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12<sup>th</sup> January 2022

Dear Sir/Madam,

### Consultation responses:

- **A market-based mechanism for low-carbon heat;**
- **Phasing out the installation of fossil fuel heating systems in businesses and public buildings off the gas grid; and,**
- **Phasing out the installation of fossil fuel heating in homes off the gas grid.**

We welcome the opportunity to respond to these consultations. This response represents the views of the Retail Energy Code Company (RECCo) and we are happy for this to be published on your website.

### About RECCo

RECCo was formed as the corporate vehicle for ensuring the proper, effective, and efficient implementation and ongoing management of Retail Energy Code (REC) and to promote innovation, competition, and positive customer outcomes. Part of RECCo's remit includes providing knowledge and expert opinion on retail energy issues to support the efficient and effective running of the retail energy market. RECCo is therefore providing this response in line with its mission statement and strategic aims.

### Summary

RECCo is supportive of the transition to low-carbon heating alternatives and agrees that decarbonisation is central to the challenge of achieving net zero ambitions. We note that prescriptive regulation can often have unintended consequences. To mitigate the risk of adverse or unintended consequences, we would welcome a collaborative and holistic approach across the energy market, including those entities who may be currently unregulated like heat pump appliance manufacturers, the current providers of off-grid fuels, and agencies who are focused and expert upon fuel poverty and rural affairs. For instance, while heat pumps may have an important role to play in the decarbonisation of heat, they are unlikely to be practicable or provide the silver bullet for all circumstances, and the proposals should not preclude alternative solutions where they best meet the needs of consumers.

Retail energy market participants and interactions may change during the heat-pump uptake, with the introduction of new business models and innovations. The framework must therefore be agile enough to encourage these business models where they support the overall objectives, including consumer protection, while also being robust enough to provide assurance and instil confidence in both consumers and investors. This design challenge must be well thought through, and lessons may be learned from other industry-wide change, such as the smart meter roll-out and accompanying communication strategies, such as deployed via Smart Energy GB. We would also welcome a consistent approach, for instance considering whether the installation of heat pump is comparable to

the situation of smart meter installation which led to the creation of the smart meter installation code of practice, which forms part of the gas and electricity supply conditions and is now governed as part of the REC.

Considering an approach which targets off gas grid buildings and introduces a general market-based mechanism applicable to on- and off- gas grid buildings, could provide the breadth of incentive and encouragement needed to drive heat pump uptake. However, these are not new technologies and are already in widespread use in other markets; we therefore question whether the volumes expected to be supported by the proposed government grants would deliver scale necessary to substantively reduce unit costs and make these heat pumps viable for the majority of consumers.

It is also acknowledged in the consultation that the phase out of the installation of fossil fuel heating in off gas grid homes is likely to target a certain group of customers by default of being off gas grid. These customers could arguably be seen as more likely to experience negative impacts than other customer groups, because, as the consultations state, consumers in this group are likely to include those in vulnerable situations, such as elderly. Consumer protection is needed to mitigate and reduce the risk of negative impacts. Consumers must therefore be central to the design, and where necessary, additional protections considered.

Using a market-based mechanism to drive the uptake of low-carbon heat relies on placing obligations on participants like manufacturers which have not traditionally been exposed to regulatory monitoring of sales or roll-out targets. This cultural shift may be a challenge, especially in the timescales envisaged. It is important to ensure obligated entities understand the expectations and requirements and the consequences of underperformance. Administration will be key to ensuring understanding and compliance. Existing mechanisms like codes or industry standards could be useful when considering the design and maintenance of the obligation. RECCo offers its support in this area, particularly around lessons learnt from the implementation of the new retail energy code including code management services.

For completeness, please see below our response to the relevant questions for all three consultations as appendices. As highlighted in many of the responses, RECCo would like to offer support around lessons learned during the implementation and maintenance of obligations, and the lessons which can be learned via industry code governance frameworks.

We would welcome the opportunity to discuss our response with you. If you have any queries, please contact Jenny Smith ([info@retailenergycode.co.uk](mailto:info@retailenergycode.co.uk)) in the first instance.

Kind regards,

Jon Dixon

**Director, Strategy and Development**

## Appendix 1: A market-based mechanism for low-carbon heat

In the following section, we provide a response only to the questions which we consider to be relevant to the us and the REC.

***Q2. 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?***

We believe there are two key considerations to ensuring the market can evolve under new obligations; the framework must be sufficiently broad and flexible to capture current and future market participants; and it must remain agile as the market develops.

Implementing new obligations will require significant consideration, particularly around the instigation of a regulatory framework, and the incentives and behaviours that the regulatory framework drives over the longer term. Bringing obligated parties up to speed with the requirements and expectations will likely involve a significant cultural shift. This is particularly the case for appliance manufacturers who may import to the UK who may have not been exposed to the UK regulatory framework before. Aspects such as performance assurance and penalties of underperformance or breaches of obligations must be well understood by obligated parties to ensure the right behaviour is encouraged.

It is likely that new business models and consumer propositions will be developed in response to the obligation. Therefore, the drafting of the obligation requires input from various stakeholders to reduce the risk of unintended consequences, and ensure the desired behaviour is incentivised. This includes taking a holistic approach and appreciation of interlinking regulation and incentives, for example, under the Energy Company Obligation (ECO) which is designed to help reduce carbon emissions by requiring energy suppliers to install energy efficiency and heating measures.

Obliging unregulated entities to comply with potentially mandatory minimum sales targets, and/or 'pooling' between organisations, or potential introduction of a certification or standard, could be complex to implement and monitor. It also risks the creation of perverse incentives, driving the installation of heat pumps in preference to other technologies which may be better suited to the particular property and/or circumstances. However, existing mechanisms such as industry codes which could provide a starting point for governance structures, especially where interaction between market participants would be needed, e.g. in a pooling mechanism. The Retail Energy Code (REC) is one such industry code which is designed with the consumer at its core and regulates many consumer interactions within the scope of the retail energy market.

Given the similarities between the retail energy market and the proposal for the industry-led heat pump installation, which also relies on consumer engagement, support, and protection, there may be merit in considering the REC as a governance vehicle for the delivery of the policy.

To ensure the market can evolve, policy makers should seek to move away from the approach of like-for-like replacement of heating, which assumes that a gas boiler will be replaced by a hydrogen or air source heat pump. True evolution will need energy to be seen as a service rather than a commodity, where a holistic approach is taken to meet all the energy requirements in a home or building.

Increasing options of how energy is sourced and supplied and therefore consumed means a potential increase in parties that consumers must interact with. In future, a consumer may have a heating supplier, an electricity supplier for the home and another for charging their electric vehicle. The various touchpoints may introduce the need for the management of home energy that is not measured in usage per kilowatt hour, but a fee for the various energy uses. Future business models need to be imagined in a way that not only allows increased use of low carbon energies, but also how

lifestyles and consumer choice will impact how energy is consumed. Therefore, obligations need to be flexible and agile to ensure that innovation is not stifled.

***Q4. 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?***

There are many energy industry policies and schemes which are worth review when considering the financial support to the heat pump market, from Green Deal, to ECO, to the Renewable Heat Incentive. Lessons can be learnt about the design of the scheme including the infrastructure and governance mechanisms. Please see the response to appendix 2, question 8 for more detail.

It is important to undertake a holistic review when critically assessing the policies and schemes, as interactions with existing schemes could either promote or discourage the intended behaviour. For example, should financial support be available for certain heat pump consumers under a new discrete incentive, consideration should be given to how that interacts with the Clean Heat Grant or Home Upgrade Grant which also could allow for funding of a heat pump.

While providing grants or other financial support could go some way in encouraging uptake, especially in the short term, financial sustainability must be considered. Bundled services in the retail energy market, such as heat pump plus tariff contract for supply of energy, could be the kind of innovation and new business model which allows for sustainable investment.

The current regulatory framework does not encourage this type of business set up, as the traditional tariff structure and rules were designed around a licensed energy supplier with a regulated and scoped role to play in the retail energy market, supplying gas and/or electricity to a premises. In the context of heat pumps, this structure should be critically analysed to understand the barriers or challenges faced by retail energy market participants, like suppliers, in offering innovative solutions. RECCo would like to offer its support in this area.

The cost of switching to low carbon heating will no doubt be more affordable to some consumers than others. Any subsidies or grants schemes need to consider how those who are unable to fund the shortfall or difference in price are not left behind. Full cost grants or other such low-cost options need to be available to those who would not otherwise be able to engage with low carbon heating. The upfront costs may prove prohibitive and therefore deter consumers who are most in need of more efficient, low cost and low carbon heating options. A means tested approach, which is tapered so that those on the lowest incomes receive the most support, may better serve those who are most in need of financial support. This may be preferable to a flat rate for all consumers.

***Q5. 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?***

Under both proposals, lessons should be drawn from the ECO policy as there are similarities between the proposals and ECO. For example, obliging the installation of a minimum number of measures, whether that is heat pumps or in the case of ECO, energy efficiency measures, there are lessons which can be learnt and applied in the development of these new proposals.

Consideration should be given to consumer outcomes, and how consumers would be protected throughout the journey from contract agreement, to installation, and post-installation maintenance arrangements. Performance assurance, certification, or applying a certified standard may also be worth considering, to ensure a minimum level of quality and service.

These concepts already exist for many energy suppliers, and as energy supply is a regulated, licensed activity, it could be arguably easier to oblige suppliers, rather than create obligations for non-licensed manufacturers.

If the 'supplier obligation' proposal was pursued, there may be merit in embedding this within existing obligations, like ECO, and/or using the existing governance structures like that provided by energy codes to manage the maintenance of the policy. More generally, the current energy crisis is likely to require a fundamental review of the retail proposition. The past emphasis on price-based competition and volumes of switching between suppliers is unlikely to deliver the relationships or certainty of returns that will be required for suppliers to make the level of investment required to absorb the initial cost of heat pump installation. If these costs are to be amortised over a number of years and recovered through standard electricity billing, the supply licence conditions will need to be modified in order to reflect that sort of long-term commitment on the part of both supplier and consumer, or to ensure that any tariffs which may be designed to facilitate such investment are interchangeable upon a subsequent switch.

***Q19. 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? And;***

***Q20. 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?***

In general, RECCo is supportive of the transition to low-carbon heating alternatives. From a market design perspective, to create a sustainable transition, incentives and protections are needed.

Consumers should feel incentivised to seek out or agree to the installation of low-carbon heating systems; installers should be sufficiently incentivised to install and maintain low-carbon heating systems both short and longer term; and there must be sufficient supply. Supply largely stems from investor confidence, which is built upon a strong and sustainable economic case to invest, largely driven by long term policy intention.

To address these challenges, consumer protections must be robust, and there must be an economic case for the consumer, installer, and manufacturer, in delivering low-carbon heating. Financial grants, or other mechanisms like loans may be worth considering until the point where economies of scale bring down the cost of the product and the installation and maintenance. Starting with non-domestic installation may be a viable option to begin the journey toward a larger scale roll out.

There may also be merit in considering the role of the retail energy market participants, like suppliers, in encouraging uptake. Suppliers often have close interaction with consumers, and already offer energy efficiency advice. Suppliers also offer tariffs and contracts for gas and/or electricity across domestic and non-domestic premises. There may be opportunities for suppliers to encourage engagement and innovate by offering bundled services. A pre-requisite to this, however, is the regulatory backdrop which must allow and support such innovation.

When considering the concept of a large scale roll out, there are likely lessons to be learned from the smart meter roll out, and perhaps from other industries. Critically assessing the approach and applying the lessons learned across the regulatory design, consumer protection and engagement, and the wider implications on the market, could be beneficial. We also consider that the incentives could appropriately be targeted towards those consumers who would benefit most from the support. At present, the avoidable funds are likely to be utilised by consumers who are sufficiently well-informed of the government's proposals and able to provide their own side of the funding requirements, rather than those in most need of the support. We consider that greater benefit could

be leveraged if the incentives were aligned with a coordinated programme to improve low efficiency housing stock rather than on a first come first served basis.

***Q26. 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.***

The delivery of the proposals could be complex to implement and deliver on a longer-term basis. In particular:

- obliging previously unregulated entities to comply with potentially mandatory minimum sales targets, and/or 'pooling' between organisations, or potential introduction of a certification or standard, could be complex to implement and monitor;
- alongside this, there would be a need for ongoing maintenance of any obligation to ensure performance continues as intended; and
- it is important that obligations remain agile enough to support and encourage innovation, while also protecting consumers.

An administration function is a tried and tested method of achieving these competing complexities. It can also be a method of ensuring the effective management of ongoing regulatory reporting and analysis.

As indicated above, existing mechanisms like industry codes, such as the REC could provide a starting point for governance and administration structures.

## Appendix 2: Phasing out the installation of fossil fuel heating in homes off the gas grid

In the following section, RECCo provides a response only to relevant questions.

***Q2. Would a 2026 end date for the installation of fossil fuel heating in homes off the gas grid give industry and consumers sufficient time to prepare for the regulations? Please provide evidence to support your response.***

There are many different objectives which must be sufficiently fulfilled before the transition to low-carbon heating systems could be considered successful to the extent that no other alternatives are available. The phase out of fossil fuel heating systems in off gas grid premises is an achievable ambition. However, there are pre-requisites including:

- investor confidence providing the investment and funds for manufacturers to ensure supply of low-carbon heating systems like heat pumps;
- consumer protections to ensure that consumers are safeguarded as the transition progresses;
- affordability and financing of upfront costs to enable consumers to take up alternatives; and
- innovation and innovative business models coming to the fore to apply downward pressure on price, and increasing quality.

Before implementing the obligations – or deciding on what will be implemented and deciding the governance framework – it is difficult to accurately assess how quickly the market will respond. Instead of committing to an end date, it could be worthwhile implementing the foundations, then reviewing the end date post-implementation. Should an end date be applied, it is important to retain flexibility if the aim of making heat pumps affordable for the mass market, has not been achieved. Any shortfall between what is deemed to be affordable, and the actual price, should continue to be filled by a subsidy, with reconsideration of the wider policies and heat pump schemes to ensure the desired behaviours are being realised from the schemes.

There should be little time required for obligated parties to comply with the obligations and robust performance assurance framework once agreed and a transition period conducted. However, the price, quality, and supply of the heat pump could take time as manufacturers scale up production and consumers become more engaged, increasing demand.

***Q4. Do you have any views on the design or content of guidance that will help households and installers determine whether it is reasonably practicable to install a heat pump? Please provide evidence to support your answer.***

There are many examples within the energy market which could be used a basis for guidance to help households and installers determine whether it is reasonably practicable to install a heat pump. A common theme of the guidance is accessibility. Using plain English, providing different website formats for view on all device types, with contact available via phone and email. Material designed to engage and drive consumer uptake is likely very different to that designed for installers to use in design and feasibility.

For example, Smart Energy GB undertake marketing campaigns to encourage consumer engagement and take up of smart meters. Lessons can be learned from their experience, and the experience of consumers of their campaigns and marketing material.

Another example is that energy suppliers are obliged to offer a smart meter to consumers directly, including follow up contact. Lessons can also be learned from suppliers' experience in undertaking this engagement, and the experiences of consumers of their engagement with their energy supplier in this context/scenario.

There are other examples such as the website and material produced for the microgeneration certification scheme (MCS) which certifies certain products and installers to support providing consumer confidence.

Given RECCo's scope in the retail energy market, its mission and value of consumer focus, we offer support in this area, particularly providing a sounding board in the development of consumer guidance.

***Q8. Do you have any views on the development of heating fuels and systems which will be consistent with wider government objectives on net zero emissions, environmental sustainability and air quality, and offer a secure and affordable fuel supply to consumers, from 2026? Please provide evidence to support your answer.***

The development of heating fuels and systems requires a holistic approach across the energy landscape. Collaborating with stakeholders from the energy industry including consumers and installers is likely to reduce the risks of unintended consequential impacts.

As mentioned in previous responses to this set of three consultations, lessons can be learned from industry-wide change, such as the smart meter roll out. From the consumer engagement strategy led by Smart Energy GB to the smart meter installation code of practice, there are existing mechanisms and deliverables which can be assessed to ensure that the lessons are applied to the potential scale up of heat pumps.

Affordability and consumer protection are areas which should be explicitly considered in the development of this policy. Off gas grid homes are likely, by default, target certain consumer groups. New innovative business models like smart enabled heating systems or bundled services to address financial barriers, could come about and may resolve some of the challenges. However, the governance and regulation of this is key.

Consumer protection must be robust to ensure that consumers gain confidence in heat pumps, from installation and maintenance to the enduring costs or contractual agreements with parties. Without sufficient consumer protection, there is likely to be a lack of confidence, which in turn may impact uptake and therefore the success of the heat pump policy.

Financial barriers must also be addressed to ensure that heat pumps are affordable, both in terms of initial upfront investment, but also in their maintenance and other enduring costs like bundled service contractual arrangements. Ensuring financial sustainability is vital to the long-term success of the policy.

An agile and scalable solution to manage the financial aspects of the policy could be used. Ideally, the associated infrastructure costs would be proportionate to the usage of the system so that the infrastructure does not require significant upfront investment. Cost increases would ideally be linked to the usage as it occurs, with cost increases getting marginally smaller over time, as the system is used more, along the principle of economies of scale. Moving away from large, centralised systems is likely to be required to achieve this. Lessons can likely be learned from energy policy such as the Green Deal and its associated infrastructure. The core of the Green Deal Central Charge database remains and could be repurposed, or aspects extracted to help create a system which is more suitable for a new scheme in line with the principles described. The benefit of this includes the reuse of existing infrastructure, which is likely far more cost effective than creating a new system.

***Q11. Do you have any views on how best to ensure compliance with the proposed regulations laid out through this consultation? Please provide evidence to support your answer***

Please see our response to Question 2 in Appendix 1 above.

***Q12. Do you have any views on what more could be done to address financial barriers to heat pump deployment? Please provide evidence to support your answer.***

Key challenges include, accessibility of premises, home ownership, eligibility criteria for funding and installation of heat pumps. Whilst these are not strictly a financial barrier to the scheme, they are indirect (potentially financial) barriers which may also require assessment alongside the funding barrier. Switching to low carbon heat sources will be more affordable for some consumers than others. We have indicated above in our response to question 4 in Appendix 1 above the financial challenges that may be faced and potential considerations to address them.

***Q13. Do you have any views on how we should encourage smart-enabled heating in homes off the gas grid? Please provide evidence to support your answer.***

A large part of encouraging uptake of smart-enabled heating in homes is consumer engagement, and supply of devices which consumers demand.

Additionally, there needs to be better understanding of this market segment and how those homes are currently heated so that more informed and targeted options that are most relevant to those consumers can be proposed and pursued. For example, a rural home with a small holding may run off a generator, whilst another off-grid home in a village may rely on oil central heating. Both meet the needs of the consumer as gas is simply not available. The question is, which alternative provides the same or improved heating at a reasonable cost of installation and demonstrates longer term financial and environmental benefits.

Consumers should feel incentivised to seek out or agree to the installation of low-carbon heating systems; installers should be sufficiently incentivised to install and maintain low-carbon heating systems both short and longer term; and there must be sufficient supply. Supply largely stems from investor confidence, which is built upon a strong economic case to invest, largely driven by long term policy intention.

To address these challenges, consumer protections must be robust, and there must be an economic case for the consumer, installer, and manufacturer, in delivering low-carbon heating and associated smart-enabled devices. Financial grants, or other mechanisms like loans may be worth considering until the point where economies of scale bring down the cost of the product and the installation and maintenance. Starting with non-domestic installation may be a viable option to begin the journey toward larger scale roll out.

There may also be merit in considering the role of the retail energy market participants, like suppliers, in encouraging uptake. Suppliers often have close interaction with consumers, and already offer energy efficiency advice. Suppliers also offer tariffs and contracts for gas and/or electricity across domestic and non-domestic premises. There may be opportunities for suppliers to encourage engagement and innovate by offering bundled services. A pre-requisite to this, however, is the regulatory backdrop which must allow and support such innovation.

***Q14. Do you have any views on what more could be done to galvanise supply chains for low carbon heating? Please provide evidence to support your answer.***

As per Question 13, the regulatory backdrop must allow and encourage innovation and innovative business models. Supply chains are likely to respond to (potential) demand when there is sufficient investor confidence that the product(s) and service(s) are certainly going to scale up. Part of this includes providing certainty through robust regulation, and partly allowing market participants the

agility to innovate. Consumer protection, however, is vital to ensure that consumers are confident and protected when engaging in the market.

***16. Do you have any views on what more could be done to ensure households, and communities, affected by our proposals experience a smooth transition to clean heat? Please provide evidence to support your answer.***

It is important that the consumer groups are represented in the scheme design. There are existing consumer group representative organisations which can help facilitate this representation. These proposals rely on consumer confidence and willingness to engage in heat pump uptake. As such, there must be engagement to bring consumers on the journey.

Lessons can also be learned from other industry-wide roll outs.

## **Appendix 3: Phasing out the installation of fossil fuel heating systems in businesses and public buildings off the gas grid**

In the following section, RECCo provides a response only to relevant questions.

***Q1. Do you agree with the principle of using the natural replacement cycle to phase out the installation of fossil fuel heating systems in non-domestic buildings off the gas grid? Yes/No. Please explain your response.***

Using the natural replacement cycle is likely to reduce the costs associated with the uptake of heat pumps, and ensure the life span of existing heating systems, making the most of the life of the assets.

Given off gas grid properties may be in clusters rather than sporadic, consideration should also be given to the impact of the phase out. For example, there may be economies of scale of undertaking replacement in geographical locations. However, there may be different challenges with that approach. Lessons could be learned from other industry-wide roll out programmes.

***Q2. Do the 2024 and 2026 timescales for introducing this policy provide sufficient lead in time for non-domestic off-gas grid consumers to prepare for their transition to low carbon heat? Yes/No. Please provide evidence to support your response where possible.***

There are many different objectives which must be sufficiently fulfilled before the transition to low-carbon heating systems could be considered successful to the extent that no other alternatives are available. The phase out of fossil fuel heating systems in off gas grid premises is an achievable ambition. However, there are pre-requisites including:

- investor confidence providing the investment and funds for manufacturers to ensure supply of low-carbon heating systems like heat pumps;
- consumer protections to ensure that consumers are safeguarded as the transition progresses;
- affordability and financing of upfront costs to enable consumers to take up alternatives and
- innovation and innovative business models coming to the fore to apply downward pressure on price, and increasing quality.

Before implementing the obligations – or deciding on what will be implemented and deciding the governance framework – it is difficult to accurately assess how quickly the market will respond. Instead of committing to an end date, it could be worthwhile implementing the foundations, then reviewing the end date post-implementation. Should an end date be applied, it is important to retain flexibility if the aim of making heat pumps affordable for the mass market, has not been achieved. Any shortfall between what is deemed to be affordable, and the actual price, should continue to be filled by a subsidy, with reconsideration of the wider policies and heat pump schemes to ensure the desired behaviours are being realised from the schemes.

There should be little time required for obligated parties to comply with the obligations and robust performance assurance framework once agreed and a transition period conducted. However, the price, quality, and supply of the heat pump could take time as manufacturers scale up production and consumers become more engaged, increasing demand.

***Q11. How do you foresee the costs associated with installing a heat pump in non-domestic buildings changing over the next 10 years? Please consider a range of system sizes in your response and provide evidence to support your answer, and***

***Q13. How can the government support cost reductions in low carbon heating technologies suitable for non-domestic buildings, particularly heat pumps? Please consider buildings of differing sizes and energy use.***

As per Question 2, there are many objectives which must be sufficiently fulfilled before the transition to low-carbon heating systems could be considered successful to the extent that no other alternatives are available. Instead of considering time, e.g. 10 years, in absolute nominal form, it may be worth considering deliverables and outcomes.

For example, investor confidence is a pre-requisite to the success of heat pump uptake. To achieve this, the regulatory backdrop must be robust to provide long-term certainty. This involves the development of the regulations in a robust governance framework with reliable administration to manage the functioning of the governance framework, including managing consumer protections.

Alongside investor confidence and consumer engagement, there will likely be innovation and innovative business models appearing. This relies on the regulatory landscape being agile enough to encourage innovation.

The combination of these factors is likely to impact the price and cost of heat pumps over the next 10 years. However, without one of these factors, e.g. if investor confidence is not sufficiently strong, it is unlikely that costs will be pushed down as low as anticipated.

***Q15. How can we support the green finance market to develop the products and investor demand that businesses will need to fund their transition to low carbon heat?***

As per Question 2, investor confidence, both in terms of manufacturers and businesses investment into heat pumps, is a pre-requisite to the success of the heat pump uptake.

Financial barriers must also be addressed to ensure that heat pumps are affordable, both in terms of initial upfront investment, but also in their maintenance and other enduring costs like bundled service contractual arrangements. Ensuring financial sustainability is vital to the long-term success of the policy.

There are many energy industry policies and schemes which are worth review when considering the financial support to the heat pump market. From Green Deal, to ECO, to the Renewable Heat Incentive. Lessons can be learnt about the design of the scheme including the infrastructure and governance mechanisms.

It is important to undertake a holistic review when critically assessing the policies and schemes, as interactions with existing schemes could either promote or discourage the intended behaviour. For example, should financial support be available for certain heat pump consumers under a new discrete incentive, consideration should be given to how that interacts with the Clean Heat Grant or Home Upgrade Grant which also could allow for funding of a heat pump.

While providing grants or other financial support could go some way in encouraging uptake, especially in the short term, financial sustainability must be considered. Bundled services in the retail energy market, such as heat pump plus tariff contract for supply of energy, could be the kind of innovation and new business model which allows for sustainable investment.

The current regulatory framework does not encourage this type of business set up, as the traditional tariff structure and rules were designed around a licensed energy supplier with a regulated and scoped role to play in the retail energy market, supplying gas and/or electricity to a premises. In the context of heat pumps, this structure could be critically analysed to understand the barriers or

challenges faced by retail energy market participants, like suppliers, in offering innovative solutions. RECCo would like to offer its support in this area.

***Q20. Do you have any views on how best to ensure compliance with the proposed regulations laid out through this consultation? Please provide evidence to support your answer.***

Please see our response to Question 2 in Appendix 1 above.

***Q25. Do you have any views on what more could be done to ensure businesses and communities affected by our proposals experience a smooth transition to low carbon heat? Please provide evidence to support your answer.***

It is important that the consumer groups are represented in the scheme design. There are existing consumer group representative organisations which can help facilitate this representation. These proposals rely on consumer confidence and willingness to engage in heat pump uptake. As such, there must be engagement to bring consumers on the journey.

Lessons can also be learned from other industry-wide roll outs such as the smart meter roll out, and Green Deal, particularly for infrastructure purposes.

To support a smooth transition, the financial aspects for businesses and communities need to be considered, and an agile and scalable solution used. Ideally, the associated infrastructure costs would be proportionate to the usage of the system so that the infrastructure does not require significant upfront investment. Cost increases would ideally be linked to the usage as it occurs, with cost increases getting marginally smaller over time, as the system is used more, along the principle of economies of scale. Moving away from large, centralised systems is likely to be required to achieve this. Lessons can likely be learned from energy policy such as the Green Deal and its associated infrastructure. The core of the Green Deal Central Charge database remains and could be repurposed, or aspects extracted to help create a system which is more suitable for a new scheme in line with the principles described. The benefit of this includes the reuse of existing infrastructure, which is likely far more cost effective than creating a new system.