tariff rate set in 2012 for the 20 – 100kW biomass boilers was set at too high a level and that tiering and a cap should have been introduced at the beginning of the scheme in order to control the budget and avoid over-generation of heat.
33. As detailed in section 3.2.1 of the Commission's State aid approval, the NI RHI scheme was intended to incentivise participants by providing an average rate of return of 12% over the lifetime of the technology.
34. The Commission's approval reads '*...the Commission notes that this (the discount rate of 12%) 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...*'
35. However, analysis carried out by the Northern Ireland Department for the Economy (DfE) shows that **some** scheme participants with 99kW biomass boilers on the (pre 18 November 2015) flat 6.5 p/kWh tariff **could** be set to receive internal rates of return in excess of 100% if payments continue for 20 years.
36. Clearly this far exceeds the 12% rate of return agreed with the Commission and, as a result, it is proposed that the amount of State aid within the small and medium biomass tariffs should be substantially reduced.
37. This is to be achieved by restricting the 6.5p tariff to only the first 1314 hours (i.e. 15% of running hours), then reducing the tariff to 1.5p/kWh tariff and then

finally reducing the tariff to zero for any heat output over 400,000 kWh per annum.

38. The introduction of the tier into the tariff at 1314 hours has the effect of regulating rates of return. Furthermore analysis by DfE, which has been validated by the Department of Finance in Northern Ireland, shows that this action will substantially reduce rates of return.
39. As a result, the proposed reduced RHI payments on a 99kW boiler for the incoming financial year (2017-18) would result in, on a levelised basis, a rate of return around 12% and will ensure that future payments are returned within the limits of the previous State aid notification.

Load Factor / Running Time

40. The analysis undertaken by DfE also shows that one of the critical flaws in the scheme design was that it was assumed biomass boilers would be operated at much lower load factors (i.e. heat for offices and homes as opposed to heat for processes and 24/7 activities such as the poultry broiler production).
41. In particular, paragraph 34 of State Aid approval states: *'In order not to provide perverse incentives to waste heat, each reference installation is calibrated to have a specific load factor and the tariff is calculated with reference to that load factor. For example, a load factor of 15% means that the installation is used at full capacity for 15% of the time'*.
42. DfE's analysis now shows that the actual load factor for many installations, at just over 40%, is much higher than originally intended. As a consequence it is now clear the tariff was set too high and the internal rates of return are unreasonably high, resulting in the potential for overcompensation.
43. While the UK accepts some installations have a legitimate basis for higher load factors (for example, poultry farms), it is now evident that a tiered tariff should have been employed from the outset (as was the case with the RHI

Scheme in the rest of the UK) to better regulate rates of return, avoid over-compensation and remove any perverse incentive to waste heat to increase payments.

2017/18 Budget – Pressures, Risks and Uncertainties

44. As detailed in the Commission's State aid approval decision, the NI RHI scheme was originally estimated to have a budget of GBP 25 million from 2011 to 2015, which was expected to increase by GBP 5 million per year from 2015 until 2020.
45. The budget for the GB and the separate Northern Ireland scheme are set nationally. The Northern Ireland share of the budget is limited to its population share, and any expenditure incurred above this share needs to be met by the NI Executive.
46. Based on the population share (3%) of the total UK budget for RHI, the Northern Ireland allocation in 2016/17 is GBP 18.3 million. The share of the budget for the incoming financial year, 2017/18, is projected to be in the order of GBP 22 million.
47. However, due to the spikes in the number of applications and the over generous tariff structure, the projected cost is nearly GBP 50 million for 2017/18 – some £28 million beyond the budget of £22 million. Without corrective action the NI Executive will face an ongoing financial pressure of around £25 million per annum for the next 20 years.
48. The actions the UK is taking are expected to bring the scheme budget back under control and, whilst this may change once the abuse actions outlined in the next section are implemented, DfE expects the budget of the scheme going forward will be broadly in line with its allocation from HM Treasury, namely:

Financial Year	HM Treasury Allocation
16/17	GBP 18.3 million
17/18	GBP 22.3 million
18/19	GBP 25.7 million
19/20	GBP 28.9 million
20/21	GBP 30.0 million

49. However, the UK also acknowledges there are risks both ways. Based on available data, the estimate for 2017/18 is around GBP 25 million against an allocation of GBP 22.3 million. It is possible there are some estimation risks, which might mean that the actual could be beyond the GBP 25 million estimate depending on the actual invoiced heat loads compared to that projected. However, there are also material risks on the other side around whether or not an appreciable behavioural correction effect occurs with the move to the November 2015 tariffs and whether there might be a marked reduction in heat and a marked reduction in payments compared to that estimated.
50. Either way, the usage information which will be gleaned from the review in the coming year will assist DfE understand these risks better and will be used to develop and assess any further changes and refinements to the scheme.
51. Finally, there is also uncertainty around the remaining applications that have yet to be accredited and hence, without actual heat output data, it is hard to estimate their budgetary requirement. Again, this will be clearer as the next year progresses.
52. For now, the UK simply asks the Commission to approve a budget for the 2017/18 year of GBP 25.3 million.

Potential Scheme Abuse

53. On 29 July 2016, DfE commissioned an independent review into allegations relating to abuse of the non-domestic RHI Scheme. In addition to examining the scheme guidance and controls, the Review considered whether installations generated heat for an eligible purpose and whether they met the policy intentions of the Scheme. That is to generate heat, by renewable means, which would still need to be generated without the incentive of the RHI Scheme.
54. During this review 295 installations were inspected involving 78 businesses and representing around 20% of payments for the NI RHI Scheme. The inspections were not randomly selected, rather they targeted based upon a range of identified risk factors.
55. The results of the site inspections were allocated to one of four categories as follows:
- Category 1: Participants generating heat for an eligible purpose within the intentions of the scheme
 - Category 2: Participants generating heat for an eligible purpose, which does not meet the intentions of the scheme
 - Category 3: Participants generating heat for an eligible purpose, but using heat in a way that is not energy efficient
 - Category 4: Generating heat which may be for an ineligible purpose and therefore may be in breach of the scheme.
56. Unfortunately the Review found that only 47% of inspection results fell into Category 1, (i.e. they were considered to be generating heat for an eligible purpose within the intentions of the scheme). This is obviously a matter of grave concern and further work is now ongoing to investigate the potential to

take enforcement action where there is evidence that there has been non-compliance with the eligibility requirements.

Corrective Action

57. As the Commission would expect DfE is now urgently taking forward a number of actions to address these failings and weaknesses in the NI RHI scheme to improve the scheme's value for money and reduce future costs.

These actions fall under three headings:

- Governance and Control

Strengthening the governance and control arrangements between the Department and the scheme administrators (Ofgem).⁹

- Audit and Enforcement

Implementing a much more rigorous approach to audit, inspection and enforcement, including taking forward appropriate action on the installations that fall into Categories 2, 3 & 4.

- Cost Controls and Rate of Return Regulation

Given the potential overcompensation at current tariff rates, as well as the budgetary pressures this creates for the NI Executive, as already detailed, DfE has amended the scheme legislation to extend the November 2015 tiered tariffs¹⁰ and cap¹¹ to all small and medium biomass installations. This would bring the rates of return, on future payments, back within the range initially agreed with the Commission. This action would also significantly reduce the incentive for scheme participants to generate heat wastefully, for the predominant purpose of increasing their support payments.

⁹ Office of Gas and Electricity Markets

¹⁰ The first 1,314 operating hours will be paid at the standard rate, reducing thereafter to 1.5 p per kWh.

¹¹ An annual heat cap of 400,000kWh was imposed, after which no payments would be made.

Renewable Heat Incentive Scheme Tariffs

58. The following table details the tariffs in the legislation

Tariff name	Installation capacity	Tariff Pence kWh (June 2012) ¹²	Tariff Pence kWh (For installations accredited after 18 November 2015) ¹³	Tariff Pence kWh (For all small and medium biomass installations)
Small Biomass	Less than 20kWth	6.2	Tier 1: 6.7 Tier 2: 1.5	Tier 1: 6.8 Tier 2: 1.5
Medium Biomass	20kWth and above up to but not including 100kWth ¹⁴	5.9	Tier 1: 6.4 Tier 2: 1.5	Tier 1: 6.5 Tier 2: 1.5
Large Biomass	100kWth ¹⁵ and above up to but not including 1000kWth	1.5	1.5	1.5
Combined Heat and Power ¹⁶	New systems all sizes	N/A	3.5 ¹⁷	3.5
	Conversion from fossil fuels all sizes	N/A	1.7 ¹⁸	1.7
Small heat pumps	Less than 20kWth	8.4	9.0	9.0
Medium heat pumps	20kWth and above up to but not including 100kWth	4.3	4.6	4.6
Large heat pumps	100kWth and above	1.3	1.3	1.3
All solar connectors	Below 200kWth	8.5	9.1	9.1
Biomethane and biogas combustion	All biomethane injection and biogas combustion below 200kWth	3.0	3.3	3.3

¹² Tariffs are quoted from the legislation and are uplifted annually using RPI

¹³ Tariffs are quoted from the legislation and are uplifted annually using RPI

¹⁴ Up to but not including 200kWth from 18 November 2015

¹⁵ 200kWth and above from 18 November 2015

¹⁶ Prior to November 2015 CHP was included in Biomass tariffs

¹⁷ From 5 October 2015

¹⁸ From 5 October 2015

Future applications to the NI RHI scheme

59. As noted previously the NI RHI scheme was suspended to new applications in February 2016. The actions that have been detailed previously are all therefore targeted at existing installations.
60. There are no plans to re-open the NI RHI scheme to new applications during 2017/18¹⁹.
61. As the scheme is meeting a policy objective of common interest (i.e. a reduction in carbon emissions from fossil fuels), DfE has not ruled out the possibility that the scheme may be opened to new applications in the future.
62. If a re-opening of the scheme is one of the outcomes of the planned review and consultation exercise, the UK will address this in a subsequent notification.

SECTION 2 - UK COMPATIBILITY ASSESSMENT

63. As the non-domestic RHI schemes in the UK are targeted at undertakings, the UK has concluded it is indisputable that State aid is present in the GB and NI RHI schemes.
64. Therefore this section of the pre-notification paper focuses solely on the compatibility of the State aid being provided under the non-domestic part of the NI RHI scheme.

¹⁹ As discussed in the conference call on 28 February 2017 and clarified in the letter dated 10 March 2017, the two CHP schemes that are currently undergoing pre-accreditation, will not be accredited before 31 March 2018 and therefore EC approval for the CHP tariffs introduced from 18 November 2015 is not required at this stage.

Guidelines on State aid for environmental protection and energy 2014-2020

65. Although the proposed revisions of the NI RHI scheme only impact on two specific tariffs and all other tariffs are unchanged, the UK understands that as the revisions to the scheme are considered legally to be new aid, the Commission has to assess the compatibility of the NI RHI scheme against the Guidelines on State aid for environmental protection and energy 2014-2020 (the Guidelines).
66. The UK is satisfied that as the revisions are essentially a tightening of the operating rules of the scheme there are unlikely to be any trade effects that were not foreseen and considered by the Commission when it approved the original scheme.
67. In relation to its compatibility assessment, the UK would draw attention to the following points.

Scope

68. The NI RHI scheme is aimed at encouraging undertakings to switch from a fossil fuel source of energy for heating to a renewable source of energy. The NI RHI scheme therefore falls within the scope of the Guidelines, in particular section 3.3, aid to energy from renewable sources.
69. In relation to this the UK notes that some of the scheme beneficiaries are poultry farmers and are therefore involved in primary agricultural production. In relation to this, the UK notes that para 14(b) in the Guidelines details aid for environmental protection in favour of undertakings active in primary production is allowed under the Guidelines providing there are no specific agricultural rules. The UK has considered the European Union Guidelines for State aid in the agricultural and forestry sectors and in rural areas 2014 to 2020 and notes that these only provide for investment aid for renewable heat, see para 137(b). The UK is therefore satisfied that there are no specific rules

in the agricultural rules and the State aid for all beneficiaries under the NI RHI scheme falls under the Guidelines.

Contribution to an objective of common interest

70. As was detailed in the Commission's decision letter on the NI RHI scheme, the scheme is intended to help NI and the UK contribute to the achievement of the targets in the Renewable Energy Directive (Directive 2009/28/EC).
71. The Commission's Guidelines also detail that State aid for environmental protection and energy objectives will be considered compatible with the internal market within the meaning of Article 107(3)(c) of the Treaty if, on the basis of the common assessment principles set out in the Guidelines, aid leads to an increased contribution to the Union environmental or energy objectives without adversely affecting trading conditions to an extent contrary to the common interest and that the specific handicaps of assisted areas will be taken into account.
72. In relation to this last point, the UK would remind the Commission that all of Northern Ireland is an Assisted Area and has been designated by the UK as a *Non-predefined 'c' area*. See SA.38113 – United Kingdom Regional Aid Map 2014 – 2020.
73. The UK would also remind the Commission that the Guidelines detail that the Europe 2020 strategy set targets and objectives for sustainable growth to support the shift towards a resource-efficient, competitive low-carbon economy and that it was envisaged that a low carbon economy with a significant share of variable energy from renewable sources requires an adjustment of the energy system and in particular considerable investments in energy networks.
74. In relation to this, the UK notes that the original decision letter for the NI RHI scheme details that:

- a. the Renewable Energy Directive (Directive 2009/28/EC) set a binding target for energy consumption coming from renewable sources, establishing that 20% of overall EU's energy consumption should come from such sources by 2020;
 - b. The UK's share of this target is 15%, and UK authorities plan to achieve this by a combination of 12% renewable heat and 30% renewable electricity by 2020;
 - c. Northern Ireland ("NI"), as part of the Member State, is expected to contribute to the UK targets and therefore must consider measures to increase the levels of renewable energy; and
 - d. As a consequence, as its contribution to the UK objective, the NI Executive set a target that 10% of all heat should come from renewable sources by 2020.
75. In the NI RHI decision letter, it was detailed that the heat demand in Northern Ireland at that time was estimated to be 17,362 GWh per year, of which around 1.7% or 300 GWh came from renewable sources. After factoring into the assessment a drop in NI's overall heat demand, which was forecast to about 16.7 TWh per year in 2020 (based on the fact that rises in demand will be outweighed by efficiency improvements), the 10% target was estimated to translate into 1.6T Wh. This meant a 10% increase correlated to an increase in heat from renewable sources of 1.3 TWh compared to existing levels.
76. At the time the NI RHI scheme was assessed by the Commission, the objective of the scheme and the NI target were accepted as being well defined and meeting an objective of common interest.
77. Despite the operational problems the UK has encountered with the Northern Ireland scheme, the objective and target have not changed, the UK would suggest the NI RHI scheme is still contributing to an objective of common interest.

Need for State Intervention

78. The UK accepts without qualification that State aid should only be targeted towards situations where aid can bring a material improvement that the market cannot alone deliver.
79. In relation to the NI RHI scheme, the scheme was clearly designed to address a market failure and, as evidenced by the very low numbers of applications in the early years of the scheme, it seems clear that the vast majority of undertakings now benefitting from the scheme would not have committed to the investment required if no financial assistance had been available.
80. In relation to the future of the NI RHI scheme, if the scheme is opened again to new applications, the UK confirms that it will ensure the tariff levels are at a level such that only genuine renewable heating installations are approved.
81. However, the UK also accepts that some of the current beneficiaries may only have applied for the scheme in order to make money by taking advantage of the flaws in the design of the scheme. In relation to this the UK would ask the Commission to note that there will be an inspection of all installations to ensure installations that we detect and remove any installations which are not complying with the requirements of the scheme.

Appropriateness of the aid

82. The UK remains of the view that State aid, in the form of operating aid, is an appropriate mechanism to encourage undertakings to switch their heating to a renewable source of energy.
83. The problems encountered with the NI RHI scheme have not changed this assessment and, if anything, have reinforced this conclusion.
84. The UK would also remind the Commission that the RHI scheme operates right across the UK and the continuation of the NI RHI scheme is deemed

essential to ensure there continues to be public confidence in the RHI brand so that undertakings and private individuals have the confidence to continue switching to renewable heat.

Incentive effect

85. The UK accepts that aid must have an incentive effect and that aid must not subsidise the costs of an activity that an undertaking would not anyhow incur and must not compensate for the normal business risk of an economic activity.
86. In relation to the RHI scheme, the UK has previously demonstrated that the production costs of heat from renewable energy sources are higher than heat production costs from conventional sources, and that, without the scheme, undertakings have no incentive to invest in the generation of heat from renewable energy sources, as such activity would be unlikely to be economically viable.
87. However, it is now clearly evident that the scheme provided too great an incentive effect for small and medium biomass boilers.
88. The actions the UK is now taking will correct this error.
89. As noted previously, the scheme is suspended to new applications. If the scheme reopens, the UK confirms that, as required by the 2014 Guidelines:
 - a. In all cases, installations will only eligible for the NI RHI scheme where work on the project has not already started prior to the aid application by the beneficiary;
 - b. The application form will include details of the applicant's name, the size of the undertaking, a description of the project, including its location and start and end dates, the amount of aid needed to carry it out and the eligible costs.

- c. In the application form, beneficiaries must describe the situation without the aid and, in addition, large undertakings must submit documentary evidence in support of the counterfactual scenario described in the application form;
- d. The granting authority will carry out a 100% credibility check of the counterfactual scenario and confirm that the aid has the required incentive effect.

Proportionality

- 90. The UK acknowledges that environmental and energy aid should only be considered to be proportionate if the aid amount per beneficiary is limited to the minimum needed to achieve the scheme's environmental protection or energy objective.
- 91. In the case of the NI RHI scheme, as is now apparent, the aid for small and medium biomass boilers was not proportionate.
- 92. However, the UK is now content that this flaw in the design of the NI RHI scheme has been addressed by the introduction of tiering and an annual heat cap and that all future tariff payments will be proportionate and in line with the original intention of the scheme as previously notified to the Commission.

In particular, the review and consultation in 2017 will inform decisions on the appropriate level of tariff rates beyond 2017/18.

Eligible costs

- 93. The UK can confirm that the eligible costs in the NI RHI scheme remain unchanged from that originally approved by the Commission. These costs are the extra investment and operating costs of a renewable heating system when compared to a conventional fossil fuel heating system.

94. The UK would also remind the Commission that the scheme was originally designed with in accordance with para 109, Option 1, of the Community Guidelines on State aid for environmental protection (the 2008 Guidelines).
95. These detail that Member States may grant operating aid to compensate for the difference between the cost of producing energy from renewable sources, including depreciation of extra investments for environmental protection, and the market price of the form of energy concerned. Operating aid may then be granted until the plant has been fully depreciated according to normal accounting rules. Any further energy produced by the plant will not qualify for any assistance. However, the aid may also cover a normal return on capital.
96. UK is content that the NI RHI scheme is still in accordance with para 109, Option 1.
97. However, the UK acknowledges that the 2008 Guidelines have been replaced by the Guidelines for 2014 – 2020 and the UK has therefore considered the requirements of paragraphs 72 – 76 in the Guidelines.
98. In particular, the UK notes the requirements of paras 73(b) and 74.

73(b) the eligible costs are the extra investment costs established by comparing the aided investment with the counterfactual situation in the absence of State aid. In principle, reference can be made to the cost of a technically comparable investment that would credibly be realised without aid and which does not achieve the common interest objective or that only attains that objective to a lesser degree.

74 Annex 2 contains a list of the relevant counterfactual scenarios or eligible cost calculations reflecting the counterfactual scenario that should be used in similar cases. The Commission may accept alternative counterfactual situations if duly justified by the Member State.

99. In relation to the NI RHI scheme, UK notes the counterfactual scenario eligible in Annex 2 for a renewable heating system is “the extra investment cost compared to the cost of a conventional heating system with the same capacity in terms of the effective production of energy.”
100. As was detailed in the original decision oil is, by far, the main fuel used for the production of heat and it is therefore appropriate to use an oil heating system as the counterfactual.

Cumulation of aid

101. When the scheme was originally notified to the Commission, the UK confirmed that new installations benefiting from the NI RHI scheme could not also receive any further operating or investment or aid.
102. This prohibition is detailed in Provision 23 of the Renewable Heat Incentive Scheme Regulations (Northern Ireland) 2012.

<http://www.legislation.gov.uk/nisr/2012/396/contents/made>

Avoidance of undue negative effects on competition and trade

103. The UK reminds the Commission the RHI scheme has been in operation since 2012 and in GB since 2011 and during this period there have never been any complaints from competitors in other Member States.
104. The UK also notes the following points:
- a. The main effect of the scheme is to encourage undertakings to switch from fossil fuels to renewable sources of heat;
 - b. Although currently suspended to new applications, the scheme was open to undertakings in the UK;

- c. The scheme does not significantly reduce the operating costs and therefore has no more than a marginal impact on competition between undertakings in the product markets affected;
 - d. The scheme is unlikely to encourage undertakings to relocate to the United Kingdom;
 - e. The aid is proportionate and limited to the extra investment costs, so the negative impact of the aid is softened.
105. However, the UK also accepts that, in some cases, the aid available has incentivised some profit seeking undertaking to invest purely because they perceived there to be a windfall financial advantage the undertaking. The revisions being proposed address this type of perverse behaviour.
106. Therefore the UK concludes the negative effects of the aid measure in terms of distortions of competition and impact on trade between Member States are extremely limited and outweighed by the positive effects in terms of the reduction in the amount of carbon produced from fossil fuels, which is an objective of common interest.

Transparency

107. The UK notes the transparency requirements in the Guidelines and will publish on the DfE State aid webpages, the full text of the approved aid scheme, its implementing provisions (or links to these).
108. The UK also notes that for new aid granted after 1 July 2016, Member States are required to publish the identity of the granting authority (DfE) and (when the cumulative amount from the NI RHI scheme exceeds EUR 500,000) the identity of the individual beneficiaries, the form and amount of aid granted to each beneficiary, the date of granting, the type of undertaking (SME/large company), the region in which the beneficiary is located (at NUTS level II) and

the principal economic sector in which the beneficiary has its activities (at NACE group level).

109. As required by the Guidelines, this information must be kept for at least 10 years, after the decision to grant the aid has been taken, and will be available to the general public without restrictions
110. In the case of the NI RHI scheme, as the scheme was suspended in February 2016, the UK has concluded it is not within the scope of this individual reporting requirement. The UK would be grateful if the Commission could confirm this is the case.

Aid for energy from renewable sources other than electricity

111. The UK notes that section 3.3.2.2 of the Guidelines contains additional conditions for Aid for energy from renewable sources other than electricity and that for energy from renewable sources other than electricity, operating aid will be considered compatible with the internal market if the following cumulative conditions are met:
 - a. the aid per unit of energy does not exceed the difference between the total levelised costs of producing energy ('LCOE') from the particular technology in question and the market price of the form of energy concerned;
 - b. the LCOE may include a normal return on capital. Investment aid is deducted from the total investment amount in calculating the LCOE;
 - c. the production costs are updated regularly, at least every year; and
 - d. aid is only granted until the plant has been fully depreciated according to normal accounting rules in order to avoid that operating aid based on LCOE exceeds the depreciation of the investment.

112. The UK is satisfied that this is the case and it confirms that the production costs will be reviewed regularly, at least every year, and that aid will only be granted until the plant has been fully depreciated according to normal accounting rules.

Evaluation

113. The UK notes the Commission may conclude that that certain categories of schemes may be made subject to a four year time limit and an ex post evaluation requirement and that this evaluation should be undertaken and submitted to the Commission within four years.
114. The UK also notes that such evaluations will be carried out for schemes where the potential distortion of competition is particularly high, but that, in order not to put disproportionate burden on Member States and on smaller aid projects, evaluation only applies for aid schemes with large aid budgets, containing novel characteristics or when significant market, technology or regulatory changes are foreseen.
115. The UK notes that the potential for distortion of competition in the NI RHI scheme is low, that the budget is relatively small, that the scheme doesn't have any particularly novel characteristics and the technologies employed are now all reasonably mature.
116. The UK therefore concludes that an evaluation plan should not be necessary for the NI RHI scheme.
117. The UK also notes that the NI RHI scheme tariffs have only been approved by the NI Assembly for the period to 31 March 2018 and that there will be a further review and consultation exercise undertaken during 2017, following which a further notification to the Commission is likely.
118. However, if the Commission feels an ex post evaluation requirement should be imposed on this scheme, the UK would be happy to oblige, on the condition that due to the need to take action quickly to bring the NI RHI

scheme budget and the potential for overcompensation under control, the Commission agrees the evaluation plan can be submitted with the notification which seeks approval for the period beyond 1 April 2018.

Reporting and monitoring

119. In accordance with Council Regulation (EC) No 2015/1589 and Commission Regulation (EC) No 2015/2282, the UK commits to the submission of annual reports to the Commission on the NI RHI scheme.

120. The UK also commits to maintain detailed records on the NI RHI scheme for 10 years from the date on which the aid was granted and will provide the Commission, upon request, with whatever information the Commission requires.