

**EXPLANATORY MEMORANDUM TO**  
**THE RENEWABLE HEAT INCENTIVE SCHEME REGULATIONS 2017**

**2017 No. [XXXX]**

**1. Introduction**

- 1.1 This explanatory memorandum has been prepared by the Department for Business, Energy and Industrial Strategy and is laid before Parliament by Command of Her Majesty.

**2. Purpose of the instrument**

- 2.1 This instrument makes changes to the Non-domestic Renewable Heat Incentive scheme (“Non-domestic RHI”) by revoking and remaking, with amendments, The Renewable Heat Incentive Scheme Regulations 2011 (as amended). This follows consultation on the reform of both the Domestic Renewable Heat Incentive (“Domestic RHI”) and Non-domestic RHI schemes. A number of amendments are made, including to: the scheme eligibility criteria; methods for calculating and issuing scheme payments; budget control mechanisms; and the levels of tariffs for making payments to scheme participants. These amendments are made to reform the RHI in line with the Department’s objectives to ensure it focusses on long-term decarbonisation, promotes technologies with a credible role to play in that transition, and offers better value for money.
- 2.2 This instrument also consolidates a number of amendments made previously to The Renewable Heat Incentive Scheme Regulations 2011.

**3. Matters of special interest to Parliament**

*Matters of special interest to the Joint Committee on Statutory Instruments*

- 3.1 None.

*Other matters of interest to the House of Commons*

- 3.2 Disregarding minor or consequential changes, the territorial application of this instrument includes Scotland.

**4. Legislative Context**

- 4.1 This instrument consolidates the amendments which have been made to The Renewable Heat Incentive Scheme Regulations 2011 and introduces amendments to the Non-domestic RHI scheme in line with the Government’s response to the consultation: [The Renewable Heat Incentive – A reformed and refocused scheme](https://www.gov.uk/government/consultations/the-renewable-heat-incentive-a-reformed-and-refocused-scheme)<sup>1</sup>, published on 3<sup>rd</sup> March 2016. It is being introduced alongside The Domestic Renewable Heat Incentive Scheme (Amendment) Regulations 2017 (2017 No. XXXX), which introduce changes to the Domestic RHI by amending The Domestic Renewable Heat Incentive Scheme Regulations 2014 (as amended).

---

<sup>1</sup> <https://www.gov.uk/government/consultations/the-renewable-heat-incentive-a-reformed-and-refocused-scheme>

- 4.2 The Non-domestic RHI was introduced in November 2011 and is open to producers of biomethane for injection into the gas-grid and to renewable heat installations that provide heat to buildings and for purposes other than heating a single domestic property. This includes, for example, systems providing renewable heating to public buildings or commercial properties, for industrial or agricultural uses, or for heating a block of flats. The Domestic RHI followed in April 2014, and is open to renewable heat installations that provide heat to single domestic properties. The schemes aim to facilitate and encourage the transition from conventional forms of heating to low-carbon alternatives. The RHI provides financial incentives to households and non-domestic consumers, including public bodies and charities, to help bridge the gap between the cost of renewable heating systems and the conventional alternatives.
- 4.3 The Autumn Statement in November 2015 confirmed the budget for the RHI to the end of the Spending Review period in 2020/21 and the reforms to the scheme are made to extract best value for money from this budget.

## **5. Extent and Territorial Application**

- 5.1 The extent of this instrument is Great Britain.
- 5.2 The territorial application of this instrument is Great Britain.

## **6. European Convention on Human Rights**

- 6.1 Jesse Norman MP, Parliamentary Under Secretary of State, Minister for Energy and Industry, has made the following statement regarding Human Rights:
- “In my view the provisions of the Renewable Heat Incentive Scheme Regulations 2017 are compatible with the Convention rights.”

## **7. Policy background**

### *What is being done and why*

- 7.1 The RHI scheme was introduced under the powers afforded to the Secretary of State by the Energy Act 2008. It was introduced to deliver carbon emissions reductions to help the UK meet its obligations under the Climate Change Act 2008 and the Carbon Budgets established under this Act, and to help the UK meet its target under Directive 2009/28/EC (the “Renewable Energy Directive”) that 15% of energy consumption is to come from renewable sources by 2020. The Government intends that the renewable heat generated under the RHI will make a significant contribution to these obligations.
- 7.2 Section 100 of the Energy Act 2008 makes provision for the Secretary of State to make regulations which establish a scheme to facilitate and encourage the renewable generation of heat and govern the administration of the scheme and the calculation of payments to participants. The Government expects the scheme to deliver over 22 terawatt hours (TWh) of renewable heat in 2020/21, with 8TWh from deployment following these reforms. Furthermore, the Government expects the scheme (the Non-domestic and Domestic RHI combined) to deliver over 40 megatonnes of carbon abatement during each of the periods of the fourth and fifth Carbon Budgets, with over 18 megatonnes of abatement delivered by deployment following these reforms.
- 7.3 The Domestic and Non-domestic schemes operate by making subsidy payments to owners of eligible renewable heat technologies and producers of biomethane (in the

Non-domestic scheme only) for the renewable heat generated or biomethane injected into the grid.

- 7.4 These Regulations make a number of changes to the existing Non-domestic RHI scheme, in line with the Department's objectives to ensure it focusses on long-term decarbonisation, promotes technologies with a credible role to play in that transition, and offers better value for money.
- 7.5 Since its launch in 2011, spending in support of deployment of biomass boiler systems has dominated the Non-domestic scheme, particularly in support of smaller scale systems. Other than biomass, there has also been a high level of spending in support of systems making use of anaerobic digestion, either for the production of biogas for combustion, or for the production of biomethane for injection to the gas grid. A high proportion of the biogas required for this has been produced using feedstocks derived from crops, and to a much lesser degree from feedstocks derived from wastes and residues. The reforms (summarised below) will amend the scheme with the intention of rebalancing further deployment supported under the scheme in order to further the objectives outlined in paragraph 7.4 above.
- 7.6 The reforms will introduce a process to give applicants greater certainty about the level of support ('tariff') they will be eligible to receive in respect of heat or biomethane production earlier in their project lifecycle. At present, applicants cannot be accepted onto the scheme until they have commissioned their project or, in the case of biomethane production, commenced injection into the gas grid. This means there can be a significant period between an investor making a decision to build a system and this system becoming eligible to receive support through the scheme, while the system is designed and built. During this period, there is the potential for the scheme's automatic budget management rules (see paragraph 7.14 below) to reduce the tariff available for the project once it has been commissioned or injection has commenced. The Government understands this has impacted on investor confidence and reduced the number of larger projects that have come forward through the scheme. This is important because larger projects can often offer higher value for money, due to economies of scale. Under the new process applicants will be able to gain a guarantee as to the tariff level for which their system will be eligible upon submitting evidence of having reached 'financial close', the point at which funding is effectively committed to the project, for example through the agreement of a loan. This is referred to as a tariff guarantee. Tariff guarantees will only be available to all applicants for certain technologies and applicants for other technologies where the system exceeds a specified size, and will be contingent on certain conditions being met.
- 7.7 The reforms make a number of changes to the tariffs. Firstly, the changes will combine the three tariffs currently available for biomass boilers of various capacities into a single tariff in support of heat produced from biomass boilers. This will apply only to new participants. The tariff will also be tiered; each installation will be eligible to receive the initial 'Tier 1' tariff for a given amount of heat use each year. Beyond this, further heat use will receive a lower 'Tier 2' tariff. These changes are designed to deliver improved value for money to the taxpayer and society by: focussing biomass support on large biomass and biomass for process- and district-heating in line with the Government's long-term approach to heat decarbonisation; encouraging deployment that is sustainable without subsidy in the longer term; and controlling overall spend on biomass, in line with the available budget.

- 7.8 The tariffs available in support of biomethane production will be reset to the levels available between April and June 2016. This reverses reductions to the tariff made automatically under the scheme's budget management rules (see paragraph 7.14). The revised tariffs are to reflect the Government's current view of the support necessary to stimulate further biomethane production.
- 7.9 The tariffs for biogas combustion systems will be reset to the levels available between October and December 2016. Again, this is to ensure the tariffs reflect the Government's current view of the support necessary to stimulate further deployment of biogas plant.
- 7.10 The reforms will introduce an annual requirement that new participants who are producing biogas from anaerobic digestion, either for combustion or for conversion to biomethane and subsequent injection into the gas grid, must produce at least 50% of their biogas from waste or residue, in order for all the biogas produced or biomethane injected to be eligible for subsidy support. Where the amount of biogas produced from feedstocks that are not wastes or residues, such as crop-based feedstocks, is in excess of 50% of the total biogas produced, this excess will not be eligible for support. The requirement reflects the Government's view that biogas technologies, like biomethane production, should make use of available feedstocks, such as wastes, to produce low carbon fuels which can be used in a flexible manner. The use of other feedstocks, such as crops, has greater potential impacts on land, such as competition with food production and reduced soil and water quality, and typically does not deliver carbon abatement as cost-effectively.
- 7.11 New arrangements are being introduced in support of ground source heat pumps making use of a shared ground loop. Ground source heat pumps generate heat from energy absorbed from the ground, which is collected using a ground loop. Multiple ground source heat pumps in individual properties, making use of a shared ground loop, can be a practical and cost effective way of decarbonising heat in buildings. Under the current arrangements such systems are eligible for support under the scheme but the Government believes that the metering requirements under the Non-domestic rules have acted as a barrier to the deployment of such systems in domestic properties. In order to support investment in this technology, where a shared ground loop system supplies heat to domestic properties, payment will be made on the basis of the estimated heat demand of each property, as it is in the Domestic RHI scheme.
- 7.12 Only certain heat uses are eligible for support under the scheme and heat which is used to dry digestate (a by-product of anaerobic digestion that can be used in agriculture) will no longer be an eligible heat use. This represents the Government's view that support for this heat use may result in digestate drying that does not lead to the best use of that digestate, and may result in overcompensation.
- 7.13 New applicants to the scheme will be required to obtain and maintain all necessary planning permissions in order to be eligible for support under the scheme. This requirement will ensure that plant or equipment built or operated unlawfully, without the necessary planning permission, are not supported by the RHI, safeguarding the proper use of public funds.
- 7.14 The reforms will also make changes to the scheme's budget management rules, which reduce the tariffs available to new applicants when certain conditions are met. These mechanisms control the spending both on individual technology types and on the scheme as a whole. Tariff reductions (referred to as tariff "degressions") are triggered

when specified thresholds for forecasted expenditure or growth in forecasted expenditure are reached. The reforms will not alter this overall framework but will introduce changes designed to simplify the rules and improve transparency, and reflect learning from the scheme's operation so far. In particular, the changes will aim to remove the potential for the rules to continue to reduce tariffs even after deployment has slowed down.

### *Consolidation*

- 7.15 Alongside the changes outlined above, the new Regulations consolidate a number of amendments made previously to The Renewable Heat Incentive Scheme Regulations 2011.

## **8. Consultation outcome**

- 8.1 The changes outlined in section 7 were informed by a consultation which set out proposals relating to both the Non-domestic and Domestic RHI schemes: [The Renewable Heat Incentive – A reformed and refocused scheme](#). The consultation ran from 3<sup>rd</sup> March to 27<sup>th</sup> April 2016 and received 370 responses from individuals, businesses, trade bodies and other organisations. The Government Response to the consultation can be found here: [RHI Reform consultation: Government response](#).<sup>2</sup> The relevant points for the content of this instrument are summarised below.
- 8.2 In response to questions relating to tariff guarantees, there was strong support for the use of installation size as a criterion for determining eligibility for tariff guarantees for some technologies, with 93% of respondents supporting this, and 65% supporting the capacity limits suggested in the consultation. Regarding the tariff guarantee application process, there were 89 responses with the majority agreeing the proposed process was broadly reasonable. On the basis of responses received and further consideration, the Government has made minor amendments to the process for applying for tariff guarantees laid out in the consultation.
- 8.3 In response to questions relating to the introduction of new tariff arrangements for biomass boilers, the majority of respondents (64%) supported the principle of tiering the tariff. There was no consensus as to the exact method of calculating each participant's tiering threshold (the point at which they move from receiving the Tier 1 to the Tier 2 tariff), though the Government's proposal, outlined in paragraph 7.7 above, had the support of a significant proportion (38%).
- 8.4 A majority of respondents (66%) disagreed with the Government's proposal that the Tier 1 tariff should be in the range of 2.03 – 2.9p/kWh, with many arguing that it would be insufficient to stimulate deployment of further smaller scale non-domestic biomass systems. A small majority of respondents (56%) disagreed with the Government's proposal that the Tier 2 tariff should be in the range of 1.8 – 2.03p/kWh. Almost all of these respondents used this question as an opportunity to repeat their opposition to tiering in general or to restate that the Tier 1 tariff was not sufficient to drive deployment. However, the Government believes the Tier 1 tariff introduced by the reforms will be sufficient to incentivise deployment of larger systems, for example those providing district- and process-heating, while also supporting smaller systems that offer comparable value for money to come forward.

---

<sup>2</sup><https://www.gov.uk/government/consultations/the-renewable-heat-incentive-a-reformed-and-refocused-scheme>

- 8.5 A large majority (87%) of respondents supported the proposal to reset the biomethane tariffs in spring 2017. However, around 49% of respondents disagreed with the Government's consultation proposal not to amend the tariffs available in support of biogas combustion. Following the high level of degressions for biogas tariffs during the course of 2016, the Government has decided tariff levels will be reset to October 2016 levels, from the date the regulations come into force.
- 8.6 In response to questions addressing the Government's proposals regarding feedstocks for use in biogas production, 50% of respondents agreed that the use of waste-based feedstocks in anaerobic digestion resulted in more cost effective carbon saving than the use of crop-based feedstocks, while 43% maintained that anaerobic digestion of crops was also able to provide cost effective carbon abatement. However, the Government retains the view that biogas derived from wastes and residues is more likely to achieve better value carbon saving than other feedstocks, such as purpose grown energy crops.
- 8.7 The consultation proposed two options for limiting payments to participants in support of biogas not derived from wastes or residues, with 78% supporting the Government's preferred approach, as outlined in paragraph 7.10 above.
- 8.8 In response to questions regarding support for ground source heat pumps making use of a shared ground loop, 51% of respondents thought that these systems should be supported under the Domestic RHI and 60% thought that they should be supported under the Non-domestic RHI, with some respondents suggesting that applicants in respect of such systems should be able to choose to apply through either scheme. Based on evidence received, the Government believes that support through the Non-domestic scheme using estimated heat demand for payments in respect of domestic properties will improve investment confidence and will also offer the greatest flexibility for a range of shared ground loop system projects to be developed.
- 8.9 The majority of respondents supported the consultation proposal that shared ground loop systems be eligible to receive the same tariff as individual GSHP systems, and the majority of respondents did not believe the proposals relating to shared ground loop systems would increase the risk of overcompensation. The Government will monitor deployment of these systems and seek to improve its evidence.
- 8.10 A small majority (55%) supported the proposal to make the use of heat to dry digestate an ineligible heat use (see paragraph 7.12), agreeing that the use of heat in this way potentially allows operators of anaerobic digestion plant producing biogas and digestate to maximise their RHI payments by using heat produced from biogas combustion to dry digestate, with the efficient and effective use of digestate drying being a secondary consideration. Respondents who disagreed with the proposal put forward a range of arguments to support digestate drying. The Government acknowledges that, when done sensitively, drying digestate can improve the quality of the digestate and enhance its application for on farm uses and more widely. However, of the options put forward, none were likely to be implemented effectively without significantly adding to scheme complexity. Evidence suggests that RHI payments may in fact be causing drying activity which is unnecessary, reducing the quality of digestate for use as a fertiliser, contributing to wider environmental impacts such as the release of ammonia, and overcompensating owners.
- 8.11 A small majority of respondents supported the proposal to introduce an explicit requirement that applicants must have in place all relevant planning permission in

order to be eligible to receive support under the scheme (see paragraph 7.13). The main concerns regarding the introduction of this requirement were that it may take some technologies longer to obtain permissions than others; that certain permits issued by the local authority might not be available until the project is about to become operational; and that this would create an extra administrative burden. After taking into account the concerns raised and the risk to the scheme, the Government believes that introducing this requirement in a light-touch manner strikes the right balance between avoiding unnecessary burden and ensuring the proper use of taxpayers' money.

- 8.12 The consultation posed a broad question regarding the RHI budget management rules (which are discussed in paragraph 7.14), which also covered the Domestic RHI scheme, asking if respondents agreed with the proposed policy approach. A common theme of the responses in relation to the Non-domestic RHI scheme was that the existing degression rules have led to too many tariff reductions on technologies that are no longer growing. The Government has responded to this with the revised proposals included in the instrument, which aim to remove the potential for the rules to continue to lead to reductions in tariffs after deployment has slowed down.

## **9. Guidance**

- 9.1 The Government Response to the consultation explains the amendments in detail and provides clarification of the changes to the scheme eligibility criteria. The Office of Gas and Electricity Markets, which administers the RHI schemes, will also publish supporting guidance that will provide further information for scheme applicants, participants and installers.

## **10. Impact**

- 10.1 There is no impact on business, charities or voluntary bodies, given the RHI is a voluntary scheme.
- 10.2 There is no impact on the public sector, given the RHI is a voluntary scheme.
- 10.3 An Impact Assessment is submitted with this memorandum and will be published alongside the Explanatory Memorandum on the [legislation.gov.uk](http://legislation.gov.uk) website.

## **11. Regulating small business**

- 11.1 The legislation does not apply to activities that are undertaken by small businesses.

## **12. Monitoring & review**

- 12.1 The Department will undertake an evaluation of the reformed RHI scheme. The evaluation will assess the impact of the scheme and identify lessons for future policy development. The evaluation will include assessment of the reformed RHI's impact on renewable heat generation, carbon abatement and contribution towards the development of a sustainable market. Regular monitoring data is expected throughout the evaluation (2017-2021), with evidence review reports expected in December 2017, May 2020 and after scheme close. The details of the evaluation will be confirmed in spring 2017.

### **13. Contact**

- 13.1 Roz Tandy at the Department for Business, Energy and Industrial Strategy, Telephone: 0300 068 6338 or email: [rosalyn.tandy@beis.gov.uk](mailto:rosalyn.tandy@beis.gov.uk), can answer any queries regarding the instrument.