

REA response to the consultation on the Boiler Upgrade Scheme and certification requirements for clean heat schemes

The REA (Renewable Energy Association) is pleased to submit this response. The REA represents industry stakeholders from across the sector and includes dedicated member forums focused on biomass heat, green gas & hydrogen, biomass power, renewable transport fuels, thermal storage and energy from waste (including advanced conversion technologies). Our members include generators, project developers, heat suppliers, investors, equipment producers and service providers. Members range in size from major multinationals to sole traders. There are around 500 corporate members of the REA, making it the largest renewable energy trade association in the UK.

We have only responded to questions of relevance to REA members and where we have views or data to support our responses.

Part one: stimulating further demand for the BUS

Question 1: Do you agree with the proposal to amend scheme eligibility criteria to allow more installations of heat pumps in combination with other electric heating appliances? Yes / No. Please provide evidence to support your response.

No. While the REA fully supports the Department's desire to encourage more heat pump installations, and we certainly welcome the premise of a more technology agnostic approach, some of the proposals actively discourage support for the installation of certain low carbon technologies, like biomass boilers, bio-LPG and HVO for off-grid properties.

We support the suggestion not to extend support to hot water only heat pumps, to ensure multiple grants are not provided to the same property, and to ensure any technology installed is capable of meeting entire space demand, but this should not be limited to just heat pumps. This should be a prerequisite for the installation of any heating technology. Limiting it to heat pumps implies that is the only technology solution available and while they will be the right option in many cases, for large, hard-to-heat, off-gas grid properties, biomass boilers, bio-LPG¹ and HVO can offer viable and affordable alternatives. Biomass boilers operate highly efficiently at low temperatures and can be easily installed on existing sites, without the need for retrofitting pipe work and heat transmitters (radiators) which can be required for heat pump installations. Biomass boilers are important in many buildings and locations where electrification is uneconomic, impractical or both.

Further, the main purpose of the Boiler Upgrade Scheme (BUS) should be to help consumers decarbonise their homes in a cost-effective way, to drive down emissions, and help us to get to net zero. As such, helping people move away from reliance on carbon intensive fuels must be a priority. Therefore, a genuinely technology agnostic approach should be encouraged, giving consumers maximum choice in deciding what technology solution is most appropriate for their property. This must include biomass boilers, alongside heat pumps and other electric heating appliances.

¹ BioLPG and HVO are fuels that are in development and growing commercially in the UK. Dependent upon their feedstock and production process (often as a co-product of sustainable aviation fuel) they can offer up to 90% carbon reductions to their fossil fuel alternatives.



As such, the eligibility criteria we do not support is the proposed requirement 'that any other heating appliance(s) which provide hot water or space heating must be electric to ensure fossil fuel 'hybrid' appliances and systems remain excluded' as this would specifically exclude biomass boilers. In 2023, biomass boilers produced more than 34,000 GWh of renewable heat, equivalent to heating almost 4 million UK homes.² Given their ongoing and important contribution, any move to exclude them from any future support is nonsensical and would appear to be more of a political decision, than one based on technology effectiveness.

Question 2: Do you have any views on the proposed eligibility criteria that should apply to multi-technology systems? Yes/No. Please provide evidence to support your response.

Yes. Please refer to our response to question one. We are strongly against the proposed criteria 'requiring that any other heating appliance(s) which provide hot water or space heating must be electric to ensure fossil fuel 'hybrid' appliances and systems remain excluded'. As outlined above, this is not taking a technology agnostic approach, and the main purpose of changing the BUS, as recognised in the consultation, should be to encourage more people to decarbonise their home heating systems. Biomass boilers already play a vital role in that, and will continue to do so, supporting the Department with its wider objectives, provided policy is not introduced that prevents them from doing so.

The nature of rolling out renewable liquid gases en masse is that we will start with a lower blending percentage of around 10% renewable and 90% fossil which is 'mass balanced'. Over time the proportion of renewables increases to the point that it reaches 100%, fully displacing the fossil content and becoming 100% renewable. As such, rather than being proscriptive about heating systems being electric only, which would exclude low carbon technologies, like BioLPG and biomass, government could instead include a criterion that explicitly excludes fossil fuel heating systems without a clear legislative pathway that is driving progress to Net Zero. An example of a legislative pathway is the introduction of a Renewable Liquid Heating Fuel Obligation that is intended to increase the proportion of BioLPG and HVO used in off gas grid heating applications and operate in a similar manner to the Renewable Transport Fuel Obligation (RTFO). This approach would ensure no long-term fossil fuel systems receive BUS support, while maintaining existing support for renewable and low carbon technology solutions and supporting the growth of hybrid heating (combined with low carbon gas) as additional technology to support the decarbonisation of heat.

As outlined in question one, this would support the overall objective of getting more people off fossil fuels and onto more suitable, low carbon alternatives, including through the introduction of a Renewable Liquid Heating Fuel Obligation. For example, biomass boilers and hybrid heating using blends of BioLPG offer significant carbon savings compared to fossil fuel systems. The lifecycle CO2 emissions of woodchips for sustainable wood heating are roughly 18kg/MWh and for wood pellets, it's around 15kg/MWh. For coal, emissions stand at around 363kg/MWh, for oil, it's 260kg/MWh and for natural gas, it's around 202kg/MWh.³

² REA, (2024), Review24, https://www.r-e-a.net/wp-content/uploads/2024/11/REview_24_High-Res.pdf

³ Forest Research, *Carbon emissions of different fuels*, https://www.forestresearch.gov.uk/tools-and-resources/fthr/biomass-energy-resources/reference-biomass/facts-figures/carbon-emissions-of-different-fuels/



Question 3: Should the BUS provide grants to support the installation of air-to-air heat pumps? Yes/No. Please provide evidence to support your response.

Yes. As outlined in question one, we support extending support to as many technologies as possible to increase consumer choice and demand, enabling more people to decarbonise their home heating, while installing the most efficient and cost-effective technology for their property.

However, we do not support the proposed position not to allow third-party ownership agreements to be used for the installation of other eligible technologies like biomass. As outlined previously, this is not Government taking a technology agnostic view nor does it give consumers proper choice over which technologies they choose to install to decarbonise their homes and buildings – which should be the main purpose of this proposal.

Question 10: Do you have any views on whether government should provide grants to support the installation of electric heating technologies that are not heat pumps (e.g. heat batteries)? Yes/No. Please provide evidence to support your response.

We strongly support the proposal to extend the BUS to thermal energy storage devices. This part of the energy storage market provides considerable benefits to the energy system and transition to Net Zero as it allows for energy vector shifting from power to heat and therefore better management of the network.

It also allows for temporal shifting of loads from peak to off peak and therefore additional such system benefits.

Innovative British manufacturers have significantly enhanced and developed heat batteries for central heating over recent years, establishing new ways of storing heat and integrating with dynamic time-of-use tariffs. We expect to see reductions in manufacturing and installation costs as volumes increase. This cost reduction is more likely to occur than with hydronic heat pumps, which are both a well-established technology and involve more internal work to upgrade radiators and more external work to install the heat pump unit. As the cost of installing clean heating systems falls, we would expect the grant level per installation for all technologies to fall.

Question 12: Do you have views on the appropriate grant levels to support the installation of other electric heating technologies (e.g. heat batteries) if supported by the scheme? Please provide evidence to support your response.

According to industry, grant levels for the installation of heat batteries for central heating should be set at £5,000 per installation. This grant level reflects a couple of key considerations:

- Any Government grants for clean heating technologies should be set at a sufficient level to broadly reach parity with a gas boiler installation. A gas boiler installation typically costs between £2,000 and £5,000.
- A grant of £5,000 would leave the homeowner paying roughly the same for a new gas boiler and a typical installation of a heat battery for central heating. We expect that heat battery manufacturers and installers will provide more information on typical installation costs in their responses to this consultation, including information that is not publicly available.

Question 17: Do you have any views on what industry and government would need to do to enable 'heat as a service' models to be offered alongside the BUS in the future? Please provide evidence to support your response.



Heat supply agreements do exist already, but these tend to be restricted to large-scale, industrial projects because of the minimum offtake agreements needed to make the projects financially viable. Heat supply agreements are also subject to market fluctuations, which makes them difficult to implement for smaller-scale projects. We saw this first-hand after the Russian invasion in Ukraine and subsequent energy price rises. If these agreements were in place on smaller projects, those costs would have to be passed onto the consumer or baked into contracts, to enable projects to readjust pricing and recover potential increases.

Question 18: Do you agree that third-party ownership providers wishing to access the BUS should be restricted to MCS certified companies? Yes/No. Please provide evidence to support your response.

Protecting consumers must always be a priority consideration when designing any support schemes. As such, we would support requirements for third-party ownership providers wishing to access the BUS to be restricted to MCS certified or equivalent companies.

Question 19: Do you agree that third-party ownership providers wishing to access the BUS must be carrying out an activity regulated by the FCA and therefore be FCA authorised? Yes/No. Please provide evidence to support your response.

Yes, for any matters that would fall within scope of the FCA, third-party ownership providers should be FCA authorised. For aspects of the scheme relating to consumer protection, then Schemes and Codes like the Renewable Energy Consumer Code (RECC) should be used to demonstrate compliance with high consumer protection standards.

Question 20: Do you agree that third-party ownership providers wishing to access the BUS must register with Ofgem and provide proof of FCA authorisation? Yes/No. Please provide evidence to support your response.

Yes. However, additional compliance requirements will be costly in terms of both time and resource, and ultimately, this is likely to be passed onto consumers, so a balanced approach is important.

Question 29: Do you agree with the approval of the MCS Customer Commitment as a code of practice for the purpose of consumer protection on the BUS? Yes/No. Please provide evidence to support your response.

No. Currently consumer protection is delivered through the BUS by virtue of the installers needing to be a member of RECC or HIES, codes which are approved by CTSI. The MCS Customer Commitment would not provide the equivalent consumer protection that is achieved through the requirement to be a member of a CTSI approved code. Many more installers are expected to enter the low carbon heating market and making those installers aware of their obligations to consumers will improve the customer experience and reduce the number of complaints overall. The dispute resolution services offered by the approved codes helps resolve complaints when the occur. The monitoring of code members (installers) by the code operators (RECC, HIES) ensures ongoing compliance and maintains high standards in the long term following initial approval.

Question 30: Are there additional measures the Department and Ofgem could implement to enhance consumer protection under the BUS? Yes/No. Please provide evidence to support your response.



Yes. We understand that REAL/RECC, with the support of MCS, is developing an ADR scheme (pending Ombudsman Association approval) with the intention of offering a sector specific and sector wide route for redress with consumers. Now, over 85% of the regulated market have access to REAL's ADR scheme, though the complexity of complaint investigation by MCS and the MCS certification bodies, means that a consumer may have a different redress experience depending on who they first raise their complaint with. Working with MCS, we are looking for join up this experience, meaning consumer have access the same scheme regardless of where they come at it through sector specific ombudsman (or equivalent scheme). A single point of redress, available to the entire sector, would provide simplicity and improve the customer experience

Question 31: Do you agree with the proposal to require installers to deduct the grant amount from the upfront costs of the eligible plant? Yes/No. Please provide evidence to support your response.

Yes. It is important that customers are fully aware of the costs associated with their installation and how much will be covered by the BUS grant.

If the installer charges the full cost of the installation and then reimburses the BUS grant afterwards, it puts the customer in a vulnerable position where the installer could retain the grant payment for themselves, leaving the customer out of pocket. This is a risk which would deter consumers of installing BUS eligible technologies.

If the grant was deducted from the upfront cost, it would minimise the various types of consumer detriment in these types of contracts. Consumers would feel the benefit of the full value of the grant from the outset, which would likely encourage more consumers to make use of the BUS.