In May 2019, The Scottish Government committed to establishing an independent Energy Consumers Commission to enhance the voice of 'consumers who reside in Scotland' within the energy market.

The Energy Consumer Commission formed in July 2020 following an extended period of consultation with key stakeholders throughout the energy industry. The Commission consists of representatives with a wealth of experience in national consumer advocacy, advice bodies, academia and local groups serving energy consumers in their communities.

This consultation response was written by the Citizens Advice Scotland energy policy team, who have been commissioned to deliver the Energy Consumer Commission's advocacy and research plans.

Chapter 2 – A 2045 Pathway for Scotland's Homes and Buildings

1. **To what extent do you support the pathway set out for achieving the 2045 net zero target and the interim 2030 target?**

1.1 The need to substantially decarbonise Scotland's heat supply has been obvious since the Climate Change (Scotland) Act 2009 was passed twelve years ago. However, progress on heat decarbonisation to date has been slow, with targets for renewable heat missed and too little done to improve the energy efficiency of Scotland's homes and buildings, and to encourage the uptake of low carbon heating. Consumer awareness of the heat decarbonisation challenge also remains low, with a recent poll conducted on behalf of Citizens Advice Scotland revealing that only 30% of consumers in Scotland are aware that fossil gas-fired heating and cooking appliances will need to be replaced if the country is to successfully reach net zero. In addition, just 10% of consumers in Scotland are aware that electricity is likely to be the principle heat source in Scotland by 2045.

1.2 However, the same survey found that 68% of respondents support Scotland's 2045 net zero commitment. Almost half (41%) of respondents felt that reducing the impact of climate change should become more of a priority for the Scottish Government in the wake of the COVID-19 pandemic.

1.3 Evidence through polling consistently finds that Scottish consumers support climate change targets and as such, we strongly support the 2045 net zero target. An interim 2030 target is sensible, but we would like to stress the importance of prioritising sufficient energy efficiency and ventilation of buildings before or ideally alongside adopting low carbon heating. Energy efficiency reduces energy demand, improves thermal comfort, and prepares buildings for the transition to net zero, making it a no regrets option. We urge the Scottish Government to emphasise energy efficiency in the decade leading to 2030.

2. What are your views on any risks of unintended consequences from this pathway?

2.1 Energy efficiency retrofit must come before or alongside installation of low carbon heating systems. If low carbon heating, such as air source heat pumps, are installed in homes that are not energy efficient it can create unaffordable energy bills and push more households into fuel poverty. Heating targets must include energy efficiency.

2.2 If consumers aren't properly supported in making the transition to net zero, there may be unintended negative consequences such as unaffordably high energy bills or higher levels of fuel debt, especially for consumers that are adopting a regulated fuel heating system such as an air source heat pump for the first time, as the following example from Citizens Advice Bureaux demonstrates:

2.3 A North of Scotland CAB reports of a client who had an air source heat pump installed as a replacement for an oil fuelled boiler in September 2020 through the Warmer Homes Scotland grant scheme. Mary was told a heat pump would save her money, but it has ended up costing more. Mary previously spent around £60-65 on electricity and £100 on oil per month during the winter, but she is now spending £200 a month on direct debit, which is unsustainable. An engineer has been back to check whether the heat pump is faulty but no fault has been found. Mary believes she was mis-sold the heating system as she was led to believe it would be cheaper than her oil-fuelled system.

2.4 The lived experiences and support needs of consumers making the switch to low carbon heating must be considered first and foremost to ensure the transition to net zero is just.

3. What are your views on our assessment of strategic technologies in low and no regrets areas to 2030?

3.1 We agree that energy efficiency is a no-regrets area, and that fabric first retrofit should be prioritised. Low and no carbon heating is only no regrets if installed properly, in homes that are thermally efficient and properly ventilated, and is supported by a robust consumer protection framework that ensures timely access to repair or redress should anything go wrong.

3.2 While heat pumps are an excellent low carbon heating system for many homes, they will not be suitable for every off-grid home in Scotland. In homes that are not suitable for heat pumps, a combination of other technologies, such as modern quantum storage heaters paired with solar PV panels and a storage battery, or district heating, may be better solutions.

3.3 Currently, consumers lack clarity about which type of heating system is most suitable for their property. We would welcome Scottish Government guidance on the best options by property type, based on typical Scottish properties.

3.3 All the "no and low regrets" technologies (apart from some forms of district heating) proposed by the Scottish Government in this consultation are forms of electric heating, which is obviously necessary for meeting "low or no carbon" criteria. However, the rapid upscaling of electric heating will affect electricity networks in Scotland, and network operators should be involved in planning processes, including the design and development of LHEES and cross-sector local area energy plans.

3.4 New heating systems should be accompanied by an electricity meter change, where appropriate, and installers or landlords should give households a thorough explanation on how to use the system. Ensuring systems are installed in highly efficient homes with the correct electricity meter type and used by people who understand them will help prevent the transition to low carbon heating from pushing households into fuel poverty, making them truly "no regrets".

4. What function should a new heat target serve?

4.1 A new heat target should be holistic in its design, so that it incorporates eliminating fuel poverty, improving energy efficiency, and eradicating carbon emissions from heating. A holistic heat target will discourage siloed policy thinking.

4.2 A heat target, while useful for providing clear signals to consumers and communities who will need to make changes to their homes and lifestyles to reach net zero, is a destination, not a strategy. Rather, it should be an outcomes-based standard that can demonstrate clear, measurable progress, supported by a strong policy framework.

5. How do you think a new heat target should account for the need to deliver against our statutory fuel poverty targets?

5.1 If Scotland meets its heat target in ten or fifteen years, and fuel poverty is at the same or higher levels than it is now, we will have failed to achieve a just transition. Current levels of fuel poverty are unacceptable, and the transition to net zero should be seen as an unequalled opportunity to lift the 24.6% of households currently experiencing fuel poverty out of it[1].

5.2 Fuel poverty targets should be built in, not bolted on to the new heat target. As local authorities will, in the near future, have a statutory duty to develop Local Heat and Energy Efficiency Strategies (LHEES) there is an opportunity to build community engagement into both the LHEES and heat targets, ensuring that communities have a say in how their homes and lives will be transformed by the just transition. Grassroots community organisations hold a huge

[1]Scottish House Condition Survey: 2019 Key Findings

amount of local knowledge and expertise and LHEES should engage these groups to ensure these expertise are captured as strategies develop.

6. Do you agree that a new heat target should apply to heat in buildings, distinct from industrial heat?

6.1 Yes, we agree. Industrial and process heat has its own distinct requirements, and a separate target should therefore be set for industry. Industrial heat should have the same end goals as domestic heat, namely reaching net-zero carbon emissions by 2045, but a different route map that takes its policy needs into account.

6.2 There is, however, an opportunity for waste industrial heat to be used in district heating, and industry should be encouraged to engage with heat in buildings where this is a possibility. An industrial heat route map would help identify when decisions about these kinds of heat networks should be made, and would avoid missing out on valuable opportunities for cross-sector decarbonisation.

7. What form should a new heat target take and why?

7.1 We feel that a heat target should be measurable against an existing baseline and include both reducing demand and reducing emissions from domestic heat.

7.2 We do not feel that installation rates of low / no carbon heating is a suitable mechanism for the heat target, as it will shift the focus of the strategy to encouraging wealthier households who can afford the high upfront costs of the technology to reap the benefits of a warmer home and lower fuel bills. The strategy should instead focus on reducing fuel poverty and achieving a just transition. An installation-based target also runs the risk of being too prescriptive, discounting innovative technologies and reducing consumer choice. Installation-based targets also risk eroding the quality of the customer journey through the heat transition, the importance of which cannot be over-stated.

7.3 The Scottish Government already collects data about the greenhouse gas emissions associated with domestic heat, domestic heat energy consumption, and fuel poverty rates[2,3]. We suggest that the new target include:

- A reduction in domestic heat consumption from the 2019 baseline of 34,337 GWh
- An increase in the capacity for renewable heat from the 2019 baseline of 2.03 GW

[2]Scottish Government Energy Statistics Hub (https://scotland.shinyapps.io/Energy/?Section=RenLowCarbon&Subsection=RenHeat&Chart=RenHeatTech)
[3]Scottish House Condition Survey: 2019 Key Findings

- An increase in the annual output of renewable heat from the 2019 baseline of 5,205 GWh
- A percentage decrease of households in fuel poverty

8. At what level should the target(s) be set and for what date?

8.1 We do not have evidence to offer about what level the target should be set at, or for which dates they should be set. However, as we have a final target of net zero greenhouse gas emissions by 2045, it would seem sensible to work back from this target as the water industry in Scotland has done in SR21.

8.2 Once the form of the heat target is decided on, the level and date should be evidence-led, decided collaboratively with Ofgem and the energy networks, and taken with a truly whole system view.

8.3 If the Scottish Government adopts the heat target structure, we suggested in our comments on Question 7, levels should be set year on year, so that progress is easily measured and demonstrated.

Chapter 3 – People

9. What are the most significant actions we can take to ensure that Scotland's people and organisations are meaningfully engaged in the net zero heat transition?

9.1 Statistics quoted in the draft strategy indicate that the impact of domestic heating on the climate is not well recognised amongst the public – this has to be overcome if the heat transition is to be realised. To commit to significant changes in their lives, people need to believe in what is being asked of them and understand how their individual actions contribute to the greater good; this is especially challenging when the changes relate to an essential human need: in this instance, the ability to keep warm.

9.2 Achieving such buy-in will require both a theoretical and practical approach, comprising: an awareness-raising campaign to improve literacy of the key issues, and coordinated community engagement to help deliver the necessary changes on the ground. We welcome the proposed bespoke public engagement strategy for heat in buildings as a means of developing such a plan.

9.3 In 2020, Citizens Advice Scotland published research into how effective engagement should be conducted to deliver positive outcomes for communities and organisations. This stressed a need to change from thinking *about* communities to thinking *like* communities. This echoes much of the debate around the energy transition, which has recognised the need for people to be active participants as opposed to disengaged subjects. The

report argues that organisations must: fully commit to delivering engagement programmes that genuinely enable communities to influence decision-making; ensure that adequate time and resources are made available; and evidence to the community how their input has influenced decision-making and outcomes. The report's warnings against inflexible approaches have a resonance to the complexities of the heat transition, arguing against engagement work which does not reflect the varying needs of individual communities.

10. What in your view are the opportunities, if any, available to key organisations, such as local government, businesses and trade associations and community or other non-government organisations, in supporting this public engagement activity?

10.1 In its Warm Home Discount 2021/22 consultation analysis, the UK Government confirmed it would proceed with proposals to make the inclusion of smart meter advice mandatory for any advice project receiving Industry Initiatives funding – this is a good example of how existing mechanisms can be amended to support public engagement activity around the energy transition. The smart meter rollout will eventually reach every corner of Great Britain and, for many households, this will be their first exposure to energy services / technologies of the future.

10.2 The success of this interaction is vital: if it goes well, evidence suggests that consumers will be more likely to consider taking the further steps that having a smart meter affords, for example: installing a low-carbon heating system or a heat battery[4]. However, if it does not go well, the consumer may be put-off from taking such steps, and the opportunity is missed – this may be the case if the consumer is not adequately supported and feels that the smart meter is an imposition, or if they experience technical issues following installation.

10.3 Smart meters are just one example. Organisations across various sectors will have opportunities to work, both independently and collaboratively, to support public engagement around the net zero heat transition in Scotland. The development of some agreed aims/principles, to underpin this work and to ensure a consistency of approach, could be beneficial here.

10.4 The third sector is well positioned to respond to consumer apprehension around the transition through advocacy and advice services, whilst the Energy Consumers Commission will have a role to play in terms of how these experiences inform policy and decision-making. Third sector and advice organisations can influence public opinion and supporting positive engagement about the benefits of the transition would help win hearts and minds in the communities the organisations serve. Local authorities can ensure that effective engagement is at the heart of their Local Heat and Energy Efficiency Strategies, whilst businesses, trade organisations and other consumer-facing actors should look to incorporate these principles into their delivery models. Perhaps most importantly, organisations must find ways to

[4] https://www.cas.org.uk/publications/consumer-insights-future-gas-and-electricity-distribution-networks-scotland

work collaboratively, exploiting each other's strengths, to deliver the best outcomes for households.

11. In your opinion, could any of the proposals set out in this strategy unfairly discriminate against any person in Scotland who shares a protected characteristic? (age, disability, sex, gender reassignment, pregnancy and maternity, race, sexual orientation, religion or belief).

11.1 We believe that the differences in the way people who have protected characteristics experience issues like fuel poverty must be taken into account during policy development and the implementation of alleviation measures such as those currently offered by the Scottish Government and those envisaged under this strategy.

11.2 The strategy notes the tension between the need to decarbonise heat in homes and the potential impact on fuel poverty this may have. However, there is a chance that the proposals in the strategy could inadvertently discriminate against people who have protected characteristics. This is because, rather than being neutral towards those with protected characteristics and ensuring the potential impacts of the strategy do not unfairly discriminate, the draft strategy appears blind to them and seems not consider the specific issues they may face in contrast to those without a protected characteristic and the possibility of unequal or unfair impacts on them.

11.3 This is partly due to the fact that, despite the strategy stating that the Scottish Government will give due regard to equalities, there is no Equality Impact Assessment accompanying it. This may be due to the intention identified in the strategy to assess each of the actions outlined in the strategy in relation to the impact they will have on fuel poverty. However, specifically identifying the impact these actions might have on people with protected characteristics as part of an EIA accompanying the strategy from the beginning would ensure any impact is taken into account at an earlier stage and mitigation is planned.

11.4 Furthermore, although the strategy states a welcome intention to target funding to the most vulnerable and those in the highest emitting properties in order to maximise carbon reductions, it could go further to consider the targeting of support to people with protected characteristics who may be more likely to be living in fuel poverty than those who do not have a protected characteristic. Analysis of people with the protected characteristics of age, disability, marriage and civil partnership, race, and sex who sought advice from the Citizens Advice network in Scotland in relation to fuel poverty in 2019-2020 shows that those CAB clients seeking fuel poverty-related advice were more likely to have a disability and be aged between 25-44 than clients seeking advice on other issues. This analysis of network data was supported by an evidence-based literature review and shall be published in the coming months.

11.5 It is good to see outlined in the strategy the possibility that the Scottish Government will consider expanding the Warmer Homes Scotland scheme to support a wider range of households in the future. In the latest annual review of the scheme (2019), there are some people who have protected characteristics who are clearly benefiting from it, such as people with a disability. However, in other groups (notably pregnant women in receipt of qualifying benefit) the numbers of people benefiting are extremely low. Part of the Scottish Government's consideration of whether to expand the scheme could include broadening it so those with protected characteristics (other than those already taken into consideration) become eligible. The Scottish Government should also consider how to target these groups so they are more aware of the support available.

11.6 The draft strategy notes a building of the evidence base on the interactions between Scotland's fuel poverty and climate commitments. This is welcome and we support recommendations from academics and third sector organisations such as the ALLIANCE, ECHR and CRER calling for the gathering of disaggregated data in relation to fuel poverty based on the protected characteristics. Currently disaggregated data on fuel poverty in the Scottish House Condition Survey is limited with only information on fuel poverty experienced by people with the protected characteristic of age available. Better data will allow for the identification of trends and targeting of resources to those who may be more likely to be living in fuel poverty and potentially any interaction between their experiences and the move to net zero. Without data in relation to fuel poverty amongst people with the other protected characteristics, awareness of, for example, the gendered nature of fuel poverty will remain limited and there will be a lack of baseline data with which to monitor steps to tackle climate change.

12. In your opinion could any of the proposals set out in this strategy have an adverse impact on children's' rights and wellbeing?

12.1 The strategy makes a welcome commitment to improve the energy efficiency of domestic buildings in Scotland alongside the installation of low carbon heating systems. Improving the energy efficiency of homes is vital as it would likely have an impact on energy costs, the reduction of which could be financially beneficial for children's families and make homes warmer and therefore improve children's wellbeing.

12.2 However, as outlined above, the strategy also notes the tension between decarbonising heat through the installation of low carbon heating systems and the potential for this to impact on fuel poverty levels in Scotland. The definition of fuel poverty in Scotland recognises that certain households have a requirement to operate an enhanced heating regime. Households with a child under the age of five are considered to require both enhanced heating hours and temperatures depending on the length of time spent at home during the winter.

12.3 There is a risk that if a low carbon heating system is installed in a family home that the inhabitants' wellbeing, including the wellbeing of any children

living in the property, could be impacted by any negative cost implications. Low carbon heating systems can be costly to install but even if financial support to install one is made available, they currently have higher running costs than systems like gas boilers. There is therefore a risk that a household's energy costs could increase and if the family is unable to afford those potentially higher costs, this may have an impact on children's rights and wellbeing.

12.4 Investing in energy efficiency and low carbon heating today will ensure that children do not suffer the consequences of worst-case scenario climate change and are not left with the bill for a problem they did not create. There are opportunities to learn from the water industry in this regard, as they have structured investment costs in such a way as to avoid burdening future generations.

13. What further action can we take to support people to make informed choices on the energy efficiency and heating options available to them?

13.1 To better support people to make informed choices on the energy efficiency and heating options available to them, the Scottish Government should improve how it funds advice services. We welcome the commitment in the draft strategy to expand the national energy advice offering; Home Energy Scotland (HES) has a key role in this, but it should not be considered a one-size fits all solution. Grass-roots organisations across Scotland currently play an important role in the provision of energy advice in their communities, but they are too often reliant on short-term, precarious funding models. The inability to forward-plan beyond the end of the current funding cycle restricts organisations and limits their ability to retain staff, grow, and diversify. Therefore, advice in Scotland requires both a national and local approach, with a longer-term planning and funding framework; this will promote the necessary retention of skills and the development of services required to effectively support consumers in the energy transition.

13.2 Alongside an increase in funding for the provision of national energy efficiency and heat advice, the Scottish Government must seek to ensure consumer buy-in and trust. Bad experiences such as the activities of rogue traders operating under government-backed schemes like the Green Deal have knocked consumer trust and created barriers to consumer engagement with energy efficiency and home renewables programmes. Without consumer buy-in, there is little if any incentive to participate in these programmes as people will not trust that programmes are happening for the right reasons, that their voices will be heard, and that they can access redress if things go wrong.

13.3 Working with organisations that are already embedded in and trusted by communities to raise awareness and help people make informed choices can build trust and increase the likelihood of take-up of measures. Using a range of accessible channels to provide information will also help make sure the digitally excluded are not left behind.

13.4 The Scottish Government should adopt a 'no wrong door approach,' meaning all services should be available to consumers no matter which organisation they originally contact. This will require the sharing of information and collaborative working practices with impartial advice agencies to ensure consumers do not fall through the gaps or receive unqualified or detrimental advice. Working with organisations that are already embedded in and trusted by communities will be essential. For example, comprehensive engagement and the sharing of information with established and trusted services like Citizens Advice Bureaux across Scotland, South Seeds in Glasgow, and local GP surgeries will ensure consumers can access holistic support through different channels. The Energy Consumers Commission has committed to establishing a grass-roots network which could also be used to raise awareness and support people in this space.

14. What is your view on the current level of support and advice provided through existing services such as Home Energy Scotland and the Energy Efficient Business' Support service?

14.1 HES is a key stakeholder of Citizens Advice Scotland and, as a result, there are regular interactions between the organisations across various workstreams. Perhaps the best example of this is partnership working on campaigns such as Big Energy Savings Month; this is delivered annually in communities across Scotland, targeting energy consumers in identified profile groups.

14.2 A regionalised, coordinated, multi-platform service is a good starting point from which to expand the national energy advice offering, and we welcome this commitment in the draft strategy. CABs in Scotland already work closely with their local HES centres; many are registered on the HES portal, and this is used mainly to refer clients requiring expert advice on energy efficiency upgrades and low-carbon heating. Feedback on the HES specialist electric heating service has been especially positive, particularly amongst CABs in rural communities who have accessed its training to upskill advisers. However, as stated in response to Question 13, there is a need for longer-term planning and funding of varied advice services in Scotland, so HES should not be considered a one-size fits all solution.

14.3 We understand that the Citrus Energy switching service, through which HES had previously referred consumers seeking switching advice, has now come to an end. Switching is likely to remain a key component of consumer engagement with the energy market, particularly as the transition to future energy services will be dependent on access to affordable, compatible tariffs. If energy consumers in Scotland are to be adequately supported in all aspects of the transition, it is important that a supported switching service in this mould continues, and that it is adequately funded.

15. Are there any further suggestions that you could provide on how the customer journey through these delivery services could be improved, in light of the ambitions set out in this strategy?

15.1 As well as an increase in funding for the provision of energy efficiency and low carbon heat advice, there is a need for significant public engagement so people are aware of these services and how to begin their journey in making their homes more environmentally friendly. We welcome the Scottish Government's recent consultation on its climate change public engagement strategy and its plans to increase that engagement. Citizens Advice Scotland's response to the consultation outlined a range of ways public engagement can be increased including: a regular, national public education campaign to improve energy efficiency literacy; an increase in funding for the provision of national energy efficiency and fuel poverty. There will be learnings to be taken from the mass public engagement surrounding the coronavirus pandemic. Public engagement on climate change and the actions which can be taken to reduce emissions, including making adjustments to homes, could build on any successes. Communication could be tailored based on the type of owner or occupier. For example, all landlords could receive information about funding available to them for the installation of energy efficiency and low carbon heating systems.

15.2 It is also vital that as part of the customer journey, consumers are informed of their rights and access to redress should something go wrong in relation to any adaptations they have made to their homes to support climate change mitigation. Consumers and communities should have access, choice, information and representation in the policies and activities that shape their day-to-day lives and strengthened consumer protection will be a vital requirement during the transition to net zero.

15.3 Part of that protection relates to adequate information provision about where consumers can access legitimate advice about their rights, access to redress, and available funding. A recent omnibus survey for Citizens Advice Scotland on awareness of rights and redress found that of adults who had recently purchased energy efficiency measures, only 28% were aware of the cooling-off period in which a policy could be cancelled for a full refund; only 34% were aware of the terms and conditions; 34% were aware of coverage available if the purchase was made on a credit card; and 22% were not aware of any of that information.

15.4 Citizens Advice Scotland's 'Fit for the Future' report (2020) outlines the need for consumers to be put first in the move to net zero, recommending the creation of a framework of robust consumer protection in the energy efficiency and renewable retrofit sector given the potential for the market to grow exponentially and the likelihood for significant detriment when things go wrong high due to inherent costs of installation and the vulnerability of some consumer groups. It recommends several further actions to advise and protect consumers in this space, including:

- Ensuring information is readily available and widely promoted about existing, legitimate funding schemes and the quality of installers to protect consumers against misinformation and rogue traders
- Developing public awareness of a Quality Mark for the energy efficiency and retrofits sectors
- Demonstrating to the public and potential rogue traders that enforcement action is available by boosting funding to Trading Standards to ensure enforcers are prepared and able to utilise that action

15.5 The need for people to be at the centre of plans for the energy transition is a view shared across the UK. For example, Citizens Advice is calling on the government to establish a net zero homes guarantee – a government-backed scheme focused on giving people confidence to install low carbon heating systems or energy efficiency measures. The guarantee would help people make informed decisions and establish simple, enforceable protection so people can engage in the market with confidence. The scheme should include support for people with funding, finance and incentives as well as information to boost public support which will be crucial for a successful transition to a low-carbon future.

16. What are the most appropriate steps we can take within our powers to ensure sufficient consumer protection for supported energy efficiency or zero emissions heat installations?

16.1 As outlined above, poor information provision can make consumers vulnerable to mis-selling, poor quality installations, and a lengthy and difficult redress process. The Scottish Government has the power to increase public engagement on the decarbonisation of heat in buildings so people know where legitimate funding streams can be accessed, the quality of installation needed, and where to go when things go wrong.

16.2 The Scottish Government should also increase funding for Trading Standards Scotland to support their work in pursuing consumer protection. Trading Standards Scotland recently reported that 30% of their case work since 2015 has related to energy efficiency, amounting to consumer detriment in excess of £4.5 million. Cold-calling and mis-selling about energy efficiency was the most reported nuisance call in 2018, accounting for 47% of all nuisance calls. With an increased drive encouraging the installation of measures such as insulation and heat pumps in order to meet climate change targets, there is a risk that these instances of cold-calling and mis-selling could increase in Scotland.

16.3 Additional funding for Trading Standards Scotland would enable strong enforcement action in this area with the twin aims of acting as a deterrent to rogue traders and ensuring the public is aware of how aggressive selling or mis-leading selling practices are addressed. This in turn would boost public trust in and take-up of measures.

16.4 The Scottish Government should also establish a public-facing database that includes key information required by consumers looking to install measures. It would include information about national funding schemes available in Scotland as well as local authority schemes as well as: details for choosing an installer, accreditation scheme details, redress information, signposting, and support. The database could be linked to Trustmark's planned Property Hub (still in development) which provides access to information relating to existing measures on properties including guarantees and warranties. This information is important for new homeowners.

17. Do you have views on whether we should adopt the use of the UK government's TrustMark quality assurance framework?

17.1 Consumer protection is not limited to legislation and as such, the Scottish Government is not necessarily bound given the area is reserved to the UK Government. Consumer protection is also provided through certification and quality assurance schemes, and their associated codes of practice.

17.2 Recent research by Citizens Advice Scotland identified twelve schemes across the energy efficiency and renewables sectors, including a Scottish Government certification scheme which allows self-certification by the trade for complying with building regulations[5]. The variety and number of schemes can cause confusion among consumers, making them more vulnerable to being scammed or making uninformed decisions. We are also concerned that some certification and trader schemes do not remove businesses from their membership lists when they fail to meet the scheme standards. This means consumers are putting their trust in poor quality businesses who are able to hold a badge of quality and undermines the majority of businesses which operate ethically and to the defined standards.

17.3 Research by Changeworks that was commissioned by Citizens Advice Scotland, and subsequent stakeholder engagement around its findings, has revealed concerns about Trustmark's quality assurance framework and code of practice. Trustmark provides information and assurances at the first stage of the consumer process but leaves consumers to navigate the convoluted landscape of certification and trader schemes at the other end of the customer journey. Good practice was not found to be adopted consistently across businesses and scheme providers, nor were efforts identified that sought to do this on a large scale.

17.4 The independent, industry-led Quality Assurance Short Life Working Group made a series of recommendations in relation to Energy Efficient Scotland, including ones on quality assurance and consumer protection and the idea that the Scottish Government should develop a Quality Mark for the programme. All suppliers wishing to take part in the programme would be required to demonstrate they met certain mandatory requirements such as fair work practices, workmanship guarantees, customer care and a code of conduct.

[5] https://www.cas.org.uk/system/files/publications/fit_for_the_future_-_consumer_protection_report.pdf

17.5 Lessons should be learned from previous programmes such as the Green Deal to ensure the Quality Mark and Energy Efficient Scotland became a high quality, trusted brand.

17.6 The development of a Quality Mark would allow the Scottish Government to go further than Trustmark. It would create one specific badge under which suppliers and traders operating through government schemes would have to adhere to and reduce the cluttered landscape of accreditation schemes. In addition to the requirements set out by the Short Life Working Group, we also believe the adoption of ethical business practices should be mandatory for any trader signed up to the Quality Mark and high-level principles on consumer standards should be signed up to as part of traders' registration. There is learning from the water industry in Scotland which could be applied in this regard, and further information on the adoption of ethical business practices is available in Citizens Advice Scotland's 2020 report "Fit for the Future: Putting consumers first in the move to net zero."

18. In your view, is there any further action that we, or other key organisations (please specify), can take to protect those on lower incomes, and those in or at risk of falling into fuel poverty, from any negative cost impact as a result of the zero emissions buildings transition?

18.1 For the zero emissions buildings transition to be realised, natural gas as a domestic heating fuel will need to be phased out at scale. With 81% of households in Scotland using gas as their primary heating source[6], the size of this task cannot be underestimated. Protecting those on lower incomes, and those at risk of falling into fuel poverty, is an adds additional complexity to the heat transition. Gas is currently the cheapest of the major commercial heating fuels and a household's access to the gas grid can be a significant determinant in the required cost of heating a home to a satisfactory temperature. The low unit cost of gas compared to electricity means that even a low-carbon heating alternative which is 2-3 times more efficient than a traditional gas boiler can still end up being more expensive to operate.

18.2 The rebalancing of social and environmental obligations is likely to be part of the solution to this, and we welcome the work that the UK Government has been undertaking in this area. However, organisations invested in the transition also have a responsibility to protect consumers from any negative costs impacts.

18.3 Utilising a coordinated and holistic approach across services that is respectful of individual consumer needs is one way of doing this. An example where such an approach was not adopted was raised at a recent meeting of Citizens Advice Bureaux energy advisers:

18.4 Heather contacted the Bureau in question stating that her energy bills had increased to an unaffordable level; she advised that an engineer had been in the house recently for something to do with the heating system, but she

[6]Scottish House Condition Survey: 2019 Key Findings

didn't know if this was linked. The CAB adviser conducted a home visit and discovered that an air source heat pump had been installed at the property – Heather had not been advised of this or given any advice on how to use it. There had been no upgrades undertaken prior to the installation to improve the energy efficiency of the property and traditional radiators remained in place. Heather's energy supplier had not been informed of the change, so she was not on a compatible tariff. The heat pump installation had been completed entirely in isolation, with no contact being made with the other required services / organisations, and no support provided to the consumer.

19. What are your views on our approach to phasing out funding for fossil fuel heating systems by 2024 where it is not detrimental to our fuel poverty objectives? Do you think that this could be achieved any sooner than 2024, and if so how?

19.1 In terms of phasing out fossil fuel heating systems, the draft strategy proposes different end dates for retrofits (2023) and new builds (2024). We will address each of these in turn:

19.2 By the end of 2023, the Scottish Government's fuel poverty programmes will opt for low / zero emission heating system replacements where this is not detrimental to fuel poverty objectives. We propose a "low-carbon first" approach, but with a recognition that this will not be feasible in all circumstances. For example, the only low-carbon option when replacing a gas boiler in a fifth-floor flat may be high heat retention electric storage heaters, but this would have negative cost implications.

19.3 Another key consideration in relation to retrofits is the future of the gas network. It is, for example, difficult to see how an end date of 2023 is compatible with the Fuel Poor Network Extension Scheme, which has recently been extended under RIIO-GD2 until March 2026. In theory, this could result in a situation where the gas network operator extends the grid to your front door, but the corresponding Scottish Government fuel poverty support scheme is no longer permitted to fund a connection or install a new gas central heating system, even if it is 'hydrogen-ready'. The future role of hydrogen in domestic heating could offer a solution to this, but the issues are complex and the draft strategy fails to engage with them effectively.

19.4 It is our view that highly targeted gas network infill, particularly in communities located close to industrial clusters where hydrogen is more likely to provide a viable future heating fuel, could make sense in some cases. However, this would require a willingness risk asset stranding where the use of hydrogen for domestic heating do not materialise. It would also require the Scottish Government to rethink its proposals for fuel poverty support such that appropriately targeted interventions remain permissible beyond 2023. The need for the gas distribution network to be closely involved in the development of policies such as LHEES should also be self-evident; we will discuss this further later in this response.

19.5 As regards new builds, we support the introduction of the New Build Heat Standard, but we believe that the proposed standard could be brought into effect sooner than 2024. Any new build communities given consent after the standard is put into law, and once clear guidance is issued, should be required to meet the standard.

20. What changes can be made to the Strategy to help maximise positive impacts and minimise negative ones on people experiencing fuel poverty and other vulnerable groups?

20.1 Although the strategy notes the importance of improving energy efficiency in buildings as well as the installation of low carbon heating systems in order to meet Scotland's ambitious climate change targets, it could put a stronger focus on improving thermal efficiency. For example, under any of the Scottish Government delivery schemes, whether a grant or a loan or funding for a domestic property or a business, it could be required that the thermal efficiency of the building be the best it can be before a low carbon heating system is installed. This may require additional funding to be built into the scheme.

20.2 To reach the households most in need of support, a fuel poverty identification plan needs to be developed. This should include a toolkit for use by practitioners to quickly determine if a household is living in fuel poverty. The Draft Fuel Poverty Strategy for Scotland proposed the development of a doorstep tool; we understand that plan has now been shelved, but an alternative is yet to come to fruition. Identification is vital to ensure that fuel poverty schemes in Scotland are adequately targeted. Evidence from the Citizens Advice network in Scotland indicates that the installation of low carbon heating systems is currently leading to affordability issues, which is not in keeping with the Scottish Government's commitment to a just transition.

20.3 Fuel poverty schemes need to reach those who need support. Many households rely on the Warm Home Discount but recent research has revealed that less than a third of people in Scotland who were eligible for the rebate actually received it[7]. Some schemes, including the Winter Fuel Payment and the Cold Weather Payment, are in the process of being devolved. This presents an opportunity to make sure they are designed to better target households experiencing fuel poverty. However, the Scottish Government has so far resisted calls for such reforms. With 24.6% of households in Scotland in fuel poverty even before the COVID-19 crisis began[8], the Scottish Government should be using ever lever available to ensure that energy is affordable for all.

[7] https://www.cas.org.uk/publications/mind-fuel-poverty-gap-warm-home-discount-scottish-context
[8] Scottish House Condition Survey: 2019 Key Findings

Chapter 4 -Place

21. What are your views on how we can support place-based deployment of zero emissions heat within our delivery programmes?

21.1 We welcome the community-oriented approach proposed by the Scottish Government in the draft strategy. Communities often know the best solutions to the problems they face and should be involved every step of the way in the transition to net zero.

21.2 There is no "silver bullet" technology or solution that will work for every household or community. Delivery of zero emissions heating within existing programs should not be painted with a broad brush, and should support households to adopt whichever zero emissions heating is most suitable for their home and lifestyle.

21.3 Scottish Government delivery programmes will have ties with local advice organisations, such as Citizens Advice Bureau, Changeworks, THAW, and South Side Seeds. These existing relationships should be utilised to ensure communities can access the support, advice, and access to redress needed to build trust.

22. What is your view on how best to engage, and support, local communities in the planning and implementation of the heat transition in their area?

22.1 The impact of the Covid-19 pandemic has been to move much of our lives online. While many aspects of in-person communications are still important there are now examples of innovative ways of undertaking community engagement such as public consultations in virtual spaces. These may broaden the reach of engagement by encouraging younger or time-poor members of communities to feed into plans.

22.2 Nevertheless, engaging and supporting local communities in the planning and implementation of the heat transition in their area must take place in an inclusive way. Engagement should use a range of accessible channels to provide information and encourage participation that does not leave behind the digitally excluded.

22.3 Engagement is resource-intensive and there needs to be tangible support for communities, including local organisations and local people, to commit resources (including time and money) so there is space and opportunity for engagement. As such, although a broad-brush, top-down approach may not suit the local needs of communities, there remains a need for a national framework, through which guidance and funding is available from the Scottish Government, to ensure parity in engagement across the country. There is an excellent opportunity to embed openness, a core value of the National Performance Framework, in this work.

22.4 The aims and objectives of engagement must be clearly identified and different audiences clearly defined so engagement can be targeted specifically to those audiences. This should be coupled with robust analysis of the effectiveness of engagement in meeting the aims and objectives. Evaluation and analysis should allow for modification of engagement practices where required, in order to create opportunities for communities to be co-designers in the changes in their communities.

22.5 Additional recommendations on conducting best practice and successful engagement with communities can be found in Citizens Advice Scotland's 2020 report 'Engaging Hearts and Minds'.

23. What role do you think community anchor organisations could play in supporting the heat transition?

23.1 Community-based and community-led organisations will play an important role in supporting the heat transition. We recommend support for local organisations which are already embedded in and trusted by communities to encourage engagement in the planning and implementation of heat transition in their areas.

23.2 There are many examples of these organisations, such as the Citizens Advice Bureaux across Scotland and South Side Seeds in Glasgow that would be good partners for awareness-raising and participatory engagement. The Energy Consumers Commission is has committed to establishing a grass-roots network which could provide an opportunity to share ideas and feedback on engagement policy.

24. In your opinion, what steps can we take to ensure that policies set out in this strategy do not unfairly impact Island and other remote communities?

24.1 Scotland's remote and Island communities are mostly off-gas, have higher levels of fuel poverty, lower levels of energy efficiency, and more hard to treat homes than other areas of Scotland[9]. Rural and Island areas will therefore need more support from the Scottish Government to make a just transition to net zero.

24.2 Because of the high number of off-gas homes, it is likely remote and Island communities will be among the first expected to adopt low carbon heating. This means higher up-front and lifetime costs for consumers who will not benefit from a mature market and supply chain. We believe a grant fund should be set aside for rural and Island communities to offset these costs.

24.3 There are also supply chain concerns for these communities. Adopting the Trustmark standard and PAS2035 requirements will, while offering protection for consumers, limit the pool of installers available to take on retrofit work.

[9]Scottish House Condition Survey: 2019 Key Findings

Installers coming from elsewhere in Scotland are likely to be costly and cause delays, as well as denying communities a valuable opportunity to develop their own supply chain. Integrating PAS2035 and Trustmark standards into training programmes, so that graduates are accredited from the get-go will relieve some of the pressure on existing SMEs to pay for accreditation themselves.

24.4 Remote and Island communities have strong bonds and engagement with these communities should be tailored to and conducted by members of their own communities. As we have discussed, existing advice organisations have a large role to play, and should be supported to create tailored engagement campaigns for the communities they serve.

25. What is your view on the timescales proposed for LHEES?

25.1 While we welcome the ambition of the proposed timescales it is crucial that local authorities are sufficiently resourced, both in terms of money and staff, to deliver. LHEES have enormous potential to deliver a just, community-led transition to net zero in Scotland. However, to meet this potential each strategy will need to be based on accurate, detailed information about local authority areas, which will take time to gather. Good LHEES will require collaboration between many different departments within local authorities, as well as expert input on hard-to-treat properties and decarbonised heating systems.

25.2 According to Scottish Government guidance, robust LHEES should include:

1. An assessment of existing local and national strategies and data availability
2. Authority-wide assessment of the existing building stock's energy performance and heat supply
3. Authority-wide setting of aggregate targets for heat demand reduction and decarbonisation of buildings – short and long term
4. Socio-economic assessment of potential energy efficiency and heat decarbonisation solutions
5. Selection of areas/ prioritisation of opportunities leading to the designation of zones
6. Costing and phasing of delivery programmes[10].

This is an enormous amount of work for local authorities to undertake in as little as 2 years. Scottish Government will need to consult local authorities and COSLA to ensure they are supported before, during, and after the planning stage, to delivery and beyond. Furthermore, LHEES will need to be regularly reviewed, evaluated and updated.

[10]Scottish Government (2017) LHEES consultation document

25.3 In the phase one LHEES pilot evaluation conducted by Scottish Government, some local authorities who participated felt that:

> "whilst they had a better understanding of what an LHEES involved, they did not feel that they had been left with a replicable method that they would be able to roll out across the whole local authority area[11]"

This is a concerning result. We agree with the Scottish Government's view in the pilot evaluation that for widespread LHEES, shared framing of expectations for LHEES and a guidance for local authorities are necessary.

25.4 The recent evaluation of phase two pilots made the following recommendations, all of which we support and encourage the Scottish Government to implement:

- Test and develop new methods for creating LHEES
- Identify relevant sources of data and data gaps
- Gain a fuller understanding of the resources and capabilities required to develop LHEES

25.4 We suggest that Scottish Government create a shared framing of expectations and detailed guidance for LHEES in collaboration with COSLA and local authorities as soon as possible. While quality cannot be compromised by speed, it is essential that the strategies are completed as soon as possible if worst-case scenarios of climate change are to be avoided.

26. Do you agree with the approach to LHEES set out above? If not, please give reasons to support this.

26.1 We agree with the intention to ensure LHEES are developed on a statutory basis and note the Scottish Government's intention to work with local authorities to ensure the development of LHEES are appropriately resourced. This will be vital as it is possible that the resources and expertise within local authorities required to develop appropriate local strategies does not currently exist.

26.2 We support the idea of a resource which local authorities can draw on to support access to the data and analysis needed to underpin authority-wide strategies but suggest additional resources may be required to be funded by the Scottish Government. The Scottish Government should be led by COSLA and the findings of their second LHEES pilot evaluation in this regard, which will understand the resource requirements of local authorities and any

[11]Scottish Government (2019) Local Heat and Energy Efficiency Strategies (LHEES): phase 1 pilots - social evaluation (sect. 3.1.1)

challenges or gaps in knowledge in relation to how to decarbonise the heat used in buildings in the best way for each local area.

- Access to expert support e.g. Changeworks
- Sharing of information among local authorities

26.3 We also agree with the importance of involving local communities in decision-making during the development of LHEES, believe the Scottish Government should consider whether action in the form of public participation during their development should be mandatory and believe that the Scottish Government should provide guidance to local authorities on the kind of engagement needed and to be encouraged both during and after development of the strategies.

27. What are your views on what Permitted Development Rights might help enable in the heat transition, in addition to those we have already included in the Permitted Development Rights review programme?

27.1 We cannot offer an opinion on this question based on our evidence. However, we would like to highlight that the strategy may conflict with the Heat Networks (Scotland) Act if it extends Permitted Development Rights for heat networks without requiring that developers undertake community engagement.

27.2 Extending Permitted Development Rights to heat networks of five or fewer consumers could however be sensible, provided every participant is made aware of their rights and understands what they are agreeing to.

Chapter 5 – Preparing our Energy Networks

28. In your view, is there further action that can be taken to ensure that our electricity systems are ready for heat decarbonisation? If yes, please provide further information.

28.1 Historical inertia since the Climate Change (Scotland) Act 2009 was passed more than a decade ago means that the Scottish Government's 2030 targets for heat decarbonisation are now highly ambitious, with supply chains under-developed and economies of scale yet to be realised; from a low baseline, more than a million Scottish buildings will require to adopt low carbon heating by the end of this decade. We agree that the vast majority of this will rely on electricity as the primary heat source. However, in many cases this will first require significant improvements in buildings' thermal efficiency, adding costs for building owners and making their conversion to low carbon heating far more resource intensive than simply changing the heating source. In turn, this is likely to further delay the transition to low carbon heating. Such condensed timeframes, taken alongside the accelerated decarbonisation of road transport announced by the UK Government in November 2020, will

place demands on Scotland's electricity networks which cannot be over-stated.

28.3 The Scottish Government's ambition is welcome, but to be credible it must ensure that its targets are both realistic and deliverable. Achieving this will require clear and coherent cross sector policy, concerted and considered action, and public and private sector funding far in excess of that already committed. If any one of these factors is absent, appropriate, targeted, strategic investment in Scotland's electricity networks becomes harder to deliver, increasing costs to consumers and potentially delaying the rollout of low carbon heating still further.

28.4 As has already been said, LHEES have enormous potential to deliver a just, community-led transition to net zero in Scotland. Properly implemented, they will provide local authorities with the ability to coordinate the rollout of low carbon heating in every settlement in Scotland, taking account of the needs of local communities – including consumers in vulnerable circumstances and consumers in fuel poverty – and embedding fairness in the energy transition from the ground up. However, as the Scottish Government's LHEES pilots have shown, local authorities cannot do this alone; they need the support of the gas and electricity networks to properly understand the myriad risks and opportunities presented by the decarbonisation challenge, and the cross-sector implications of their decisions, if they are to arrive at a workable and cost-efficient heat transition.

28.5 Scotland's electricity networks need greater certainty to develop their business plans and phase their investment in the most cost efficient ways possible. It is essential therefore that LHEES are informed by the networks and inform new, local area energy plans developed by the networks, Scottish Government and other cross-sector stakeholders. Local area energy plans should then inform the Scottish Energy Strategy and networks' business plans for RIIO-3 and beyond. It is in our view only through the implementation of such a hierarchy that consumers and communities can be placed at the heart of the heat transition whilst giving networks the confidence and certainty they need to invest appropriately ahead of need in a way that efficiently enables a transition to low carbon heating that will need to accelerate rapidly in the latter part of this decade and throughout the 2030s.

29. What are your views on the changes set out above for the electricity networks and are there further actions that could be taken by government, the regulator or industry that would make these more cost effective? Please provide evidence to support any suggestions.

29.1 As has already been said, the lack of significant progress on heat decarbonisation in the twelve years since the Climate Change (Scotland) Act 2009 was introduced creates a very significant challenge to Scotland's ability to realise its 2030 emissions targets. It is therefore now essential that central and local government work closely with the energy industry in Scotland to

develop a credible plan for the very significant uplift in low carbon heat installations that will be required in the second half of this decade and beyond. This must deliver both coherent and deliverable policies, and significant sources of finance.

29.2 The energy transition is a journey on which the whole country must be prepared to willingly embark; it is not something that can be achieved successfully or cost effectively via the blunt instrument of regulations alone. A sustained programme of meaningful consumer education and engagement will therefore also be vital to securing the level of consumer buy-in required to deliver a just and inclusive transition.

29.3 Central to a cost-effective heat transition in Scotland will be LHEES. Too often, however, the Scottish Government refers to LHEES as an afterthought in the decision-making hierarchy. We also note that there is as yet no formal means to tie the thirty-two local Strategies together with plans for decarbonisation in other sectors to form one coherent, cross-sector narrative. We have detailed in response to Question 28 our thoughts on why this is important, and on how this could be done.

29.4 The Scottish Government's approach to the phasing of heat decarbonisation also needs to be re-examined if unnecessary costs are to be avoided. Presently, this phasing appears to be guided by carbon budgets, apparently over-riding considerations of deliverability, affordability, fuel poverty, or impacts on the electricity system.

29.5 We recognise the tension between the urgency to act on climate change and the need to ensure an affordable, just, and deliverable transition to net zero. However, as currently proposed, it is clear that Scotland's electricity distribution networks will incur additional costs to accommodate the demand created by the conversion of oil and LPG heated buildings to low carbon heating than would be the case if headroom were created locally by converting suitable properties that currently use traditional forms of electric storage heating to low carbon heating first. The Scottish Government's preferred approach would also appear to have a lesser short-term impact on fuel poverty than would such an alternative phasing. A geographically scattergun approach to heat decarbonisation is also unlikely to help the electricity networks to plan the efficient reinforcement of their networks, where required. A rolling programme of retrofit, guided by LHEES and prioritising fuel poor communities, may therefore be a more effective means to deliver on the Scottish Government's fuel poverty and heat decarbonisation targets.

29.6 The Scottish Government must also recognise that the realities of whole building retrofit mean that many older properties will struggle to be improved to the extent required for the cost-effective operation of a heat pump. Owners and tenants of many of the country's older buildings could therefore face the unenviable choice of spending disproportionate sums to upgrade the

fabric of their homes, or excessively high running costs of their low carbon heating system. The potential for alternative forms of electrical heating sources such as high heat retention storage heaters to provide reliable and affordable low carbon heating in suitably retrofitted older buildings should therefore not be discounted so readily, particularly where such technologies can be combined with secondary energy storage technologies. Encouraging diversity on the electricity distribution networks will also be helpful in keeping reinforcement costs to a minimum.

29.7 Alongside this, the distribution of costs associated with preparing the GB energy system for net zero also needs to be addressed if the electrification of heat is to be advanced at pace in a way that does not result in energy bills increasing significantly for consumers who adopt low carbon heating. Currently, the vast majority of social and environmental levies fall on electricity billpayers[12], with many of these charges linked to consumption and without any consideration of consumers' ability to pay. Though it can be argued that the monies raised through such levies have been successful in driving down the carbon intensity of GB's electricity supply, in Scotland it has resulted in a scenario where consumers making used of the greenest form of energy pay the highest prices – the very opposite of the kind of 'polluter pays' approach that would encourage consumers to switch to low carbon heating. With price signals still strongly in favour of mains gas, we therefore welcome the work that the UK Government has recently been undertaking in this area, and we look forward to engaging with their forthcoming consultation on these matters in due course.

30. In your view, what changes are needed to ensure that those least able to pay, including those in fuel poverty, are not unfairly impacted by the transition in our electricity and gas networks?

30.1 Gas and electricity network costs currently comprise 23.86% of a typical GB consumer's dual fuel bill[13]. Although Ofgem's RIIO-2 Final Determinations for gas and electricity transmission and gas distribution are predicted to have minimal impact on consumers' bills[14], it is likely that RIIO-ED2 will see electricity distribution costs increase. Despite ongoing support from the Hydro Benefit Replacement Scheme, average electricity distribution costs in PES area 17 are already 14% higher than in any other region of GB (and 45% higher than the GB average)[15]. Any increase in electricity distribution costs in RIIO-ED2 or beyond is therefore likely to be felt particularly keenly among consumers in the North of Scotland who rely on electricity as their primary

[12] https://www.ofgem.gov.uk/publications-and-updates/infographic-bills-prices-and-profits
[13] https://www.ofgem.gov.uk/publications-and-updates/infographic-bills-prices-and-profits
[14] https://www.ofgem.gov.uk/system/files/docs/2020/12/riio2_overview_document_web_1.pdf
[15] https://www.ofgem.gov.uk/system/files/docs/2021/03/riio-ed1_annual_report_2019-20_supplementary_data_file_0.xlsm

heating fuel – a customer base that will only increase as the heat transition progresses.

30.2 With 43% of households in Scotland who use electric heating in fuel poverty even before the COVID-19 crisis struck, and 76% of those households in extreme fuel poverty[16], it is vitally important that the network investment required to support the energy transition is targeted and phased appropriately to avoid consumers bearing unnecessary expense. While fuel poverty rates among on-gas consumers are considerably lower than they are among consumers who make use of other heating fuels, the same is also true for gas network costs as the networks are reconfigured to carry low carbon gases and the associated costs start to fall on a reducing customer base. The costs associated with decommissioning assets made redundant by the heat transition must also be shared fairly.

30.3 This is not simply a matter of regulation. Ofgem has demonstrated that it has learned from the experience of previous price controls when issuing its RIIO-2 Final Determinations by proposing a much tighter financial settlement for the energy networks. This should ensure that all consumers, including consumers in fuel poverty, receive better value for money from the gas and electricity networks than has been the case in RIIO-1[17]. We would expect that, subject to the outcome of networks' appeals to the CMA, RIIO-ED2 will result in a similar outcome in this regard.

30.4 While Ofgem must also ensure that appropriate frameworks are in place to ensure that networks consistently take a collaborative, whole energy system view of future investment needs, the Scottish Government must do more to ensure that Scotland's energy networks are consistently able to play a full and active role in the design and delivery of LHEES if they are to be able to plan their investment with the certainty required to deliver decarbonisation at lowest cost to consumers. As has already been said, the question of how the transition to low carbon heating should phased must also be reassessed to ensure that network investment is incurred efficiently and that the needs of fuel poor consumers sit at the heart of the heat transition.

30.5 On this final point, the gas and electricity networks themselves also have a significant role to play as, in RIIO-2 and beyond, the digitisation of the networks progresses and the transition to localised system operation continues.

30.6 The mutual benefits to networks and consumers of a future where as many consumers as possible have access to technologies that enable them to take advantage of a changing retail energy market driven by the evolution of the energy generation mix should be axiomatic. However, there is a very real risk that many fuel poor consumers will be unable to afford such technologies and

[16]Scottish House Condition Survey: 2019 Key Findings
[17]https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/EnergyConsumersMissingBillions.pdf

therefore risk being left behind, incurring higher ongoing costs through their exclusion from new services and a reduced ability to engage in significant load shifting. This in turn may drive the need for additional network reinforcement.

30.7 While we would expect the Scottish Government to provide significant, targeted funding and guidance to help many of those affected actively participate in future markets, we nevertheless think it is likely that the DNOs will also need to provide targeted gap funding where mutual benefits (including the social return on such investment) can be realised in areas of high network stress.

30.8 Rather than viewing the heat transition as a risk to fuel poor consumers, with appropriate support it can therefore instead be seen as an opportunity to level up opportunity and reduce inequality among consumers in Scotland. Research conducted for Citizens Advice Scotland suggests that there is a high degree of support among consumers in Scotland for the adoption of such an approach[18].

31. What are your views on the changes set out above for the gas networks?

31.1 While recognising the potential for hydrogen to act as a source of long-term energy storage, we agree with the Scottish Government's assessment of the likely extent of hydrogen as a source of non-process heating in a net zero Scotland. Although the H100 Fife project will provide a tantalising glimpse of hydrogen's potential in a domestic setting, we also agree that 100% hydrogen is unlikely to play a significant role in Scotland's fuel mix by 2030.

31.2 Nevertheless, the use of green hydrogen and biomethane blends as a means of reducing the carbon intensity of Scotland's gas supply is a pragmatic transitional measure, and the Scottish Government's support of such innovation is to be welcomed. However, greater clarity on the future of Scotland's five SIUs is still required. Their rural and coastal locations not only hold significant potential as testbeds for innovation, but as possible catalysts for the decarbonisation of other sectors (e.g. marine transport). While this obviously goes beyond the scope of this consultation, such considerations are central to a just transition and exemplify the importance of local area energy planning in the delivery of a net zero Scotland.

[18] https://www.cas.org.uk/system/files/publications/consumer_insights_on_the_future_of_the_gas_and_electricity_networks_in_scotland.pdf

32. Are there further actions that could be taken by government or industry that you think would make the changes set out more cost effective? Please provide evidence to support any suggestions.

32.1 Though beyond the scope of this consultation, it should also be noted that there are particular issues of fairness which remain to be addressed in relation to the decarbonisation of road transport, with the investment in our electricity networks that this will demand likely to be significant. Left unaddressed, this is likely to increase electricity network costs for all consumers and will mean that many forms of low carbon heating become more expensive to operate. This is likely to have a cooling effect on consumers' enthusiasm for electrified forms of low carbon heating which could jeopardise both the Scottish Governments heat decarbonisation and fuel poverty targets.

32.2 In Scotland, 28% of households have no access to a car for personal use – a figure which rises 40% among households with a net annual income less than £10,000[19]. Vehicle ownership also varies greatly by household type, by disability status, and by urban / rural location. For example, 48% of single pensioner households and 46% of households with significant long-term health conditions have no access to a car or van for personal use[20].

32.3 Low income households in Scotland are among those least likely to have access to a private vehicle, while 86% of income poor households in Scotland are in fuel poverty[21]. If a national EV charging infrastructure and any associated network reinforcement were to be funded via a universal or consumption-linked charge on all consumers' electricity bills, this would place further financial stress on many households who are already struggling to meet their essential fuel costs. Many of these households are also among those least likely to directly benefit from such investment. Socialising the costs of the EV rollout among all consumers would therefore run counter to the Scottish Government's Economic Strategy and its efforts to reduce the incidence of fuel poverty in Scotland to no more than 5% by 2040.

32.4 To address this, DNOs will need to work closely with Ofgem, central and local government, licensed electricity suppliers, and the private sector to design a funding model that allows the network costs associated with EVs to be borne by those who will use the necessary infrastructure and who are able to pay for its rollout. This might involve a combination of local and / or national taxation, and electricity bill levies payable only by those who use EVs.

[19] https://www.transport.gov.scot/media/49874/scottish-transport-statistics-2020-may-2021.pdf
[20] https://www.transport.gov.scot/media/49874/scottish-transport-statistics-2020-may-2021.pdf
[21] Scottish House Condition Survey: 2019 Key Findings

33. What evidence can you provide on the potential for heat networks in Scotland that can help inform a new ambition for deployment within the final Heat in Buildings Strategy?

33.1 Heat networks offer great potential for decarbonising heat in Scotland, especially within Scotland's cities where individual measures such as heat pumps may not be suitable for the housing stock. Scottish Renewables undertook research in 2019 that identified 46 potential projects in Scotland's seven cities, which altogether had the potential to deliver 600 GWh of heat per year and serve 8% of Scotland's heat demand by 2030[22].

33.2 It is important to balance development of heat networks with achieving a just transition. Regulation must provide space for innovation, while protecting consumers. The Heat Network (Scotland) Bill was a praiseworthy first step, however it will be important to monitor how well it is implemented as the sector grows.

34. What evidence can you provide on the potential for heat derived from energy from waste to qualify as low or zero emissions?

34.1 We have no evidence to offer on this question.

35. What views do you have on mechanisms to support this and the use of wider sources of waste heat?

35.1 We have no evidence to offer on this question.

36. With the sustainable market for heat networks described above in place by the early-2020s, are there any further gaps that must be filled to support subsequent delivery of heat networks? If so, what are these and are there particular types of organisation that would be key in filling these?

36.1 The Heat Networks (Scotland) Bill began the important work of regulating heat networks in the UK, however it was limited by the reserved nature of consumer protection powers. Much of how heat networks develop will be influenced by which regulator is appointed to monitor them, but the Scottish Government could proactively create a common procurement framework and skill standards for the supply chain. As heat networks grow, the sector will require more skilled individuals to install and maintain them; additional skills training should be established now, so that the supply chain is prepared for future demand.

36.2 Heat networks are likely to be included in LHEES, and some grassroots organisations have begun identifying their potential within their own communities. As heat networks are currently somewhat of a niche specialty,

[22]Scottish Renewables (2019). Available at: https://www.scottishrenewables.com/assets/000/000/481/sr_-_heat_networks_in_scotlands_seven_cities_original.pdf?1579766323

the Scottish Government should offer central support for scoping and procurement to local authorities who are developing heat networks, as well as resource local authorities to obtain the capacity and skills to do so on their own.

36.3 The Heat Trust, of which the Energy Consumer Commission is a member, is the current gold standard for heat networks, and can offer valuable expertise on the further development of the industry. There are also lessons to be learnt from the water industry in Scotland, who have a good track record of community engagement. Scottish Water has facilitated the installation of waste water heating systems in Galashiels and Stirling, both of which were first of their kind in Scotland[23].

Chapter 6 – Kick-starting the Investment in the Transition

37. What are your views on the range of actions identified above to kick start the investment in the transition over the next 5 years?

37.1 We support the range of activities identified. We will comment on individual priorities and activities in our responses to questions 38-44.

38. Do you agree with the strategic funding priorities set out above?

38.1 We generally agree with the strategic priorities set out in the draft strategy. We will comment on each priority below.

Supporting those least able to pay

38.2 We welcome the commitment to eliminating poor energy efficiency as a driver of fuel poverty throughout the draft strategy, and we agree that those who are least able to pay should receive full financial support to reach minimum standards of energy efficiency and adopt low carbon heating.

38.3 However, we are concerned that there is a large group of households who will fall through the gaps, and potentially into fuel poverty or debt – those who are currently just able to make ends meet, who are not in receipt of passport benefits, but who cannot afford any additional expenses and have no savings. Before COVID-19, the majority (59%) of the working age population in relative poverty lived in working households. This group, which may grow as the full extent of the economic effects of COVID-19 are realised, are financially vulnerable. They should not be excluded from the financial support and advice they need to meet net zero targets because they are not in receipt of benefits and are not classified as fuel poor.

38.4 While being in receipt of benefits is a useful indicator to identify households at risk of fuel poverty, schemes should consider other factors to ensure

[23] https://www.scottishwater.co.uk/about-us/energy-and-sustainability/renewable-energy-technologies/heat-from-waste-water

households are not being missed. The delivery bodies mentioned in the draft strategy by Scottish Government, such as Warm Works and Warmer Homes Scotland do outstanding work, but households must be in receipt of passport benefits to qualify for support. We hope that these programs, or an equivalent financial mechanism, will be expanded to include households who are just keeping their heads above water.

38.5 Fuel poverty is transient; households who are on the edge of fuel poverty must be caught before they fall if fuel poverty rates in Scotland are to see any meaningful progress. The renewal of the Warmer Homes Scotland contract in 2022 offers an excellent opportunity to broaden the remit of the scheme to include at-risk households.

Investing in strategic technologies in low or no regrets areas

38.6 As we have discussed elsewhere in our response, we feel that the definition of strategic technologies should be widened beyond those mentioned in the draft strategy, to preserve consumer choice and provide room for flexibility and innovation where possible.

38.7 We support the inclusion of community-focused schemes in this area, noting that the water industry has seen positive outcomes from engaging communities about water efficiency and waste-water recycling projects in their areas[24].

38.8 Community organisations can play a positive role in supporting consumers through the transition to low or no emissions heating systems, ensuring utility meters are changed (if necessary), and incorporating more holistic advice such as assisting in switching electricity provider, informing consumers of their rights, and performing benefits checks.

Showcasing Net Zero leadership and share learning through early adoption in key areas of focus

38.9 We agree that the public sector should lead the way in showcasing net zero leadership, provided they are supported to do so with expert advice.

38.10 A survey conducted in 2020 by YouGov on behalf of Citizens Advice Scotland found that the majority of small and medium enterprises (SMEs) surveyed in Scotland had taken no action on climate change. Most who had not done so had not because they didn't know where to begin or felt that decarbonisation was not relevant to them. These results indicate that SMEs could benefit from sector-specific engagement and financial support to reach net-zero targets.

[24] https://www.cas.org.uk/publications/engaging-hearts-and-minds-study-conducting-successful-engagement-communities-and

Investing in innovation and demonstration to drive forward competitive advantage

38.11 We agree with this priority. However, the energy efficiency sector is particularly vulnerable to mis-selling and rogue traders who take advantage of government backed schemes to seem legitimate.

38.12 To encourage innovation and ensure consumers have access to redress, the Scottish Government should create a ring-fenced pot of funding to be used to correct installations of new technologies that have gone wrong, pursue legal action against companies who have knowingly mis-sold technologies, and compensate consumers who have been mis-sold by a trader participating in a government backed scheme.

38.13 Consumers must be brought, not forced, along the journey to net-zero. Consumers who wish to be early adopters of low carbon heating or participate in pilot schemes must have assurance that they will not be left with the bill when things go wrong. Establishing this fund would support a "learn by doing" approach, while providing good consumer protection and encouraging best practice amongst installers.

39. In your view, should equal funding be allocated across these priorities or should certain priorities be weighted in terms of impact for Scotland?

39.1 We believe that the strategic priorities should be weighed in view of achieving a just transition and supporting National Performance Frameworks. Many of the proposed strategic priorities directly correlate with outcomes in the National Performance Framework, such as communities, environment, poverty, and health. Viewing the priorities through this lens will encourage cross-sectoral thinking and ensure that progress in one area is not achieved at the expense of another.

39.3 In achieving this balance, special consideration should be given to rural and island communities. Rural and island communities are likely to have greater proportions of households who are living in or who are at risk of fuel poverty, and in homes that are hard to treat, and so should be supported by a "rural uplift" to funding.

40. What are the opportunities and challenges we face in maximising our £1.6 billion investment?

40.1 There are myriad ways to spend £1.6 billion on the transition to net zero, which is both an opportunity and a challenge. We believe that funding for households in fuel poverty, consumer protection, LHEES, consumer engagement, and advice and support should be prioritised.

40.2 Citizens Advice Scotland calculated the estimated costs of bringing every household in Scotland to a minimum standard of EPC band C by 2040, and

social rented housing to EPC band B by 2032 to be around £11 billion[25]. Based on the Scottish Government covering 90% of fuel poor costs, and 10% of costs for those able to pay through grants or tax incentives, this would equal a government contribution of £8.38bn over the 20 year lifetime of EES[26].

40.3 An investment of £1.6 billion over the course of the next Parliament, while a sizeable commitment, will need to be managed very carefully to ensure the ambition of this strategy is met. We believe the £1.6 billion of allocated funding could be optimised in the following way[27]:

Programme/Activity	Proposed budget (per year) £m
Warmer Homes Scotland – National Fuel Poverty Support	171
Local authority-led area-based schemes (HEEPS:ABS)	
Energy Efficient Scotland Transition Programme Pilot projects / engagement & support for the self-funded sector. HES Loans and other financial support.	76.6
National energy efficiency and fuel poverty advice	22
Local authority support including Local Heat and Energy Efficiency Strategies	14
Major Engagement Campaign	1
New programmes- development and delivery[11]	17
Support for Trading Standards Scotland (TSS) and Local Authority Trading Standards	0.5[12]
Scottish Government (public) contribution to the private rented sector	7.9
Consumer Redress Fund	10
Total	320

[25]Cost = (minimum SAP points needed to reach band C) x (£485) x (number of homes). £485 is the estimated cost per SAP point estimated by Warmer Homes Scotland in their most recent annual report. Detailed calculations are available on request.
[26]Citizens Advice Scotland expects the Scottish Government to contribute 90% for fuel poor and 10% for able to pay in the owner occupier sector, and the whole cost of upgrading the social rented sector.
[27]Details about calculations available on request.

41. What are your views on the role of government funding over the next five years? For example, should it be focused towards significant increases in the volume of renewable heat and energy efficiency measures installed or more targeted at specific priority groups or technologies?

41.1 The Scottish Government has committed to a fabric-first approach to retrofit, which necessarily means upgrading the energy efficiency of buildings before or ideally alongside installing renewable heat.

42. What are your views on how we can use our funding to leverage and encourage private sector and other forms of investment?

42.2 Consumer trust is essential for private investment. Bad experiences with government-backed schemes like Green Deal have damaged consumer trust and created barriers to engaging with energy efficiency and home renewables. This barrier can be overcome by establishing a consumer redress fund to support consumers when installation of new technologies go wrong, expanding access to expert advice and support, and creating a public engagement campaign underlining consumer rights in the transition to net zero.

42.3 The Scottish Government currently uses its funding to encourage private investment, however more research could be done to ensure that consumers are able to access products that are appealing to them. Beyond the existing incentives currently on offer, most notably interest free loans from Home Energy Scotland, there is space for more creative offerings. Green mortgages, small cash grants, council tax incentives, on-bill financing, and the PACE model are all worth further research and consumer testing.

43. What are your views on the effectiveness of our existing delivery programmes in supporting different client journeys, including for those in or at risk of fuel poverty? (for example, landlords, home owners, non-domestic building owners – public and private, domestic and non-domestic tenants). In your opinion, are there any gaps in support?

43.1 We will address this question by each client type listed in the question, for the sake of clarity.

43.2 Private landlords will, in the timeline proposed by this strategy, be the first private sector to reach EPC band C, which will require a huge financial investment. We do not support the provision of grants for private landlords, as we believe grant funding should be reserved for those least able to pay. If grants are offered as a financial incentive, we believe that no increase of rent should be permitted. There will be a large group of landlords who are not able to afford expensive retrofits out of pocket, so it is important that private landlords have access to interest free loans, green mortgages, and holistic

advice services. The Scottish Government should not overlook this sector in public engagement campaigns.

43.3 As we have discussed previously, there is always concern that owner occupied households who are not in receipt of means-tested benefits and/or who are not listed on their energy supplier's or network company's Priority Services Register may not get the advice or financial support they need. Many of these households are often living on the edge of fuel poverty, or find themselves moving in and out of it, and therefore aren't able to put up the capital for a loan to upgrade the energy efficiency of their home. More consideration and assistance should be given to these households. If the Scottish Government adopts cost effectiveness as a trigger for additional financial support and advice rather than grounds for abeyance, a financial mechanism should be created to support households who are not necessarily fuel poor or income poor, but who need assistance in bringing their hard to treat home up to standard. This could be in the form of an interest free loan or a green mortgage made available at a favourable rate.

43.4 Recent research by Citizens Advice Scotland found that, of SMEs who were surveyed, larger SMEs, SMEs with higher turnover, and those who had been established for longer were more likely to have taken action to reduce their carbon footprint. SMEs who had not taken any kind of action cited lack of knowledge, lack of funds, and lack of interest as the biggest barriers to engagement with the decarbonisation agenda. Scottish SMEs in the sample were more likely to express a need for support to get started on decarbonisation. A targeted, collaborative campaign to help SMEs understand their contribution to meeting Scotland's climate targets, and where to access advice, support, and funding could increase confidence and encourage early action on decarbonisation. Additionally, targeting advice and funding by business size, age, and turnover as well as sector is more likely to reach SMEs who need it most.

44. Is there any action we can take to further tailor our support to meet the ambitions set out in this strategy, including in relation to fuel poverty? (Please include any evidence you may have to show what this might achieve.)

44.1 We have no additional evidence to offer.

Chapter 7 – Working Towards a Long Term Market Framework

45. What are your views on the approach outlined above to take action towards a long-term market framework for net zero emissions in buildings

45.1 We agree that independent analysis and modelling to better understand the cost of upgrades is necessary to work on new funding models. It should also be used to estimate costings for grants for low and middle income households.

45.2 We agree that a Green Heat Taskforce has potential, however it is essential that it include, in addition to a wide range of technical experts, a consumer voice. Consumers play just as large, if not the largest part in the market, and deserve to be represented. However, it will essential that any working group reliant on input from members is outcomes focussed, and is given a clear remit and set of objectives.

45.3 Timescales for market mechanisms should align with other Scottish Government standards to ensure clarity and encourage consumer trust. The timescales proposed are not consistent with the New Build Heat Strategy proposed by the Scottish Government earlier this year, nor Housing to 2040. We ask that the Scottish Government revise these timescales to align with previous standards.

45.4 It is essential to work with the UK government to design new market mechanisms that can secure and accelerate the transition in reserved areas, and areas within which there are common goals, such as net zero targets.

45.5 We are not opposed to a heat as a service model, as a varied approach to the low-carbon heat transition must include consideration of a role for demand side response. However, we would urge the Scottish Government to learn from examples of best practice, such as the Energy Systems Catapult living lab, when conducting pilots. While heat as a service would be a different purpose than previously proposed for a publicly owned energy company, this may be preferable to a supplier model given current market conditions.

45.6 Council tax should never be used as a penalty for consumers. Citizens Advice Scotland consistently counts council tax arrears amongst its leading causes of debt, and the economic conditions created by the COVID-10 pandemic are unlikely to have alleviated this; indeed Citizens Advice Scotland has predicted a "tsunami of debt" in the next year.

46.6 Council tax *could* be used as a useful incentive to encourage consumers to undertake energy efficiency retrofit. In their response to the Scottish Government Consultation "Improving energy efficiency in owner occupied homes" Citizens Advice Scotland proposed two mechanisms to encourage compliance with a minimum energy efficiency standard in the owner occupied

housing sector. The response is publicly available on the Citizens Advice Scotland website[28].

46. What are your views on how we can achieve a fair and equitable cost distribution for the net zero transition, including ensuring we tackle fuel poverty?

46.1 To be effective, we agree that the net zero transition requires a fair and equitable cost distribution, including across future generations, and we welcome the repeated reassurance throughout the draft strategy that no action will be taken that risks exacerbating fuel poverty as an unintended consequence. Going a step further, the aim ought to be establishment of a cost distribution which *enhances* both net zero ambitions and fuel poverty eradication, while emphasising fairness at its heart. We recognise the difficulty in achieving that balance, however it is essential that we achieve a transition to net zero which is just and fair for ourselves and for future consumers.

46.2 A good starting point for this is identifying household-types that will be most-likely to require support in the transition. The draft strategy correctly identifies households in Scotland that use electricity as a primary heating source as being particularly vulnerable in this regard, and proposes the rebalancing of policy costs/levies as a means of correcting this. From our work in this area, we know that electric heating users are disproportionately represented amongst the fuel poor (43%) and that a lack of market access and being subject to high costs are contributing factors in this. The North of Scotland is a net exporter of renewable energy but consumers there pay amongst the highest electricity costs in Great Britain – this is an extreme example of an unequitable cost distribution. Moving some social and environmental obligations onto fossil fuels seems like a logical solution – this would achieve a rebalance whilst disincentivising their ongoing use in domestic heating - but there would be a need to ensure revenues are protected as consumption of these fuels begins to flatline.

46.3 However, electric heating is just one example, and similar consideration will be required in many different areas. For example: a range of financing options for domestic energy efficiency upgrades will be required to ensure access and fairness, whilst robust consumer protection will be required in low-carbon heating installations to improve buy-in from households that can least afford for things to wrong.

[28] https://www.cas.org.uk/publications/citizens-advice-scotland-response-%E2%80%98improving-energy-efficiency-owner-occupied-homes%E2%80%99

47. What financing mechanisms are needed to encourage investment from householders, businesses and the private sector?

47.1 There will need to be a wide range of financial mechanisms to encourage investment, as there is a wide range of financial needs. Many consumers who are not classified as fuel poor will not be able to take on loan repayments (even if they are interest free), put a down payment for a loan, or pay up front costs for zero emissions heating.

47.2 We would support a scaled grant system for able to pay householders that incentivises early adoption through covering all or most of the cost early in the transition and pays less of the cost as time goes on. For example, the grant could cover 80-90% of the cost prior to 2025, but only 10-15% in 2028. Financial modelling would be required to identify the best ratios for this.

47.3 In a survey conducted in April 2021 by YouGov on behalf of Citizens Advice Scotland, 55% of respondents indicated that non-repayable grants that cover part of the cost would incentivise them to fit low carbon heating in their home. Respondents could choose more than one option, and other popular incentives included a £1000 council tax rebate over five years following installation (43%), a £500 council tax rebate over five years following installation (40%), interest-free loans that cover all of the cost (35%) and a "green" mortgage that offers lower rates for more efficient homes (25%).

47.4 We encourage the Scottish Government to undertake more research with consumers to help understand what financial support and incentives they want and need.

Chapter 8 – A Regulatory Framework

48. What are your views on the regulatory actions set out in the proposed regulatory framework?

48.1 We recognise that different sectors will require different regulatory frameworks due to the unique needs and existing legislation. However, we believe standards should be aligned across sectors, to ensure compliance, offer clarity for consumers, and comply with strategies in Housing to 2040.

48.2 We do not agree that 2028 is a realistic timescale for the Private Rented Sector (PRS) to meet EPC band C. We believe the PRS and owner-occupied sectors should both meet EPC band C by 2030. This would align the two sectors, ensuring properties that move between the two do not fall through gaps in enforcement. Additionally, if market mechanisms are not introduced until 2025, as suggested by this draft strategy, private landlords will only have three years to meet the standard, which could overwhelm local authorities who will be expected to provide enforcement, as well as a shortage of quality installers in high demand areas. Many rental properties could be removed from the market if landlords feel unable to meet the standards.

48.3 The PRS is the least efficient housing sector, having the highest proportion of properties in EPC bands E, F, or G. This does create a sense of urgency, as it is unfair to leave tenants to foot the bill for inefficient housing, but at the same time indicates that many PRS properties, especially in rural areas are likely to be hard to treat. Tenants and landlords will need support to meet the standard, including a spectrum of advice that ranges from accessible online resources and toolkits to telephone or face to face advice.

48.4 We do not agree with change of tenancy as a regulatory standard for the PRS. Change of tenancy is an administratively difficult trigger point for local authorities, as there is no natural point of contact between local authorities, landlords and tenants at change of tenancy. Several local authorities that participated in the Energy Efficiency Scotland pilot program reported limited knowledge of the age, condition, and energy efficiency rating of homes in the private rented sector, making it challenging to identify homes that needed repairs and estimate the required investment of time and money necessary to bring them up to standard. Administrative burden, especially in areas with high rates of turnover could cause low levels of enforcement.

48.5 We agree with Shelter Scotland that landlord registration is a more natural trigger point for regulation, with less administrative burden than change of tenancy. Integrating EPCs into the landlord registration database would have an additional benefit of filling existing gaps in data.

48.6 Separate targets for PRS, owner occupied, and mixed tenure buildings is confusing and likely to lead to inaction. Instead, mixed tenure buildings should be included in the sector targets, but additional advice and financial incentives should be offered to occupants of multi-occupancy buildings who are willing to adopt a fabric first, whole building approach that includes communal areas such as stairs, foundations, roof structures, and services (such as hallways) to individual flats.

48.7 This could consist of:

- Additional (perhaps higher value) interest-free loans available to groups of occupants or a Factor
- A fund matching scheme for upgrades to communal areas
- Appointment of a government funded retrofit coordinator (as required under PAS2035) to whole building retrofit schemes so as to not increase costs

In areas of Scotland where Factors are responsible for the upkeep of buildings, scheme money could be released to the Factor.

48.8 We support the proposed review of Energy Performance Certificates (EPCs). The report "ABC? Easy as EPC" published last year by Citizens Advice Scotland highlighted the need to make EPCs more consumer friendly, as consumers pay them very little attention and find them unhelpful in their current form.

However, a recent survey conducted on behalf of Citizens Advice Scotland found that 80% of respondents felt that "an independent and impartial home energy report that recommends measures for your property" would be useful when deciding to install energy efficiency measures.

48.9 Additional area or zone-based triggers will create an additional level of regulation that may be difficult for consumers to understand and navigate. Instead, as part of LHEES, local authorities could support owner occupiers or private landlords within their council area or specific zones to "buy into" large works in their area, coordinated by a PAS2035 installer. This would encourage economies of scale while relieving pressure on owner occupiers or landlords who may not otherwise know where or how to start making upgrades to their properties.

49. What are your views on the timeframes set out for the application of the regulation set out above?

49.1 We feel 2030 is the most appropriate backstop date for both the PRS and owner-occupied sectors. For more detail, please refer to our answer to question 48.

50. What are your views on how our Delivery Programmes could support compliance with regulation?

50.1 Existing delivery programmes will play a key role in supporting compliance with regulation by offering expert and holistic advice to consumers, as well as facilitating financial support.

50.2 We advocate a "no wrong door" approach to advice provision, so that consumers are always able to access appropriate advice and redress. There are already referral mechanisms between delivery programmes and advice agencies such as Citizens Advice Scotland, which have had positive outcomes for vulnerable consumers.

50.3 Some groups, such as private landlords, may not be aware that services such as Home Energy Scotland's home assessment are available to them. A targeted engagement campaign could encourage engagement with financial support and expert advice, which in turn will encourage compliance.

51. What other mechanisms/support may be required to ensure that regulation is fair and equitable for all?

51.1 We recommend that minimum standards should be aligned across housing tenures so that the regulatory framework proposed in this strategy is compatible with the goals and strategic objectives set out in Housing to 2040.

51.2 Equal access to advice and redress, regardless of housing sector or income, is essential. Any guidance issued by the Scottish Government must be equally accessible to groups who are traditionally digitally excluded. A "no wrong

door," holistic approach to advice provision is always the best approach, so that every consumer receives the support and advice they need.

51.3 To protect consumers when things do go wrong, collaborative efforts should be made to deliver a sector wide approach to redress that is streamlined and simple for consumers to navigate.

51.4 Additional financial support for remote and rural areas may be necessary, as on average, rural homes are less energy efficient than urban homes –78% of rural homes are below EPC band C compared to 54% of urban homes[29].

Chapter 9 – The Economic Opportunity

52. What are your views on the plans set out to maximise the economic benefits to Scotland from the heat transition?

52.1 We have no evidence to offer on this question.

53. What role could technology-specific milestones (for example, by 2025) play in supporting supply chain development, and how should these milestone levels be developed?

53.1 We have no evidence to offer on this question.

54. Is there anything further that can be done to ensure that Scotland realises the economic opportunity available from the heat transition?

54.1 We have no evidence to offer on this question.

55. What more can be done to support the development of sustainable, high quality and local jobs in the heat and energy efficiency supply chain across the breadth of Scotland?

55.1 We have no evidence to offer on this question.

56. In your view, what are the opportunities and constraints presented by the role of the wider public sector in maximising the economic benefits to Scotland?

56.1 We have no evidence to offer on this question.

57. In recognition of the proposals in the forthcoming skills consultation, what further action can be taken to support skills development in Scotland over the lifetime of this strategy?

[29]Scottish House Condition Survey: 2019 Key Findings

57.1 If the Scottish Government adopts PAS 2035 standards, PAS 2035 accreditation should be integrated into training and apprenticeship programs, so that graduates are accredited to the highest standards from the beginning of their careers. This decision should be taken as soon as possible, so that the supply chain can begin developing and avoid a cycle of "boom and bust" brought on by uncertainty and shifting standards. Once taken, businesses, training institutions, and consumers should be notified as soon as possible of the Scottish Government's decision, so that messaging is consistent over the lifetime of the programme.

57.2 Including PAS 2035 in training and apprenticeship programs will also alleviate pressure on SMEs who may not be able to afford training for existing employees, but who are eager to expand and take advantage of the growing market for energy efficiency.

57.3 Training programmes should include soft skills, as assessors and installers will be interacting with people in their homes, many of whom will be vulnerable. With the correct training, assessors and installers could help identify households who are at risk of fuel poverty or debt and refer them to appropriate advice services and delivery programmes.

58. Are you aware of any barriers to the reskilling of existing oil and gas heating engineers to equip them to install low and zero emission heating?

58.1 We have no evidence to offer on this question.

59. How can we support the development of more opportunities for young people?

59.1 We have no evidence to offer on this question.

Chapter 10 – Working with the UK Government

60. To what extent do you agree that the issues identified must be addressed jointly by the UK and Scottish governments to unlock delivery in Scotland?

60.1 The draft strategy correctly argues that the zero-emissions heat transition cannot be realised through action only within devolved competence. The issues identified in Chapter 10 are not contained within national borders and require whole systems solutions – but 'whole systems' really needs to mean the whole system. From the gas and electricity systems being operated at GB level, to the energy prices and levies on customer bills that are subject to the regulated GB energy market, it is clear that a coordinated approach between governments, with appropriate incentives, will be required to deliver real change. The alternative approach risks creating a 'tragedy of the commons' – where self-interest only serves to diminish outcomes and increase costs.

60.2 There also needs to be sufficient flexibility in decision making to account for national differences in the approach to net zero; this must go beyond target dates and consider the delivery bodies and technologies that the transition is dependent on. We would argue that 'leaving no-one behind' is not the best yardstick by which success should be measured here. The transition is an opportunity to address inequality rather than embedding it still further, and not exacerbating existing fuel poverty should be considered a minimum requirement.

61. Are there any further areas where joint action is required, for example to ensure no one is left behind in the transition and fuel poverty is addressed?

61.1 The future design of levy-funded fuel poverty support in Scotland is uncertain. In the coming months, we expect BEIS to outline plans for the future of the Warm Home Discount scheme in England and Wales, whilst the draft strategy outlines a plan to combine the Warm Home Discount and Energy Company Obligation under a single fuel poverty support scheme in Scotland. Research published by Citizens Advice Scotland in 2020 identified potential benefits in linking support schemes more closely to national fuel poverty definitions and strategies, but co-operation between governments will be required to ensure that these benefits are realised. Maintaining an 'as is' Warm Home Discount scheme in Scotland as England and Wales moves towards a fully data-matched alternative, even for an interim period, will create a two-tier system, and therefore should not be considered a viable option.

Chapter 11 – Monitoring, Evaluation and Future Decision Making

62. Do you agree with our proposals for a monitoring and evaluation framework? If not, please state your reasons and suggested improvements.

62.1 We agree with the proposals. We believe that an outcomes-based strategy is best, with clearly measurable and demonstrable goals. We look forward to seeing the monitoring and evaluation framework and will offer more comments when it is published.

63. What are your views on how lessons learned from heat and energy efficiency policy and programmes should be shared with the sector and key stakeholders to ensure that Scotland benefits from the public investment outlined above?

63.1 We feel that there are excellent opportunities for sharing best practice and lessons learned within the sector and key stakeholders. Public engagement can include SMEs, organisations, and key stakeholders as well as consumers.

63.2 It would be very valuable for advice organisations, local authorities, and key stakeholders to have access to a website or database that allows sharing of

best practice, discussions of lessons learnt or current challenges, and access to technical experts. This would be a low-cost way for the sector to coordinate a nation-wide, whole system response.

64. Finally, is there any other information you would like to provide us with that is relevant to the development of Scotland's Heat in Building Strategy?

Environmental Report Consultation Questions

Consultation Questions have been included within the Environmental Report to help shape respondents views on the Strategic Environmental Assessment.

65. What are your views on the accuracy and scope of the information used to describe the SEA environmental baseline set out in the Environmental Report?

65.1 We have no evidence to offer on this question.

66. What are your views on the reasonable alternatives set out in the Environmental Report?

66.1 We have no evidence to offer on this question.

67. What are your views on the predicted environmental effects as set out in the Environmental Report?

67.1 We have no evidence to offer on this question.

68. What are your views on the findings of the SEA and the proposals for mitigation and monitoring of the environmental effects set out in the Environmental Report?

68.1 We have no evidence to offer on this question.

General questions

69. Is there any further information you wish to provide on the content set out in this draft Strategy?

70. Is there anything else you would like to highlight about the role, opportunities for, and constraints of, specific types of organisation (such as local government, other public sector, trade associations, individual business organisations, charities, environmental organisations, community groups) in contributing to the transition to zero emissions buildings, in particular over the next five to ten years?

For any comments or questions, please contact:

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