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Diane Barr Assistant Clerk to the Economy, Energy and Tourism Committee Room TG.01 The Scottish Parliament Edinburgh EH99 1SP

Dear Diane

Submission from the Sustainable Development Commission Scotland on the Scottish Government's Energy Efficiency Action Plan

I am writing to provide you with views from the Sustainable Development Commission Scotland (SDC Scotland) on the Scottish Government's recently published Energy Efficiency Action Plan.

SDC Scotland is the Scottish Government's independent adviser on sustainable development. We hold Government to account to ensure the needs of society, the economy and the environment are properly balanced in the policy decisions it makes and the way it runs itself.

We are the only organisation charged with reporting publicly, independently and impartially on how well Government decisions contribute towards a fair, healthy and prosperous future for everyone.

We are jointly owned by the UK Government, the Scottish Government, the Welsh Assembly Government and the Northern Ireland Executive, reporting directly to the Prime Minister and First and Deputy First Ministers.

We welcome the opportunity to respond to the Scottish Government's Energy Efficiency Action Plan but would like to note that the plan has been a long time in development. This is disappointing given the importance of the topic to Scotland's economy, our environment, and also to helping us manage costs for Scottish households. This effort has been in marked contrast to Government action on renewable energy, where the opportunities are clearly being understood and realised.

However, we are now seeing that Scottish Ministers understand the role energy efficiency in meeting climate change targets and how energy efficiency will contribute to social and economic development through cost reduction and new business opportunities.

In particular we see that the Energy Efficiency Action Plan brings a more strategic approach to Government action. Previously there have been good individual initiatives but these have not been brought together. Action on energy efficiency by Government has been characterised by too many separate schemes or initiatives not being sufficiently linked together.

Our headline points are as follows:

Governance and delivery: We see that the Action Plan provides a much more strategic framework for tackling energy efficiency. However, we have concerns about the size of the resource within the Scottish Government for delivering energy efficiency. We support the overall target within the Plan but would like more detail on how this breaks down to different aspects and how the Scottish Government will report against this.

We are also not clear about how the Action Plan will fit alongside the forthcoming Report on Proposals and Policies and the Low Carbon Economy Strategy. Government needs to ensure consistency across these documents. These documents also need to provide more detail on some of the actions within the Action Plan, including information on timescale and means of delivery.

Investment: We are glad to see that identifying new investment routes is highlighted by the Scottish Government but disappointed that further detail is not available in the Action Plan. This is something that the Government needs to act fast on, particularly given active discussions at a UK level on the role and focus of a Green Investment Bank. The Government's Scottish Futures Trust also has an important role in looking at how funding vehicles can be developed to encourage investment in energy efficiency.

Economic development: The Action Plan recognises the potential for energy efficiency to contribute to our economy, both through reducing costs, but also through the development of new products. However, there is little detail in the Plan about the likely scale of savings of new opportunities. This is in stark contrast to the well studied Scottish renewables market. Its potential numbers of jobs and market growth is well understood.

Behaviour change: We are very pleased to see the Government adopting the "Four Es" model for looking at how to influence attitudes and behaviours. SDC Scotland sees this as the most well developed model for influencing climate change behaviours. We support the Government's commitment to "develop and refine the four Es model." However we are concerned that the Government is shying away from the difficult actions it needs to take by saying '...we need to improve our understanding of people's energy related attitudes and behaviours and how to influence them.' Our view is that there is sufficient understanding of this, and the priority is action that properly incentivises changing behaviour.

Transport: We are pleased to see that the Government includes transport efficiency within this Plan. However, as set out in *Getting There* our recent review of Scottish Government strategy and delivery, we see transport as being a critical area and one in which the situation in Scotland is not sustainable. Subsequent to publication of this report, the Scottish Government has decided not to update the existing Strategy. However, we see that the current Strategy is not delivery the required outcomes in transport, meaning it either needs to be updating, or the means of implementation needs to change.

I hope that this is of use to your Committee in its review of the Energy Efficiency Action Plan.

Below are more details on the above points. If you would like further information from Scottish Renewables please do not hesitate to get in touch.

Yours sincerely

Maf Smith Director (Scotland)

Governance and delivery

Government focus on energy efficiency has been poor in comparison to action on other related topics such as renewable energy. We hope that the publication of the Action Plan and its delivery will remedy this. One concern is how the Scottish Government organises itself to deliver energy efficiency. Action across many parts of Government will be required, so there must be shared knowledge, expertise and responsibility across Government. However there also needs to be a central strategic resource that can manage delivery. The team put together to deliver this Action Plan and coordinate delivery needs to be maintained and strengthened.

We support the Government's basis for setting the target. However, a potential downside of the approach of linking the target to final energy consumption is the lack of information about the potential contribution of different sectors to the overall target. A reduction of 12% by 2020 is achievable, but will be challenging given that energy use in the transport sector is rising, not falling. Government will need to report on the energy use of different sectors, and may need to provide more details on the contribution of these sectors to the overall target. The Plan notes (p17) that Government has "considered the potential for reduction in energy consumption at a sectoral level" but notes that "a target to reduce 'total final energy consumption' will not focus on the same fuels or have comparable outcomes across these sectors."

The Action Plan sets out a series of five specific indicators. These are

- 1. Household energy rating: Standard Assessment Procedure/National Home Energy Rating
- 2. Installations of key energy saving measures
- 3. Final energy consumption by fuel for the Industrial and Commercial Sector
- 4. Road transport fuel consumption per vehicle kilometre
- 5. Road transport energy consumption: tonnes of fuel per 1000 of population.

We see that each of these indicators will prove useful in helping Government track progress. However none of them measure actual energy use of these sectors. Government will therefore need to publish data on energy use in the domestic, industrial/commercial and transport sectors so that it can target resources and keep its overall target on track.

As well as the Energy Efficiency Action Plan, we also expect the Government to publish its Low Carbon Economy Strategy and its Report on Proposals and Policies. The relationship between each of these is not clear, but we expect that the Low Carbon Strategy will set out in more detail what action Government is taking to secure the economic opportunities around energy efficiency, while the Report on Proposals and Policies will provide more detail on delivery of some of the Actions set out within this Action Plan.

Investing in energy efficiency

Our comments here focus on domestic energy efficiency, and in particular the use of finance to support neighbourhood retrofit programmes, as set out in our 2010 UK report *The Future is Local*.

Identifying sufficient investment will be a challenge for Scotland. The dominant model in the past has been through government grant support. In the domestic sector support comes either through Government or energy supply companies, but there are limits to how much these two sectors can contribute. Certainly if we are to see improvements in thermal performance of housing throughout Scotland, more significant investment is available than is currently available. We are glad to see that the Scottish Government has identified this as an issue, and that the 2011 Conference on Investment (following the 2010 Edinburgh conference on Investment in Low Carbon Generation) will be focused on energy efficiency.

Businesses wanting to invest in efficiency usually need to call on their own resources, and while there are good support programmes to provide advice – for example the Carbon Trust – these programmes are small in scale in comparison with the scale of the problem/opportunity.

In transport, Government is relying primarily on business to deliver innovation and bring more efficient products to market. Loans and innovation grants are available, supplemented by regulatory and taxation measures to encourage a market shift in consumer behaviour.

Government must think carefully about how best to stimulate investment in energy efficiency. While many regulatory and tax powers are reserved to the UK Government, there are opportunities for Scotland to develop new funding vehicles for communities.

Public sector funds will be very constrained so we need to use what is available more effectively. This means giving a greater capability to neighbourhood partnership to influence how public sector funding (and that over which the public sector has some influence, such as the new obligation on energy companies) is used in their area. The fact that the Scottish Government has given greater financial autonomy to local authorities is a welcome addition to this capability. But Government needs to look more closely at the neighbourhood level when reviewing ways to devolve power and greater autonomy to local government and community groups.

We see that there is most benefit in structuring funds to support neighbourhood retrofit programmes in which whole areas are improved. Upgrades can generate profit in the short and long term, delivering quick and slow wins to investors. However, it can be difficult for neighbourhood partnerships to access institutional investment. Institutional investors typically require investment scales of circa £50m for equity investment and £100m for debt investment. If neighbourhood partnerships are to attract private sector investment we need to develop mechanisms which make it easier for them to access finance. The role of the proposed UK Green Investment Bank will be critical in this. The Bank must fund efficiency as well as generation, and must be able to unlock finance for neighbourhood level projects alongside large scale strategic infrastructure.

If places are to be truly sustainable in the long term however, we must move beyond simply attracting institutional investors. We need to enable communities to develop self-sustaining local investment vehicles which retain and re-invest any surplus profits for community benefit. These surplus profits can be used to help fund those projects which have no direct revenue-generating potential but can deliver a range of community benefits.

To support local investment vehicles we need to be smarter about how we use the limited public sector finance there is available. The early stages of projects (scoping and development) carry the highest risk to investors. Public sector resources could be used to minimise this risk and allow projects to progress. This can be achieved through a variety of methods including public sector underwriting, use of public assets, seed funding for scoping works, research and development, and setting a clear policy framework. When deciding how public money is spent, consideration should be given to how it could provide a return for local re-investment.

Economic development

It is clear there is significant potential for energy efficiency to support the Scottish economy. Increased efficiency will cut costs, or at least minimise the impact of increases in the unit cost of energy. Any savings can be reinvested into the economy rather than spent on fuel. There will also be significant opportunities for Scotland's economy, through a range of actions. These stem from local area based employment in installing insulation and equipment, through to development of new products and technologies that use energy more efficiently. One critical area will be in the development of smart meters and smart grids in which generation and demand are "actively" managed. Opportunities exist for Scottish university spin off companies and others to benefit from this emerging global market. However, the Action Plan does not set out the scale of this opportunity or on what aspects the Scottish Government and Scottish Enterprise will focus on.

The Scottish Government is finalising its low Carbon Economy Strategy, and has made it clear that this Strategy is about the whole economy, not just low carbon generation technologies. We hope that the finalised Strategy sets out clearly the scale of opportunity here and more detailed actions.

Behaviour Change

SDC Scotland is very pleased to see a comprehensive and wide-ranging set of actions to encourage more energy efficient behaviours in Scottish homes, businesses and in the public sector. The combination of social marketing, information and advice is vital to fill the knowledge gap recent research (SEABs-08 and the messaging research undertaken by Flamingo on behalf of Scottish Government) has identified.

We are also very pleased to see that the Scottish Government's behaviour change work takes the 4E's framework as a starting point. This framework is essential to understanding the complexities of the attitude/behaviour gap that exist in relation to energy efficient behaviours. The approaches work best when they are delivered as part of a package, properly researched and evaluated.

However we are concerned that the Government is shying away from the difficult actions it needs to take by saying '...we need to improve our understanding of people's energy related attitudes and behaviours and how to influence them.' (p25)

All policy interventions impact on behaviour in some way. Behaviour change needs to be seen as an outcome, and not an intervention in itself. Enabling sustainable behaviours is particularly challenging due to the disconnect people face between the current benefits of their behaviours and lifestyles and the longer term negative impacts on the environment and society. While a growing number of consumers are prepared to make the more difficult, expensive or outside the norm 'green' choice, the majority cannot or will not. It is therefore essential for policy makers to consider how all people can be 'enabled' to live more sustainable lives. The evidence that 'changing contexts' – the environment in which we make decisions – is more effective than 'changing minds' is well documented. Despite this evidence, we continue to see 'personal responsibility' advocated by many politicians and commentators as a favoured approach to behaviour change.

SDC Scotland believes that the 4-E's and recent behaviour change research (a review can be found in SDC's recent submission on behaviour change to the House Of Lords Science and Technology Committee) demonstrates that non-energy efficient behaviour is caused by a range of factors outwith lack of information or a laissez-faire attitude to environmental issues or climate change.

Much of the SDC's advice to government on behaviour change has been based on our involvement in the Sustainable Consumption Roundtable and the subsequent report *I Will If You Will* (2006). It made clear that the scale of transformation needed to address the major challenges of climate change and global sustainability cannot be achieved by 'green' consumers alone. Government policies and business practices need to **ensure that sustainable choices are the easy choices for everyone**. This is the background to our advice on sustainable diets (*Setting the Table*,2009); sustainable travel (*Smarter Moves*, 2009) and homes and communities (*Stock Take*, 2006; *The Future is Local*, 2010). We have also showcased ideas that could have a transformative effect on the sustainability of the economy, places and people's lives (*Breakthroughs for the21st Century*, 2009) and significantly we have demonstrated how government should re-evaluate it's policy appraisal in our vision for a sustainable transport system in Scotland (*Getting There*, 2010).

The Scottish Government's own research (SEAB's 08) shows that people who fall into the 'Deep Green' classification often behave contrary to their articulated beliefs and values by for example flying on holiday or driving to work. Tackling this attitude/behaviour gap goes to the heart of government's efforts on energy efficiency and many other policy challenges. Policy teams need to understand where people are, how to engage better, how to incentivise people to change, and how to drive the market. Initiatives and approaches need to be evaluated. We therefore recommend more evaluation and understanding of what interventions work best in practice, e.g. which levers and which combination of levers are more effective in different situations, and who is best to deliver these. This will require closer working between government, business, civil society and academia.

An example here is how people need to be encouraged to take up new technologies and to continue to use them appropriately. There is likely to be an ongoing rebound effect from climate friendly behaviour. People may purchase a more fuel efficient vehicle but drive further in it, or they may take an extra holiday flight because they have saved money on their energy bill. Any behaviour change programme needs to be sustained and to combine work on influencing attitudes and behaviour with the kinds of infrastructural changes that both enable and encourage the desired behaviours long term. There are positive examples of the Scottish Government engaging on climate change. Both the Climate Challenge Fund and the 2020 Delivery Group have brought new groups and interests to the table to find practical solutions to Scotland's climate change challenge.

The case for extending or repeating the sort of community funding provided by the CCF seems to rest on a fairly widely shared sense amongst activists and some policymakers that more sustainable lifestyles will be embraced by increasing numbers of people whose imagination and trust are captured by genuine bottom-up movements starting from where people are.

However, learning emerging from current CCF work suggests it is important to discuss outcome measures that differentiate between lifetime changes (e.g. loft insulation which once installed can be assumed to make a permanent contribution) and lifestyle changes (e.g. active travel – is a convert to cycle commuting likely to be a convert for life?). This aspect of behaviour change is not covered by the EEAP and will have to be addressed indepth through the plan's action points.

SDC Scotland remains sceptical to the Scottish Government's approach of disseminating advice and information to create behaviour change. But we are equally encouraged that the Energy Efficiency Action Plan includes reference to the 4E's model and an approach to behaviour change that is systematic and implemented in policy development. We hope this will be developed and built on in the research and engagement work outlined in the plan's actions.

Transport and energy efficiency

Earlier in 2010, SDC Scotland produced *Getting There*, a review of Scottish transport policy. We see that transport policy in Scotland is not delivering against sustainable development criteria. While Government is taking action to reduce emissions, improve quality, accessibility and affordability, improving journey times and connections, transport indicators are showing a negative trend.

Both emissions and the volume of road traffic continue to increase. They are symptoms of an unsustainable transport system. A shift to more use of public transport and active travel like walking and cycling has yet to take place. Train use is up but bus use remains in decline. In short, how we use transport in Scotland is a long way from the Government's stated aims of improving journey times and connections, reducing emissions and improving quality, accessibility and affordability.

It is also clear that while improvements in vehicle technologies and changes in fuel type (e.g. use of biofuels or use of electric vehicles) will bring reductions in impact, they will be insufficient to meet overall emission reduction targets. Scottish Government research shows that to deliver the 2020 climate change target will require a wide range of actions including politically difficult ones such as road speed reductions and increasing parking charges. This must be implemented alongside options like investing in cycling infrastructure and public transport and supporting electric car technology.

The Scottish Government has decided not to refresh its existing Transport Strategy. Given this, we see that the Government must look afresh at its delivery of the existing strategy, given that current action is failing to make sufficient change in reducing the impact of transport in Scotland. We also want to see more detail in the Report on Proposals and Policies on the actions Scotland will take to tackle emissions in transport.