WRITTEN SUBMISSION FROM ECO RENOVATION NETWORK

The Eco-Renovation Network is a voluntary initiative set up to encourage individuals to take action to increase the sustainability of their own homes. Our aim is to make it easier for people to find out and share information on eco-renovation and to reduce the costs to people through co-operative buying. we are based in Glasgow and our activities cover mainly Glasgow and the West of Scotland.

The Climate Change (Scotland) Bill is an opportunity to produce world-leading legislation to put Scotland ahead of the game in terms of reducing greenhouse gas (GHG) emissions, developing flourishing, low-carbon communities and cities, and demonstrating Scotland's willingness to take the lead in moves towards a truly sustainable future.

We believe that we can drastically and quickly reduce Scotland's emissions while building resilient and happy communities. This does, however, require a deep commitment from the Scottish Government in providing leadership, the right incentives and regulation, wise and innovative infrastructure development and having the confidence to address issues of equity.

The Bill, as it stands, is not ambitious enough. In order to avert dangerous climate change we need to make deeper GHG reductions sooner, with an immediate start and set an interim target for 2020 of at least 42%[1].

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

We welcome the adoption of a target of an 80% reduction in GHG emissions by 2050. However, recently evidence has emerged that the build up of greenhouse gases in the atmosphere is happening more rapidly than expected. We also know more about the dangers of positive feedbacks in accelerating climate change. We recommend that provision is made within the Bill to ensure that targets are consistent with current knowledge of the science of climate change.

The 2030 target is not sufficient to make the reductions needed to play Scotland's part in avoiding dangerous climate change. In order to stabilise atmospheric concentrations of greenhouse gases, the key figure is the cumulative amounts of gases emitted, which depends on how quickly GHG emissions are reduced, as well as the level of interim targets. Since CO_2, and many other greenhouse gases, are long-lived in the atmosphere, an early emission-reduction pathway is vital in minimising the cumulative effects of GHGs. Both the Stern Review and the UK CCC Report state that early reductions in GHG emissions are more effective, and that deeper cuts will be necessary later if we do not take immediate action.

Both the UK and European legislation have 2020 as a key reporting target. Given the importance of early reductions, this 2020 target gives a statutory commitment towards faster cuts in the short to medium-term. Scotland's Bill should sit comfortably alongside legislation emerging from UK and Europe which have a 2020 target.

The UK CCC has recommended a reduction target below 1990 levels of 42% below 1990 levels[2], if a global agreement emerges at Copenhagen, and cuts of 34%[3] if the UK acts unilaterally. We believe that we should adopt this tighter target to ensure that Scotland's effort counts

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that

[1] Below 1990 levels
[2] 31% below 2005 level
[3] 21% below 2005 level

these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

No comments.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

The Bill allows for an effectively horizontal trajectory of emissions up to 2020. This is because there is no statutory 2020 target and the draft legislation asks only that emissions decline up to 2020 but does not define the speed of cuts. It is important that percentage reductions are set in the legislation up to 2020 as early cuts will reduce Scotland's cumulative emissions, ensure that Scotland is ahead of the game in developing a low-carbon economy and demonstrate the leadership which will encourage the rest of the world to engage with immediate reduction of greenhouse emissions.

Q.4 The Bill introduces the concept of a "net Scottish emissions account" as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

Cuts in Scotland's greenhouse gas emissions should represent a true reduction of Scotland's own greenhouse gas emissions. It is important that every nation plays its part in reducing global carbon emissions.

Within the Kyoto Protocol, permits can be purchased by Kyoto signatories from the non-signatory developing countries through the Clean Development Mechanism (CDM). This system is subject to leakage as there is no absolute global cap on emissions. We do not believe that Scotland should use permits from this mechanism, or similar, to ease their domestic commitments on GHG reductions.

Over the next few years, however, discussion for a successor for the Kyoto protocol, which will end in 2012, will take place. If a global cap on carbon emissions can be negotiated then a system of trading permits to emit between nations becomes practical.

Q5 The Bill defines "Scottish emissions", in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that "Scottish emissions" are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Greenhouse gases are emitted in order to provide goods and services to consumers. The consumers create the demand for the goods and services and are, therefore, responsible for the greenhouse gases emitted during production and transport of those goods and services.

It is estimated that the UK has a 'carbon deficit' [4], this has not been broken down for Scotland. This means that our imports are responsible for more greenhouse emissions than our exports.

We acknowledge that conventional frameworks for attributing greenhouse emissions to nations work on the basis of gases emitted in the country and not those attributable to the consumption of a country's citizens. This is governed by the availability of quality reporting data and the importance of reporting production-based figures such as GDP.

In the current system, where Scotland's greenhouse gas reduction effort is not set within a truly global framework for reduction and reporting, we acknowledge the limits of the consumption-based approach for attributing emissions. However, we would like the Scottish Government to work towards a consumption-based reporting system for future global agreements and, until then, to monitor consumption-based emissions alongside those attributable to production and report on these alongside other climate change figures.

Aviation is the fastest growing source of greenhouse gas emissions, it has enjoyed the benefit of tax-free fuel, despite the increased damage that GHG emissions at altitude inflict on the climate. If aviation and shipping were excluded from the bill, low-carbon forms of transport would be at a competitive disadvantage which would damage research and development of low-carbon transport for the future and put food producers in Scotland at a disadvantage to overseas producers.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government's approach to obtaining independent, expert advice on climate change?

No comments.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland's emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

No comments.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

No Comments

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change,

[4] Carbon Trust (2006) 'The carbon generated in all that we consume'
http://www.carbontrust.co.uk/Publications/publicationdetail.htm?productid=CTC603

proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

No submission.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

No comments.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

No comments.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

Greenhouse gases from buildings account for up to 40% of total emissions, with domestic dwellings accounting for 25% of GHG emissions. Huge reductions can be made quickly and efficiently by increasing the energy efficiency of homes. We agree that an action plan to improve energy efficiency of buildings is essential, and this needs to include increased investment in energy efficiency measures for homes and more assistance for people to access the financial help that is available. This will tackle fuel poverty as well as reducing greenhouse gas emissions.

Building standards for energy efficiency should also be tightened with the inclusion of passive design for heating and cooling. We need an aspiration to make our housing stock in Scotland carbon neutral and the ambition and vision to make this happen.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government's thinking in this area.

What are your views on this approach?

No Comments.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

Renewable heat is one of the areas where Scotland must start to make more progress. At present huge amounts of heat is wasted, including in the production of electricity and in the biomass that is left to decompose in landfill, which could be converted into heat for homes. It is vital that these, and other heat sources, are used for heating homes and businesses. It is right to note, however, that insulation and draft-proofing should be undertaken before a renewable heat project to ensure that the efficiencies are as high as possible.

Community heating projects should be encouraged and included in new-build developments, both private and public, where this is appropriate. Community heat and power leads to even more efficiencies, with the opportunity that the energy can be, not only efficiently used, but from 100% renewable resource if biomass is used to make the heat.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas: Waste prevention and management plans;

Waste data;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?

No comments.

Q16 What are your views on the adequacy of the Scottish Government's consultation in advance of publishing the Bill?

No Comments.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No Comments.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

The most effective way of changing people's consumption behaviour and decisions is to change the price signals so that higher carbon goods are more expensive. This can be done through a cap-and-trade system with the price being set by the availability of permits to emit, or by a carbon tax. People reacted to the summer rise in the cost of petrol by buying 20% less fuel and this shows that, even a small rise in the cost of carbon-intensive products can have an effect on consumption behaviour. However carbon taxes or cap-and trade will have a disproportionate impact on the poor. Although greenhouse gas emissions are closely related to income, poorer people are often tied into existing inefficiencies due to being unable to afford insulation, new appliances or other lower carbon technologies.

The solution to this is to redistribute the proceeds of a carbon tax or a cap and trade auction for permits to householders, alongside direct help for households to obtain insulation and other energy-saving technologies. Various mechanisms have been proposed for this and we propose a synthesis of some of these in the answer to Question 20.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

It is important that the single goal of reducing our GHG emissions does not overshadow the broader goals of sustainable development for Scotland. It is true that ending our reliance on fossil fuels and drastically reducing our GHG emissions will contribute to making our planet more sustainable, however we need policy and practice that will bequeath a planet with all eco-system functions in tact to future generations.

Reductions in GHG emissions can be achieved in many ways and not all of these are equally desirable. We need to be careful in choosing the path that offers a sustainable future for everyone. Forum for the Future's report 'Climate Futures' [5] examines five sharply different scenarios for 2030. We need to ensure that our policy leads us to a future that fosters well-being for all at local and a global level, while maintaining our eco-systems and planetary support systems, including maintaining and enhancing biodiversity and places of wildness.

In order to work within the earth's capacity to provide energy, materials, ecosystem services, and biodiversity we need to focus on improving qualitative aspects of growth and leave behind the obsession with quantitative growth that has taken us into, not only an economic crisis, but a climate crisis and a looming resource crisis.

This means using our resources to improve people's lives, rather than simply increasing national income, and involves both the sustainable use, and more equitable distribution, of those resources. Much of what is of most value to us as humans is invaluable (or immeasurable) and we need to acknowledge the limits of a metric such as GDP in guiding our decision making.

Q20 Do you have any other comments on the Bill?

In order to achieve the targets set out in the Climate Bill it is going to be necessary to set up system of pricing carbon. At present, consumers do not pay the full price of the damage that greenhouse gases do in the prices of our goods[6] and in some cases there is even a subsidy (for example no fuel tax on aircraft fuel). This means that we consume more carbon intensive goods than we would otherwise do if this price was internalised and there is less innovation in low-carbon technology than there should be. A price for carbon in the economy would encourage innovation to low-carbon technology, encourage conservation and efficiency and encourage consumers to make different consumption decisions.

We propose a carbon pricing system that is easy, effective, equitable and efficient. Since all greenhouse gases need to be included, but CO_2 is the major gas, when we use the term carbon, we mean all greenhouse gases as carbon equivalents.

1. **Easy:** Carbon is priced only when it enters the economy, which means only a few producers (coal/gas/oil/cement and fertiliser[7]) will be directly affected. This reduces the transaction costs of the system, makes it easier to minimise leakage and to police effectively. The price will be determined by an annual auction of permits with a decreasing cap each year. The cap on permits will be determined by a scientifically established safe level and an achievable decent plan.

2. **Effective:** The additional costs will be passed down in the price of all goods. The advantage of a universal system like this is that the information on carbon content of the goods is automatically transmitted down the production and supply chain through the price. This leads to efficiencies at all levels, substitution of lower carbon alternatives, low-carbon innovation and changes in investment behaviour by individuals, government and companies. Price signals to the consumer will change consumer behaviour.

[5] Forum for the Future (2008) 'Climate Futures' www.forumforthefuture.org/

[6] Several schemes internalise the costs of carbon emissions in a small way, for example, the Climate Levy on business, the European Trading Scheme and fuel tax. The ETS has not achieved as much as was promised due to the failure to auction permits and to have a low enough cap on the levels of carbon dioxide emitted. Caps should be decided with a view to the decent path and the carrying capacity of the planet, rather than companies own estimates of how much emissions they have had in the past.

[7] The use of fertiliser on the soil leads to the production of Nitrous Oxide, N_2O, a greenhouse gas 298 times more potent than CO_2.

3. **Equitable:** The price for carbon will increase the costs for the consumer. To avoid this becoming a regressive tax on the poor, a proportion of the proceeds of the auction of the permits to the firms will be redistributed, through the existing tax and benefits system, to everyone to cover the basic increases in the cost of living. Because there is a close relationship between income and greenhouse gas emissions, poorer citizens will get more than they need to cover the increases in their bills. The wealthiest people, who are producing the greatest quantities of greenhouse gases will not be fully compensated for the increased prices. Because the payment is no longer acting as a subsidy on high carbon goods, people will switch to lower carbon goods and be able to pocket the difference.

   The remaining portion of the proceeds from the auction of permits will be divided and used, firstly to support climate change adaptation measures for developing countries. And secondly, as an adaptation and mitigation fund for Scotland. This will go towards investing in energy conservation measures such as insulation, innovation and investment in alternatives and investment in infrastructure to support low-carbon living, such as transport infrastructure, community heating etc.

4. **Efficient:** Permits to emit are auctioned to the emitting companies, and these permits can be traded to ensure that the reductions are achieved in the most efficient way.

Annex 1 gives a diagrammatic representation of how the system works.

Looking forward to the future: As the cap on carbon comes down year on year, people will begin to invest in a low-carbon future. People will buy products that will last and repairing broken items will become the norm. An expectation of lower carbon caps in the future will lead to major decisions being made with a sustainable future in mind. For example: where to live, which house to buy/build, which transport options to choose.

Annex 1: An illustration of the process of the proposed scheme