Response to Scottish Government's "Energy Efficient Scotland: Improving energy efficiency in owner occupied homes", March 2020

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1. **Do you agree or disagree that there should be a legally-binding energy efficiency standard for owner-occupied housing?**

We agree that there should be a legally-binding standard for owner-occupied housing. In our response to the July 2018 Energy Efficient Scotland consultation we emphasized that: "the value of energy efficiency upgrades has been discussed since at least the 1970s. Voluntary action by building owners continues to be slow and uneven. The industry is fragmented, and supply chains are inadequate. New standards will make action a necessity, rather than an optional extra; it is important to introduce them early in order to raise awareness amongst households and readiness within the supply chain." This still stands and a legally-binding standard is essential for reducing domestic energy consumption.

2. **Do you agree or disagree that EPC Energy Efficiency Rating band C is the appropriate standard to use? Please explain.**

Setting a target EPC rating for owner occupied homes is welcome; however, we suggest that the targets should be much more ambitious. The B rating in the social housing sector is positive and could be matched within the owner occupied sector. However, Government needs to be more ambitious now, working towards A-rated and near-zero carbon homes across all sectors in order to provide clear messaging for the types of activity expected and build momentum within markets and supply chains for 2040 goals.

3. **What are your views on the "fabric first" approach as described section 1.1?**

A fabric first approach is essential. The sizing and output of any installed heating system is determined by the properties of the building fabric. Consequently, installing alternative heating systems *before* improving the building fabric could result in more expensive, over-sized heating systems that produce more greenhouse gas emissions than is absolutely necessary. In addition, successful retrofitting will only be achieved through a 'house as a system' approach[1] that recognises the building envelope as a single thermal unit[2]. This means that the 'fabric first' approach needs to move beyond incremental improvements

(for example, adding loft insulation and some wall insulation) to a systematic whole-house treatment of each property.

1) Janda K & Killip G, 2010. Building Expertise: A System of Professions Approach to Low-Carbon Practice In: Proceedings of the ACEEE 2010 Summer Study. Paper 10: 114 – 126.

2) Clarke L, Gleeson C & Winch C, 2017. What kind of expertise is needed for low energy construction? *Construction Management & Economics*, 35(3): 78-89.

4. In your view, how can we ensure that when EPCs are used to determine compliance with the standard they are robust and not easily open to misuse?

To ensure that EPCs are completed robustly and not mis-used, it is essential to build Quality Assurance into all aspects of the supply chain. This can be achieved by following the recommendations identified in Scottish Government's Quality Assurance Short Life Working Group Recommendations Report[1] to deliver a competent and appropriately trained workforce. This includes ensuring the quality of accreditation bodies, with training, monitoring and evaluation. The standards for who is able to become an EPC assessor need to be more stringent, for example, requiring some prior knowledge of building fabric and energy efficiency. In line with the Report recommendations, all EPC Assessors should hold the Quality Mark for Energy Efficient Scotland; this will ensure that they are subject to vetting and verification processes, operating with ID cards, and listed in a publicly available Directory. Qualified individuals need to be subject to periodic testing throughout their career.

1) Cuthbert I, 2019. Quality Assurance Short Life Working Group Recommendations Report. Available at: https://www.gov.scot/publications/quality-assurance-short-life-working-group-report/

5. Do you think the standard should be fixed, or should it be subject to periodic review and change over time? Please explain your view.

It is critical to provide clear communication to supply chains and the public now; as such any stricter targets (for example EPC B by 2040) should be introduced now, rather than providing people with less notice later. As noted in our response to the July 2018 consultation: "Energy performance improvements in buildings are currently running at a much lower rate than required to achieve 2030 targets, meaning that more needs to be done faster than building owners or the existing supply chain will do without market intervention[2]. Government needs to communicate and support forthcoming standards now. This is critical for increasing the rate of retrofit by property owners and to catalyse workforce up-skilling, product innovation, and professionalisation of the building and heat supply trades. In particular, tradespeople and supply chains have been identified as notoriously slow to adapt[3,4]. An illustrative example is the introduction of condensing boilers, which were supported with the introduction of grants over a decade ahead of the introduction of the mandatory standard. The availability of such grants was increased and the future standard announced well ahead of its introduction[5]. This faster action will support market innovation in materials, work processes and supply chains."

1) Webb, J., 2016. Heat and Energy Efficiency: Making Effective Policy. Advisory Group Report for the Committee on Climate Change. Available at: https://www.theccc.org.uk/wp-content/uploads/2016/10/Heat-and-Energy-Efficiency-Advisory-Group-Report-Making-Effective-Policy.pdf
2) Bowden, F., Brass, C., Watson, B., Mitrovic, D., Tompkins, J, Zygmunt, J. & Jordan, D., 2012. *Plug-it: Final report to the Department for Environment Food and Rural Affairs*, London: SEED Foundation, Policy Studies Institute and Waterwise, Defra.
3) Killip, G., 2013b. Products, practices and processes: exploring the innovation potential for low-carbon housing refurbishment among small and medium-sized enterprises (SMEs) in the UK construction industry. *Energy Policy*, *62*, 522–530.
4) Killip, G., 2011. *Implications of an 80% CO2 emissions reduction target for small and medium sized enterprises (SMEs) in the UK housing refurbishment industry*. (B. Boardman, N. C. Eyre, & C. Jardine, Eds.). Environmental Change Institute, University of Oxford, Oxford.

6. Do you agree or disagree that 2024 is the right start date for the mandatory standard to start operating? Please give your reasons, whether you agree or disagree.

As above, the mandatory standard needs to be introduced as soon as possible. This will provide clear messaging to support awareness and engagement amongst home owners and encourage action from supply chains.

7. Do you agree or disagree with point of sale as an appropriate trigger point for a property to meet the legally-binding standard?

Yes, the point of sale offers a clear trigger point and opportunity for Building Control officers to assess the standard of the property, and enforce the legally-binding standard. However, there is a need to develop a much stronger momentum around retrofitting owner-occupied homes. This will include investing in systematic engagement strategies and supporting early 'smaller' actions on tackling climate to encourage more substantial retrofitting work. For example, where households are reluctant to engage, initial raising of awareness through encouraging a change in appliance use could contribute to future financial investment in retrofitting work.

Evidence shows that householders have usually developed their 'retrofitting journey' over time, and in an incremental way[1,2]. Consequently, additional important trigger points are when householders make home improvements, and refurbishments (for example, bathrooms, kitchens and extensions), and changes to heating such as gas boiler replacements. Additional trigger points are during changes in life course (for example, when people have children or retire)[3]. Using trigger points, the costs and disruption associated with retrofit can be minimised[4]. It is important then to build an advisory system in which construction businesses, heating installers and health professionals ask questions and offer opportunities/ encouragement for retrofitting when they become aware that an owner is

planning any home improvements, or is replacing a heating system. For example, if an owner contacted a construction firm to complete an extension, or applied for a bank loan, a responsibility for the firm, the lender and the householder would be to consider and discuss wider retrofitting work that could be undertaken. Installers replacing a heating system should also be required to discuss and advise on options for further efficiency improvements. Creating new norms around the consideration and continuation of retrofitting activities will only be achieved through training tradespeople, health professionals, mortgage and home loan providers, and community workers to engage in discussions about this.

1) Changeworks, 2019. Scotland's Energy Efficiency Programme (Energy Efficient Scotland) Stage 2 Transition Pilot. Available at: https://www.changeworks.org.uk/sites/default/files/CW_in_Peebles_Interim_Full_Report.pdf
2) Killip, G., 2013b. Products, practices and processes: exploring the innovation potential for low-carbon housing refurbishment among small and medium-sized enterprises (SMEs) in the UK construction industry. *Energy Policy*, *62*, 522–530.
3) Burningham K & Venn S, 2017. Are lifecourse transitions opportunities for moving to more sustainable consumption? *Journal of Consumer Culture*, 20(1): 102-121.
4) Kerr, N. & Winskel, M. 2018. Private household investment in home energy retrofit: reviewing the evidence and designing effective public policy. ClimateXChange. Available at: https://www.climatexchange.org.uk/media/3146/cxc-epe-evidence-review-full-report.pdf

8. Do you agree or disagree that responsibility for meeting the standard should pass to the buyer if the standard is not already met at point of sale, as described above? Please explain your views and give any evidence you have, whether you agree or disagree.

This would be acceptable, if reflected in a lower house sale price: a buyer required to upgrade the property, in line with requirements set in the Home Report or further specialist survey, should be able to recoup the cost of work from a lower house purchase price; zero cost loans should be available as an extension to the mortgage. The cost of upgrade work would need to be agreed between buyer and seller at point of sale, based for example on three quotes from accredited traders for specified improvements.

9. What, if any, unintended consequences do you think could happen as a result of these proposals? For example, any positive or negative effects on the house sales market.

Although there may be short-term objection to the change, high quality fabric upgrades to the private housing sector will have overall market benefit by improving the quality of stock and raising expectations about energy performance of the house among buyers.

10. Do you agree or disagree with point of major renovation as an appropriate trigger point for a property to meet the legally-binding standard?

We agree that trigger points in addition to point of sale need to be incorporated into any

strategy to encourage retrofitting amongst owner-occupiers. The inclusion of 'major renovation' is dependent on the way that this is defined (see below), and as noted previously, a much broader range of trigger points should also be considered. It is correct to note that existing disruption could make it more feasible (in terms of acceptability for householders) for additional works to take place.

11. What is your view on how "major renovation" should be defined? Should the Energy Performance of Buildings Directive definition, as described in Annex B, be used? Please explain.

The definition provided in Annex B and used in the Energy Performance of Buildings Directive suggests that a 'major renovation' is higher than 25% of the value of the building, or more than 25% of the surface of the building envelope. This indicates that the household would already be undertaking a significant amount of work (for example £50,000 worth on a £200,000 property) and it is hard to see how such extensive work on the building envelope could fail to incorporate energy measures in some form (such as wall insulation). If 'major renovation' is a trigger point for concerted effort to encourage energy efficiency and heat decarbonisation, then the definition must capture more of the works taking place in domestic properties. Consequently, we recommend that the definition of 'major renovation' is amended so that it includes work of a lower value and lower proportion of the property (for example, work valued at 10% of the value of the building). Through this, a greater proportion of properties can be captured in the definition, for encouraging action at the scale needed to meet the Scottish Government's 2045 targets.

12. How could a requirement to meet the energy efficiency standard at point of major renovation be checked and enforced? Who should be responsible for this?

The enforcement of the energy efficiency standard at points of renovation will rely on the upskilling of construction and heating trades, and increasing the capacity of Building Control functions within local authorities. A development of the Scottish Building Standards scheme must incorporate energy efficiency standards. Construction trades need to be made aware of any changes to the scheme, and delivering energy efficient homes must be incorporated into the existing training programmes. This cannot be an additional 'energy' module, but must instead work to deliver a culture shift in how construction tradespeople see their role in improving properties[1,2]. In addition, as per the proposals laid out in this consultation, the need for 'consequential improvements' should be incorporated into the Building Regulations – this means that a requirement to improve building energy performance will be triggered by a change or improvement in another aspect of the building.

To be successful, any revised Scottish Building Standards scheme must also ensure compliance, which will rely on compliance checking from Building Control. A mechanism akin to the boiler registration scheme could be established, whereby all listed boilers are registered with Gas Safe, who are then able to perform compliance checks as appropriate.

1) Clarke, L., Gleeson, C., & Winch, C. (2017). What kind of expertise is needed for low energy construction? *Construction Management and Economics*, 1–12.
2) Wade F, Hitchings R & Shipworth M, 2016. Understanding the missing middlemen of

domestic heating: installers as a community of professional practice in the United Kingdom. *Energy Research & Social Science*, 19: 39-47.

13. What do you think would be a fair and appropriate method to ensure compliance, if the legally-binding standard is not met? What type of penalty system would be appropriate? Please explain.

Any penalty system could relate to Council Tax. This is a recurring tax paid by every household, and there are already different costs associated with different property sizes and types. Existing calculations for Council Tax banding could be revised to incorporate information about the property's energy rating. This could be as simple as an additional fee if the property does not meet the EPC C standard, or it could be calculated on a scale based on how far from the standard it is (for example, an EPC E property would be 'fined' or taxed more than an EPC D property); the additional tax would, in line with Council Tax, also rise in proportion to property value. If Building Control are responsible for enforcement, then knowledge of buildings failing to meet the standard could be shared with the tax department and a penalty could be applied through the recurring council tax bill for the property.

14. Should a penalty for failing to comply with the standard be one-off or recurring?

The penalty, if paid as an additional component of Council Tax (as suggested above), would continue until the required Standard was achieved.

15. At what level, approximately, should any penalty be set?

After the required date for regulatory compliance, it could, as suggested above, be scaled in proportion to the gap between current standard and regulated standard, and in proportion to property value, in line with Council Tax banding.

16. Are there any particular groups of people who could be adversely affected, more than others, by enforcement processes and charges?

There is a need to ensure that those in fuel poverty are not additionally taxed for living in poor quality homes. Grants need to be available, under planned schemes such as HEEPS, to avoid harm.

Owners of 'hard to treat' properties, where costs are likely to be high and not quickly repaid through bill savings, also need to be able to access quality-assured energy efficiency services, where providers guarantee long term performance of materials and standard of work. Zero cost loans will be needed for mandated work above an agreed price threshold, such as work costing more than £25,000.

17. Which body or bodies should check if the standard has been complied with at the trigger point, and should be responsible for levying any penalty?

It is essential that legislation is systematically enforced through a unitary system, with

independent assessors. A key institution for ensuring compliance in building decarbonisation is re-trained and reinforced local Building Control Officers. With local authority funding diminished through austerity and associated reductions in staff numbers[1], Building Control Services have experienced significant reductions in scale and compliance checking capabilities. This will be insufficient for monitoring compliance at the scale needed for Energy Efficient Scotland, and any legislative programme to deliver improvements in the owner-occupied sector must include compliance checking. As such, additional resource needs to be channelled to local authorities to provide more comprehensive Building Control Services. A single system with independent assessors will help to minimise corrupt practice, poor quality work and distrust by buyers[2].

1) Audit Scotland, 2018. Local government in Scotland – challenges and performance 2018. A report prepared for the Accounts Commission.
2) Webb J (2016) Heat and Energy Efficiency: Making Effective Policy. Advisory Group Report for the Committee on Climate Change. Available at: https://www.theccc.org.uk/wp-content/uploads/2016/10/Heat-and-Energy-Efficiency-Advisory-Group-Report-Making-Effective-Policy.pdf

18. Considering the information above and in Annex D, what are your views on the best way to approach cost effectiveness, taking into account the trade-offs between how easy to understand and how sophisticated different definitions are, and how the different definitions might affect the number of homes that actually achieve the EPC C standard?

19. Other than technical feasibility and cost effectiveness, are there any other reasons why a homeowner may not be able to bring their property up to EPC C at point of sale or renovation, and would need to be given an exemption or abeyance? (For example, difficulties of getting permission from other owners for common parts of buildings.) Please explain.

20. Do you agree or disagree that, even if a property can't fully meet the standard, it should be required to get as close as possible to it?

Yes, all properties should be required to achieve the highest energy efficiency possible, where such actions are technically feasible, even if this does not achieve the mandated EPC rating. It is worth noting that measures can improve the numerical EER (Energy Efficiency Rating) without bringing the property into a different EPC band; this does not mean that the measures are not worthwhile. Cost effective for owner occupiers needs to be defined very carefully; it is already clear that the price of property upgrades in many cases may not be paid back quickly through bill savings; nevertheless, the rationale for energy saving is not simply financial, but societal: property owners need to invest now, in order to avoid passing the increasing costs of climate emergency to future home owners.

21. Do you agree or disagree that any exemptions or abeyances from the standard should be time-limited?

22. Which body or bodies should take decisions about granting abeyances? Should this be done at a local level or centrally at a national level?

This needs to be at national level to minimise opportunities for variations in practice, or malpractice, to develop, and to ensure that decision making is as streamlined and consistent as possible.

23. The SLWG on Assessment propose that any new assessment regime should exist on two levels, comprising both a mandatory asset-based assessment and an optional occupancy-based assessment. What are your views on this approach? Do you agree that an occupancy assessment should be optional? Are there specific inputs that should be included in both? Please explain your answer.

24. The SLWG on Assessment propose that the output of the assessment should be a report with tailored recommendations that set a clear pathway to both regulatory compliance (i.e. EPC band C) and zero carbon. There are conflicts between meeting the EPC rating and zero carbon. What are your views on how this can be handled/mitigated? Please explain your answer.

25. The new assessment proposals from the SLWG on Assessment include more of an advisory role for the assessor. What are your views on the additional skills and training required to deliver this role? Are existing Domestic Energy Assessors best placed to provide the tailored recommendations? What risks and conflicts do you foresee and how would you propose to mitigate them? Please explain your answer.

The current EPC assessor market does provide a convenient framework to build upon for implementing owner occupier standards within Energy Efficient Scotland, but there is more to do here. A specific challenge is the scale of the market. Given that the proposed regulations will apply to all owner occupied buildings across Scotland, there is unlikely to be a sufficient number of qualified assessors to cater for demand in a market of the scale anticipated. The success of the programme is reliant on ensuring that supply is sufficient to meet demand as market grows, and so it is likely that new EPC assessors will need to be trained and additional members of supply chains could be engaged with.

EPC assessors could take on an advisory role, with additional training. There are well documented problems with inconsistent EPC assessments, and EPCs not being completed correctly[1]. Any existing EPC assessors will thus need to demonstrate their capability, or undertake refresher training – in line with Scottish Quality Assurance Mark outlined by Short Life Working Group on Quality, Skills and Consumer Protection[2]. Such up-skilling needs to take place across entire supply chains, not just EPC assessors. This is essential for enabling different supply chain actors to align around energy efficiency advice, encourage retrofitting actions, and filter owner occupiers towards official EPC assessors for wider retrofit intervention (thus, creating a culture of retrofit and energy efficiency across the industry, rather than relying on specific individuals to do this).

The SLWG recommendations note that: '*There may also be a need to develop softer skills,*

*such as customer service, identifying and engaging with vulnerable customers, consumer protection, working with cultural differences and available funding and support skills' (*p.38*)*. These skills are absolutely critical for encouraging retrofit and the subsequent success of Energy Efficient Scotland. These should not be referred to as 'soft' skills, instead, such customer liaison skills must be regarded as a necessity in any training developed for EPC assessors.

It is critical that a single, clear and easily communicated Scottish Quality Mark is developed for all members of the supply chain, as per recommendations from the SLWG on Quality, Skills and Consumer Protection[2]. We agree with the Assessment SLWG recommendation to ensure that assessors are fully accredited with the Scottish Quality Mark.

1) Jenkins, D.P., Simpson, S.A., & Peacock, A. (2017). Investigating the consistency and quality of EPC ratings and assessments. *Energy*. 138: 480-489.
2) Cuthbert I, 2019. Quality Assurance Short Life Working Group Recommendations Report. Available at: https://www.gov.scot/publications/quality-assurance-short-life-working-group-report/

26. The SLWG on Assessment propose that the tailored recommendations to improve energy efficiency and achieve zero carbon should consider the legal designation of buildings, obvious defects or condition issues, and local costings. Do you foresee any liability issues in this approach and if so, what suggestions do you have to mitigate them? Do you believe the inclusion of local costings to be practical and what are your thoughts on what level should be considered 'local'? Should the local cost of energy also be considered? Please explain your answer.

27. The SLWG on Assessment propose that the assessment should provide a theoretical indication of whether recommendations are technically feasible. Please provide your views on who should determine actual technical feasibility? Should this be a qualified installer or someone else? Please explain your answer.

Establishing trust and a clear chain of responsibility is critical for successful energy efficient retrofitting. Multiple interactions with different individuals and tradespeople can lead to confusion and mixed messaging for homeowners. In addition, relying on multiple individuals for incremental information about retrofitting activities can lead consumers to lose interest or become frustrated and choose to end their engagement in potential retrofitting. It is therefore crucial that the 'customer journey' is made as straight forward as possible, and allows householders to develop trusting relationships with tradespeople[1]. With this in mind, the EPC assessor should be trained to determine technical feasibility when completing the EPC assessment. In more complex cases, there may be a need for a retrofitting coordinator[2]. It will be essential that the householder does not receive different messages from different people. Consequently, this coordinating role could be played by someone who is a qualified EPC assessor, or the two could work in close collaboration.

1) Maby C & Owen A, 2015. Installer Power. Available at: www.ukace.org/wp-content/uploads/2015/12/Installer-Power-report-2015.pdf

2) Cuthbert I, 2019. Quality Assurance Short Life Working Group Recommendations Report. Available at: https://www.gov.scot/publications/quality-assurance-short-life-working-group-report/

28. In your view, what are the most important considerations for homeowners who are required to meet the legally-binding standard, in relation to skills, supply chain, consumer protection and quality assurance?

Proactive, integrated supply chains are crucial for developing successful retrofitting programmes[1]. Consumers prioritise trust and reliability, and become frustrated when tradespeople do not communicate well or deliver poor quality work[2]. This is often overcome by hiring local tradespeople, who have an established reputation in the area and are also available to return to the job if there are any problems[3].There is a need for variety: different clients require different approaches when tradespeople work in their homes. In addition, when customers are undertaking low carbon work, the demonstrable skills and capacities of supply chain actors are crucial[4].

1) Kerr, N. & Winskel, M. 2018. Private household investment in home energy retrofit: reviewing the evidence and designing effective public policy. ClimateXChange. Available at: https://www.climatexchange.org.uk/media/3146/cxc-epe-evidence-review-full-report.pdf
2) Mallaband, B., Haines, V. and Mitchell, V. 2013. Barriers to domestic retrofit: learning from past home improvement experiences. In: Swan, W. and Brown, P. eds. Retrofitting the Built Environment. Chichester, Wiley Blackwell, 184-199.
3) Maby C & Owen A, 2015. Installer Power. Available at: www.ukace.org/wp-content/uploads/2015/12/Installer-Power-report-2015.pdf
4) Fawcett, T. and Killip, G. 2014. Anatomy of low carbon retrofits: evidence from owner-occupied Superhomes. *Building Research & Information*, 42(4), 477-488.

29. What are your views on how the Quality, Skills and Consumer Protection SLWG recommendations specifically have an impact on the owner occupied sector? Please explain.

Owner occupiers often undertake retrofitting work independently and are therefore reliant on the availability of high quality, trusted supply chain actors. This is in contrast to the social housing sector, which tends to operate on a larger scale with social housing landlords and local authorities procuring on behalf of residents. Similarly, owners of privately rented properties can access additional services through Private Landlords Associations. Owner occupiers have few centralized resources they can draw upon to support them in identifying suitable tradespeople and undertaking comprehensive retrofit[1,2]. As such, owner occupiers are the sector most reliant on reliable supply chains for energy retrofitting. The Quality, Skills and Consumer Protection SLWG recommendations include the need for a single Scottish Quality Mark for all members of the Energy Efficient Scotland supply chain. This is crucial to enable owner occupiers to be able to identify tradespeople with suitable skills and expertise. Another recommendation is to explore a potential retrofit coordinator role. This could be crucial for supporting owner occupiers in managing complex retrofitting which may require the involvement of numerous individual tradespeople.

1) Maby C & Owen A, 2015. Installer Power. Available at: www.ukace.org/wp-content/uploads/2015/12/Installer-Power-report-2015.pdf
2) Kerr, N. & Winskel, M. 2018. Private household investment in home energy retrofit: reviewing the evidence and designing effective public policy. ClimateXChange. Available at: https://www.climatexchange.org.uk/media/3146/cxc-epe-evidence-review-full-report.pdf

30. In your opinion, is this the right range of Scottish Government financial support schemes? Are there any gaps, regarding either types of financial product or groups of people who may be excluded from being able to access products? Please explain your views.

We support the Scottish Government developing a variety of financial support schemes. However, some existing schemes need to be streamlined and developed to maximise their effectiveness. In particular, access to Home Energy Scotland (HES) loan needs to be made more straightforward. At present, the HES loan requires an upfront payment from the building owner to the supply chain organisation completing the work. HES then payback the money to the building owner[1,2]. This means that anyone without the upfront finance available is effectively precluded from taking out a HES loan. This is a huge barrier to occupants undertaking retrofitting work which needs to be resolved quickly if HES is to be the major mechanism through which owner occupiers access funding support.

Energy efficient mortages and equity loans both good strategies. However, there is also a need to provide finance to those groups who are not classed as fuel poor, but who do not have access to the money necessary for retrofitting. These might include people who have an income, but do not receive benefits that would qualify them for support through Warmer Homes Scotland. For groups within this category, a £10,000 home improvement is often unaffordable, and loan repayments (for example, through HES) are undesirable. As a higher proportion of residents are lifted out of fuel poverty through the Energy Efficient Scotland scheme, there is the potential to expand existing fuel poverty support (for example, through Warmer Homes Scotland and Area Based Schemes) to low income groups – to try to support this sector of the market.

1) Changeworks, 2019. Scotland's Energy Efficiency Programme (Energy Efficient Scotland) Stage 2 Transition Pilot. Available at: https://www.changeworks.org.uk/sites/default/files/CW_in_Peebles_Interim_Full_Report.pdf
2) Wade, F., Webb, J & Creamer, E. 2020. Energy Efficient Scotland Phase 2 Pilots: Final Social Evaluation Report. Forthcoming.

31. Do you agree or disagree that grant funding from the public purse should be focused on households who are vulnerable or in fuel poverty? Please explain if you disagree.

Yes, although these households also receive support through existing local authority programmes (for example, HEEPS:ABS). Potential grant funding going directly to owner occupiers could also be targeted at those on low incomes but not classed as being in fuel poverty. A revolving loan fund model could be developed, with the Government creating a

large pot of finance, which can then be made available through a credit union. Credit unions specifically target low income groups, and through a standard low interest loan model, the finance could be put back into the central pot for subsequent works. Through this model, finance allocated for energy efficiency works could be added onto mortgage agreements. Alternatively, models like the existing UK Government help-to-buy ISA[1] could be trialed, where savers accrue money in an ISA and, if this is used for energy efficiency works, they receive a top-up from the government.

1) https://www.gov.uk/government/publications/help-to-buy-isa-factsheet

32. In your opinion, what sources of non-government, private sector support are people most likely to want to access? (eg from banks, building societies, credit unions, mortgage providers)

This is likely to depend on the life stage and financial situation of the owners, the terms of any available loans, including interest rates, and ease of access. Mortgage providers are likely to be central in the majority of cases; energy efficiency loans could be structured at lower rates of interest than equivalent mortgages; they could also be structured to ensure that the more ambitious and costly the energy efficiency upgrade, the more favourable the loan terms, as in the German KfW model for energy efficiency loans to home owners.