**Draft Scottish Energy Strategy**

**Consultation Response from the Consumer Futures Unit,**

**Citizens Advice Scotland- May 2017**

**Introduction**

1. The Consumer Futures Unit (‘the CFU’) sits within Citizens Advice Scotland (‘CAS’). The CFU is the Scottish consumer representative body in the regulated markets of energy, post and water. It uses evidence, expert analysis and research to put consumer interests at the heart of policy-making and market behaviour.
2. The CFU welcomes the publication of the draft Energy Strategy and this opportunity to comment on it. In response, we provide below:
* A summary of our views on the key issues raised in the draft strategy
* Comments on the content of chapters 1 and 2, neither of which were covered by consultation questions
* Answers to the specific consultation questions raised
1. The CFU has commented separately[[1]](#footnote-1) on the draft Climate Change Plan (CCP), and we are, simultaneously with this, making a separate submission on the Scottish Energy Efficiency Programme (SEEP) consultation. The Scottish Parliament considered the draft CCP in detail. From the perspective of consumers facing multiple household pressures and wider economic uncertainties, we noted the concerns expressed by MSPs[[2]](#footnote-2) on:
* the need for more detailed and robust information on specific measures – how and when the proposed emissions reductions will in practice be achieved.
* the burden of the reduction plans which appears to be placed on the residential sector, as compared with transport and agriculture.
* the need for greater emphasis upon behaviour change and on how consumers will be engaged in support of the required levels of emissions reduction.
1. The draft CCP raised significant unanswered questions about the impacts on consumers, including the costs and affordability of emissions reduction measures for households. Given the significant role that consumers are likely to play in the low carbon transition, consideration of the impacts upon and behaviours of consumers must be central to future proposals and policies.

**Summary of Key Issues**

1. We welcome the production of an energy strategy which draws together all aspects of energy production and consumption, and we are pleased to see that consumer concerns have already been integrated into the strategy. From that perspective, we summarise our key concerns below:

***A greater emphasis on energy efficiency***

1. We believe that a national strategy should place more emphasis on energy efficiency before considering production. This makes sense because:
* Energy efficiency is, very largely, a no regrets policy: it reduces demand regardless of the source of energy required
* It builds on existing capacity and as the draft strategy recognises, brings multiple public benefits
* More efficient use of energy can either reduce the pressure on generation assets, free up energy for export, or deliver a combination of these

***A greater emphasis on heat***

1. The strategy shows clearly that some 50% of energy use in Scotland is from heat, and we agree that providing affordable, low carbon heat is the central challenge for the strategy. However, neither the content of the strategy nor the presentations at the associated consultation event reflect that balance as yet; emphasis remains on energy production, whether from oil and gas or renewable electricity.

***Understanding and addressing the investment challenge for energy efficiency***

1. There are clear drivers for investment in energy production, as exemplified by the £2.6bn Beatrice Offshore Windfarm highlighted at the seminar[[3]](#footnote-3). However, investment in energy efficiency is driven almost entirely by the public sector, and is at considerably lower levels than needed to meet the costs identified in the draft strategy and associated consultation documents. The strategy needs to be clearer about how this gap will be addressed.

***The role of low carbon heating in meeting the proposed 50% renewable energy target***

1. We recognise the need to reduce climate change emissions associated with activity in Scotland. Even setting aside the international context, climate change will have impacts on consumers in Scotland both directly, through extreme weather events, and indirectly, by changing availability or costs of goods and services which are affected by climate change. Given this context, we welcome the discussion on a target for production of renewable energy across all sectors, with the absolute need for energy demand reduction as above.
2. However, we are concerned that the emphasis on delivery of low carbon heat within current proposals will not necessarily be of benefit to all consumers – or for Scottish Government fuel poverty policy - in the absence of a significant change in the balance of energy prices. For homes without mains gas, low carbon heating is part of the solution to both fuel poverty and to reducing emissions. We continue to recommend that delivery of low carbon heating and associated support is concentrated towards those households, particularly those using electric heating who currently suffer from the highest rates of fuel poverty of consumers of different fuels[[4]](#footnote-4). However, for homes heated with mains gas, low carbon heating is at present more expensive[[5]](#footnote-5). The final strategy needs to consider alternatives and address this tension.

***The changing context for Community Energy***

1. We recognise the situation described, under which rapid declines in feed in tariff (FiTs) rates[[6]](#footnote-6) mean that the current model of community energy generation will no longer be economically viable[[7]](#footnote-7). Following the model of integrating energy supply and demand set out in the strategy, there would be benefit in investigating whether locally generated energy can be supplied directly to local consumers at rates which can both provide a return for community investments at the same time as lowering prices for consumers.
2. Currently, distributed solar PV seems to offer the best opportunity to achieve these aims. As discussed in our response to consultation question 1, Solar PV is also – by some distance – the most popular renewable technology for consumers in Scotland, and we would suggest that this technology should receive greater attention in the final strategy as a result.

***Behaviour change***

1. As we set out in our views on the draft Climate Change plan, there is an opportunity to consider behaviour change to a greater extent across the strategy. Consumer behaviour has a vital role to play in both helping to reduce energy demand, which can help to reduce fuel poverty, and to enable the successful uptake and delivery of new technologies.

***Monitoring and evaluation***

1. Throughout the draft strategy, there are numerous mentions of existing Scottish Government programmes. There may be a case for simplifying this landscape – but in any case, it would be helpful for the final strategy to give details of what programmes have achieved in the past, including impacts of both technologies and advice for consumers, to help inform targets and approaches for what is likely to be successful in future.
2. However, our 2016 research *Taking the Temperature[[8]](#footnote-8)* highlights the lack of detailed monitoring and evaluation available of a number of Scottish (and UK) Government programmes designed to address fuel poverty and reduce emissions from the household sector. Our response to the SEEP consultation provides detailed suggestions on the minimum level of monitoring and evaluation we would expect to see of that programme.

**Comments on Chapter 1 – A 2050 Vision for Energy**

1. We welcome the overall vision, set out in both the facing pages of this chapter and in **paragraph 5**, of delivering:

***“-a modern, integrated, clean energy system, delivering reliable energy supplies at an affordable price, in a market that treats all consumers fairly; and
-a strong, low carbon economy – sharing the benefits across our communities, reducing social inequalities and creating a vibrant climate for innovation, investment and high value jobs.”***

…while recognising in **paragraph 6** that:

***“Scotland’s consumers – our households and businesses – must be at the heart of this approach. The energy system envisaged in this strategy will deliver opportunities for suppliers and consumers of energy alike, addressing in particular the damaging impact of poor energy provision for those in fuel poverty.”***

1. In line with our opening comments, we would suggest the vision would be strengthened by an explicit reference to energy efficiency. We do however welcome the closer integration of energy efficiency and provision of heat into a whole-system approach, as described in **paragraphs 11-16**.
2. We note throughout the document the reference to various Scottish Government energy-related programmes, including for example those listed in **paragraph 24**. While there is some explanation given of what individual programmes are intended to do, there is far less detail of what current or previous programmes have, in practice, actually achieved. We would suggest that delivery of the ambitions throughout the strategy will require more rigorous monitoring and evaluation and consideration of value for money, particularly where changes depend on consumers making – sometimes expensive – investments in their homes and / or change their behaviours.

**Comments on Chapter 2 –Understanding Scotland’s Energy System**

1. This chapter sets out the current position in relation to energy production and consumption in Scotland. While this background is helpful, its presentation separates the two issues. It would be more useful, in the final version of the strategy, to provide this information in an integrated way, in line with the whole-system approach proposed in chapter 1.
2. As **paragraph 34** notes, the Scottish Government has a target for the generation of electricity from local and community owned sources. We would suggest that there can be a big difference between these, and that, as a result, grouping them together is not necessarily helpful. Locally owned energy generation capacity, in the absence of a community share or benefit fund, provides nothing more for the community than any other private investment. In contrast, the community benefit funds associated with some larger scale windfarms can provide much more benefit[[9]](#footnote-9).
3. We agree that community ownership typically generates greater returns for the community involved. However, the change in Feed in Tariffs discussed earlier in this chapter means that the previous model of funding a project under which electricity is sold to grid only, while the bulk of income comes through FiTs, is unlikely to be viable in future. There is therefore a pressing need to identify a means of directly connecting supply and demand if communities and the individual consumers within them are to benefit in the future. We would suggest that this is perhaps most easily achieved by using distributed solar PV at present, and expand on this in our answer to question 1 below.
4. **Paragraph 41** and **diagram 9** deal with the use of mains gas, which is by far the most common heating fuel in Scotland. While we agree with assessment of drivers for the observed trends in reducing gas use, it would be helpful to deepen that analysis.
5. In particular there has been, and continues to be, significant take up of more efficient condensing boilers as older models reach the end of their working lives. The Scottish House Condition Survey[[10]](#footnote-10) shows a clear growth in numbers of more efficient boilers of around 5% each year, as well as significant and welcome take up of lower cost insulation measures.
6. It would be helpful to understand how these real world trends have informed future modelling. For example, current trends suggest that all less efficient boilers will have been replaced by 2025 without any public intervention beyond that already in place, and also that insulation programmes will continue to make progress[[11]](#footnote-11), albeit at slower rates than have been recorded in recent years. It therefore seems reasonable to ask to what extent the downward trend in mains gas consumption is expected to continue, and what implications might this have both for emission reduction, and for consumer demand for low carbon heating. This again relates to the need to better monitor impacts, of which we believe real world energy use and bills are the most important to consumers.
7. In relation to costs for consumers, diagram 11 shows gas and electricity bills combined. While this illustrates the premium paid by households using pre-payment meters, it does not show the different prices per unit of heat charged to users of different fuels. Electric heating is by far the most expensive of these, an issue which should be considered by the strategy given likely future emphasis on electrically powered heating as a means of decarbonising.
8. **Paragraph 47** shows recent positive trends in EPC ratings. These welcome improvements have been achieved by delivery of relatively lower cost and easier to install measures as noted above. It would be helpful to set out what future trends the strategy is aiming to deliver in terms of Energy Performance Certificates (EPCs).
9. **Paragraph 48** discusses economic impact, but does not identify energy efficiency under this heading. As also highlighted by the Centre for Energy Policy at the University of Strathclyde[[12]](#footnote-12), our research shows that that there are economic gains available at a local level from energy efficiency, both through the installation activity and as a result of household spending released by reductions in energy bills[[13]](#footnote-13). Further, there is a balance of payments gain as well - as our energy demand is reduced, domestically generated energy can be exported.

**Consultation Questions**

**1. What are your views on the priorities presented in Chapter 3 for energy supply over the coming decades? In answering, please consider whether the priorities are the right ones for delivering our vision.**

1. In contrast to the parallel sections of other chapters – the vision statement at the start of Chapter 3 does not make any reference to consumers or to eliminating fuel poverty.
2. However the chapter emphasises the need for widespread deployment of low carbon heating. It is likely that low carbon heating will only be acceptable to the majority of consumers where it provides a service which is at least as good as, and is ideally better, than that which is currently available, at a cost which is comparable and ideally lower than the heating systems being replaced. As further discussed in paragraph 35 below, our *Hot off the Grid* research report highlighted that the level of acceptance and satisfaction with replacement heating systems in off-gas rural Scotland varied depending on a number of parameters[[14]](#footnote-14). If these conditions of affordability and consumer acceptability are not included in the assessment of potential actions, the strategy is likely to work against the grain of consumers immediate interests by making energy less affordable and running the risk of making fuel poverty worse.
3. While we are not able to comment on the majority of technical proposals for different aspects of energy production, we would emphasise the need for consumer issues to be considered as part of all proposals. The few areas on which we are able to comment in detail are addressed below.
4. In relation to electricity generation from renewables (**paragraph 107 and following box**), we would suggest that greater emphasis could be placed on solar PV – which has been, by a significant margin, the most popular renewable technology adopted by consumers. 51,000 households have installed Solar PV[[15]](#footnote-15) in Scotland - this is five times the number that currently have renewable heating[[16]](#footnote-16) installed under the RHI. Further, distributed generation from solar PV faces fewer obstacles than larger scale generation to meeting the strategy’s aims of connecting generation and supply.
5. However, it must be noted that consumers must be better protected and informed about solar PV and other renewable heating schemes, if they are to be delivered successfully across the country. Recent casework evidence from across the Citizens Advice Bureaux network in Scotland shows that some consumers are being scammed and mis-sold solar PV where they are tied into long term loans and do not receive the benefits they expect.
6. We are aware of at least one community energy project (Edinburgh Solar Co-op)[[17]](#footnote-17) in which investors have funded the installation of PV panels in a number of Edinburgh council schools and other buildings. While the project depends on Feed in Tariffs (FiTs), it does so to a lesser extent than generation projects which sell only to the grid, as the participating schools purchase electricity directly from the co-op. As a result, the Edinburgh solar model also reduces costs for the public sector – and in the case of schools, also provides a practical illustration which can be linked to education on energy and climate change.
7. As the strategy notes, FiTs have fallen considerably in recent years. It seems likely that projects which can provide that direct link between production and consumption are more likely than others to succeed in future. We would therefore suggest that more emphasis be placed by the final strategy on solar PV, including in learning any lessons from its deployment which might be relevant to the delivery of low carbon heating.
8. Subsequent sections of this chapter focus on low carbon heat. Before considering those issues, we would again emphasise that the final strategy should be specific about the expected reduction in heat demand which would be expected as result of further gains in energy efficiency. As the consultation on SEEP acknowledges, there are considerable uncertainties about the costs of low carbon heating. We believe there are similar risks surrounding consumer acceptability, given that many low carbon heating options will not be a direct replacement for gas boiler systems[[18]](#footnote-18), which have high satisfaction ratings among consumers. Our *Hot off the Grid*[[19]](#footnote-19) research report highlighted that how easy a new heating system was to operate, along with the varying level of disruption and mess involved with installing different systems and how much new systems cost to run, appeared to be fundamental to consumer satisfaction and acceptability of new systems[[20]](#footnote-20). In contrast, energy efficiency is – largely – a no regret approach; insulation cuts bills and emissions regardless of the form of heating used in the building.
9. **Paragraph 121** touches on the RHI, a subsidy currently provided by the UK government. In light of the experience of rapidly changing levels of support through FiTs, we would agree that the Scottish Government should seek to capitalise on the RHI while it is available.
10. **Paragraphs 122 – 126** consider district heating. As above, we support the installation of district heating where it improves comfort and reduces costs for consumers; at present, these conditions are met most easily in areas of dense housing without access to individual mains gas supplies. More widely, we would suggest that consumers should be given the option to connect to district heating, rather than be compelled to do so. Further, as outlined by the Scottish Government’s *Strategic Working Group on Fuel Poverty* and in the draft energy strategy there is currently a lack of statutory protection for consumers using district heating[[21]](#footnote-21). In recent research the CFU explored the future role of regulation in district heating[[22]](#footnote-22).
11. More generally, district heating schemes are run as supply monopolies, and therefore there is an additional need to protect consumers against overly high prices as there is generally no option to switch supplier or tariff. Further, as highlighted in the strategy, the risks involved with developing district heating systems, with the capital expenditure spread across a smaller number of people means that the cost of capital for such schemes is high. The strategy should ensure that district heating schemes consider affordability for consumers as a priority.
12. Building on this, we believe that the strategy should be more transparent about the likely trajectory and therefore short, medium and longer term priorities for transition to low carbon heat. It would be helpful to be clear about the changes expected, particularly where those changes require significantly altered choices and / or costs for individual consumers – for example, in relation to the implications for take up of heat pumps (individual and large scale) and replacement of old and inefficient electric heating. Current fuel poverty policies and programmes – rightly, in our view – promote the delivery of affordable heat, which at present means extension of, and connection to, the mains gas network. We would want to see a detailed approach with associated analysis of likely impacts on energy affordability before commenting on this further.
13. We would also point out that more detail will be needed to provide guidance for the policies, programmes and investments required to make the transition to low carbon heating. Otherwise, key players such as private industry, local authorities, housing associations, and communities will find it difficult to plan for the future, or to understand what changes might be required in terms of incentives, advice, planning requirements, building regulations, and skills development.
14. This is particularly important for local authorities, given the proposals for Local Heat and Energy Efficiency Strategies (LHEES). We have stated in our response to that consultation that LHEES should, in aggregate, deliver the overall aims of SEEP: this requires those overall aims to be clear and robust.

**2. What are your views on the actions for Scottish Government set out in Chapter 3 regarding energy supply? In answering, please consider whether the actions are both necessary and sufficient for delivering our vision.**

1. The vast majority of actions proposed are technical; from our perspective the main gap is therefore lack of analysis of costs and benefits to consumers.

One exception to this, which we support **(page 46)**, is the action to:

***“continue to offer financial support and advice to domestic and business customers of all sizes to uptake renewable heat technologies and asks that the RHI continue to cover a wide range of technologies including, biomass, heat pumps and solar thermal renewables to allow all potential Scottish investors and customers to obtain the benefits of the RHI scheme”***

1. However, given the significant role that heat pumps are likely to play in the transition to low carbon heat, we would expect additional actions to explore the barriers and opportunities for that technology. The draft Climate Change Plan envisages a big role for heat pumps, but the draft energy strategy does not include any actions that would lead to the level of uptake needed to meet these expectations, especially given today’s baseline of around 10,000 currently installed[[23]](#footnote-23).
2. We note that the cost effective pathway to achieve climate change targets leads to a 30% increase in demand for electricity as a result of electrification of heat and transport **(paragraph 132).** We agree that, to minimise additional investment needed and therefore control costs for consumers, smart energy systems will have much to offer in terms of more flexible use of the electricity grid, shifting energy demand to times of greater supply. The potential consumer benefit of such a flexible system, where costs could be driven down, has been identified by Citizens Advice research[[24]](#footnote-24). However, this emphasises the need for explicit consideration of consumer behaviour as part of the strategy. The same Citizens Advice research also identified some of the likely difficulties of demand side response (DSR) and getting consumers to engage with such processes[[25]](#footnote-25). The current lack of this discussion is, in our view, a gap which should be addressed in the final strategy.
3. Another area we would have expected to see covered is the role of next generation electric storage heating; although numbers are declining, there remain just under 300,000 households dependent on storage heating, and rates of fuel poverty among this group are considerably higher than for any other heating source[[26]](#footnote-26). An energy strategy that has consumers at its centre needs to consider how best to deliver affordable solutions for those consumers, while helping meet climate change targets.

**3. What are your views on the proposed target to supply the equivalent of 50% of all Scotland’s energy consumption from renewable sources by 2030? In answering, please consider the ambition and feasibility of such a target.**

1. We agree that it is in consumers’ long term interest to address climate change, regardless of global concerns, because consumers in Scotland are likely to experience further negative impacts if no action is taken. These impacts will be both direct, perhaps most obviously through flooding and disruption to service delivery as a result of extreme weather events, and indirect, through increased prices and / or lack of availability of goods produced elsewhere, as a consequence of climate change in other countries.
2. Our experience suggests that householders are more concerned about pressing economic issues than longer term problems. So the issue is, or at least should be, as much about identifying a range of solutions which fit with consumers’ concerns as implementing what is technically possible.
3. The 50% target above is translated into a high target for low carbon heating. As we set out in our response to the District Heating consultation, the proposed targets are, in the absence of very significant changes to the relative costs of heating systems, ambitious, and there is a risk in relying on low carbon heating to deliver those targets.
4. Rather, the strategy should build on the existing approach of delivering low carbon heating and electricity generation in circumstances where its installation also reduces bills and improves comfort. It is worth noting that take up of renewable heating systems – even with the public sector paying for advice through Home Energy Scotland, Scottish Government zero interest loans and the Renewable Heat Incentive – remains relatively limited across Scotland[[27]](#footnote-27). If lower carbon heating is not attractive to consumers with that level of support in off gas areas, where uptake would be most expected due to higher heating costs, it is unlikely that it will be attractive when compared to mains gas. The Scottish Government needs to consider what other approaches could deliver the carbon savings needed. We would welcome discussion on this point.
5. We would also suggest that any target should be broken down into electricity and heat with milestones for domestic and non-domestic buildings and for other sectors. This would also provide an opportunity to consider the possible role of hydrogen for heat post-2030, as well as identifying other options in the event that it is not possible to deliver low carbon heating at the levels currently suggested.

**4. What are your views on the development of an appropriate target to encourage the full range of low and zero carbon energy technologies?**

1. We agree that targets and/or policy objectives should be developed for the uptake of renewable heat and solar PV in homes where these technologies are appropriate – determined by the costs and benefits of different technologies to consumers. Targets should also be linked to appropriate support for consumers, including advice and practical support throughout the decision-making and installation process, as well as in relation to grants, and, where necessary, regulations.

**5. What ideas do you have about how we can achieve commercial development of onshore wind in Scotland without subsidy?**

We have no view on this question.

**6. What are your views on the potential future of Scotland’s decommissioned thermal generation
sites?**

We have no view on this question.

**7. What ideas do you have about how we can develop the role of hydrogen in Scotland’s energy
mix?**

1. We are not in a position to comment on technical aspects of this question. However, we do note the reference in the draft strategy to consumers’ preference for current gas central heating systems, and we would support investigation into the extent to which hydrogen would be compatible with this preference. As we commented on in our draft Climate Change Plan response, the use of hydrogen as a heating fuel may also rely on a number of emerging technologies, such as Carbon Capture and Storage. Therefore the costs of both re purposing the gas grid for hydrogen, alongside the associated running costs of hydrogen production, must be carefully managed to ensure that they are affordable and fair for consumers. Given the uncertainties involved with the deployment of hydrogen as an alternative fuel for the mains gas grid, contingent national scale heat decarbonisation policies should also be explored.

**8**. **What are your views on the priorities presented in Chapter 4 for transforming energy use over the coming decades? In answering, please consider whether the priorities are the right ones for delivering our vision.**

1. We welcome the first two points in the vision statement on **page 53**:
* ***Scotland’s domestic and non-domestic buildings have undergone a low carbon transformation – substantially reducing greenhouse gas emissions and delivering a host of economic, social, health and regeneration benefits.***
* ***Scotland has an energy market that delivers fair outcomes for all consumers – particularly those on low incomes and at risk of fuel poverty.***
1. However, we believe the ambition in relation to energy efficiency should be clearer. For example, it would be possible to include the aim of eliminating energy inefficiency as a cause of fuel poverty. This would also help make the vision clearer for consumers.
2. The second point, highlighting the needs of those in fuel poverty, is essentially, what is missing from the parallel vision section of chapter 3, as noted above.
3. **Diagram 15** shows clearly the extent to which previous national energy efficiency targets have been exceeded. To inform the future development of the strategy, we would welcome more detail on how this overall trend has been delivered, disaggregated by sector.
4. For example, the strategy notes that – among other areas – there has been significant progress in insulation, and we have referred above to the strong progress in replacement of older, less efficient central heating boilers. At the same time, new housing is more efficient than older housing in terms of construction, but tends to be detached and therefore of a less inherently efficient built form. Without the detail of these and other concerns, there is a risk the strategy will be insufficiently targeted.
5. **Paragraph 152** onwards discusses SEEP. We have responded separately to the detail of that consultation; some overarching comments are included here.
6. We welcome the inclusion of energy efficiency as a National Infrastructure Priority. The strategy identifies a contribution from the Scottish Government of some £0.5bn over 4 years, against an expected total cost of at least £10bn over 15-20 years – this, obviously, leaves a large gap. In this respect, it is worth noting that almost all investment in energy efficiency or low carbon energy to date has been driven by the public sector, either directly or indirectly:
* Indirect public sector support via energy supplier obligations, mandated by the UK Government and using money raised from consumers’ bills to provide, mainly, subsidised insulation measures
* Direct public sector support from the Scottish Government, through Home Energy Scotland to provide free or subsidised insulation measures and heating systems
* Indirect public sector support for electricity generation from the UK Government, via subsidies generated from consumers’ bills (FiTs and others)
* Direct public sector support from the UK Government for renewable heating (RHI)
* Rising standards in new build housing as a result of regulation
1. The Green Deal, which intended to bring private sector investment to this area, has not done so to any significant extent. The only measure where significant private sector investment takes place just now without an external financial incentive to consumer is replacement boilers, which seem typically to be replaced at end of life by householders.
2. In contrast, there is very clearly significant investment in electricity generation capacity – SSE’s investment of £2.8bn in the Beatrice Offshore Wind Farm was noted at the Energy Strategy seminar on May 2nd. Given the lack of income stream but wider range of public benefits, we would suggest that significantly greater levels of public money will be needed to achieve energy efficiency and low carbon heating aims than are currently available.
3. Given this situation, we would welcome clarity on what the overall quantified aims of SEEP are, relative to the targets set out in the draft Climate Change plan, and an associated discussion on how the identified financial gap will be addressed. Addressing this gap is a pressing need for the strategy more widely as well as for SEEP; if the gap remains, the Scottish Government will need to identify other areas where emissions can be reduced to compensate.
4. Following from the above, we agree with the wider benefits associated with energy efficiency improvements identified in **paragraph 155**, which include health, economic development and community regeneration, as well as reductions in climate change emissions. We believe this range of public outcomes – which we believe are wider than those generated by many other, more narrowly focused projects – justifies correspondingly greater public investment, from a wider range of public budgets. There should, for example, be a case for resources from economic development to be directed at much greater scale towards energy efficiency, and for greater participation from the health and social care sectors in identifying and facilitating delivery of fuel poverty alleviation, as set out in reports commissioned by the Scottish Government[[28]](#footnote-28),[[29]](#footnote-29).
5. The ‘actions’ box following **paragraph 159** should address directly where and how additional finance is expected to deliver the overall aims of SEEP.

**9. What are your views on the actions for Scottish Government set out in Chapter 4 regarding transforming energy use? In answering, please consider whether the actions are both necessary and sufficient for delivering our vision.**

1. We welcome, with some possible reservations, the intention to make all buildings near zero carbon by 2050. In line with the above, we suggest:
* That demand should be reduced as far as possible through energy efficiency
* That low carbon aims should not be achieved by increasing heating prices for consumers beyond what they would otherwise pay
1. We would welcome greater emphasis being placed on the standards required of new buildings. It would also be helpful for SEEP to set a specific target for improvements in public buildings. This is an area clearly within the control of the Scottish Government, and combines the opportunity to provide stable demand against which industry could plan, at the same time as delivering exemplars of good practice which are highly visible to members of the public.
2. The SEEP delivery programme will need new identity and appropriate, robust governance at a very high level, including regular reporting and scrutiny. It would be for the Scottish Government and Parliament to determine how these should be framed, including perhaps in legislation. Specifically:
* Targets and governance arrangements should be clearly set out, together with monitoring and requirements for regular reporting to the Scottish Parliament on progress
* There should be clear interim and final targets set for energy performance of both domestic and non-domestic buildings by the end of the SEEP Programme.
* We believe the interim target for the vast majority of domestic buildings should be EPC band C. There are clear advantages to using the EPC band C: the EPC provides a simple A to G scale, similar to energy ratings for appliances and it is already used and understood. The bands allow for flexibility in reaching the target, and it allows tailored approaches rather than prescribing measures. Achievement of this target would to a large extent eliminate energy inefficiency as a cause of fuel poverty.
* SEEP should concentrate support for renewable heat towards off gas grid homes, especially those dependent on electric heating.
* In line with the discussion above, a clear upwards trajectory of public investment for SEEP is needed, to provide an appropriate range of financial incentives and advice and support for both landlords and homeowners in all circumstances, and to provide certainty for industry and stakeholders on delivery.
* An independent body to be responsible for the delivery of SEEP should be established, in a similar approach to that used to manage infrastructure projects such as roads and the Commonwealth Games.
1. As discussed in our separate response to the SEEP consultation the CFU has been undertaking work to understand consumer’s perspectives on regulation and incentives in the owner occupier housing sector. In 2015, we published *Coming in from the cold: minimum standards of energy efficiency in private sector housing – the view from consumers and bureaux[[30]](#footnote-30).* Overall, this research suggested it would be a challenge to convince homeowners in general that regulation would be a good thing, and more preference was given instead to empowering and supporting homeowners to make energy-efficient choices through the provision of advice, information and incentives. Arguably this was, even then, already current practice in Scotland; and the study was not able to explore in greater depth how this would achieve the required step change in uptake of some of the more difficult home efficiency measures.
2. To shape our input to the development of SEEP, we decided to take a further and more detailed look at this area, looking in particular at whether there may be an appropriate balance between regulation of owner-occupied properties for minimum standards of energy efficiency on the one hand, and offering financial incentives on the other.
3. In January 2017, the CFU therefore commissioned a substantial and innovative new project, using for the first time deliberative research techniques, to help inform our response to this part of the SEEP consultation.
4. The new research clearly demonstrates the continuing, substantial political challenge to be overcome before consumers – homeowners in particular – can be persuaded to accept regulation of their ‘private domain’ to minimum standards of energy efficiency. As the report states[[31]](#footnote-31), people appear by and large to be ‘not there yet’ in lining up with the positions agreed by their governments on climate change and future energy usage, and on the targets, investment costs and behaviour change which those imply. There may be a risk of public opinion on this subject diverging even more if there is a growing perception that Scotland and its residential sector are shouldering a disproportionate burden compared with other sectors and countries. The research suggests that any new regulation would need to be preceded, or at least accompanied by, substantial efforts to lead and transform public opinion – whether through education, communications and marketing, or awareness-raising.
5. The actions for the Scottish Government (set out in the box below **paragraph 159**) are all necessary, but unlikely to be sufficient in the above context: the first is a welcome but very long term aim, the middle three actions are focused on administrative rather than delivery outcomes, and the wording of the final action suggests continuation of funding at current levels, which the strategy itself recognises is only a small part of the resource needed.
6. **Paragraphs 160-163** discuss retail aspects of the energy market and the potential for improvements through smart metering. We agree with the analysis presented, and we welcome the availability of the Citrus Energy switching advice as a core element of the service provided by Home Energy Scotland. We will continue to work with the Scottish Government to promote that service, and also to provide more detailed advice where needed, through the network of Citizens Advice Bureaux.
7. **Paragraph 164** onwards continues this discussion into the role of new, independent suppliers. While we welcome the benefits Our Power brings to its customers, our understanding is that these are open only to social housing tenants at present. We are aware that the development of Our Power to its current stage took some years and considerable investment. If it is not possible to widen the range of consumers who can transfer to Our Power, which would be our first objective, we would suggest that locally branded supply options can be more quickly developed by using white label approaches such as Ovo Communities[[32]](#footnote-32). The recent experience of Hebrides Energy[[33]](#footnote-33) also shows that partnerships need to consider a wider range of issues than just cost to consumers.
8. The actions for the Scottish Government (box below **paragraph 169**) are welcome, but could be more specific, as above. We support the approach of using smart meter data, with appropriate permissions from the consumers concerned, to provide tailored energy efficiency advice.

**10. What ideas do you have about what energy efficiency target we should set for Scotland, and how it should be measured? In answering, please consider the EU ambition to implement an energy efficiency target of 30% by 2030 across the EU.**

1. We support setting a new energy efficiency target for Scotland. As discussed above, we believe that energy efficiency is a no regrets policy. It reduces the need for heating and thus brings multiple public benefits regardless of the source of heat. We are not in a position to comment on the precise scale of a future target, but would support one set on the basis of the ambition to eliminate energy inefficiency as a cause of fuel poverty.

**11. What are your views on the priorities presented in Chapter 5 for developing smart, local energy systems over the coming decades? In answering, please consider whether the priorities are the right ones for delivering our vision.**

1. We support local authority master-planning, as discussed in **paragraph 195** as a means of delivering new investment and tackling local decarbonisation challenges. We believe that other relevant local authority strategies and, in particular, development plans should be required to be consistent with energy and climate change aims. Further, City Deals and regeneration plans may offer opportunities in the near future to take forward the transition to low carbon heat and highly insulated buildings, if these aims are incorporated as early as possible.
2. More specifically, we recognise the description of the challenge of linking electricity supply and demand at local levels in practice. As we note above, solar PV provides this link for individual buildings, but we are not yet aware of approaches which can replicate this mechanism for multiple buildings, even when the generation source is within very close proximity. We would suggest that the vision for this area should explicitly reflect delivery of a solution to this challenge.

**12. What are your views on the actions for Scottish Government set out in Chapter 5 regarding smart, local energy systems? In answering, please consider whether the actions are both necessary and sufficient for delivering our vision**.

1. We recognise and welcome the support the Scottish Government has provided to communities in relation to energy generation, and the commitment to continuing that support in future. However, it would be helpful for the final strategy to describe, and if possible quantify, the outputs and outcomes which are sought from individual programmes. We would also suggest that all projects should consider explicitly the potential for positive impacts on local consumers, not just communities, in relation to provision of affordable energy.

**13. What are your views on the idea of a Government-owned energy company to support the development of local energy? In answering, please consider how a Government-owned company could address specific market failure or add value.**

1. We would suggest that a GOEC could have a positive role in a number of ways:
	* Our 2016 research[[34]](#footnote-34) found that capacity among local authorities to deliver energy efficiency schemes under current models was variable. Given that LHEES are certain to involve greater complexities than HEEPS-ABS, there is likely to be a demand for a central resource to assist authorities in planning for LHEES, where a need is identified.
	* More widely, we believe that a majority of local authorities will need support specifically to develop district heating schemes, and delivery of that support through a GOEC would enable the sector to learn and transfer experience more quickly than would otherwise be the case.
	* Similarly, there may be challenges in delivering solid wall insulation in some circumstances – again, a national organisation would have an overview not available to individual authorities.
	* A single organisation would also be better placed to oversee and maintain consistent approaches in the delivery of minimum standards of energy efficiency in the private rented sector, where intervention is needed to ensure compliance.
	* As above, a GOEC could also have a role in exploring ways to better connect local generation with local demand, potentially improving the returns for community energy projects.

**14. What are your views on the idea of a Scottish Renewable Energy Bond to allow savers to invest in and support Scotland’s renewable energy sector? In answering, please consider the possible roles of both the public and private sectors in such an arrangement.**

1. A number of communities have already raised funds from members of the public to support investments in generation capacity. As we discuss in our response to question 8 – and as was clear at the May 2nd seminar – there is no shortage of investment funds for generation, because there is a clear and reliable pathway for financial return. This is obviously not the case for energy efficiency.
2. We therefore support the idea of a Scottish Energy Bond as one way of connecting energy production and use, but it should go wider than renewables to have the explicit aim of generating funds for energy efficiency as well; we are aware that some communities have already made this link by using funds generated from renewable energy to support energy efficiency measures. The Scottish Government should seek to make this a standard part of any future package under a bond.

***15. What ideas do you have about how Scottish Government, the private sector and the public sector can maximise the benefits of working in partnership to deliver the 2050 vision for energy in
Scotland?***

1. Reflecting our response overall, we would suggest that partnership working would be more effective if there is common understanding of the consumer demand side of the energy industry; most of the text here relates to the supply side. The language of this section also gives the impression of emphasising technological change. In line with the Scottish Parliament’s comments, we would welcome discussion here on the role of behaviour change.

***16. What ideas do you have about how delivery of the Energy Strategy should be monitored***

1. Our 2016 research *Taking the Temperature[[35]](#footnote-35)* highlights the lack of detailed monitoring and evaluation available of a number of Scottish (and UK) Government programmes designed to address fuel poverty and reduce emissions from the household sector. Our response to the SEEP consultation provides detailed suggestions on the minimum level of monitoring and evaluation we would expect to see of that programme.
2. We believe that all wider Scottish Government interventions to deliver aspects of the energy strategy should have a similarly detailed approach to monitoring and evaluation. We also consider that the proposed annual report should disaggregate trends by sector and, as far as possible, that individual interventions should be set against that context. We would also support the report being formally submitted to the Scottish Parliament for appropriate scrutiny, especially given the comments by Parliamentary Committees to which we referred at the start of this response.

**17. What are you views on the proposed approach to deepening public engagement set out in this chapter?**

1. The proposals on public engagement are welcome but, in our view, need to be made more relevant to consumers and to offer choices. In line with our opening comments, the draft CCP presented a single pathway to deliver emission reduction. We believe there would be value in public consultation about the possible range of different approaches which could be taken to deliver emission reductions, including action in sectors other than energy generation and heating. While it is outside our remit to carry out this work directly, we would be interested in working with the Scottish Government to explore these issues.

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1. <http://www.cas.org.uk/publications>, February 2017 - The CFU provided evidence to the Scottish Parliament’s (1) Environment, Climate Change & Land Reform Committee; (2) Economy, Jobs & Fair Work Committee; and (3) Rural Economy & Connectivity Committee. [↑](#footnote-ref-1)
2. <http://www.parliament.scot/newsandmediacentre/103918.aspx> - Scottish Parliament news release, 10 March 2017, summarising the reports of the four scrutiny committees, later endorsed in plenary debate, 16 March. [↑](#footnote-ref-2)
3. <http://sse.com/whatwedo/ourprojectsandassets/renewables/beatrice/> [↑](#footnote-ref-3)
4. Scottish House Condition Survey 2016

<http://www.gov.scot/Resource/0051/00511081.pdf> [↑](#footnote-ref-4)
5. Heating options in off gas areas- costs and carbon Changeworks

<http://www.gov.scot/Resource/0050/00508140.pdf> [↑](#footnote-ref-5)
6. <https://www.ofgem.gov.uk/environmental-programmes/fit/fit-tariff-rates> [↑](#footnote-ref-6)
7. <http://www.localenergyscotland.org/media/76690/Local-Energy-Scotland_changes-to-FIT.pdf> [↑](#footnote-ref-7)
8. Taking the Temperature, Consumers Future Unit 2016

<http://www.cas.org.uk/publications/taking-temperature> [↑](#footnote-ref-8)
9. <http://www.parliament.scot/ResearchBriefingsAndFactsheets/S4/SB_12-71.pdf> [↑](#footnote-ref-9)
10. <http://www.gov.scot/Resource/0051/00511081.pdf> [↑](#footnote-ref-10)
11. Taking the temperature- Consumer Futures Unit 2016

<http://www.cas.org.uk/publications/taking-temperature> [↑](#footnote-ref-11)
12. Energy saving innovations and economy wide rebound effects – Centre for Energy Policy – University of Strathclyde

<http://cied.ac.uk/research/impacts/energysavinginnovations> [↑](#footnote-ref-12)
13. Economic impact of improving energy efficiency of fuel poor households in Scotland

<http://www.cas.org.uk/system/files/publications/economic-impact-of-energy-efficiency-investment-in-scotland.pdf> [↑](#footnote-ref-13)
14. Hot off the Grid: Delivering energy efficiency to rural, off-gas Scotland. Consumer Futures Unit, 2016

http://www.cas.org.uk/publications/hot-grid [↑](#footnote-ref-14)
15. Sub-regional Feed-in Tariffs statistics Dec 2016- <https://www.gov.uk/government/statistical-data-sets/sub-regional-feed-in-tariffs-confirmed-on-the-cfr-statistics> [↑](#footnote-ref-15)
16. <https://www.ofgem.gov.uk/publications-and-updates/domestic-renewable-heat-incentive-quarterly-report-issue-10> [↑](#footnote-ref-16)
17. <http://www.edinburghsolar.coop/> [↑](#footnote-ref-17)
18. Scottish Government SEEP Consultation Document

http://www.gov.scot/Resource/0051/00513248.pdf [↑](#footnote-ref-18)
19. Hot off the Grid: Delivering energy efficiency to rural, off-gas Scotland. Consumer Futures Unit, 2016

http://www.cas.org.uk/publications/hot-grid [↑](#footnote-ref-19)
20. Installation/capital costs not considered in satisfaction surveys as heating systems were installed by social landlords. [↑](#footnote-ref-20)
21. ###  A Scotland without fuel poverty is a fairer Scotland: Four steps to achieving sustainable, affordable and attainable warmth and energy use for all – The Strategic Working Group on Fuel Poverty

### <http://www.gov.scot/Publications/2016/10/2273>

 [↑](#footnote-ref-21)
22. <http://www.cas.org.uk/system/files/publications/citizens_advice_scotland_-_cfu_-_response_to_lhees-dhr_consultation.pdf> [↑](#footnote-ref-22)
23. <https://www.ofgem.gov.uk/publications-and-updates/domestic-renewable-heat-incentive-quarterly-report-issue-10> [↑](#footnote-ref-23)
24. Take a walk on the demand side –Citizens Advice 2014- <https://tinyurl.com/ne97ddz> [↑](#footnote-ref-24)
25. Take a walk on the demand side –Citizens Advice 2014- <https://tinyurl.com/ne97ddz> [↑](#footnote-ref-25)
26. <http://www.gov.scot/Resource/0051/00511081.pdf> [↑](#footnote-ref-26)
27. <https://www.ofgem.gov.uk/publications-and-updates/domestic-renewable-heat-incentive-quarterly-report-issue-10> [↑](#footnote-ref-27)
28. An Action Plan to Deliver Affordable Warmth in Rural Scotland – The Rural Fuel Poverty Task Force

<http://www.gov.scot/Publications/2016/10/2017> [↑](#footnote-ref-28)
29. ###  A Scotland without fuel poverty is a fairer Scotland: Four steps to achieving sustainable, affordable and attainable warmth and energy use for all – The Strategic Working Group on Fuel Poverty

### <http://www.gov.scot/Publications/2016/10/2273>

 [↑](#footnote-ref-29)
30. Coming in from the cold- Consumer Futures Unit 2016 <http://www.cas.org.uk/publications/coming-cold> [↑](#footnote-ref-30)
31. To be published summer 2017. [↑](#footnote-ref-31)
32. <https://www.ovoenergy.com/about-ovo/communities> [↑](#footnote-ref-32)
33. <http://www.hebrides-news.com/hebridean-energy20217.html> [↑](#footnote-ref-33)
34. Taking the Temperature, Consumers Future Unit 2016

<http://www.cas.org.uk/publications/taking-temperature> [↑](#footnote-ref-34)
35. Taking the Temperature, Consumers Future Unit 2016

<http://www.cas.org.uk/publications/taking-temperature> [↑](#footnote-ref-35)