

**EXPLANATORY MEMORANDUM TO**  
**THE RENEWABLE HEAT INCENTIVE SCHEME (AMENDMENT) REGULATIONS**  
**2014**

**2014 No. 1413**

1. This explanatory memorandum has been prepared by the Department of Energy and Climate Change (DECC) and is laid before Parliament by Command of Her Majesty.
2. **Purpose of the instrument**
  - 2.1 This instrument amends the Renewable Heat Incentive Scheme Regulations 2011 (S.I. 2011/2860) (“the RHI Regulations”) in order to improve the scheme and increase deployment of renewable heating technologies in the non-domestic sector.
  - 2.2 The main changes introduced by these regulations are:
    - Expansion of the non-domestic scheme. The introduction of new tariffs, both for previously unsupported technologies and through the introduction of improved bespoke support for some currently supported technologies. The regulations also introduce new or adjusted eligibility rules for these technologies.
    - Tariff review. An update of existing tariffs following the gathering of new evidence and the subsequent review.
    - Changes to rules regarding Public Grants. The introduction of more flexibility into the scheme rules which relate to the treatment of public grants.
    - Clarification of eligibility rules. An improvement to the way we refer to the standards required for plants with capacity below 45kWth and a clarification of rules for registration of biomethane producers.
    - Budget management. Amendments to the operation of the financial control mechanism to reflect the changes made to tariff levels, improved understanding of market potential and available budgets, as well as improvements to the mechanism for forecasting scheme expenditure.
3. **Matters of special interest to the Joint Committee on Statutory Instruments**
  - 3.1 None.
4. **Legislative Context**
  - 4.1 The Secretary of State makes this instrument in exercise of powers conferred by sections 100 and 104 of the Energy Act 2008 (“the Act”).

- 4.2 The RHI Regulations established the RHI scheme to facilitate and encourage the renewable generation of heat by giving subsidy payments to eligible generators of renewable heat. The non-domestic RHI scheme supports the generation of renewable heat in non-domestic sectors (industrial, commercial, public sector and not-for-profit) and producers of biomethane. The Domestic Renewable Heat Incentive Scheme regulations 2014 (SI 2014/928) were made on 8 April 2014 and introduce support for the generation of renewable heat in domestic dwellings.
- 4.3 The Renewable Heat Incentive (Amendment) Regulations 2013 (S.I. 2013/1033) amended the RHI Regulations to introduce a long-term budget control mechanism until the end of the Spending Review period (31st March 2015). Prior to this amendment the RHI operated under an interim cost control mechanism, whereby expenditure was not controlled until it exceeded a pre-determined level and the scheme would be temporarily suspended. This form of cap can have a detrimental impact on investor confidence and lead to a stop-start market. For the new mechanism to take effect it was necessary to introduce these amendments before the beginning of the financial year.
- 4.4 The Renewable Heat Incentive (Amendment) (No.2) Regulations 2013 (S.I. 2013/2410) amended the RHI Regulations to introduce air quality emission limits to all biomass boilers seeking accreditation under the non-domestic RHI; introduced a new streamlined approach to metering along with a number of minor changes. It was necessary to introduce Air Quality limits to the scheme as soon as possible since biomass combustion for heat generates pollutants which can reduce the air quality of an area, adversely affecting public health. Biomass forms the majority of renewable heat generation in the RHI and with the RHI expected to drive significant uptake in biomass, without emissions limits future biomass air pollution may have resulted in a material cost to society. The development of detailed proposals on how participants could demonstrate that installations met the air quality limits required work which was not finalised in time to introduce alongside the budget management amendment. The metering amendment was also necessary because complexity in the previous metering requirements acted as a barrier to uptake of RHI eligible renewable technologies.
- 4.5 The Renewable Heat Incentive (Amendment) (No.3) Regulations 2013 (S.I. 2013/3179) amended the RHI Regulations to correct two points relating to the operation of non-domestic Renewable Heat Incentive scheme. This further amendment was required after we identified minor improvements to help the practical implementation of the policy intent. Not making this amending correction would have had a significant impact on uptake to the scheme.
- 4.6 Each amendment to the scheme listed above has been necessary to expedite urgent changes necessary to ensure the scheme continues to run smoothly without detrimental impact to investor confidence, public health and renewable heat uptake. The further amendments being introduced here are part of a planned programme of scheme expansions and improvements to drive uptake. Given

timelines on delivering these amendments, it has not yet been possible to consider consolidating the regulations. The Department's intention is to consider whether consolidation of the regulations is the best way forward at the next review.

- 4.7 The Domestic Renewable Heat Incentive Scheme Regulations 2014 (S.I. 2014/928) which were made on 8 March 2014, introduce support for owners of eligible plants that generate heat from renewable sources for domestic properties. The Renewable Heat Incentive is designed to support both domestic and non-domestic properties. There was further work required to tailor the scheme to domestic participants and to ensure value for money was being achieved which was why the scheme initially launched as non-domestic only. Those regulations introduce the Domestic Renewable Heat Incentive Scheme and fulfil the commitment made to make the RHI available for domestic properties.
- 4.8 Technical standards contained within the amendments are being notified as a fiscal measure under the Technical Standards Directive.
- 4.9 The Final Impact Assessment was approved along with the Government Response Document: "Non-Domestic Renewable Heat Incentive, Improving Support, Increasing Uptake". A signed copy is available publicly here.  
<https://www.gov.uk/government/consultations/renewable-heat-incentive-expanding-the-non-domestic-scheme>

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

- 5.1 This instrument applies to Great Britain.
- 5.2 In accordance with section 100(7)(a) of the Act, the Secretary of State has obtained the Scottish Minister's consent to the making of these Regulations.

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

- 6.1 Gregory Barker, Minister of State for the Department of Energy and Climate Change, has made the following statement regarding Human Rights:

In my view the provisions of the Renewable Heat Incentive Scheme (Amendment) Regulations 2014 are compatible with the Convention rights.

## **7. Policy background**

What is being done and why

- 7.1 The RHI scheme was introduced primarily to help meet the UK's target under Directive 2009/28/EC (the "Renewables Directive") that 15% of energy consumption is to come from renewable sources by 2020. The UK intends that renewable heat will make a significant contribution to this overall energy target.

The RHI scheme is in line with the Government's longer-term energy and climate change goals.

- 7.2 The RHI provides a long-term tariff scheme and opened for applications on 28 November 2011. It supports the generation of renewable heat in non-domestic sectors (industrial, commercial, public sector and not-for-profit) and producers of biomethane. From spring 2014 the RHI will also provide financial support for the renewable generation of heat in domestic properties.

#### Expanding the non-domestic scheme

- 7.3 The changes being introduced as a result of the September 2012 consultation on expanding the non-domestic RHI are:

- **Introducing support for biogas combustion plants of 200kWth capacity and over.** Due to a previous lack of evidence at the larger scales, the scheme launched with biogas combustion only supported for installations with a thermal capacity under 200kWth. After further analysis, new tariff bands are now being introduced for biogas combustion, a tariff of 5.9p/kWh for installations with a thermal capacity between 200kWth and under 600kWth; and a tariff of 2.2p/kWh for installations of 600kWth capacity and over.
- **Introducing support for Air to Water Heat Pumps.** Currently the only heat pumps eligible for the RHI are those which produce heat from the ground including groundwater. Air to water heat pumps (AWHPs) are another renewable heating technology, but previously too little evidence was available to set a tariff. These amendments introduce support to AWHPs with a tariff set at 2.5p/kWh.
- **Introducing a bespoke tariff for good quality biomass CHP.** Currently, biomass combined heat and power (CHP) installations, which produce both heat and electricity, are eligible for support in the RHI under the standard biomass tariff. CHP has increased costs and risks associated with it over heat only biomass plants. Therefore a separate specific tariff has been developed to incentivise the uptake of this technology. These amendments introduce support to biomass CHP, which has CHP Quality Assurance certification, with the tariff set at 4.1p/kWh.
- **Introducing greater flexibility in the eligibility rules for biomass and biogas CHP.** Biomass and biogas CHP systems are currently eligible for the RHI provided the whole system produces heat and electricity from only biomass or only biogas. However, CHP engines may be fed by a mixture of both biomass and/or biogas boilers and fossil fuel boilers. We want to encourage the use of renewable CHP where possible and so these amendments change the rules such that, provided a CHP engine has a biomass/biogas

combustion unit feeding the CHP, the relevant RHI tariff will be payable on the heat output of the CHP engine as a proportion of renewable input.

- **Introducing a bespoke tariff for Deep Geothermal Heat.** Currently, deep geothermal plants are eligible for the RHI under the ground source heat pump tariff. Deep geothermal is a separate technology to Ground Source Heat Pumps with a different cost profile. A tariff was calculated based on the specific costs of deep geothermal. These amendments introduce a bespoke tariff for deep geothermal plants of 5.0p/kWh.
- **Extending eligible waste streams for Energy from Waste plants.** Currently heat from biomass contained in Municipal Solid Waste (MSW) is eligible to receive the RHI with no other waste streams eligible. This exclusion has restricted deployment for Energy from Waste plants since it is rarely viable to run a plant purely on MSW. These amendments align the rules with the Renewables Obligation (a scheme which subsidises generation of renewable electricity) in allowing other waste streams to be used provided that it can be demonstrated there is a minimum of 10% biomass content in the waste.
- **Introduce new Seasonal Performance Factor requirement for heat pumps.** European Commission guidance published 1<sup>st</sup> March 2013 confirmed that, in order to be considered renewable, heat pumps should have a minimum seasonal performance factor (the ratio of heat output of a heat pump to electricity used expressed as an average over the whole year) of 2.5. These regulations therefore introduce an eligibility requirement that heat pump systems are designed and installed to achieve at least this seasonal performance factor.

### Tariff Review

7.4 The changes being introduced of the non-domestic tariff review are:

- **Large biomass.** Taking into account updated evidence provided by industry, modelled output and relativities to other tariffs the large biomass tariff is being increased from the current value of 1.0p/kWh to 2.0p/kWh.
- **Solar thermal.** Solar thermal currently receives the maximum tariff available; set at the former Value for Money cap. The updated evidence suggests a tariff of 24.2-27.8p/kWh which is above the cap. The tariff is now being updated to the latest value for money cap of 10.0p/kWh.
- **Ground source heat pumps:** Support for ground source heat pumps is currently banded by size. Model outputs as part of the review implied that the tariffs would be relatively close to one another and therefore a single unbanded tariff is being adopted. Taking into account the range of evidence, we assessed that a 9.0p/kWh tariff would be appropriate to incentivise up to 50% of the

heat potential of this technology. As the tariff is paid on the full amount of heat generated by the heat pump, this equates to 12.5p/kWh of renewable heat which is above the value for money cap of 10.0p/kWh of renewable heat. Applying this cap the tariff equates to 7.2p/kWh of heat produced. This tariff is being split into a higher 'tier 1' tariff of 8.7p/kWh applicable for initial heat produced and a lower 'tier 2' tariff of 2.6p/kWh for subsequent heat. This tariff structure is the same as is currently used for small and medium biomass and is designed to ensure there is no incentive for participants to waste heat.

#### Degression (Budget Control Mechanism)

- 7.5 The 2013 Regulations introduced a degression-based mechanism to control spending in the non-domestic scheme until the end of March 2015.
- 7.6 Degression is a responsive cost-control mechanism which reduces tariffs at quarterly intervals when certain tests are met. The mechanism is designed to ensure that tariffs are value for money and the scheme remains within fixed annual budgets. This is important as the RHI is funded by the taxpayer.
- 7.7 Reductions only take effect where the level of estimated expenditure under the scheme exceeds the thresholds set out in the regulations, which are considered to reflect when the expenditure is more than is affordable. The rules which determine whether a degression, or tariff reduction, is needed are set out in the regulations.
- 7.8 Whether a tariff is reduced, and to what extent, will depend on the expenditure for an individual technology, the scheme as a whole, whether there have been any previous tariff reductions and the growth in the market since any previous tariff reduction. The method of estimating expenditure is also set out in regulations. This involves DECC estimating the committed expenditure for the non-domestic scheme over the following 12 months. It does this by determining heat loads (load factors) for all systems which have applied to join the scheme as well as those accredited or registered by Ofgem. These latest amendments do not amend these core principles.
- 7.9 The amendments cater for changes being made to some tariff levels, the introduction of new technologies, improved understand of market potential and future budget levels for the scheme as a whole. In addition, these amendments will improve the manner by which we determine estimated expenditure under the scheme in light of our experience of operating the scheme to date. The main changes are:
- We will count plants towards our estimates using the date when we realistically expect them to start to have budgetary impacts, which will not always be the application date, based on applicant reporting.

- Improvements to the approach for estimating the load factors for medium and large biomass plants producing heat to enable a process, bringing them into line with the method used for other technologies currently in the scheme.
- For large plants, that are more than 1MWth in size, we propose to ask new plant owners applying to the scheme to provide us with their 'estimated annual eligible heat generation' as part of the application process to improve estimates of heat load until plant metering data is provided. This approach will also apply to large biogas plants of 600kWth capacity and over.

#### Public grants

- 7.10 The 2011 RHI regulations prevent applicants that have benefitted from a public grant for the installation of a renewable heat system from accessing the RHI scheme. The exception is for plant completed and first commissioned between 15 July 2009 when the RHI scheme was first announced and 27 November 2011 when the scheme was introduced. In these cases any part of the grant that has been used to meet all or any of the costs of purchase and/or installation of the installation must be repaid to the granting authority before RHI payments can be made. The original intent behind this approach was to avoid breaching state aid rules on accumulation of aid and to maximise value for money.
- 7.11 The current RHI regulations as drafted means that the RHI does not overcome one of the key barriers to installing renewable heat technologies for those groups who have no or limited access to the upfront capital needed (e.g. public sector bodies and community groups). We are also aware of a number of applicants that are eligible or willing to repay their grants in order to access the RHI but have been unable to do so because the granting authority has ceased to exist or their installation was not completed and commissioned within the window identified above. After two years of the non-domestic RHI, a more flexible approach to the interaction between public grants and the RHI could encourage more renewable heat installations to come forward.
- 7.12 These amendments will extend the eligibility window for repayment of grants and to allow some grant recipients who are unable to pay back their grants to access the RHI via reduced tariff payments.

#### Clarifying eligibility rules

- 7.13 When the non-domestic renewable heat scheme was launched in November 2011 the regulations set out that where a plant seeking accreditation is 45kW or less, the plant and its installer was certified under the MCS at the time of installation.
- 7.14 This amendment sets out specific MCS standards for various micro-generation eligible technologies; solid biomass, ground source heat pump and solar thermal. This will improve transparency for other schemes to be considered equivalent and therefore eligible for the RHI scheme.

- 7.15 The scheme allows for additional capacity to be added to existing plant. Amendments are being made to the regulations which determine when such applications can be approved, and the tariff level that the existing and new plant will both receive. These changes are intended to simplify the overall approach.
- 7.16 Finally, the rules of eligibility for producers of biomethane are being clarified to resolve ambiguity currently in the regulations, with a capacity being set at registration and the process set out for registering additional capacity. Further, biomethane producers who have signed a Connection Agreement but are not yet at a stage to register for the scheme will be able to apply for preliminary registration.

## **8. Consultation outcome**

- 8.1 The proposals set out in the September 2012 consultation in the non-domestic scheme and accompanying consultation on air to water heat pumps and energy from waste received positive responses, with a large majority of respondents agreeing with the proposals to introduce support for air to water heat pumps and expanding the waste streams eligible for the RHI. Useful information was provided which enabled us to further refine policy and take final decisions on areas of less certainty.
- 8.2 Most of the responses to the May 2013 tariff review consultation were also supportive of the proposals, which themselves took into account communications with stakeholders and industry. The final tariffs arrived at took into account modelling, evidence and stakeholder feedback.
- 8.3 We advised in the May 2013 tariff review consultation that some adjustments to the current depression triggers might be required as we considered expanding and improving the scheme. We did not officially consult on proposed changes to the methodology given that the core principles by which the depression mechanism operates were not changing. We did however engage with key stakeholders directly on proposed changes. In the December 2014 Government response we advised of changes to the existing approach to how we determine whether a tariff reduction is needed.
- 8.4 There was no formal consultation on the approach to repayment of public grants in the non-domestic scheme, but the approach taken is in response to stakeholder representation that a more flexible approach to the interaction between public grants and the RHI could encourage more renewable heat installations to come forward.
- 8.5 The proposed changes to the eligibility requirements relating to the Microgeneration Certification Scheme update the relevant testing standards and allow for equivalent schemes. They are consistent with the approach recently



introduced in the Domestic RHI regulations. As such, these changes were not specifically consulted on.

- 8.6 Amendments to additional capacity are required to ensure the policy, as previously implemented, continues to apply with the degression changes, therefore these amendments were not formally consulted on.
- 8.7 Changes to biomethane registration rules followed extensive consultation with industry, both through the formal July 2012 consultation and close consultation during subsequent policy development.

## **9. Guidance**

- 9.1 Ofgem will provide further updated guidance for potential participants in the RHI scheme in a variety of formats and place this on their website - [www.ofgem.gov.uk](http://www.ofgem.gov.uk).

## **10. Impact**

- 10.1 The RHI is a voluntary subsidy scheme. The impact on industrial, commercial, public sector and not-for-profit organisations is only applicable if they are owners of eligible renewable heat installations and choose to apply for the RHI.

## **11. Regulating small business**

- 11.1 The legislation applies to small businesses that operate in the renewable heat market or use renewable heat, however it does not add regulatory burden to their operations.

## **12. Monitoring & review**

- 12.1 DECC is monitoring the performance and operation of the non-domestic scheme and will seek further amendments to the RHI Regulations 2011 if necessary.

## **13. Contact**

Pete Burnill at the Department of Energy and Climate Change, Tel: 0300 068 6198 or email [Peter.Burnill@decc.gsi.gov.uk](mailto:Peter.Burnill@decc.gsi.gov.uk)