REA response to Scottish Government Proposals for a Heat in Buildings Bill: Consultation

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

Consultation questions

Question 1

To what extent do you support our proposal to prohibit the use of polluting heating systems in all buildings after 2045?

- ☐ Strongly support
- ☒ Somewhat support
- ☐ Neither support nor oppose
- ☐ Somewhat oppose
- ☐ Strongly oppose
- ☐ Don't know

Please include any additional comments below:

Whilst we strongly support the prohibition of fossil fuel heating systems in Scottish buildings after 2045, the REA objects to the inclusion of bioenergy systems within the definition of 'polluting heating systems'. We do not believe that biomass, bioLPG, and biogas should be included in the same category as gas and oil boilers, given that biogenic carbon is different to fossil carbon – as described by the IEA and IPCC in their greenhouse gas emissions inventory[1]. This is also further collaborated by Green House Gas Protocol that defines CO2 emissions from biomass as out of scope.[2] The protocol is used as the bases for the Government Greenhouse Gas Conversion Factors, which inform Standard Assessment Procedure calculation for buildings in Scotland. Section 9 of the UK GHG Conversion Factors methodology state that "At the point of use, biofuels are defined as "net carbon zero" or "carbon neutral" as any CO2 expelled during the burning of the fuel is cancelled out by the CO2 absorbed by the feedstock used to produce the fuel during growth." [3]

[1] See 2.3.3.4 (Chapter 2, page 2.4) of the IPPC 2019 Refinement of the 2006 Guidelines for National Greenhouse Gas Inventories.
[2] Greenhouse Gas Protocol https://ghgprotocol.org/
[3] See Methodology Documentation https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023

An approach that conflates these two carbon types is counter to the science and not consistent with the treatment of emissions in wider Scottish Policy. As long as bioenergy is done sustainably it is not the same as a fossil fuel boiler. The Scottish Government's focus on 'zero-direct-emissions' systems ignores the entire carbon lifecycle of a technology.

Both indirect and direct emissions should be considered when assessing the greenhouse gas emissions a heating system is responsible for, as this would better define its total impact on the environment. Indeed, some of our members have been involved in scope 1-3 assessments of bioenergy systems and highlight that when assessing the whole-lifecycle low carbon benefits of bioenergy it stands up against grid production of electricity, and that biomass heat has a carbon footprint 23 times smaller than heating oil systems[4].

Furthermore, many modern biomass boilers have improved their particulate emissions abatement technologies – for instance, electrostatic precipitators filter out 99% of particles – and innovation is happening all the time in the sector to further drive down emissions.

All renewable low-carbon technologies have a role to play in the decarbonisation of the heating system and we would encourage a Heat in Buildings policy that is focused on technology agnosticism – to ensure that the right technology is used for the right building. Bioenergy has a valuable role to play in heat decarbonisation – in 2021 wood fuelled biomass systems were estimated to have saved 1.6 million tonnes of CO2[5], making it the biggest contributor to heat decarbonisation in Scotland to date. Bioenergy should be included as an option, rather than thought of as being 'exempt' in certain scenarios, as it is important to offer alternatives to the many building types and locations where electrification is uneconomic, impractical or both. The UK's Biomass Strategy has recognised a role for bioenergy in decarbonising the heat system, especially in complex to decarbonise situations, and as Scotland's own Bioenergy Strategy is yet to be published it would be premature to limit its role. Allowing bioenergy would also align Scotland with the EU, as their Renewable Energy Directive recognises a role for bioenergy in decarbonisation. Furthermore, members have highlighted concerns regarding the shortages of skilled trades particularly in heat pump servicing - by reducing consumer choice it will place increased pressure on a limited skills sector.

It is also important to recognise that rural properties are not the same as urban properties, and that a different approach is required when decarbonising these properties. Bioenergy can play a key role in the just transition in Scotland and ensure rural communities aren't left behind.

Hybrid systems should also be considered to help enable the transition. Hybrid heat-pumps when combined with a bioenergy system provide a net-zero compatible solution – this could be particularly useful for rural off-grid homes.

Question 2

To what extent do you agree that we should introduce a minimum energy efficiency standard to be met by private sector landlords by the end of 2028 (even if they are already using clean heating)?

☐ Strongly support

[4] Land Energy (2023) Comparison of Lifecycle CO2 emissions from heating oil and wood pellet
[5] Energy Saving Trust (2021) Wood Fuel Demand and Usage in Scotland - 2021 report https://forestry.gov.scot/publications/1486-wood-fuel-demand-and-usage-in-scotland-2021-report

☒ Somewhat support

☐ Neither support nor oppose

☐ Somewhat oppose

☐ Strongly oppose

☐ Don't know

Please include any additional comments below.

It is important to note that the matter of landlord spending on energy efficiency has been contentious previously in related areas. For example, the Minimum Energy Efficiency Standards (MEES) for private rental sector homes imposes a threshold test for spending on landlord funded energy efficiency measures. This is set at around £6,000 or £10,000 depending on the year and step up from EPC banding required.

This has led to a lack of action in some properties especially in recent times due to cost inflation, and subsequently energy efficiency improvements have not been made. Similarly, the necessary investments even below the limits are a challenge for many small landlords, again leading to inaction.

Therefore, the proposals under discussion must avoid this problem, perhaps by highlighting some of the other support available such as zero-interest loans for such work in Scotland, in order to drive up compliance and energy efficiency measures under these proposals. Furthermore, sufficient funding mechanisms need to be in place, or the regulations need to be designed in such a way that the costs of installing such measures are not just passed onto renters unfairly when there is already a cost-of-living crisis.

Question 3

To what extent do you agree that we should introduce a minimum energy efficiency standard to be met in owner occupied homes (which still have a polluting heating system) by the end of 2033?

☐ Strongly support

☐ Somewhat support

☒ Neither support nor oppose

☐ Somewhat oppose

☐ Strongly oppose

☐ Don't know

Please include any additional comments below.

The REA supports the Scottish Government's aim of improving the energy efficiency of homes to help reduce bills and enable all to live in comfortable and warm homes. However, the costs are quite

prohibitive for certain properties to meet those standards, and it seems like the burden of paying the costs would fall on the consumer. The broadest range of options should be left available to owners to meet these standards with costs capped to avoid over burdening owners. The government needs to ensure consumers are aware of current support mechanisms available under the Home Energy Scotland and Business Energy Scotland schemes, and it should also expand these schemes. Those in low-income brackets should also have full-funding support available so that consumers do not have to go into debt to meet government legislation.

Our members have also raised concerns regarding the availability of skills and whether we have the supply chain to meet the demand created by this.

Question 4

Do you agree with our proposal to set a minimum energy efficiency standard that can be met by either installing a straightforward list of measures, or showing a good level of energy efficiency based on a reformed EPC fabric efficiency metric?

- ☐ Strongly support
- ☒ Somewhat support
- ☐ Neither support nor oppose
- ☐ Somewhat oppose
- ☐ Strongly oppose
- ☐ Don't know

Please include any additional comments below.

Much of the existing housing stock may struggle to meet minimum energy efficiency standards, and so offering the alternative option of meeting a standard by installing measures seems appropriate.

Question 5

What is your view on the initial proposed list of measures to meet the minimum energy efficiency standard?

- ☐ Strongly support
- ☒ Somewhat support
- ☐ Neither support nor oppose
- ☐ Somewhat oppose
- ☐ Strongly oppose
- ☐ Don't know

Please include any additional comments below.

The proposed measures seem appropriate. The list should be adaptable and make sure that the most suitable measures for the buildings type are installed. An assessment should take place beforehand to determine which measures are most suitable, taking into account the cooling and heating needs of the building.

Our members also recommend that the 'thickness' specified of insulation (270mm loft, 80mm hot water cylinder) would better be specified as a U value or similar. Most A rated modern hot water cylinder, for instance, do not have 80mm of insulation but instead have 40mm of high-performance insulation. 80mm thickness is based on 'rockwool' type insulation which has much poorer thermal performance than factory applied, closed cell foam insulation. Not only would it be perverse to demand additional insulation (or replacement) of high efficiency modern cylinders, but many cylinders are installed in locations where there is no space for additional insulation. Similar arguments could be made for different types of loft insulation.

Question 6

Do you think that properties for which most or all of the measures on the initial proposed list are not relevant should be required to meet an equivalent minimum energy efficiency standard?

☒ No – these properties should be considered compliant once they have installed all the measures that are appropriate for their building type, even if this is few or no measures.

☐ Yes – they should be required to meet the standard and additional measures should be included on the list (such as solid wall insulation, solid floor insulation and flat roof insulation), and they should be required to install all of these where feasible

☐ Yes – they should be required to meet the standard and additional measures should be included on the list (such as solid wall insulation, solid floor insulation and flat roof insulation), but they should only be required to install some of these where feasible and cost effective

☐ Yes – they should be required to meet the standard and additional measures should be included on the list (such as solid wall insulation, solid floor insulation and flat roof insulation), but they should only be required to install some of these where feasible, and they should be allowed additional time to do so

Please include any additional comments below.

If measures are too costly, disruptive and ineffective to install, properties should not be forced to install them. Measures should be installed where appropriate for that building.

Question 7

Do you think that an alternative approach to setting the minimum energy efficiency standard is required?

☐ Yes

☒ No

☐ Don’t know

Please include any additional comments below.

Where a property is of a type or construction where the listed measures are not appropriate, then there is no point in attempting more difficult, more disruptive and more expensive measures. This over complicates what would otherwise be a simple and effective policy that can be easily understood and complied with.

Question 8

Do you agree that the use of bioenergy should continue to be permitted in certain circumstances?

☐ No, it should be prohibited in all cases

☐ Yes, it should be permitted for those buildings already using it

☐ Yes, it should be permitted for those buildings who have no other clean heating system available.

☐ Yes, it should be permitted for those buildings already using it and for those buildings who have no other clean heating system available.

☒ Yes, it should be used in wider circumstances (please describe these).

Please include any additional comments below.

Scotland has an established bioenergy industry across power, heat and transport. As identified by the Climate Change Committee, EU and the UK's Biomass Strategy, bioenergy is expected to continue to play an important role in all of these sectors, including heat, in order to meet decarbonisation targets, especially in complex to decarbonise situations. As such, bioenergy should continue to be allowed in wider circumstances.

The sector accounted for an estimated 5,000 jobs across Scotland in 2021 and provided a market value of over £860 million to the Scottish economy[6]. Biomass is the largest source of renewable heat in Scotland, with an estimated 3,750 GWh of output from over 8,500 installations, primarily biomass boilers (79% of all renewable heat generated in Scotland). Biomethane, produced from wastes and energy crops, is the second largest contributor to renewable heat with an estimated output of 920 GWh from 18 installations (16% of all renewable heat generated) and increased by 52 GWh between 2021 and 2022[7]. Biofuels, like rDME and bioLPG will also play a role in decarbonising hard to treat properties, especially those using oil boilers, with very low conversion costs.

It is important that the Scottish Government recognise an ongoing role for bioenergy in heating, particularly in rural, off-gas-grid areas which typically have more complex to decarbonise homes of which there are 512,230 in Scotland (around 2/3 in rural areas and 1/3 in Highlands and Islands)[8]. This would be consistent with the treatment of bioenergy heating in the UK's Biomass Strategy.

[6] REA (2022) Review 2022 https://www.r-e-a.net/resources/review-22/
[7] Scottish Government (2022) Scottish Energy Statistics Hub https://scotland.shinyapps.io/sg-scottish-energy-statistics/?Section=RenLowCarbon&Subsection=RenHeat&Chart=RenHeatTech
[8] House of Commons Library (2023) Constituency data: Households off the gas grid https://commonslibrary.parliament.uk/constituency-data-households-off-the-gas-grid/

Similarly, complex to decarbonise properties on the gas grid requiring high heat loads and have low energy efficiency standards, such as listed buildings or large public buildings, may also find bioenergy a suitable decarbonisation solution.

The Heat in Buildings Bill needs to allow for the fact that in such cases bioenergy is the most cost-effective renewable heating option. Failure to do so could leave many households and businesses, especially in rural areas, behind without adequate, or financially feasible, options to decarbonise. We would recommend that there should be an assessment against defined criteria to determine the right technology for the right situation taking into account technological, economic and environmental factors. In the majority of cases electrification is likely to be the correct solution, however there will be a significant number of situations, as explained above, where biomass will be a more appropriate alternative.

Bioenergy can particularly have a role to play where electrification may not be the most suitable solution, such as rural and island communities with poor grid connections, certain non-domestic buildings requiring high heat loads, and complex-to-decarbonise homes. They can also operate at a higher heat load than heat pumps, making them a valuable high temperature heat source. As such, biomass boilers work particularly well at medium-large scales due to higher heat loads, making them suitable for use in larger properties including hospitals, schools, hotels, B&Bs, care homes and other non-domestic situations.

Allowing bioenergy and hybrid-heat-pumps with bioenergy options would help give choice of heat supply for consumers, particularly those in rural and island communities, and off-gas-grid areas – who may be concerned about both the lack of connection to the electrical grid, and the robustness of the grid system.

Finally, biomass has strong links to the forestry sector and thus generates many local benefits – notably supporting a circular economy in rural areas. This is especially true for rural areas of Scotland, where local biomass resource provides highly sustainable, local feedstocks which support local employment, while encouraging managed forestry, leading to healthier and more productive woodlands that sequester more carbon than unmanaged woodlands[9]. One biomass boiler installation can support 10-15 supply chain jobs[10], which is particularly valuable in rural areas – Dumfries and Galloway and Highland have the highest concentrations of biomass installations and it is a valuable employer in these areas[11]. Biomass is also an important tool in addressing fuel poverty – which is particularly high in remote rural areas (where 29% of households are in fuel poverty) and was highest for those using electricity as their primary fuel[12].

We have attached an annex of case studies to our submission which highlight the important role bioenergy is already playing in Scotland.

[9] Forest Ecology and Management (2023)
https://www.sciencedirect.com/science/article/pii/S0378112723004383?via%3Dihub
[10] Biomass Heat Works (2022) Wood Heat Conference Update on Biomass Heat Works Campaign
https://www.r-e-a.net/wp-content/uploads/2020/10/S4-WH2020-Neil-Holland-Biomass-Heat-Works.pdf
[11] Energy Saving Trust (2021) Wood Fuel Demand and Usage in Scotland - 2021 report
https://forestry.gov.scot/publications/1486-wood-fuel-demand-and-usage-in-scotland-2021-report
[12] Scottish Government (2023) Scottish House Condition Survey: 2021 Key Findings
https://www.gov.scot/publications/scottish-house-condition-survey-2021-key-findings/pages/3-fuel-poverty/

Question 9

To what extent do you support the requirement to end the use of polluting heating following a property purchase?

- ☐ Strongly support
- ☒ Somewhat support
- ☐ Neither support nor oppose
- ☐ Somewhat oppose
- ☐ Strongly oppose
- ☐ Don't know

Please include any additional comments below.

It makes sense to have different points in time by which one may be asked to meet the Heat in Buildings Standard. This will help spread out installations between now and 2045, and balance supply and demand. This could help grow the market for clean heating technologies and start driving costs down earlier on. However, a balance needs to be struck and it shouldn't be mandatory to install a new boiler following a property purchase if it has only recently been replaced, as otherwise this would cause unnecessary waste. It would make sense for the grace period to depend on the age of the current boiler to account for the embodied carbon of systems already in place. There should also be sufficient support mechanisms in place to help cover the cost of replacement, as currently the median reported costs[13] of installations under the domestic RHI are higher than a typical gas boiler replacement:

- ASHP's range from £7500 for a <5kw to £27,350 for a 41-45kw
- Biomass Boilers range from £13,000 for a 6-10kw to £25,800 for a 41-45kw
- GSHP's range from £8590 for a <5kw to £50,000 for a 41-45kw

Until the market is more fully established and costs come down to be similar to a gas boiler, the government needs to be make sure it is affordable and feasible for owners to make the switch.

Question 10

We are proposing to give those purchasing a property a 'grace period' to end their use of polluting heating. Do you agree with this proposal?

- ☒ Yes - the grace period should be two years
- ☐ Yes – the grace period should be three years
- ☐ Yes – the grace period should be four years
- ☐ Yes – the grace period should be five years
- ☐ No, please provide reasons for your view.

[13] DESNZ (2022) RHI monthly deployment data: May 2022 https://www.gov.uk/government/statistics/rhi-monthly-deployment-data-may-2022

Question 11

To what extent do you support our proposal to apply a cost-cap where people are required to end their use of polluting heating following a property purchase?

- ☐ Strongly support
- ☐ Somewhat support
- ☐ Neither support nor oppose
- ☒ Somewhat oppose
- ☐ Strongly oppose
- ☐ Don't know

Please provide reasons for your view.

It is difficult to see how a cost cap would work in practice and there is a high chance it could be used to avoid compliance. It would be difficult to define and enforce - what costs are included in the cap, for what sort of heating system etc. If purchasers know they are going to have to fit a low carbon heating system at the point of purchase, then the cost of that should be factored into the offer that they make, in the same way that any other work they need to do (e.g. fixing the roof) will be factored in. In the event that a cap is implemented, then it is critical that anyone 'using' the cap to avoid switching to low carbon heating should have to pay the capped costs into a fund to support wider de-carbonisation measures.

A flat cost cap would not be suitable as the range of costs will be so wide that it would either exempt all larger properties or be pointless when applied to small properties. A size-based cost cap might be more logical, but it could also become a vehicle for avoiding the installation of a low carbon heat source. A purchase price based cost cap might also work, but could cause significant market distortions as purchasers inflate the cost of the work and reduce purchase costs.

Question 12

Which of the following methods of applying a cost-cap do you support?

- ☐ A flat cost-cap
- ☐ A size-based cost-cap
- ☐ A purchase price-based cost-cap
- ☒ None
- ☐ Another, please suggest below

Please provide alternative suggestions

Question 13

To what extent do you support the proposal that the Scottish Ministers should be given powers to extend the circumstances in future (beyond a property purchase) in which people could be required to end their use of polluting heating?

This could be, for example, preventing the installation of new fossil fuel boilers when replacing the heating in your home or business premises.

- ☐ Strongly support
- ☒ Somewhat support
- ☐ Neither support nor oppose
- ☐ Somewhat oppose
- ☐ Strongly oppose
- ☐ Don't know

Please include any additional comments below.

We would support the power to include additional trigger points for requiring people to end their use of a fossil-fuel based heating system to ensure that making the switch to non-fossil fuel based heating isn't concentrated in the 2045 backstop but spread out throughout the time period. Preventing the installation of new fossil fuel boilers when replacing the heating in your home or business premises is a sensible trigger point and means resources would not be wasted, streamlining the switching process. Otherwise, under the regulations suggested in this consultation, an owner could replace their old boiler with another fossil fuel boiler (as this will likely be the cheaper heating option) and then sell the house immediately after, after which the new owners would be required to install a non-fossil fuel heating system – resulting in unnecessary waste. However, it is still important that there is sufficient financial support to help homeowners make the switch whenever that it required.

It is important that any new trigger points for installing low carbon heating systems are consulted on and scrutinised prior to implementation.

Question 14

To what extent do you support our proposal to provide local authorities (and Scottish Ministers) with powers to require buildings within a Heat Network Zone to end their use of polluting heating systems by a given date?

- ☐ Strongly support
- ☒ Somewhat support
- ☐ Neither support nor oppose

☐ Somewhat oppose

☐ Strongly oppose

☐ Don't know

Please include any additional comments below.
This proposal seems appropriate to encourage buildings to connect to the heat network system and provides assurances to investors and developers of heat networks that there will be adequate demand. However, bioenergy systems should not be included within this definition of 'polluting heating systems' for the reasons mentioned in question 1.

Question 15

To what extent do you support our proposal to provide powers to local authorities (or Scottish Ministers) that require developers to connect new buildings within Heat Network Zones to a heat network?

☐ Strongly support

☒ Somewhat support

☐ Neither support nor oppose

☐ Somewhat oppose

☐ Strongly oppose

☐ Don't know

Please include any additional comments below.
We would somewhat support this proposal, as it aligns with the UK's Heat Network Zoning policy. However, this should be compared against the costs of other low-carbon heat installations, such as heat pumps, and it should only be mandated to connect to the heat network where cost-effective for both developer and consumer.

Question 16

To what extent do you support our proposal to require occupiers of non-domestic properties to provide information about unused heat on their premises?

☐ Strongly support

☒ Somewhat support

☐ Neither support nor oppose

☐ Somewhat oppose

☐ Strongly oppose

☐ Don't know

Please include any additional comments below.
Providing this is not commercially sensitive information we would support this proposal. There should also be the option of exemption if they can provide good cause.

Question 17

To what extent do you support our proposal to potentially require buildings with unused heat to provide this to a local heat network?

☐ Strongly support
☐ Somewhat support
☒ Neither support nor oppose
☐ Somewhat oppose
☐ Strongly oppose
☐ Don't know

Please include any additional comments below:

We would support this proposal as it aligns with UK policy on Heat Network Zoning, however there is currently insufficient information to consider impacts on heat producers for us to yet fully support the proposals. It is important that there are sufficient support mechanisms in place. The system and process for doing so should be fair, transparent and simple, as this could incentivise buildings to connect.

There should also be the option of exemption if it is not commercially viable to do so and they can provide good cause. It must be recognised that there are potentially significant costs involved in supplying 'unused heat' into a network. It should be incumbent on the heat network operator to offer adequate incentives to producers of 'unused heat' so that they will deliver it to the network.

We would also note that this policy needs to align with other Scottish and UK policy objectives and timeframes. For example, many thermal plants in Scotland are supported by the Renewable Obligation. These contracting arrangements will start to come to an end in 2027. Without clear support from government such assets will be looking at decommission at the end of their support, leading to both a loss of capacity and heat network potential. If Government wants to ensure these sites are available to be added to a heat network, then indication of wanting to maintain this capacity needs to be forthcoming as soon as possible. Equally, the same sites, will also be considering investment in areas like hydrogen production and CCS. It is important that policy objectives are clear so that ambitions to realise negative emissions, or hydrogen production, do not conflict with heat network aims.

Question 18

We will need to have a way to monitor if people are meeting the Heat in Buildings Standard, and discussed two options for this. Which do you support?

☒ Submitting EPCs alone

☐ Sampling a percentage of buildings

☐ A combination of the two

☐ None, there should be no monitoring

☐ Another method, please suggest below or explain your selected answer

An EPC which shows the type of heating system fitted and any fabric measures appropriate to satisfy the energy efficiency standard should be an ideal way to check compliance for all buildings. Where there is a requirement to comply by a particular date, the building EPC can be checked prior to that date to confirm compliance.

Question 19

We will need to have a way to enforce the Heat in Buildings Standard. We discussed possible options to help achieve compliance. What are your views on these ideas?

☐ I support relying on market and financial product mechanisms such as mortgages or home/ building insurance

☒ I support extra Council Tax and Non-domestic Rates charges, in future, for those who don't comply

☐ I support the introduction of civil penalties, in future, if compliance is not achieved

☐ I support a mixture of the above options

☐ I do not support any form of enforcement

Please explain your answer:

A system similar to the current council tax penalty for empty properties makes sense. It incentivises local enforcement, utilises existing processes and is proportionate to the property size.

Question 20

To what extent do you support our proposals to modify the Standard or exempt certain people from the need to meet the Heat in Buildings Standard?

☐ Strongly support

☐ Somewhat support

☐ Neither support nor oppose

☒ Somewhat oppose

☐ Strongly oppose

☐ Don't know

Please include any additional comments below.

If there are individuals whose financial circumstances mean they will find it difficult to comply with the Heat in Buildings Standard, then they should be provided with financial support to do so. It should not be a reason not to de-carbonise their homes, all of Scotland's population should be able to live in warm, insulated buildings.

Question 21

Which people, businesses, or types of buildings, if any, should be eligible for a modified standard or exemptions?

Those who have proactively chosen to install bioenergy systems already, should be allowed to continue using these systems both up to and beyond the 2045 backstop, for the following reasons:

- These properties are already contributing to the Scottish Government's renewable heat target;
- Many of these properties will be in receipt of the Renewable Heat Incentive, and we do not believe it would be fair or reasonable for the term of the RHI to be cut short
- The reasons that led to the owners of these properties installing biomass rather than other forms of no/low carbon heating may continue to present barriers to the deployment of a heat pump.

Furthermore, it is important to recognise that different buildings will have different heat requirements. Therefore, those in complex-to-decarbonise or hard-to-treat properties, particularly older, grade I listed, should also be eligible for a modified standard and allowed to use the most suitable low-carbon heating system for the building – including bioenergy.

Finally, modified standards or exemptions should be in place where there are regulatory or physical constraints which prevent the use of zero direct emissions options, whether due to listed building status, a lack of physical space, or a lack of capacity on the local electricity distribution network.

Question 22

To what extent do you support our proposals to give certain people extra time to meet the Heat in Buildings Standard?

☐ Strongly support

☒ Somewhat support

☐ Neither support nor oppose

☐ Somewhat oppose

☐ Strongly oppose

☐ Don't know

Please include any additional comments below:

Those in lower income brackets, who may be less able to afford retrofitting and new low-carbon heating systems should be given extra time to meet the standard. As the costs of these measures should come down over time, this should enable more people to adhere to the regulations as time goes on.

Question 23

Which people, businesses or types of buildings, if any, should be eligible for extra time?

As mentioned previously, those who have proactively chosen to install low-carbon bioenergy systems should not be penalised and should be allowed to continue using bioenergy systems both up to and beyond the 2045 backstop.

While we would strongly oppose any requirement to move away from biomass before 2045, if bioenergy systems were to be limited however, at the very least, those on the RHI or any other support mechanism should be allowed to continue using their bioenergy systems until the end of the contract, and thus be given extra time to meet the standards. Support will then need to be provided if they are required to switch to another form of low carbon heating. It is our view that it would be a far better use of public money to ensure existing low carbon heating systems, which are already in place, like existing biomass boilers, are maintained and continue to be used.

Question 24

To what extent do you support our proposal to require all buildings owned by a Scottish public authority to be using clean heating systems by 2038?

☒ Strongly support

☐ Somewhat support

☐ Neither support nor oppose

☐ Somewhat oppose

☐ Strongly oppose

☐ Don't know

Please include any additional comments below.

We support this measure, as governments and local authorities should lead the way in decarbonising their buildings as soon as possible. This will provide reassurances to developers and investors, and help encourage the private sector to decarbonise as well. However, bioenergy systems should be included as a heating system that could be used by public authority buildings where appropriate. As mentioned previously, biomass works especially well at medium-large scales due to higher heat loads, making them suitable for use in larger properties including hospitals, schools, and care homes. They can also operate at a higher heat load than heat pumps, making them a valuable high temperature heat source, particularly in older, poorly insulated properties.

Clearly signposting current support mechanisms available – including Scotland's Public Sector Heat Decarbonisation Fund, and the UK's Public Sector Decarbonisation Scheme (which is available for government departments operating in areas of reserved policy but located in Scotland), would also be recommended. To enable all public sector buildings to meet this target, Scotland's Public Sector Heat Decarbonisation Fund may need to be expanded and extended.

Question 25

We are considering the following further duties on public sector organisations to support planning for the transition by 2038:

☒ Placing a new duty on public sector organisations which would, from 2025, prevent them from replacing a polluting heating system with another (unless impractical)

☒ Creating a new duty for each public body to develop and implement a plan to decarbonise their buildings

☒ Placing a new statutory reporting duty on public sector organisations to demonstrate progress towards their 2038 objective (with the potential for the 2038 then to be non-statutory); and/or

☐ Placing no further statutory requirements on public sector organisations (instead relying on their ability to plan alongside our delivery and funding programmes to meet the 2038 objective)

Please include any additional comments below.

Public sector organisations should be required to develop and implement a plan to decarbonise their buildings by 2038. They should have to report on their progress towards that target. The target should remain a statutory duty. In the meantime, the assumption should be that if a high carbon heating system needs replacement, it should be replaced by a low carbon alternative, providing this is financially and practically feasible.

Question 26

Do you agree with our proposals to include powers in the proposed Heat in Buildings Bill to change the current requirement in legislation for a narrowly-defined renewable heat target?

☐ Yes

☐ No

☒ Don't know

Please include any additional comments below

Question 27

Do you agree that the Heat Networks (Scotland) Act 2021 should be amended in light of the passage of the Energy Act 2023?

☒ Yes

☐ No

☐ Don't know

Please include any additional comments below
We would encourage alignment across the UK's nations on Heat Networks to enable consistent understanding for both consumers and developers given their complexity. This will also help both developers and investors, ensuring a consistent national market.

Question 28

Are there any further amendments to the Heat Networks (Scotland) Act 2021 that the Scottish Government should consider?

Regarding section 4.3 on Heat Networks, it is currently unclear if bioenergy systems would be able to be used in a heat network beyond 2045. The REA believes it is important that bioenergy systems are continued to be allowed in heat networks beyond 2045. It would be counterproductive to allow bioenergy in heat networks up to 2045 but make them change afterwards, as you'll have already invested in the infrastructure and pipework. Failure to do so would create a waste of public money, when an appropriately low carbon heating source is already in place. Furthermore, a heat network operating at 80 degrees wouldn't be the same as a heat network running off 50-60 degrees from a heat pump, and it would be a waste of resources to have to switch this back over again.