

Citizens Advice Scotland's Response to the Scottish Government's New Build Heat Standard: Scoping Consultation

March 2021

Scotland's Citizens Advice Network empowers people in every corner of Scotland through our local bureaux (CAB) and national services by providing free, confidential, and independent advice. We use people's real-life experiences to influence policy and drive positive change. We are on the side of people in Scotland who need help, and we change lives for the better.

Overview

Citizens Advice Scotland welcomes this consultation, which reflects the pace and scope of Scotland's climate ambitions. We are pleased that the Scottish Government has proposed a principle-based, people-centred approach.

It is essential that the outcomes of this standard reflect the complex heating, cooling, and ventilation needs of Scotland's housing stock, and widens accessibility to truly affordable, highly efficient housing for low income and fuel poor households. Developers should be encouraged to follow the best practices of community engagement and ethical business practice so that the full potential of the buildings covered by this standard is realised. To aid developers in making future proof decisions, clear, thorough, and accessible guidance should be issued alongside this standard.

Response to Consultation Questions

1: Do you agree with the above key outcomes? Please explain your view.

Citizens Advice Scotland agrees with the proposed key outcomes as a starting point for the standard. However, we suggest that they would be better viewed as principles than outcomes due to the variety of exogenous factors which may limit the effectiveness of the proposed standard in achieving several of the stated aims. We also suggest that these 'outcomes' should be underpinned by the seven consumer principles: information, access, choice, redress, safety, fairness, and representation.

We acknowledge that these 'outcomes' as proposed are part of the consultation process, and that the Scottish Government will add more detail and nuance to them as the development of the standard progresses. Citizens Advice Scotland would like to ensure the following considerations are included in the final version of the 'outcomes'.

➤ **Outcome 1: Our new buildings no longer contribute to climate change**

This is a strong commitment to reaching Scotland's climate change targets, and Citizens Advice Scotland (CAS) commends the ambition it demonstrates. However, absent of consideration of the embedded greenhouse gas emissions in Scotland's newly constructed buildings, which is outwith the scope of the proposed standard, we do not agree that the standard can claim to achieve the stated outcome. We would suggest that the outcome should be amended to reflect what the standard can realistically hope to achieve i.e. **"The operation and use of Scotland's new buildings no longer contributes to climate change"**.

➤ **Outcome 2: Reduced demand for heating and cooling**

Requiring the highest possible standards for energy efficiency in newly constructed buildings in Scotland is a no-regrets policy that will reduce carbon emissions and reduce the negative impact of poor energy efficiency as a driver of fuel poverty. We therefore welcome and support this proposed outcome.

➤ **Outcome 3: The cost of heating our new homes and non-residential buildings is affordable**

While recognising that directly influencing the cost of energy is beyond the scope of the proposed standard, we believe that this outcome, when considered as a principle, could be expanded to explicitly address fuel poverty and support a just transition.

Electric heating, which includes not only storage heaters but new technologies such as heat pumps, is currently more expensive as a source of heat than more carbon intensive fuel vectors. This despite the Scottish electricity system being the greenest it has ever been¹. The fuel poverty rate in households who use electricity as their primary source of heating, at 43%, is nearly twice the fuel poverty rate of households who use primarily gas as their primary source of heating (22%)². Consumers should be incentivised and encouraged to adopt low carbon heating, such as modern electric storage heaters or heat pumps where appropriate, but they must be supported to use the system through affordable tariffs and expert technical support.

The cost of purchase or rent for highly efficient properties should also be considered. If a premium is charged for highly efficient properties, only people who can afford those properties will benefit from energy bill savings and associated health benefits, meaning the standard would have no or even a negative impact on fuel poverty rates. We urge the Scottish

¹ In 2019, 89.5% of gross electricity consumption came from renewable sources. Scottish Energy Statistics Hub (<https://scotland.shinyapps.io/Energy/?Section=WholeSystem&Chart=RenEnTgt>)

² [Scottish House Condition Survey: 2019 Key Findings](#)

Government to consider ways by which they can expand access to truly affordable, highly efficient homes to include fuel and income poor households.

We suggest this outcome is amended to read **"The cost of heating our new homes and non-residential buildings is affordable and does not contribute to fuel poverty"**.

➤ **Outcome 4: The systems we use in new buildings provide us with a reliable supply of heat**

Irrespective of the heat source employed, a reliable supply of adequate heating, cooling, and ventilation should be a prerequisite for all new buildings in Scotland. Consequently, while we support the principle of the stated outcome, we believe the outcome itself is currently too narrowly defined in that it refers neither to cooling nor ventilation, nor to the adequacy of the relevant systems to be employed in Scotland's new buildings. We therefore suggest this outcome would more appropriately encompass the objectives of the proposed standard were it to read **"The systems we use in new buildings provide us with an adequate and reliable supply of heating, cooling, and ventilation"**.

➤ **Outcome 5: Opportunities for retraining and upskilling of the workforce across Scotland**

Scotland's transition to net-zero offers a huge opportunity for sustainable job creation. We urge the Scottish Government to work closely with existing local supply chains to achieve this outcome.

Significant investment in upskilling will be necessary to reach Scotland's climate targets. Rural and island community supply chains are likely to need additional support to meet the demand of new build developments and energy efficiency retrofit.

Most contractors and installers will not be specialised in energy efficiency or low carbon heat installation. While able to install the technology, they may not be able to offer additional technical support or advice post-installation when the consumer needs it. Part of upskilling in the supply chain should include post-installation support and soft skills to help installers interact with consumers who may be vulnerable.

Where existing jobs and industries will have to transform radically or face decline under Scotland's climate change ambitions, action must be taken now to offer retraining and upskilling to those affected. This will ensure an adequate supply chain is in place to support the transition, but also prevent the cliff-edge of redundancies that is inevitable if nothing is done.

➤ **Outcome 6: Informed, educated consumers**

CAS could not agree more that “Awareness is key”. We have called for a co-ordinated and sustained public engagement campaign on energy efficiency for several years and will be responding to the Scottish Government’s consultation on a public engagement strategy separately.

Any engagement campaign should be holistic and take place from the beginning to the end of the retrofit or building process. Consumers should be educated about the heating, cooling and ventilation systems that are installed (or that will be installed) in their homes before buying, be shown how to use them when they move in, and be appropriately supported throughout their residence if something goes wrong. Meters and controls should be included in the demonstrations to ensure that consumers are best able to optimise their use of heating, cooling and ventilation systems. This will be particularly important where flexible assets are deployed.

Information and education should also contain consumer rights, especially for consumers who are on heat networks. Many consumers who move into new build developments will not be familiar with heat networks, their rights, and how to seek redress or advice.

➤ **Outcome 7: Our indoor and outdoor spaces are filled with cleaner air**

CAS supports this proposed outcome.

➤ **Outcome 8: Our heating systems are smart, enabling the flexible and stable operation of our energy network**

It will be essential to ensure that both heating *and cooling and ventilation* systems installed in buildings in Scotland that are constructed after the proposed standard takes effect are capable of smart, flexible, and efficient operation, without detriment to the comfort of buildings’ occupants. Specifying heating and cooling systems with adequate and appropriate provision for demand side response will not only limit the impact of these systems on Scotland’s energy networks and provide bill payers with opportunities to keep energy bills more affordable; in places it will also facilitate the provision of additional services to the networks, generating revenues for Scotland’s energy consumers and allowing some of the benefits of the energy transition to flow directly back to communities.

CAS therefore supports the intent of this proposed outcome but suggests it be amended to expressly include cooling and ventilation: “**Our heating and cooling and ventilation systems are smart, enabling the flexible and stable operation of our energy network**”.

➤ **Outcome 9: There is a continued supply of high-quality homes and non-residential buildings which are in line with identified requirements**

While not equivalent, there is a very strong correlation between income and fuel poverty³. If the full ambition of the just transition is to be realised, new build, highly efficient homes must be high-quality and affordable to consumers on lower incomes, across all tenure types.

Extreme fuel poverty rates in the second lowest income band increased 9% between 2018 (16%) and 2019 (25%)⁴. This is before the impact of the COVID-19 crisis and rates are likely to increase significantly as the economic effects of the pandemic are felt. The lowest rates of fuel poverty are associated with the highest rates of energy efficiency; fuel poverty rates in homes built after 1982 or that are rated EPC band C or better are below 10%⁵.

Ensuring highly efficient homes with low carbon heating systems available to households that have low incomes or who are fuel poor will help preserve the principles of the just transition in this standard. We suggest the outcome read “**There is a continued supply of high-quality and truly affordable homes and non-residential buildings which are in line with identified requirements**”.

2: Are there any additional which should be embedded here?

As outlined, we would like to see a stronger commitment to a just transition. This includes support for people to retrain and change sectors sooner, rather than later, and realising the benefits of highly efficient homes for fuel poor households embedded in these outcomes.

3: Do you agree with limiting this Standard to ‘new buildings’ as defined within section 2.2?

We agree with limiting the standard to newly built buildings. However, we have some reservations about buildings created by conversion, as these might require specialist retrofit depending on the age and fabric of the building. We look forward to further guidance on how this would apply to historic or unique buildings.

4: Do you agree with: (a) our approach taken to require future installed heating systems to be zero direct emissions only, and (b) our approach taken to focus on direct/ point of use emissions that a building owner has responsibility over only?

We agree with the approach of limiting the responsibility of building owners to the emissions that they can control at point of use, though we note that this position will be fatal to the prospects of

³ 73% of income poor houses were fuel poor in 2019 (SHCS)

⁴ [Scottish House Condition Survey: 2019 Key Findings](#)

⁵ [Scottish House Condition Survey: 2019 Key Findings](#)

using unabated biomethane as a source of net zero emissions compliant heating in newly constructed buildings in Scotland. However, there need to be guidelines about the nature and extent of this responsibility that are clear and understandable for developers and building owners. Developers will need to work with Scotland's energy networks, energy services companies, and other energy market participants such as aggregators and flexibility service providers, to ensure that all heating, cooling and ventilation systems are appropriate for their setting and installed in as future proof a way as possible.

5: What evidence can you offer on ways of ensuring zero direct emissions from heating that could be compliant with this Standard?

CAS does not have evidence that would allow us to provide an answer to this question.

6: What are your views on section 2.6, specifically regarding what mechanism the Scottish Government could use to ensure compliance with the Standard?

We would support option a) Continuing with an existing methodology and – potentially – changing the emissions factors to reflect a 'direct emissions' rating for different technologies, more than option b). However, this methodology would need to be clearly communicated and easily accessible, as well as accompanied by a concise and easy to understand guidance.

We believe a better mechanism could be delivered if option a) were to be combined with option b), such that building developers and homeowners could be provided with or signposted to a list of technologies that are approved to meet the standard based on their direct emissions ratings. This list should be frequently reviewed and updated to reflect innovative and new technologies. This combined approach would allow for greater consumer choice and flexibility and would avoid overuse of any one technology, as it is well accepted that decarbonising heat in Scotland will require a mix of many technologies and systems.

7: What steps can the Scottish Government take to support industry to deliver this Standard, and how could we make compliance with this Standard easier?

Industry will need clear, coherent guidance and signposting to available services and support, sufficiently ahead of the standard taking effect, in order to comply with the standard. Any guidance should include not only technical advice, but examples of best practice in community engagement and ethical business practice. The Scottish Government should collaborate with industry and stakeholders in writing this guidance to ensure that it is sufficiently thorough and addresses consumer and industry needs.

8: How do we ensure that consumers are protected from increased energy bills, while giving developers flexibility to comply with the Standard?

There are myriad technologies available to developers that will enable them to comply with the standard. If newly built homes, as covered by this standard, are built to a high standard and degree of energy efficiency, with suitable low carbon heating systems that are smart, flexible, and accompanied by the right metering infrastructure, and inhabited by consumers that are knowledgeable about their heating system and how to use it, then consumer bills should not be high.

There are of course external factors beyond the consumer or developer's control; the current structure of levies on energy bills makes electricity significantly more expensive than gas, as mentioned in our response to Question 1 in regard to the proposed Outcome 3. However, well informed consumers living in highly efficient homes with low bills is certainly possible if developers embed ethical business practices and good community engagement from the outset and are invested in building strong functional communities. The Scottish Government has a role to play in incentivising and supporting these types of developers through standards like this one.

9: What are your views on new buildings connecting to an existing heat network, where development takes place within a heat network zone? Do you envisage any unintended consequences as a result of this proposal?

We cautiously agree with this proposal, if consumers who will purchase and live in the homes are made aware that they will be using a heat network, what this entails, and what their rights as heat network users are.

The nature of heat networks makes them a natural monopoly, meaning that consumers do not have choice in the same way that consumers of regulated fuels do. This makes the principles of information, access, redress, safety, fairness, and representation even more important. Additionally, it will not be possible to carry out meaningful community engagement with communities that have not yet been built. Local authorities should take careful consideration of how heat network zones will affect the community that lives in them.

10: Do you agree with the Scottish Government's proposal to introduce this Standard in 2024? What are your views on this Standard being brought into force for new buildings consented earlier than 2024?

We believe that the proposed standard could be brought into effect earlier than 2024. We believe that any new build communities given consent after the standard is put into law and clear guidance is issued should be required to meet the standard.

11: How can opportunities be maximised for the supply chain involved in the delivery of new homes (ranging from product suppliers to on-site operatives), including skills?

CAS does not take a view on this.

12: What do you envisage the key challenges would be for developers, and wider-building industry, in meeting this proposed Standard? How could this sector be supported to address those challenges?

CAS does not take a view on this.

13: What are the key challenges for the energy networks regarding the deployment of zero emissions heating in new developments? How could this sector be supported to address those challenges?

The most significant challenge to Scotland's energy networks arising from the implementation of this standard appears to us to arise from a misalignment of policy and a lack of maturity among some of the low carbon heating technologies that will be capable of supporting the Scottish Government's climate change commitments.

Absent clear direction on the future of the gas network and a mature heat network market in Scotland, it seems almost certain that many developers will have little choice but to install electric heating in Scotland's new buildings once this standard takes effect, even in areas where it may be ill-suited e.g. due to network constraints and / or the appropriateness of the area for the use of an alternative heating source.

Pursuing this standard before detailed, whole energy system local area energy planning is in place may be necessary for Scotland to achieve its net zero emissions commitments, but it will not be conducive to delivering decarbonisation at lowest cost to consumers as investment decisions will be based on what is available, rather than what is the best solution in any given location.

Introducing the new standard once heat network zones have been fully mapped out would partially mitigate against this if larger developments were to serve as the trigger for heat network rollout. However, while we recognise the Scottish Government's ambition to roll out and begin delivery of Local Heat and Energy Efficiency Strategies by the end of 2023⁶, we do not currently share their confidence that this will be achievable.

Scotland's DNOs may therefore be required to invest significantly in network upgrades which, when looked upon from a whole energy system perspective, is in our view unlikely to be the most efficient

⁶ [Draft Heat in Buildings Strategy – Achieving Net Zero Emissions: Consultation](#)

way to deliver decarbonised heat in all cases. This will increase electricity distribution costs for all consumers in the DNO's licence area, in some cases unnecessarily.

The above having been said, we are mindful that a response to the climate emergency requires immediate action, and that delaying implementation of interventions such as the proposed standard until both energy system planning and a wide range of technologies are sufficiently mature will fail to deliver on Scotland's climate change obligations. We therefore support the introduction of the proposed standard as soon as is practicable and highlight the challenges this will create as a reminder of the value of policy certainty in driving efficient decision making in the area of low carbon heat.

14 : How do you see this Standard interacting with wider-energy system changes, and what role do you see for flexibility and smart technologies?

On the interaction of this standard with the wider energy transition, we refer to comments made in response to Questions 4 and 13.

On the question of the role for flexibility and smart technologies, we refer to our response to Question 1 on the proposed Outcome 8.

15: What can be done to encourage greater consumer awareness and understanding?

New build homes pose a difficulty in engaging consumers, as in many cases they are a community or household that does not yet exist but deserves to have a say in how their home is designed and built.

Developers should engage with the people who purchase new build homes from the beginning of the process – including marketing the homes or developments. Developers can embed ethical business practices and consumer principles in every stage of the development, ensuring consumers have information, access, and representation, and can make informed decisions⁷. Fair, transparent contracts should be made available that clearly outline what responsibility developers have to consumers to support them in using new and potentially unfamiliar technologies in their homes, as well as what redress is available to them should something go wrong.

⁷ <https://www.cas.org.uk/publications/leading-example-principled-journey-through-regulation>

16: What approach should be taken when considering new non-domestic buildings, and what are the specific challenges and opportunities relating to new non-domestic buildings?

CAS does not take a view on this, but notes the potential opportunity that exists for new non-build domestic buildings to play a key role as anchor loads or heat sources in the proposed development of heat networks.

17: By introducing this Standard, what challenges or opportunities might result for households on low incomes (for example, around affordability or access), and how can the Scottish Government best take account of these?

Low income and fuel poor households exist in every tenure. Fuel poverty is transient; people move in and out of fuel poverty throughout their lives and support must be far reaching and flexible to follow. As outlined in our response to Question One, fuel poor households are more likely to live in homes with poor energy efficiency and have low household incomes. High-quality, highly efficient homes should be made available to households that are fuel poor and must be truly affordable. To ensure that no one falls through the gap, or is unfairly impacted by this standard, we hope that the Scottish Government will conduct a thorough Fairer Scotland Impact Assessment as a part of the consultation process. We would be happy to discuss this further with the Scottish Government.