

Renewable Heat Incentive Consultation - Biomass Combustion in Urban Areas:

In the Clean Air Strategy published in May 2018, the government committed to consult on restricting new biomass installations in urban areas under the Renewable Heat Incentive (RHI). Accordingly, the Government has published [a consultation](#) to this effect, proposing that biomass combustion installations should no longer be eligible for RHI support if they are located in urban areas that are on the gas grid. The consultation defines urban areas as settlements with a population of more than 10,000 and on the gas grid. It should be noted that there are large numbers of urban properties which have no gas connection but are in areas served by the gas network. These properties would count as “on grid” for the purposes of this restriction. This consultation covers new applications from the time amending regulations come into force in England, Scotland and Wales.

The proposed changes would apply to all new domestic and non-domestic biomass installations of all sizes, and also to new biomass combined heat and power (CHP) installations. The government proposes that this restriction will not relate to existing RHI installations in urban areas or to biogas installations. The consultation recognises that biomass boilers are significantly less polluting than burning solid fuel on open fires, but states that they still produce much higher levels of particulate matter than gas- or oil-fired alternatives.

The majority of RHI biomass installations are not in urban areas. However, the consultation highlights that a small but significant proportion has been accredited in on-grid, urban areas, and will thus be contributing to urban air pollution. Specifically, their figures suggest that 12.2% of non-domestic biomass and CHP are on-gas grid in urban areas whereas 4.6% of domestic biomass are on-gas grid in urban areas.

In summary, the main asks of this consultation are whether:

- Domestic and Non-Domestic biomass combustion should be banned from RHI support in urban areas (including large biomass)
- Respondents agree that biogas should not be banned from RHI support in urban areas
- Maintenance checks should be mandated for existing *and* new installations on the RHI.

The REA and WHA have written a draft response to this consultation. Below are several **selected** questions from the consultation, along with our response. Please feel free to use these in order to submit a response via the [online portal](#), or email (rhi@beis.gov.uk). The deadline for submissions is **27th November 2018**.

General Comments

- The REA and WHA supports the Government's aim to improve air quality, however the proposals to ban RHI support for biomass combustion is a unnecessarily blunt policy instrument and shall be counterproductive.
- The proposal will limit options for the decarbonisation of heat, especially in larger public and private sector buildings, while negatively affecting the Government's ability to meet its decarbonisation targets on heat.
- Government should be focused on promoting and enforcing quality standards, using the RHI to support the installation of systems that meet both existing and stronger emission requirements.
- In some locations, excluding background concentrations, peak emissions from domestic fireplaces and inefficient stoves (commonly used as secondary heating for aesthetic reasons as well as comfort) are thought to contribute up to 31% of the concentrations in air of PM_{2.5}, particulate matter harmful to health. These forms of heating are regulated by Clean Air Zones and DEFRA Exemptions, both of which are currently poorly enforced. Emissions from wood-fuelled biomass- boilers, by comparison, are far smaller and controllable through the use of high performance filters. These biomass boilers are already strictly regulated in terms of their particulate emissions – without which they would not be eligible for the RHI.
- Emissions values will, as of December 2018, be tightened for larger scale biomass boiler projects under the Medium Combustion Plant Directive (MCPD), therefore delivering SO₂, PM_x and NO_x reductions from installations. This could be particularly pertinent given that 80% of UK households and industrial, public sector and commercial heat users are located in the urban areas under consultation, including university campuses, hospitals, care homes and district heating schemes.
- Placing a blanket ban on efficient, regulated biomass boilers would inevitably result in these users defaulting to natural gas, taking the UK even further away from its renewable heat targets. It is also possible that those who do want to use biomass will now default to cheaper systems with worse emissions than biomass boilers and where regulations are poorly enforced.
- A blanket ban in urban areas would also ignore experience from every other developed country which has seen the successful deployment of biomass heating across their economy. In Europe, biomass heating in homes and industry has contributed to significant progress towards decarbonisation – in Sweden, for example, almost every town and city has a district heating system, providing heat to domestic properties and steam to industry. Two thirds of the plants have switched from oil or gas to biomass, and 90% are Combined Heat and Power plants, able to supply electricity as well as heat.
- Government's attention would be better focused on addressing the broader problem of ensuring that existing regulations (such as Smoke Control Areas) are actually complied with and that the rules are well understood by suppliers and consumers of wood fuel.
- In addition, we would welcome the enforcement of regular maintenance checks on all urban biomass boilers, so as to ensure they are running at the highest level of performance.

2. a) Do you agree with the proposal to remove RHI support for biomass in urban areas off the gas grid? No.

b) Please provide any available evidence in support of your response.

Rather than banning biomass combustion from the RHI in urban, on-gas-grid areas entirely, we would make two main recommendations:

- regular maintenance checks mandated for new *and* existing domestic biomass boilers. This way poor performance, decreased efficiency and higher particulate emissions associated with sub-optimally maintained systems can be avoided.
- that biomass boilers are fitted with appropriate particulate filtration systems (e.g. bag houses or ESPs).

3. a) Do you agree that for the purposes of this restriction, the criterion should be based on being both urban and having access to the gas network? No.

b) Please provide any available evidence in support of your response.

We believe that the criterion for RHI-exclusion should be based on:

- a failure to demonstrate emission values within those parameters set by the RHI and the Medium Combustion Plant Directive (MCPD) as of December 2018.
- a failure to provide evidence showing regular maintenance checks. This should be an ongoing obligation of both new *and* existing urban biomass accredited to the RHI.
- properties unable to demonstrate significant economic barriers to securing a gas connection, where served by the gas network.

4. a) If you have answered 'No' to Question 3, what method would be more appropriate and why?

- Mandated maintenance checks alongside particulate matter filtration technologies can ensure that RHI biomass boilers in urban areas are air quality compliant.

b) How could this criterion be verified by Ofgem?

- The maintenance checks of biomass boilers would require the submission of stronger evidence by accredited individuals (e.g. maintenance invoices/certificates) to Ofgem. This would highlight any installations which fall outside of RHI/MCPD air-quality compliance and these cases would then have an enquiry opened against them pending improvements within a fixed term.

8. a) Do you have any other proposals on how to minimize the air quality impacts of biomass in the RHI? If so please provide further details here.

- Reducing the RHI emissions thresholds (e.g. particulate matter (PM) threshold from 30g PM/Gj to **15g**).
- Improving current maintenance checks as ongoing obligations by moving from self-declared to evidence-based system (provision of maintenance invoice by participants).
- Tiered-support based on the emissions profile (efficiency) of systems.