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REA Response:
A market-based mechanism for low-carbon heat

The Association for Renewable Energy & Clean Technologies (REA) is pleased to submit this response to the above call for evidence. The REA represents industry stakeholders from across the whole heat sector and includes dedicated member forums focused on green gas, biomass heat, biomass power, renewable transport fuels 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 over 500 corporate members of the REA, making it the largest renewable energy trade association in the UK.

1. **Do you have views on the proposal to apply this mechanism to the heating appliance market, basing the obligation on the sale of fossil fuel boilers and applying it to appliance manufacturers?**

We support an obligation that applies to both, appliance manufacturers and fossil fuel suppliers. Installers should also be considered.

We would also like to stress that such an obligation needs to be combined with urgent and effective measures to roll out energy efficiency improvements to the UK housing stock, where this is required.

As manufacturers, installers and suppliers are inevitably intertwined in the renewable heating supply chain, the best way to ensure an effective mechanism is for the obligation to be spread between all parts of the supply chain. We should note that our members supplying bio-LPG have mentioned that manufacturers of fossil fuel boilers able to take bio-LPGs, or other renewable fuel sources and drop-in biofuels should be considered in the implementation of this policy.

Manufacturing members feel that they have little influence in what installers order from them. It may be appropriate for BEIS to consider how an obligation relates to installers and the need to install a certain number of renewable energy systems.

2. **Do you have comments on how the market would be likely to evolve once this obligation was in place? For instance, do you envisage that it would be most likely to lead to growth in certain business models or consumer propositions?**

Members have raised concerns that the mechanism seems overly focused on the total number of installations, rather than heating capacity or total carbon reduction. We suspect if this mechanism continues with its installation favoured approach, it will lead to a large number of installations for very small heat pumps, which might not deliver as many carbon savings as could be made on a less installation focused mechanism. This may lead to a strong growth in small, potentially lower-quality heat pump markets whilst providing little benefit to high-quality and more expensive heat pumps. The obligation should be accompanied with strong systems for providing consumers with independent advice about appropriately sized installations to ensure the correct technology is being installed in the right situation.

3. **Do you have views on how competitive pressure can be maintained to support cost reductions and efficiencies in the heat pump market over time, as have been seen in other sectors? Are there further steps that you feel would be justified to take within the design of this market-based mechanism to support this?**

Steps within the design of the market-based mechanism that could drive down costs include a fuel switching tariff with degression mechanisms, or competitive CFDs. This is especially true for larger scale non-domestic installations. These mechanisms, however, should not include only

heat pumps but all low-carbon heating technologies or fuels that can play a role in decarbonising heat.

4. **Do you have views on how future financial support to the heat pump market, such as financial support for certain heat pump consumers, might work most effectively alongside this market-based mechanism, and how reliance on such support can be reduced over time?**

As previously highlighted, all these proposals should also be viewed in the context of improving energy efficiency. A great deal of financial support will be needed for energy efficiency and home upgrade projects to ensure as many properties as possible are heat pump ready by the time this policy comes into effect.

Members are concerned about running costs to consumers: if heat pumps are placed in properties that are not heat pump ready via installation of sufficient insulation, consumers will be paying more for heating due to high electricity prices. Even if Government were able to achieve parity between heat pump and gas boiler costs, more needs to be done to reduce the high cost of electric heating. In its upcoming Call for Evidence on Fairness and Affordability. Government should consider how domestic energy bills can be rebalanced between electricity and gas prices, to both increase the cost of gas and decrease electricity, making heat pump OPEX costs more competitive than running a gas boiler.

5. **Do you have views on the alternative 'supplier obligation' proposal? If the government were to pursue this approach, what design considerations would help to make it work best for the energy retail market and for consumers?**

As discussed in our response to question one, we would support an obligation on both manufacturers and fuel suppliers. We believe fossil fuel producers should also be obligated to assist in the decarbonisation of heat. We believe an obligation on high-carbon fuels would not only support the low-carbon fuel market but help balance British heating towards renewable sources.

We don't support an electricity supplier obligation. An electricity supplier obligation is unlikely to lead to the right technology being installed in the right place, as electricity suppliers are likely to favour heat pumps. However, government may wish to consider a specific parallel obligation for off gas grid properties whereby the obligation is placed on fuel suppliers rather than electricity suppliers, so that these are required to supply an increasing percentage of renewable fuels like biomass, BioLPG, vegetable oil/biodiesel and HVO.

6. **Do you have views on the treatment of 'air-to-air' heat pumps in the market-based mechanism? Please provide evidence to support your response.**

No further comments.

7. **Do you have views on the treatment of high-temperature heat pumps in the market based mechanism? Please provide evidence to support your response.**

No further comments.

8. **Do you agree with the proposal to apply a 45kWth heat pump capacity limit? Yes/No. If no, please provide evidence to support a higher or lower capacity limit.**

Yes, we believe a 45kWth capacity limit is reasonable for the domestic heat pump market. This is in line with other renewable heating policies such as the Boiler Upgrade Scheme, as well as recognised standards through schemes such as MCS.

9. **Do you have views on the proposal for a 70kWth capacity limit for fossil fuel boilers to generate an obligation under the policy? Yes/No. b) Do you believe that this is an appropriate level to avoid a substantial risk that this could lead to 'over-sizing' of boilers sold above the policy's limit? Yes/No. Please provide evidence to support your answers and views on how risks may best be mitigated.**

We would support an expanded capacity limit for fossil fuel boilers to generate an obligation under this policy. As many fossil boilers as possible should be obligated in order to maximise the level of renewable heating in the UK and minimise fossil heat. A 70kWth capacity limit would mean a large number of fossil boilers would still be installed without any obligation or further measures to support the development of low carbon heat. A strict capacity limit does bring a substantial risk of over-sizing fossil fuel boilers. In order to avoid this BEIS should make the obligation as encompassing as possible.

10. **Do you have views on whether the market-based mechanism is an appropriate tool for supporting the 'smart' heat pump capability and use, and any limitations of this? Please explain your answer. b) Do you have views on whether this should be through differentiated incentives, through the exclusion of 'dumb' heat pumps from qualifying scope, or another approach?**

No further comments.

11. **Do you agree that hybrid heat pump systems should be included in the market-based mechanism? Yes / No. Please explain your answer.**

Yes, hybrid heat pump systems should be included in the market based mechanism. Hybrid heat pumps offer another decarbonisation option for consumers and maximising consumer choice should be a priority. Hybrids will allow government to get heat pumps into more hard-to-treat properties where a pure heat pump system isn't possible due to cost, disruption, or electricity constraints.

12. **Do you agree that the mechanism should differentiate between different types of hybrid system/product to focus incentives on those which are most consistent with the policy's objectives? Yes / No. Please explain your answer.**

We agree, the mechanism should only support hybrid heat pumps when the hybrid consists of other renewable heating technologies or fuels, e.g. a biomass boiler and should exclude hybrids with fossil heating systems.

13. **Do you have suggestions on ways in which the government, the heating industry or others could manage the challenges and gain the assurances outlined, in order to include hybrid systems in a market-based mechanism without impacting on the policy's primary objectives to grow the heat pump supply chain and significantly reduce greenhouse gas emissions?**

No further comments needed.

14. **Do you have views on our proposed approach for alternative low-carbon heating appliances under the market-based mechanism?**

We would strongly support the obligation also applying to alternative low carbon heating solutions. The 'hard to treat' domestic off gas grid sector is estimated to be 20% of all domestic properties. This equates to 260,000 domestic properties where heat pumps may not be the most appropriate solution. Whilst heat pumps can be very effective in many scenarios, it is important policy prioritises the right technology for the right situation via a technology agnostic approach.

Whichever obligation target is chosen, the government must ensure heat pumps are going into suitable homes and alternative low-carbon heating systems are going into homes where heat pumps aren't suitable. The best way to meet the mechanism's goal of decarbonising heat is to open up the mechanism to alternative low carbon heating technologies and fuels to maximise carbon savings made. The REA does not see the justification in excluding alternative low carbon heating technologies.

As well as alternative low carbon heating, the government should also open up low carbon heating networks to be supported by the market based mechanism. Not only would this benefit low carbon options such as geothermal heating but it could bring renewable heating to a great number of properties.

15. **Do you agree with the proposal to distinguish qualifying installations under the obligation by appliance capacity rather than by building use? Yes/no. Please explain your response.**

Yes, if the mechanism can help decarbonise businesses, then distinguishing via appliance capacity is a good place to start. We believe this would be the most appropriate way to ensure the mechanism is effective.

16. **Do you believe there is a need to go further to limit the scope of qualifying installations in non-domestic properties under the obligation, for instance through an upper limit on floor-size of properties? Yes/no. Please provide evidence to support your response.**

No, renewable installations should be encouraged and large properties should not be punished or prevented from seeking support through the market-based mechanism. This would support low carbon heating supply chains and help to grow the market for low carbon heating.

17. **What challenges may be involved in focusing the obligation on retrofit installations only, excluding those in new-build properties, and how might these be addressed?**

Retrofit properties are likely to have less effective energy efficiency measures than new build properties. This means alongside technology installation, a great deal of work will be needed on the property to make it heat pump ready. Without taking steps to make properties heat pump ready in the first instance it is likely a lot of work could go to waste and costs to the consumer would increase. This is why support should also be targeted at other non-heat pump renewable heat technologies.

18. **Do you agree with the proposal to focus the policy on appliance installations, in order to enable a range of risk mitigation and impact-enhancing measures? Yes/no. Please provide evidence to support your response.**

Yes, we agree the priority should be installation level, rather than wholesalers. This will make the policy easier to monitor and will ensure that money from the mechanism goes directly into heat decarbonisation. It would also ensure appliances made under the obligation are provided to UK consumers, keeping carbon savings within the UK.

19. **Do you support the proposal to incentivise the installation of low-carbon heating systems that replace fossil fuel heating systems more strongly than those that do not? Yes/no. If yes, do you have comments on how this could work most effectively?**

Yes, the priority for the policy should be the decarbonisation of heat, if an installation can prove it is replacing a fossil heating system, and thus saving a great deal of carbon, it should incentivise appropriately. Mechanism for effective incitement could include a calculation of total heating saved during the transition from fossil heating system to renewable heating system under the market based mechanism.

20. **Do you support the proposal to incentivise the installation of low-carbon heating systems that replace more carbon-intense fossil fuel systems more strongly than others? Yes/no. If yes, do you have comments on how this could work most effectively?**

Yes, as discussed earlier we support a dynamic approach targeting both fossil heating systems and carbon intensive fuels. We would support the mechanism incentivising technologies that move away from high carbon fuels towards low carbon fuels. This includes replacing fossil boilers with boilers able to take low carbon fuels such as biomass and hydrogen.

21. **Do you support the proposal to incentivise the installation of standalone heat pump systems more significantly than hybrid heat pump systems? Yes/no. If yes, do you have comments on how this could work most effectively?**

No, we support the installation of any low carbon heating system, whether they be heat pump, hybrid or alternative. Any hybrid units supported should be non-fossil fuel based.

22. **Do you support the proposal to attach a higher obligation to the sale of the most carbon intense heating appliances, such as oil boilers? Yes/no. If yes, do you have comments on how this could work most effectively?**

Yes, the most carbon intensive appliances should face the highest obligation in order to meet the policy's decarbonisation goals and the government's 2040 net zero targets.

23. **Do you have suggestions for other outcomes, beyond those outlined here, for which differentiated incentives within the obligation might be appropriate? Please provide evidence to support your response.**

No further comments.

24. **Do you have views on the most appropriate central target for the policy? What metric, including but not limited to those here, do you believe would work best to meet the policy aims and design principles? Please provide reasoning to support your response.**

The primary central target of the policy should be the growth of a stable, vibrant and successful British renewable heating industry, with robust supply chains and a mature business structure. In turn the policy should reduce consumer reliance on the fossil fuel industry and rebalance Britain's heating market in favour of renewables.

A secondary target should be the reduction in total emissions caused by British heating, as well as other environmental benefits such as better air quality and more energy efficient homes.

25. **Do you have views on the most appropriate trading mechanism for the policy? What market arrangements, including but not limited to those here, do you believe would work best to meet the policy aims and design principles? Please provide reasoning to support your response.**

We would support a trading mechanism in a similar model as the Renewables Obligation and the Renewable Transport Fuel Obligation as appropriate examples of scheme design. These models are already accepted and understood by the British renewables industry. Thus a scheme similar to these examples would be easy to install and implement with little disruption to the industry.

26. **Do you have views on options for, or considerations related to, the delivery and administration of the proposals set out in this consultation and/or to the role of an administrator? Please provide reasoning to support your response.**

We would accept Ofgem managing the scheme as the only body with the experience and resources to manage such a scheme effectively. Ofgem would also bring extensive experience in managing compliance and resolving disputes. We would strongly support a public body managing the scheme and would object to any private company being placed in charge of the scheme.

Some of our members have had issues with Ofgem in the past so we would like to see reassurances that Ofgem will be given additional funding and resources to match this new obligation. Lessons must be learnt from poor delivery of the RHI. Over the life of the RHI the REA has regularly engaged with Ofgem E-Serve concerning our member's deep frustrations in the delivery of the RHI. We continue to receive regular communications from members reporting a wide range of operational issues and serious complaints. Delays to accreditations, or reaccreditations, has been a long term concern. A twelve-month delay seems common in the cases reported to us, with several reporting delays of over 23 months.

If Ofgem are to be awarded the contract for administering the Market Based Mechanism the existing operational issues must be demonstrably resolved. The new contract must include clear KPI's that BEIS actively holds them accountable with regular performance reviews.

27. **Do you have suggestions on how monetary and non-monetary penalties may be designed and administered in order to ensure compliance with the obligation?**

No further comments.

28. **Do you agree with the proposal to apply the obligation to the manufacturers of all fossil fuel boilers sold on the UK market, including non-UK companies? Yes/no. Please provide reasoning to support your response.**

Yes, we would strongly support the obligation applying to all fossil fuel boiler manufacturers, including non-UK companies. The goal of this scheme should be to grow the British renewable heating industry, not foreign fossil heating companies.

29. **Do you have views on how either the proposed or the alternative approach to ensuring the obligation applies fairly across both UK-manufactured and imported products could be delivered most effectively, while keeping administrative complexity proportionate?**

No further comments.

30. **Do you have views on whether, and to what extent, the policy proposals here might disproportionately impact upon certain types of consumer, with a particular focus on those in groups with protected characteristics? Please provide evidence to support your response**

No further comments.