



Friends of the Earth Scotland Consultation Response

Conserve and Save - the Energy Efficiency Action Plan for Scotland

January 2010

Introduction to Friends of the Earth Scotland

Friends of the Earth Scotland (FoES) is a independent registered Scottish charity (SC003442). We stand for environmental justice, which means a decent environment for all without using more than our fair share of the world's resources. We are an independent member of the Friends of the Earth International network. We welcome the opportunity to comment on this consultation.

For further information contact:

Francis Stuart, Parliamentary Officer

fstuart@foe-scotland.org.uk 0131 243 2701

Q 1: Should Scotland's energy efficiency target be based, as discussed, on energy savings achieved or total consumption? Or are there alternative ways in which a target should be set and monitored? If so, what would be the benefits of such an approach?

The main energy efficiency target should be based on total consumption. As a result it will be delivered by a combination of energy conservation and energy efficiency measures, which respectively reduce energy use, and make its use in buildings, appliances and vehicles more efficient (providing the same outcomes).

With the passing of the ambitious Climate Change Act - including a 42% emissions reduction target for 2020 - it is imperative that energy efficiency plays its full part in leading Scotland to a low-carbon future. To do this will require Scotland to reduce its overall energy consumption. As the consultation itself notes: 'reducing absolute energy demand is the ultimate aim in terms of contributing to greenhouse gas emissions targets' (p35).

Q 2: What should be the basis for the energy efficiency target? For example, should any "energy savings achieved" target take into account UK ambition and programmes? If so, how ambitious should Scotland be in its energy efficiency targets compared to the UK?

Scotland will have to meet it's own targets mandated by the Climate Change Act. This will require clear aims for conservation and efficiency in heat, transport and electrical energy. Simple scenarios for 2020 and 2030 developed by Friends of the Earth Scotland, and based on an assumption of significant incremental transfer of heat and transport energy to electricity suggest that targets in the order of a 25-30% reduction in absolute heat energy use by 2020 (50-60% by 2030); and 20-25% reduction in transport energy use by 2020 (40-50% by 2030), are required – in tandem with the deployment of renewable energy sources – to meet Scotland's climate change targets. In annual terms we should aim for a 4-4.5% pa reduction in heat use; a 3-3.5% pa reduction in transport energy use; and a 1.5-2% pa improvement in electricity use efficiency to 'make space' for electricity use to increase in the heat and transport sectors¹.

Obviously, while the Scottish Government should work with the UK Government where appropriate, given Scotland's more ambitious 42% target, Scotland will have to be more ambitious in our policy response.

Q 3: What approach do you consider we should take to setting out how different sectors will contribute to our target? What further evidence should be collected and assessed?

The energy efficiency action plan has been delayed for years. We believe there is enough known about the potential of relevant sectors to make a judgement now about what sectors should contribute at what level. Sectoral contributions to the overall target should be identified, especially at the overall level of heat, transport and electrical energy, and our views on these are set out in the response to question 2 above. While we are unlikely to get it perfect, moving forward with an ambitious approach without delay is important. While further evidence and policy options for all sectors should be continually collected, this should not prevent action now.

Q 4: What evidence do you have to suggest that the different levels of saving identified in the broad sectoral indications may or may not be achievable?

Within Scotland's homes - the Kirklees council example provides strong evidence, while WWF Scotland's 'analysis of area-based approaches to improving energy efficiency in Scotland's homes'ⁱⁱ backs this up. Within the transport sector – the Atkins report shows the strong potential to reduce energy use from transport. And within the public sector – the public body duty should provide a strong prompt for public bodies to meet what is required of them.

While these are just three examples of what is possible, we would suggest that rather than focusing on what is currently possible, the focus should be on what is necessary. This would 'reframe' the debate and require the Scottish Government to show both leadership and imagination. After all there is no point setting targets for down the line which you know will achieve. Instead the point is to drive innovation. As Nelson Mandela once said: "It always seems impossible, until it's done."

Q 5: What other research do you think is required, with specific reference to energy efficiency and behaviour change?

It would be useful to undertake detailed analysis of how householders and businesses would respond to different models and approaches to energy taxation, as part of a package of efficiency measures.

Q 6: What more do we need to do to change attitudes and influence behaviour?

The most important thing we can do to change attitudes and influence behaviour is to get on with delivery now. By implementing many of the measures that the energy efficiency action plan will contain, the public will be able to see the multiple benefits that many of these policies produce and feel an increasing part of the climate change agenda. A good example would be a area-wide home insulation scheme given that it would reduce peoples fuel bills, create jobs in the construction industry and tackle climate change. At the same time, Government policies – for example on new buildings – that aren't of the highest standard undermines public confidence and support for tackling climate change and fuels the belief that climate change is not a pressing concern.

Having said this, we also believe the Government should consider linking education into building programmes. For example, when someone receives a grant or voluntarily upgrades the energy efficiency of their house, they could at the same time or shortly after, receive a short explanation about how to minimise energy use in their home.

In addition there is a case for initiating serious exploration of how incentives, regulation and pricing could be made to act in synergy to promote efficiency behaviour.

Q 7: Various organisations, including EST and the Carbon Trust (which deals primarily with the business and public sectors, see chapters 8 and 9) are currently involved in public engagement. Should we seek to develop a single brand for all energy saving advice in Scotland? If so, why?

Yes. Customers/Clients can find the existence of two organisations confusing. However a rebranding exercise must be approached with caution to ensure coherent advice and support across the range of climate-change related behaviours. It should also be recognised that previous customers may need further advice, so a degree of continuity is required.

Q 8: Do you agree that these are the key concerns for Scottish Government to consider when developing action on energy efficiency in housing?

No. Although we agree with all the measures listed, we are extremely concerned that fuel poverty is not included in this list, particularly given the Scottish Government's statutory target to eliminate fuel poverty by 2016. The roll out of smart energy meters should also be considered (although this could be included within the behaviour change point).

Q 9: What do you think are the key issues that the Scottish Government should consider in the design and location of new housing and the maintenance and improvement of the existing housing stock to ensure that they are adapted to future climatic conditions?

The most up to date climate science should be considered when building new housing stock or improving existing stock. The UK Government's climate projections offer a strong tool that should be used in local developments to ensure they will be able to adapt to climate change impacts.

Q 10: With regard to traditional and historic buildings as defined in footnote 40, what do you think are the most important energy efficiency issues?

We agree that the measures used in housing and many non-domestic buildings are not applicable to many traditional buildings. At the same time however, these buildings should not be immune from consideration of reducing their carbon footprint and, while many have embraced this challenge for others it is still not on their agenda. We would recommend the work of certain organisations in this regard – for example many National Trust properties and Edinburgh World Heritage.

Q 11: What is the right balance in funding between Government, landlords and individual households?

It is clear that placing the onus on individuals has not worked. Therefore we believe there should be a dramatic increase in funding – particularly from Government. In particular we believe the area-wide home insulation scheme should be dramatically increased “in the order of £100-170 million per year over the next decade to come” as recommended by the Energy, Economy and Tourism Committee. Lord Stern has advocated even higher figures as part of a package of spending on a ‘green stimulus’ⁱⁱⁱ. Unfortunately the current level of investment by the Scottish Government will not provide the step change needed in this area. Investment of the scale suggested by the Committee would cut carbon emissions, create green jobs, and tackle fuel poverty.

In addition, and in order to tackle fuel poverty, spending should increase for the Energy Assistance Package and the other microgeneration funding streams available for households. At the same time the technologies eligible for funding under this should be extended to include biomass boilers and ground source heat pumps.

While the onus is therefore upon the Government, landlords should also contribute, particularly given the private rented sectors current standards as well as the fact that

many of these households remain fuel poor. We would therefore support the annual raising of minimum energy efficiency standards for buildings. Given the National Home Energy Rating (NHER) level identified as 'fuel poverty proof' by Energy Action Scotland is 8, we believe the Government should work towards achieving this target for 2016, beginning first with the private rented sector.

While finance should be made available for this, we believe it would be more appropriate in the form of loans rather than grants, following the German example where loans are available over long terms at low rates; or using the model of equity charges against the building value.

Q 12: Taking into account the scale of the challenge and behaviour issues, and the work set out in this chapter and Chapter 7 (housing regulation), what other policies should be taken forward to meet our climate change objectives in respect of housing?

An accelerated roll-out of smart meters – which the UK Government has indicated will be rolled out by 2020 - should be seriously considered. Given Scotland's more ambitious targets, these should be rolled out by 2015. This should be done alongside a national wide home insulation scheme.

Boiler scrappage scheme – the Scottish Government should follow the UK Government's lead and implement a boiler scrappage scheme for old boilers.

The Scottish Government should also move forward promptly with the development of a regulatory framework to require improvements in the private rented sector.

Q 13: If Scottish Government were to prioritise the expansion of any individual existing programme, which should that be, and why?

The area wide home insulation scheme has been shown to have excellent results in Kirklees, and, if given the same level of priority and funding of £100-170 million, could deliver for Scotland. The Government should further investigate the scope for issuing green bonds to provide such funding.

Q 14: What research and/or consultation needs to be undertaken to determine whether or not the existing Energy Report/EPC regime would be sufficient to provide a basis for regulation?

No comment.

Q 15: Should energy efficiency standards be applied to all homes, or should the option of targeting regulatory requirements be considered?

While standards should apply to all homes, there should be differentiation between sectors regarding the level and speed at which standards for existing buildings should be raised.

Q 16: What are your views on which types of homes and/or neighbourhoods should be targeted?

While we support minimum standards for all homes, initially the private sector could be targeted through a regulatory scheme at point of sale or rental (with the private rented sector prioritised), while owner occupied and social housing could be also targeted through a national area-based scheme.

Q 17: What are your views on which energy efficiency standards should be applied?

We would support use of the National Home Energy Rating (NHER).

Q 18: How regularly should these standards be reviewed?

Standards must be reviewed regularly to reflect changes in climate science, and relevant economic and technical knowledge.

Q 19: What are your views on the kind of organisation that should manage the enforcement of the standards?

No comment.

Q 20: What are your views on when regulation should be introduced?

As mentioned in question 16 this could be done immediately through point of sale or rental requirements for the private rented-sector and through a national area-wide scheme for owner occupied. Following this we would support a review to ensure a) the whole Scottish housing stock was fuel poverty proof from 2016 or b) the poorest 50% of Scottish households were fuel poverty proof from 2016.

Q 21: Should SG seek to introduce regulation in a way that maximises CERT investment?

We support the Scottish Government and Energy, Economy and Tourism Committee's calls for proportionate CERT spending in Scotland. Given the relative predominance of poverty in Scotland in comparison to the rest of the UK, the situation where Scotland doesn't get its fair share not only stops Scotland taking the strongest possible action on climate change it is also socially unjust.

Q 22: What support should be provided to low income and/or vulnerable households to enable them to meet the required standards?

As previously mentioned the funding for the energy efficiency assistance package should be doubled and the available technologies expanded. Similarly a boiler scrappage scheme should be considered.

Q 23: Should Scottish Ministers seek to regulate to raise energy efficiency standards in the private rented sector ahead of other tenures, or should it introduce requirements that cover all tenures at the same time?

As previously mentioned, we support minimum standards for all homes. However, the private rented sector should be targeted at point of sale or rental, while owner-occupied could be targeted initially through a national area-based scheme.

Q 24: Should any regulation of energy efficiency standards in the private rented sector be tackled through the mechanism of the Repairing Standard, or through the broad enabling powers introduced in the Climate Change (Scotland) Act?

The critical issue will be effectiveness, and enforcement. Also, given the importance of Scotland's world-leading climate legislation and the need to ensure a coherent approach to tackling climate change across Government, we would support their introduction through the powers of the Climate Change (Scotland) Act.

Q 25: If the Repairing Standard is used to regulate energy efficiency standards in the private rented sector, should this be done: a) by adding the energy efficiency criteria of the Scottish Housing Quality Standard to it; b) by adding the energy efficiency criteria of the Scottish Core Standards for Accredited Landlords to it; or c) by some other means?

No comment.

Q 26: Do local councils consider HECA to be important in ensuring that the energy efficiency of all housing stock is a priority for the council?

Apparently not - not enough is being done at local authority level. With regards to HECA however, we believe HECA should be retained unless something stronger is put in place.

Q 27: Does the information gathered under the HECA process make a significant contribution to planning local activity on energy efficiency?

No comment.

Q 28: Should HECA remain as a distinct duty on local councils or should it be incorporated within local housing strategies with local action on energy efficiency reflected, as appropriate, within Single Outcome Agreements?

As mentioned above HECA should remain unless something stronger is put in place. We also strongly support increased energy efficiency measures in single outcome agreements.

Q 29: If HECA is retained, what steps, if any, should be taken to improve its effectiveness?

Given HECA only requires reporting we believe the setting of strong targets is required. In addition consideration should be given to enforcement mechanisms and sanctions. This might enable a monitoring authority, probably the building standards division within each local authority, to levy, hold and disperse fines.

Q 30: Given this information, is there a case for Government to introduce legislation to require business compliance? For example, should there be a minimum criteria required for energy efficiency based on a sub-sector approach to drive a greater up-take of energy efficiency measures?

Yes. While, on fuel poverty grounds a focus on housing is understandable, on climate change grounds, a focus on the business could reap great rewards and, given 'first-mover' benefits, also benefit the economy. As well as looking at tax rebates, a larger loan scheme for SMEs to increase uptake of energy efficiency measures should be considered.

Q 31: Consideration is being given to the potential role for operational ratings. Should sub-metering be considered for existing non-domestic buildings which are part of a large campus? Or will financial drivers such as the introduction of the Carbon Reduction Commitment be sufficient?

We do not anticipate the CRC to have an adequate and rapid enough impact in Scotland given the current and predicted state of carbon markets in the UK and Europe.

Q 32: How could the Scottish Government improve its understanding of industrial energy end-use consumption in Scotland?

No comment.

Q 33: What is the role for Scottish Government in regulating the industrial sector to drive a greater up-take of energy efficiency?

The Scottish Government needs to provide a clear signal to the industrial sector of the direction of travel arising from Scotland's ambitious climate change targets. It should be noted that this direction is not scaring business but ensuring the clarity that they need moving forward. The Government needs to set stretching targets, with reference to BAT an understanding of investment cycles and an awareness of the potential impacts on overall consumption-related emissions, as well as production-based territorial emissions.

Q 34 What more could the Scottish Government, its agencies and the wider public sector be doing to drive a greater up-take of energy efficiency in the SME sector and in non-domestic buildings and processes?

As mentioned in answer to question 31, and alongside tax rebates, the Government should consider a loan scheme for SMEs to increase uptake of energy efficiency measures. This should be backed by a firm regulatory approach to the improvement of non-domestic buildings, and supported by public procurement policy to help build markets for energy efficiency materials and efficient appliances. It must be clarified that SEPA can regulate energy efficiency and given effective strong guidance.

Q 35 What steps could be taken by the Scottish Government to encourage the use of waste industrial heat?

The Government should complete a detailed heat mapping exercise and then ensure that heat mapping is fully and effectively integrated with development planning guidance. There should also be tough standards – requiring heat use contracts as part of heat plans - for new heat sources such as thermal treatment plants.

Q 36: Should the Scottish Government use regulation to ensure public bodies undertake energy efficiency measures and place greater emphasis on energy efficiency in their policies?

Yes. Energy efficiency measures should form a core part of the guidance being prepared for public bodies in relation to their duties in the Climate Change (Scotland) Act.

Q 37: Should energy efficiency targets be set for the public sector as a whole or for individual organisations?

There should be GHG emissions reduction targets for individual public bodies, and energy efficiency targets for broad divisions of the public sector. However, within individual emissions targets, organisations should be permitted latitude to decide to what extent energy efficiency measures will be deployed to meet their targets. While this would obviously differ according to a range of factors including geographical location, housing stock, and potential for other measures, we would expect energy efficiency to form a central part of most responses and the guidance should reflect this.

Q 38: Should training on the procurement of energy efficient, low-carbon buildings be rolled out across the public sector?

Yes. Procurement (not just in relation to energy efficiency but also other carbon saving measures) is a key tool in reducing the public sector's carbon footprint. Wherever procurement is undertaken, training should be required and provided.

Q 39: Should energy saving advice be rolled out to staff in all large public sector organisations?

If so, should that advice include only general energy saving information, or should more job-specific advice be developed for staff whose role impacts upon energy consumption on a more significant level (e.g. planners, procurement officers)?

Yes. Within a broad programme there should be a focus on those who have the most impact including planners, procurement officers and those at a higher level. Advice should not simply be in the form of written material but include personalised training with detailed advice for those in key roles.

Q 40: Should the Scottish Government introduce greater standardisation of how energy performance is measured and reported across the wider public sector, including the possibility of mandating particular monitoring and reporting tool(s) that enable comparability while meeting the specific needs of particular organisations?

Yes. In order to ensure comparability and allow transfer of best practice, standardised monitoring and reporting should be considered.

Q 41: Should the Scottish Government seek commitment from all public sector bodies to report energy efficiency progress at their regular board meetings?

Yes. This should be done on an annual basis to fit in with the Climate Change (Scotland) Act and other reporting measures.

Q 42: In your view, what should a follow-up to the Carbon Management Programme include?

No comment.

Q 43: Which delivery route would be most suitable for energy saving advice to the smallest public sector bodies? The Carbon Trust (through Carbon Management Lite), EST or some other mechanism?

No comment.

Q 44: How should public sector bodies be funded to deliver energy efficiency improvements? Should organisations wishing to invest in energy saving measures provide co-funding?

We would refer the Government to our joint report with Oxfam Scotland entitled: 'Meeting Scotland's Climate Targets: Models to Incentivise Public Sector Action'^{iv}. This report suggests a public sector climate fund that would provide and enable:

- a) initial seed funding to allow public bodies to bid for available finance for energy efficiency measures
- b) financial sanctions if public bodies don't meet their targets – thereby allowing the potential to maintain a rolling fund that could support further energy efficiency measures.

A less comprehensive approach might be to extend and expand the central energy efficiency rolling fund model.

Q 45: What more should the Scottish Government and the public sector as a whole do to meet Audit Scotland's concerns? (e.g. so that clear guidance is provided on energy efficiency action required of the public sector, that monitoring and reporting is improved and that energy efficiency best practice is disseminated across the sector)?

There may be a role for a new agency here to provide such actions. Alternatively these roles (and the necessary resources) could be allocated to an existing body such as the Sustainable Development Commission or the Carbon Trust.

In addition, provided there is standardised data, the Scottish Government should produce a league table of local authority and other public bodies' energy efficiency performance.

Q 46: Given the powers available to Scottish Government, which actions should we focus on to support the deployment of low-carbon district heating?

Given it is not currently the case, we would support pipework and other plant associated with a combined heat and power and district heating scheme being exempted from non-domestic rates. In addition, the Government should provide clear guidance regarding the inclusion of district heating in development plans, and consider the inclusion of appropriate schemes in the next national planning framework. It should require the use of appropriate planning requirements on heat sources. It should consider the provision of credit guarantees or other financial measures (such as green bonds) to underpin infrastructure development. Support for district heating should be focused where the existing building stock is suitable for retrofit, but difficult to treat to the highest standards of

energy efficiency.

Q 47: What actions should other key stakeholders, such as local authorities and industry, be encouraged to focus on to support low-carbon district heating. How should Scottish Government help to achieve this?

Local authorities and businesses should give consideration to implementing low carbon district heating when building major infrastructure projects. Any such requirement could be supported by centralised advice and support. This would require strong development planning. We would also support effective implementation and graduation of a financial support mechanism.

Q 48: How can Scottish Government best support this activity? Are there partner organisations which can assist?

As mentioned above the Scottish Government could provide centralised advice and support. This could also include financial assistance. Those with previous experience in this field should be consulted as should the Combined Heat and Power Association.

Q 49: With the introduction of cash-back schemes, should Scottish Government support for small scale low- and zero-carbon technologies be adjusted? If so, how?

The provision of financial (and other) support for such technologies is likely to persist regardless of the introduction of feed-in tariffs or equivalent. Any review of the detailed support rates and mechanisms will need to take account of the UK Government's proposals in this respect. Ideally householders should be eligible for both forms of support.

Q 50: What more can we do to encourage people to reduce the amount of travel, e.g. through behavioural change or modal shift in their daily lives?

Smart choices could be rolled out across the public sector. It should be noted however, that a move towards sustainable travel requires action across Government with more investment in active travel as opposed to major road building projects, adjustments to planning policy, and adjustments to existing infrastructure provision including road redesign (and even closures) to facilitate cycling and walking.

Q 51: What partnerships do we need to create to enable build more sustainable infrastructure and networks and develop new technologies and fuels, e.g. with the transport industry, manufacturers and business users?

This is a complex area, and many of the drivers involved arise at a European scale. However it is important that for Scotland we ensure that the new technologies adopted reinforce our goal to increase the renewable proportion of electricity generation to very high levels. Thus the renewable electricity industry should be involved in partnerships to roll out, for example, electric vehicles and charging infrastructure that help mitigate intermittency.

Q 52: Is the Scottish Government doing enough to help the wider business community in Scotland to focus on changing how energy is used, and in identifying appropriate and effective energy efficiency measures?

No. Businesses still typically miss energy efficiency opportunities because of various obstacles such as landlord-tenant problems or perceived opportunity costs. The effective response of businesses is one of the prizes to be gained from improvements in domestic energy efficiency to address fuel poverty, thus allowing energy taxation as part of green tax reform.

Q 53: On what opportunities should business focus its efforts on, e.g. finding and using less energy intensive materials and developing low carbon processes?

This clearly depends on the sector: in some it will be logistics, in others buildings, and in others process energy or materials.

Q 54: What more could the Scottish Government do to help drive innovation and to promote technology investment and opportunity across the extended supply-chain and business community in Scotland?

There is clearly an ongoing, and probably expanded role for Scottish Enterprise (SE), and HIE. The potential for the IT and software sectors to develop expertise in smart controls and appliances is probably greater than currently foreseen. The potential for enhanced use of IT in offices, logistics etc to reduce overall energy use is substantial.

Q 55: Is there adequate support for energy-efficiency related R&D and the commercialisation of energy efficient technologies? How should this be provided?

Despite existing measures there is clearly more potential, and an enhanced role for SE, HIE and SFC. The Government can also help drive market development, eg through procurement standards, such as for LED lighting. Effective funding for area-based efficiency schemes can also contribute to market making through, eg bulk demand for micro-renewables.

Q 56: What could be done to support energy efficiency in the Corporate Social Responsibility agenda in Scotland?

As above.

Q 57: What needs to be done to promote the role of ESCOs and Energy Performance Contracting in Scotland?

Among other measures the Government should consider the use of public procurement to purchase such services and assist the development of the market.

Q 58: Do we need industrial networks which mirror those of the academic research centres? How should they be set up to deal best with the challenges which affect a large number of stakeholders?

Yes. If we are to commercialise advances, eg in vehicle efficiency technologies, such networks will be needed. The model of the Energy Technology Institute for involvement of industrial partners may be worth exploring, although it has raised concerns about intellectual property. Government involvement in such networks can be critical to realise benefits in terms of technology transfer to developing countries also.

Q 59: How can we ensure Scotland has the skilled workforce needed for the transition to a low carbon economy?

An ambitious approach is merited here. Government should support a 'Green New Deal' approach to investment in green sectors, especially efficiency, and back this with a 'Just transitions' approach which guarantees retraining opportunities to those in negatively affected industries or sectors.

Q 60: Are the actions outlined the right ones at this stage?

The specific measures are all appropriate. A broader vision, as suggested above, is also required.

Q 61: Is this a fair balance of activity across society?

This section outlines many useful activities, although with a focus on incentives and voluntary measures which we believe cannot be maintained. The analysis of roles within the business sector is relatively undifferentiated. We would highlight the need for greater

emphasis on the financial sector (as a source of efficiency investment rather than fossil fuel investment), energy utilities (given a structure in which demand reduction is strategically appropriate), and property owners (who should bear a disproportionately large share of the costs of upgrading the building stock – from which they will disproportionately benefit).

Q 62: Are there other partners who should share responsibility for delivering energy efficiency improvements

See above. Here we wish to particularly emphasise the responsibility of the financial sector which has failed to mobilise finance for efficiency, compared with finance for new energy supply. This a clear example of its failure to internalise carbon risks in its operations and lending portfolios. There is a clear case for regulatory measures to ensure that banks provide efficiency finance to householders at mortgage rates, and wider case for a Green Investment Bank to underpin the low carbon economy. We would urge the Scottish Government to press Westminster to consider using the taxpayer's majority stake in RBS to begin the transformation of that bank into a model of green investment.

Q 63: How do we best promote private sector investment in energy efficiency?

Through a judicious mix of regulatory drivers and market incentives.

Q 64: How do we prioritise our financing across government, especially given that we are in a period of tighter resourcing?

Prioritisation should be given to efficient support for tackling fuel poverty. This would not only have social and environmental benefits but also help facilitate early energy taxation as part of green tax reform^v.

Q 65: How can we best develop partnerships (including academics, R&D, local authorities, businesses etc), in which all partners can demonstrate their proactive engagement and ability to promote energy efficiency?

There may be good examples from partnerships within the renewables industry. Scottish Renewables could be consulted on this issue.

Q 66: How do we tap into and better utilise the resources we have across Scotland?

There is a continued need for clear leadership and tough targets. This gives a strong steer to all stakeholders and enables Government, business and communities to work together to tackle climate change.

Q 67: What larger programmes and funds are there, e.g. at EU level, that we can pool together to tap into (either within Scotland or with international partners)? Which international partnerships should we be pursuing?

No comment.

Q 68: What do you think are the key gaps in sum of actions underway and proposed? Has anything been identified that you consider unnecessary?

In terms of governance, we believe climate change and energy efficiency, given its social and economic facets, should be a key sector for the Scottish Government in order to deliver its strategic outcomes. The biggest gaps are perhaps at the level of strategic vision, both in terms of the scale of contribution from efficiency and conservation; and the opportunities these provide to underpin a low-carbon economy. In particular the provision of adequate finance for an ambitious area-based programme of building stock improvement (£100m per year or more) is the acid test in this respect.

Q 69: How do we ensure that our efforts add up to more than a simple summary of all the constituent parts? If so, how might this be?

With regards to the technical elements – there should be support for dynamic demand appliances and metering. This would help facilitate renewables as well as peak spreading through demand management. This has to be driven at the same time and alongside efficiency measures to ensure efficient implementation.

With regards to learning - sharing best practice is crucial. A competition could be considered for the best energy efficiency measures. Not only would this reward the best project (and given their previous success may lead to more energy efficiency measures) but would allow a database of good projects to be catalogued and shared.

Q 70: Should we make energy efficiency a core criteria for all major infrastructure investment?

Yes. There is no point spending substantial money on energy efficiency projects if major new infrastructure programmes undermine the good work by increasing overall energy consumption. Hard choices will need to be taken to avoid infrastructure investment that is not compatible with energy efficiency and conservation objectives. Major infrastructure problems should therefore be of the highest energy efficiency standards and in order to improve behaviour change it should be made clear to end users that any given project was designed and built with climate change in mind.

Q 71: How should Scottish Government reduce negative impacts?

There are two principal environmental risks relating to an efficiency approach which do not appear to be recognized here. First that in the absence of changed prices efficiency can trigger a rebound effect of increased energy consumption: for example savings on home heating spent on a holiday by air. To avoid this requires a strategic approach to allocate costs, and to raise unit energy prices in tandem with efficiency so that bills do not rise, but emissions fall.

Second there is the issue of waste generation from redundant appliances, building work etc undertaken for efficiency purposes. This needs to be properly taken into account in the waste management plans of the Scottish Government.

Q 72: What equalities implications have not already been considered?

It is important to remember that tackling climate change itself is a way to address inequalities, especially at a global scale. However, our efficiency actions should be designed not only to help eliminate fuel poverty, but to enable technology transfer to developing countries to allow them to leapfrog into a low-carbon economic model.

Q 73: What have we missed? What else should we consider?

Serious consideration should be given to a strong Emissions Performance Standard (EPS) for power stations (effectively efficiency standards for power stations). It should be noted that there is significant cross party support for such a measure – an amendment was passed at stage of the Climate Change (Scotland) Act but withdrawn for technical reasons at stage 3.

ⁱ See also The Power of Scotland Renewed (<http://www.foe-scotland.org.uk/campaigns/coal/powerofscotland/>)

ⁱⁱ Online at: http://assets.wwf.org.uk/downloads/report_v_5.pdf

ⁱⁱⁱ

<http://www.lse.ac.uk/collections/granthamInstitute/publications/An%20outline%20of%20the%20case%20for%20a%20%27green%27%20stimulus.pdf>

iv Shirra, K (November, 2008) Available on request

v Green Fiscal Commission report online at: http://www.greenfiscalcommission.org.uk/index.php/site/about/final_report/h