



WWF for a living planet®

“Human Progress is neither automatic nor inevitable. We are faced now with the fact that tomorrow is today. We are confronted with the fierce urgency of now. In this unfolding conundrum of life and history there is such a thing as being too late... We may cry out desperately for time to pause in her passage, but time is deaf to every plea and rushes on. Over the bleached bones and jumbled residues of numerous civilisations are written the words: Too Late.” Martin Luther King

Response to the Scottish Climate Change Bill Proposals Consultation

WWF Scotland has commended the SNP Government’s commitment in its Manifesto and the growing support across the political parties in the Scottish Parliament to deliver strong legislation on climate change. Along with thousands of people across Scotland, WWF now welcomes the opportunity to contribute to the consultation on proposals for the Scottish Climate Change Bill and urges the Scottish Government to bring forward strong legislation to reduce greenhouse gas emissions as a priority.

The full response provides answers to each of the consultation questions. The key points are summarised below.

1. The Scottish target should be based on the Kyoto Protocol basket of six greenhouse gases. This follows the conclusion of the IPCC that the minimum target for developed countries should be 80% CO_{2e}¹.
2. The Climate Change Bill should include statutory targets of at least 3% per year. This is the absolute minimum annual reduction needed to ensure we do not emit more than our fair share of greenhouse gases.
3. The Climate Change Bill target must include the emissions from international shipping and aviation.
4. The Climate Change Bill should require the calculation of the total cumulative budget of emissions that Scotland can produce up to 2050.
5. The Climate Change Bill should require reporting on Scotland’s consumption based emissions.
6. The Climate Change Bill should establish an independent Scottish Climate Change Commission to advise, monitor and provide scrutiny on the implementation of the Bill.
7. The Climate Change Bill should place a duty on the public sector to require it to reduce its emissions in line with the national reduction rate.
8. The Climate Change Bill should ensure that no more than 30% of the effort required to reduce emissions from one year to the next can be met by international credits.
9. The Climate Change Bill should include a sustainability duty to ensure that measures taken in pursuit of its objectives do not lead to perverse environmental, social or economic consequences. This sustainability duty should be firmly based on the definition provided in the Scottish Sustainable Development Strategy.
10. The emissions reduction target should take account of the abatement effort made by companies under the ETS.

¹ CO_{2e} or carbon dioxide equivalent is a measure used to compare the emissions from the six greenhouse gases based upon their global warming potential.

Introduction

The next five to eight years present Scotland, and the world, with a closing window of opportunity in which to prevent dangerous climate change from becoming a devastating reality. Scotland's Climate Change Bill must address this urgency for action and provide a strong framework that ensures we make a fair contribution to a global effort to tackle climate change.

The forthcoming Climate Change Bill marks a significant milestone on Scotland's path to a One Planet Future. We must seize this opportunity to make a substantial reduction in our Ecological Footprint and move away from our current, three planet, lifestyle. By taking the necessary steps, Scotland can offer real global leadership that sets the benchmark for emissions reduction and, as a result, ensure we are well positioned to reap the rewards of being at the forefront of a new carbon global economy.

The Climate Change Bill should provide the strong framework that would allow government to facilitate the step from awareness to individual action. An established body of research indicates a widespread awareness of environmental problems that is not translated into pro-environmental behaviour and action.² Behavioural change will be an essential component if we are to achieve an 80% reduction in green house gas emissions by 2050. For example, a WWF commissioned report assessing the level of emissions reductions feasible within UK housing stock by 2020 and 2050 estimates that behavioural change could reduce emissions by 5-10%.³ However, to release the reduction potential locked into current behaviour patterns requires leadership, reciprocity and a strong supporting framework.

1.2 Evidence for urgent action

This consultation response is guided by the scientific evidence for urgency in action.

The Scottish Climate Change Bill must be based on what the science demonstrates is needed in terms of emission reduction to prevent dangerous climate change. The current proposals for legislation lack this scientific clarity of purpose and instead plot a path between political pragmatism and scientific evidence. These two concerns cannot be traded, political credibility rests on making the reductions demanded by a growing body of scientific evidence: expediency must not override the imperative for action.

The scientific evidence for immediate action is absolutely clear and only continues to accumulate. Indeed, recently published data describes how the climatic changes we are currently witnessing are considerably in advance of the latest Intergovernmental Panel on Climate Change (IPCC) predictions, the established international benchmark for policy making.

For instance, the observations of Arctic sea ice melt recorded by the National Snow and Ice Data Centre from the summer of 2007 offer a worrying insight to the non-linear impacts of climate change. At the end of September 2007, sea ice was 39% below the long-term average from 1979 to 2000. If ship and aircraft records from before the satellite era are taken into account, sea ice may have fallen by as much as 50% from the 1950s. Based on their analysis of actual arctic ice melt, Stroeve et al (2007)⁴ conclude that current sea ice melt is thirty years ahead of IPCC projections.

Another example of the impacts we are witnessing now is provided in a recent United Nations Environment Programme (UNEP) report from its World Glacier Monitoring Service (WGMS). It

2 Jackson, T 2005 *Motivating Sustainable Consumption – a review of evidence on consumer behaviour and behavioural change*.

London: SDRN

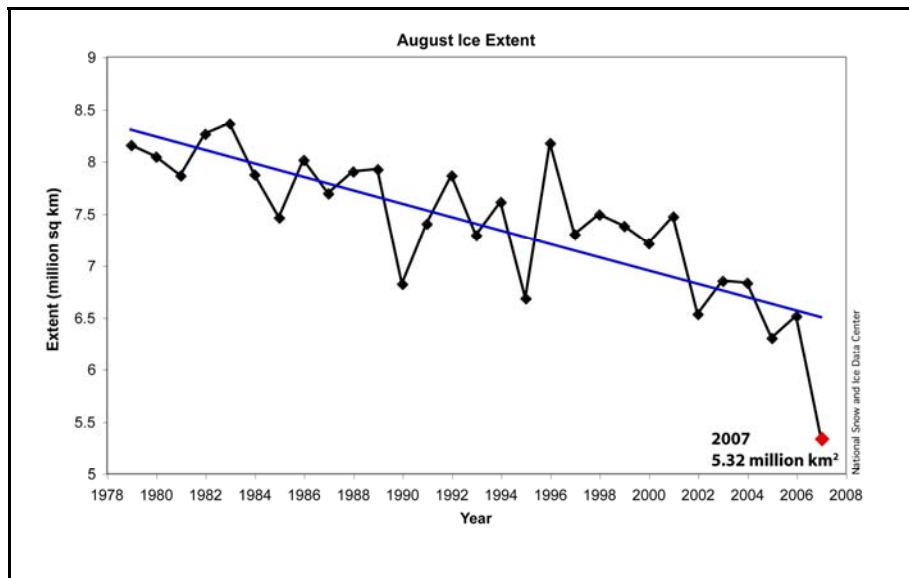
3 WWF, 2008 *How Low, Achieving carbon savings from existing housing stock in the UK*

4 <http://www.cosis.net/abstracts/EGU2007/01362/EGU2007-J-01362.pdf>

showed that for almost 30 reference glaciers, the average rate of melting and thinning had more than doubled for the years 2004-2005 and 2005-2006.⁵ Commenting on this report, Achim Steiner, UN Under-Secretary General and UNEP Executive Director, highlighted the importance of these glaciers and their role in warning us of the impacts of climate change:

"Millions if not billions of people depend directly or indirectly on these natural water storage facilities.....There are many canaries emerging in the climate change coal mine. The glaciers are perhaps among those making the most noise and it is absolutely essential that everyone sits up and takes notice."

Figure 1. Arctic sea ice 1978–2007⁶



1.3 Scotland’s opportunity to lead

Scottish Government’s commitments for legislation on climate change have received massive international attention. Support for targets, as outlined in the SNP Manifesto, has come from thousands of people in more than 145 countries across the world; the Scottish Bill should demonstrate that this support is deserved and ensure that Scotland becomes a true world leader in tackling climate change. With an international audience comes access to investment and expertise that can ensure the necessary transformation to a carbon-constrained economy can still deliver a sustainable economy. As Richard Lambert, CBI Director-General says;

".....this is a story of opportunity as well as risk. With the right focus on R&D, we can be at the forefront of new low carbon technologies that will power the world economy. We don’t have to return to the dark ages or live joyless lives to cut our carbon footprints - we just have to learn, together, to do things differently, with carbon becoming a new currency in our economy."

Scotland has the opportunity to seize the rewards for leading the technological shift demanded by climate change. If we are bold and ambitious, we can drive a global response to the threat of climate change.

⁵ See <http://www.geo.unizh.ch/wgms/mbb/mbb9/sum06.html>

⁶ Graph copied from the National Snow and Ice Data Centre website. See

http://nsidc.org/news/press/2007_seaiceminimum/20071001_pressrelease.html

2.0 Key Issues for the Scottish Climate Change Bill

This section outlines key issues of strategic importance that must be considered in relation to climate legislation for Scotland. Other specific issues addressed by particular questions in the consultation document are addressed in the following sections.

We note that the consultation event held on 26 March at Victoria Quay gave particular focus to the question of annual targets and, as such, anticipate that the section below will provide a valuable contribution to the Scottish Government's focus on this area.

2.1 Establishing a statutory target for an 80% reduction in greenhouse gas emissions

It is absolutely critical that the Scottish Climate Change Bill establishes a statutory target for at least an 80% reduction of greenhouse gas emissions in Scotland by 2050.

It is welcome that the proposals reflect this. By providing clear support for an 80% reduction target, the Scottish Climate Change Bill could set an international benchmark. However, what needs to be clear is that this includes all greenhouse gas emissions in line with previously preferred Government policy (Scottish Government Website January 2008). This target will then meet what is currently globally agreed needs to be delivered by developed nations in order to avoid the worst impacts of climate change. Scotland's long-term target should continue to be based on what the science demonstrates is required.

Since the industrial revolution, the world has warmed by some 0.75 °C, in addition to this experienced change in temperature there is another 0.6 °C rise to occur due to the time lag between emissions and temperature change. As a result, we are already seeing significant impacts on the world's poorest people and on biodiversity. To avoid catastrophic climate change, the increase in average global temperatures must not exceed 2 °C above the pre-industrial average. This objective was adopted by the EU in 1996 and is the threshold agreed by the UK Government, the IPCC and set out in the current Scottish Climate Change Bill proposals consultation.

The importance of an 80% reduction in emissions is that to stand even a 50% chance of staying below two degrees and to stand a chance of avoiding the worst impacts of climate change, it will be necessary to stabilise global greenhouse gas emissions at below 450ppm (CO_{2e})⁷ and probably nearer 400ppm (Meinhausen 2006, see also the Stern Review and IPCC Summary for Policy Makers 2007). The IPCC concluded in its 2007 reports that, in a global context, this requires a 50% cut in emissions from a 1990 baseline by 2050 and for industrialised countries like Scotland, at least an 80% cut by 2050.

However, for this target to be credible and to have real meaning in the immediate future, the Bill must go beyond the consultation proposals and establish year-on-year greenhouse gas reductions of at least 3% per annum. Setting Scotland on a steady downward trajectory of emission reduction of at least 3% per annum is critical to achieve 80% by 2050.

The legislation should be framed to take account of an equitable contribution to staying below a temperature rise of two degrees centigrade and enable the review of minimum targets based on the international science consensus for reductions needed.

2.2 The Bill should include annual statutory targets of at least 3% year-on-year reductions.

The Scottish Climate Change Bill must set statutory targets of annual reductions of at least 3% in emissions. Targets of at least 3% are critical to achieve the necessary downward trajectory that

⁷ The CO₂ equivalent level is described as the amount of CO₂ that would be required to give the same climate change contribution as the sum of the basket of six gases.

will ensure Scotland makes a fair contribution to preventing dangerous climate change. Indeed, 3% reductions should be the absolute minimum that Scotland should aspire to achieve annually.

The 2050 target is an important goal; however, for it to be meaningful it must be matched by the necessary commitment to year-on-year reductions. As the consultation proposals says, '*the setting of a single point reduction target does not, by itself, determine the total emissions produced over a period*'. As specified by the Minister, the 80% greenhouse gas reduction target equates to year-on-year reductions of just over 3% across the basket of six greenhouse gases. The reduction emissions curve described by the 3% annual reduction approximates Scotland's maximum emissions budget until 2050. Any delay in action to reduce emission by 3% will mean Scotland eats into its CO_{2e} budget. At a UK level, emissions since 2000 have already accounted for approximately 25% of the UK's budget up to 2050; Scotland has made similar inroads into its 2050 carbon budget. The earlier we start, the easier it will be to meet the long term target; the longer we fail to cut emissions by 3% each year, the greater the necessary annual cuts will become.

The SNP manifesto set out a commitment to an 80% cut in emissions by 2050 and mandatory annual reduction targets of 3%. This commitment was in line with the absolute minimum necessary reductions described by science. However, the current proposals for the Bill present a clear move away from this and instead describe a preference for a multi year budget process.

The primary reason cited in the consultation for avoiding an annual target is not based on any change in the advice from science, (as recognised by the Minister for Climate Change in evidence to the Transport, Infrastructure and Climate Change Committee on 5 February 2008⁸) but rather on fears that Government will not be able to meet them. These fears seem to relate to the effect of exceptional circumstances e.g. a particularly cold winter or high oil and gas prices leading to greater reliance on coal.

The Scottish Climate Change Bill must establish statutory annual reductions of at least 3% rather than a multi year budget period for a number of reasons:

- i) The science continues to make it clear that this is the absolute minimum reduction needed to ensure Scotland makes a fair contribution to preventing a global temperature rise of more than two degrees.
- ii) The action we take in the next few years is critical. Without annual targets, there is a risk of inaction in early years and delays in making early progress in working towards the 80% cut. Inaction will be cumulative with every future year faced with greater challenges than the previous one. For instance, two years of delivering just 1.5% and 2.5% reductions will mean the third year is challenged to meet a 5% reduction. A budget approach alone presents a real risk that the challenge spirals out of reach, undermining the long-term confidence needed to deliver.
- iii) Statutory reduction targets of at least 3% per annum would ensure a steady equitable path towards the 80% reduction is set and that the target is achieved.
- iv) Annual reporting against targets allows for the quicker identification of ineffective policies and their prompt correction.
- v) The opportunity to borrow from future years because there are 'exceptional circumstances' one year as part of a multi-year budget approach is based on an implicit assumption that there will be no 'exceptional circumstances' the following year. If it is not possible to anticipate them in one year neither will it be possible to predict them for the following year.
- vi) With a Parliamentary cycle of four years, a multi-year budget period out with this period risks removing accountability and simply shifts responsibility for any failure to make adequate progress into the subsequent Government.

⁸ See <http://www.scottish.parliament.uk/s3/committees/ticc/or-08/tr08-0302.htm>

- vii) Annual targets will ensure it fulfils its ambition of providing ‘a strong example to other countries showing what can be done’.

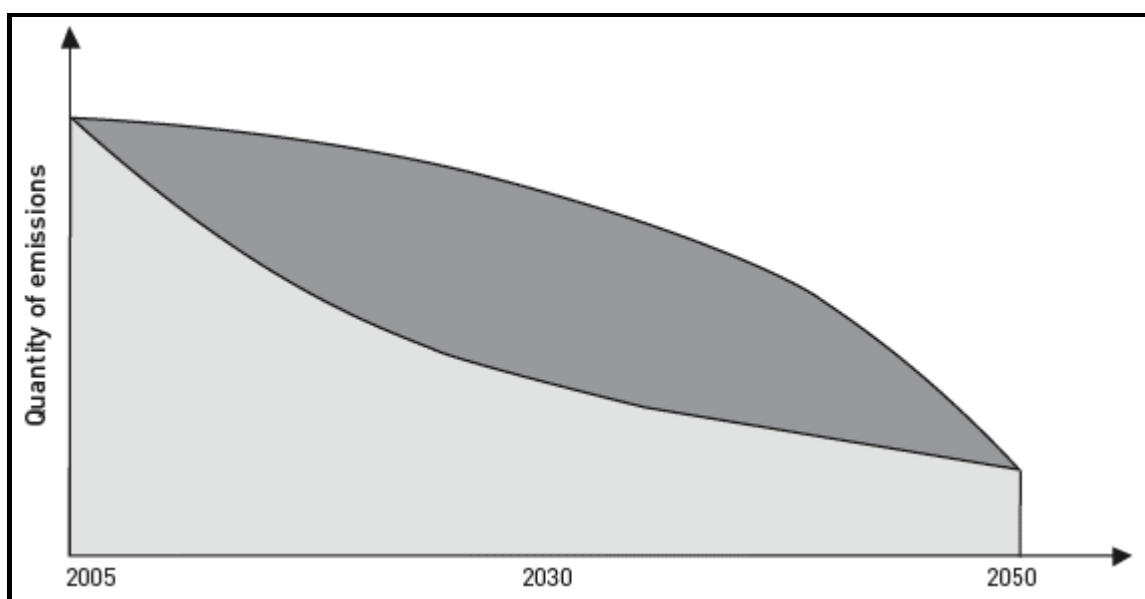
The urgency of acting now: Current global greenhouse gas emissions are already at 430ppm CO_{2e} and are increasing at approximately 2% per year. We have an ever-narrowing window in which take action, any delay will make the challenge harder and more expensive and the likelihood of passing 2°C even greater.

3.1 The importance of a cumulative budget target

In addition to the 80% target by 2050, the Scottish Climate Change Bill should provide a clear cumulative emissions budget. The climate change we are experiencing now is a result of greenhouse gases emitted over 100 years ago. The fact that these gases persist in the atmosphere means we must know the total budget of emission until 2050 and ensure we do not exceed this amount. It is essential that a cumulative budget is defined by the Scottish Government to ensure we remain on the correct emissions reduction path. The shape of the emissions reduction curve is just as important as the final percentage reduction in 2050. This is neatly described by Figure 2 below. This graph, taken from the consultation, shows the weakness of relying on an end point target alone and the importance of defining the cumulative budget for Scotland. Without a cumulative budget, the Bill’s goal of making a fair contribution to preventing dangerous climate change has limited credibility; as the Bill proposals state: “*such a [cumulative] target, if met, would give greater certainty about the level of Scotland’s contribution to the global effort to tackle climate change than a single point percentage reduction target.*”

The suggestion that because Scotland’s contribution to climate change is relatively minor it need not adopt a cumulative target, is inconsistent with the stated goals of the Bill and would apply equally to the setting of a percentage target. The proposals also suggest that a cumulative target would be more challenging and costly, however this is a false comparison, the cumulative target ensures Scotland delivers its fair reduction in emissions, on its own the 80% target does not. The consultation appears to compare the costs of the necessary action with those associated with inadequate action, this is an entirely false choice.

Figure 2. The importance of a cumulative budget



The proposals argue that the challenge posed by a cumulative target increases the risk of it being missed and therefore threatens to undermine the Bill. The alternative scenario, of not committing to a cumulative target, would do far more to undermine the Bill, as it would remove the important assurance that mitigation actions required by the 80% target were sufficient and credible.

A cumulative target would show real leadership, drive the necessary emissions reductions and ensure the Scottish people had confidence that the Climate Change Bill was delivering the right level of emissions reductions.

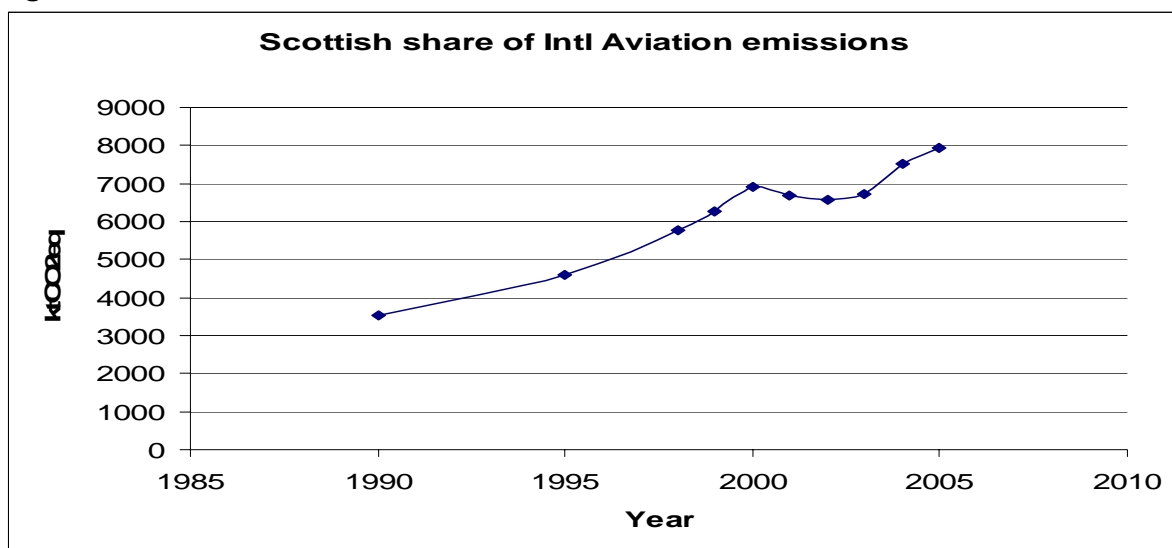
2.4 Inclusion of emissions from international aviation and shipping

Emissions from international shipping and aviation must be included in reduction targets set by the Scottish Climate Change Bill.

There is no reason for the targets established by the Climate Change Bill not to include these emissions. The arguments set out in the consultation proposal do not prevent their inclusion. The time for action is now; to delay their inclusion is to introduce an unnecessary level of uncertainty for other business sectors that will do much to undermine confidence in the Bill.

Aviation is one of the fastest-growing sources of greenhouse gas emissions in the UK. Since 1990, UK CO₂ emissions from aviation have risen by 125%; they are currently growing by between 5 and 10% a year. In 2005, aviation accounted for 6.3% of the UK's CO₂ emissions.⁹ Given the extra warming effects of non-CO₂ emissions from aviation,¹⁰ aviation's share of the UK's contribution to climate change is higher – probably in the region of 10-13%. Emissions from global shipping were recently revealed to be higher than previously thought and with regard to direct CO₂ emissions, they are larger than the aviation sector, and growing just as fast. In Scotland, the emissions contribution from international aviation has risen from approximately 5% of all GHGs in 1990 to 13% of all GHGs in 2004, under a business as usual scenario this contribution will have increased to approximately 44% by 2050.

Figure 3: Scottish share of international aviation emissions¹¹



9 Defra. (2007). Estimated emissions of carbon dioxide by IPCC source category, type of fuel and end user: 1970 – 2005. Defra, London. February 2007.

10 As well as CO₂, aviation produces nitric oxide and nitrogen dioxide at altitude form ozone, a greenhouse gas, and water vapour, which at altitude leads to the formation of contrails and cirrus clouds.

11 This analysis is an approximation of international aviation and shipping emissions for Scotland derived by a population-based split of UK figures. It does not allow for the fact that regional airport passenger numbers are growing faster than the UK average.

Starting from 2007, a 3% a year reduction path inclusive of international shipping and aviation will equate to approximately a 76% reduction by 2050. While this shows that the annual reduction must be *at least* 3%, it also illustrates that the inclusion of aviation and shipping should not pose a significant risk to the Scottish Government's stated commitment to annual reduction of 3% a year. The exclusion of these emissions would of course risk the Climate Change Bill target of 80% being missed as a significant and growing percentage of emissions go uncounted; we have to take responsibility for all our emissions.

Available data and established definition: Under the Kyoto Protocol, the UK Government has been required to report international aviation and shipping emissions as a memo item. The Intergovernmental Panel on Climate Change publishes best practice guidelines on aviation and shipping reporting. From the available methodologies and definitions described by the IPCC, the UK has adopted the Tier 3 approach, this is the most developed and accurate method, providing emissions figures based on actual flight data. These official figures go back to 1990 and so disaggregated Scottish data could be used to include aviation emissions on the same basis as other sectors from the moment the Bill becomes law.

International Framework: The inclusions of emissions from aviation and shipping provide the Scottish Government with a significant opportunity to fulfil its stated commitment to "*provide a strong example to other countries showing what can be done*"¹². To prevent their inclusion until 'an international framework is place' presents an unnecessary and damaging delay that undermines the credibility of the Scottish Climate Change Bill.

It is clear that EU ETS will not, alone, stop the strong upward trend in the growth of emissions from international aviation, nor will it provide a framework for apportioning international flights to member states. According to the Commission's Impact Assessment of the inclusion of aviation within the ETS, under the current proposal, aviation emissions would grow by 78%, instead of 83% under a business-as-usual approach; a reduction equivalent to less than one year's growth in emissions. In addition, the Commission estimates that the costs incurred from inclusion in the scheme will only slightly lower the demand for air travel. By 2020, demand will have grown by 135% (relative to 2005 levels) compared to 142% in the absence of a trading scheme¹³.

It is also clear from the Command Paper accompanying the UK Climate Change Bill that the ETS will not provide a framework for describing a Member States emissions contribution from aviation¹⁴. The only allocation of emissions to Member States that will occur as a result of ETS will be for the purposes of auctioning the small percentage of permits that are not handed free of charge directly to airlines. Therefore, the ETS will not produce a workable method for allocating Scotland's net aviation emissions. The Scottish Government cannot delay including these emissions in the Climate Change Bill on the basis of an international framework that is not even in development.

Power to manage aviation and shipping emissions: It is true that a number of powers to reduce aviation and shipping are reserved to the UK Government. However, Scotland does have critical levers including planning powers that could effect emissions from aviation and shipping.

12 Climate Change Consultation on proposals for a Scottish Climate Change Bill.

13 Based on the scenario with €15 per tonne CO₂ allowance prices in the 'Impact Assessment of the Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community'. A recent assessment by Ernst & Young, commissioned by the industry, is even more pessimistic as to what effect the policy would have on emissions

14 14 Taking Forward the UK Climate Change Bill, DEFRA, October 2007 note 13 on page 17 (<http://www.official-documents.gov.uk/document/cm72/7225/7225.pdf>)

As the recently launched National Planning Framework (NPF) shows, the Scottish Government does have planning powers that relate to both shipping and aviation. The proposed NPF sets out a clear Government commitment to extend the capacity at Scotland's two busiest airports and significantly increase port capacity at Rosyth and Scapa Flow.

The Scottish Government can also work to create the much-needed modal shift away from aviation by driving forward a programme of alternative travel opportunities such as offered by improved rail and ferry provision. In addition, the Scottish Government could completely remove public subsidies supporting growth in air travel. Similarly, a behaviour change campaign focused on flying could be promoted by the Scottish Government to increase awareness of the impacts and the alternatives.

2.5 A Sustainability Duty

The Bill should include a **sustainability duty** to ensure that measures taken in pursuit of its objectives do not lead to perverse environmental, social or economic consequences. This sustainability duty should be firmly based on the definition provided in the Scottish Sustainable Development Strategy. A legislative duty to apply principles of sustainable development in measures to reduce emissions would help ensure we are not harming biodiversity, increasing hunger or creating fuel poverty in the process of meeting our targets.

3 Consultation Questions

In the following section, we provide answers to selected questions from the consultation.

3.1 Should a Scottish target be based on carbon dioxide only or the basket of six greenhouse gases?

The 80% reduction target for the proposed Climate Change Bill must be based on the basket of six greenhouse gases (GHGs). A target that addresses the cumulative effect of the principal greenhouse gases is in line with international commitments under the Kyoto Protocol and in keeping with Scotland's Climate Change Programme. It is welcome that such a target has been the stated preference of the Scottish Government. Its inclusion in the Bill ensures it establishes an effective framework to mitigate the effects of climate change and will deliver on the SNP's 2007 manifesto promise..

The Scottish Climate Change Bill should focus on reducing Scotland's total greenhouse gas emissions for the following reasons:

- a) The UN and EU are agreed that in order to restrict temperature rise to below the critical 2 °C warming threshold, global concentrations of *greenhouse gases must be not exceed 450 ppm CO₂ equivalent*. The IPCC describes the 80% reduction target as the minimum reduction in GHGs required to ensure global concentrations do not exceed 450 ppm. If the Scottish Government's intended 80% reduction is to follow international advice and ensure as a nation we make a fair contribution to reducing emissions, the Scottish Target must be based on GHGs.
- b) Non-CO₂ emissions in Scotland make a significant contribution to Scotland's climate emissions:
 - While CO₂ constitutes 84% of Scotland's GHG emissions much of the remaining 16% is made up of Nitrous Oxide (N₂O) and Methane (CH₄) from land use/soils/livestock.

- Aviation is responsible for emissions of climate-changing pollutants other than CO₂. Given the need to ensure that emissions from Scotland's share of aviation and shipping are included in the Climate Bill, the target must also take account of these non-CO₂ emissions. The IPCC estimates that the climate change impact of aircraft emissions is between two and four times greater than CO₂ emissions alone.
- c) The UK Government already collects and reports emissions of all six key greenhouse gases for Scotland and reports them as carbon equivalent. There would be no additional resource demands as a result of reporting on GHGs, indeed this would have to continue anyway.

3.2. Should the Bill contain provisions to alter which gases are included, for example if the reliability of data for a particular gas improves or if science changes in the future about which gases cause climate change?

The Bill should include such provisions to allow for the capture of all possible greenhouse gases. Such changes should be made on the basis of advice provided by an independent Scottish Climate Change Commission. If changes are proposed these should be consulted upon and any changes through secondary legislation should be delivered through an affirmative instrument.

3.3 The Scottish Government wishes to ensure that the Bill gives sufficient incentives to invest in energy efficiency and renewable electricity. Should the targets be based on source emissions; an end-user inventory; or on individual targets for energy efficiency and renewable electricity? Do you have any other suggestions?

The Climate Change Bill should require Scottish Ministers to bring forward an Emissions Reduction Plan. Efforts to improve efficiencies *and* reduce demand should be set across all sectors and be seen as part of a hierarchy of responses described by this plan. Based on the independent advice of a Scottish Climate Change Commission, this plan would include targets for energy demand reduction, improved energy efficiency and increased renewable energy. These targets will need to change over the lifetime of the Bill to reflect emerging technologies and climate change science, to this end the Emissions Reduction Plan should be reviewed on a rolling basis.

The reduction plan, and the targets it contains, should relate to our production-based emissions. To do otherwise, and apply them to just our electricity consumption, would introduce a fundamental inconsistency in the implementation of the Bill by only partially adopting a consumption-based rationale. However, these targets should be seen alongside annual *reporting* on Scotland's consumption-based emissions. This would allow for the balance between consumption emissions and production emissions to be transparently set out.

The Climate Change Bill should allow for the future introduction of consumption-based targets (see question 3.13 below).

Production emissions should be driven down irrespective of their end user, as this happens the emissions of Scotland's energy sector will be reduced. Scotland's renewable resource has been estimated at approximately 60GW, equivalent to 75% of existing generating capacity across the UK. If we take the steps needed to fulfil this renewable energy potential, our production-based emissions would be driven down, irrespective of the fact that some 20% of electricity might be exported.

The Scottish Climate Change Bill should require the production of an Energy Strategy that commits to addressing both our consumption and production of energy and has an objective of cutting Scotland's climate change emissions.

3.4 Do you agree that the Bill should allow the means of measuring the target to be changed through secondary legislation to reflect international developments or unforeseen consequences of the Bill?

The means of measuring should remain in line with accepted international best practice and guidance. If changes are proposed, these should be made explicit and any changes through secondary legislation should be consulted upon and delivered through an affirmative instrument. However, this should only happen following the advice and support of a Scottish Climate Change Commission and should be guided by the assessment of Scotland's fair contribution to the prevention of dangerous climate change.

3.5 Should the emissions reduction target take account of the abatement effort made by companies under emissions trading schemes? If so, how?

Ensuring the role of the EUETS sector in Scotland is properly accounted for is a complex yet important role for the Climate Change Bill. The following is suggested as a means of addressing this important sector.

Excluding the abatement effort delivered by the traded sector from the target is not a credible option. Just less than 50% of Scotland's emissions are captured by the ETS scheme, to exclude this percentage would place an unrealistic emissions reduction burden on the sectors of the economy responsible for the remaining 50% of emissions and would do nothing to ensure Scotland's ETS installations showed emissions reductions in line with the necessary path of at least 3% a year. As the Bill proposals state, the emissions reduction required under the ETS *'is likely to be insufficient to meet domestic reduction targets'*. The Bill must therefore include provisions to address this shortfall.

Ensuring a fair contribution from the ETS sector in Scotland. Before accounting for the emissions reductions delivered by the ETS sector, it is important to ensure it makes a contribution in line with the national reduction rate. The current proposition for an EU-wide ETS cap (20% from 2005 levels by 2020) is considerably less ambitious than the medium-term target for Scotland based on a minimum annual reduction of 3% a year, and indeed is less than the UK target likely to emerge as a result of the review due to be conducted by the Committee for Climate Change (and probably less ambitious than the Government's proposed minimum CO₂ reduction of 26% by 2020). Although it would be necessary to build a new process for securing this 'additional' level of emissions reduction, there is no preventative barrier to achieving this. Indeed, there are strong reasons why such extra reductions must be achieved. For instance, the analysis presented by IPPR, RSPB and WWF in *The 80% Challenge* report shows that the first step towards the 80% target must be met through rapid and almost complete decarbonisation of the electricity generation sector.

It is increasingly clear that while the ETS has an important role to play, on its own it is not a silver bullet or a substitute for an effective climate/energy policy, in its relative infancy every effort should be made to ensue 'additional' emissions reduction. The Stern Review recognises that carbon markets which are in the early stages of development are too volatile, and too prone to leakage and poor caps, to deliver mitigation and deployment of new technologies at the speed and scale needed to avoid dangerous climate change. This analysis is also implicit in the introduction of UK measures such as the Renewables Obligation, which aims to incentivise renewable energy generation, despite the fact that the power generation sector is already included within the ETS.

The Scottish Government could pursue a number of options to ensure the necessary reductions are secured from those installations captured under the ETS. Firstly, it could actively encourage the UK Government to implement policies that encourage improvements in efficiencies within the ETS sector, thus driving down their emissions further. It could also encourage the UK Government to auction ETS allowances at a level more compatible with its own domestic targets. Since the UK Government would effectively 'own' the allowances, whilst it would be *entitled* to

auction up to levels equivalent to the EU cap, it would not be *obliged* to do so if it wished to reign in emissions further. Although the auction of ETS allowances will be open to any purchaser in the EU, the UK, and Scotland, would have ensured additional emissions reductions had occurred in line with the necessary reduction path.

The impact of this would probably be to very slightly tighten the cap across the whole EU, thus raising the carbon price slightly. This action would be in line with the UK and Scotland's position as global leaders in tackling climate change.

Secondly, given the extra rate of reduction demanded by the 80% target in Scotland, the Scottish Government could take action to reduce the ETS rate further. In order to do this, they could 'buy out' credits equivalent to the necessary national reduction rate.

If neither of these options are adopted, the Scottish Government would have to focus on the remaining emissions sectors and secure 'additional' reductions across these in line with the 'shortfall' from the ETS.

Finally, the Scottish Government should investigate the extent to which its powers would allow it to auction ETS credits in the future.

Taking account of the abatement effort from the ETS. The Scottish emissions reduction target should take account of the abatement effort made by companies under the ETS. This could be achieved through counting the balance of emissions in credits from Scotland's ETS installations in March of each year.

3.6 Do you agree that international credits should be counted towards Scottish targets? Should there be limits on credits counted towards Scottish targets?

The priority for the Bill has to be to ensure a reduction of domestic emissions in Scotland. International emission reduction credits could be allowed but their use should be limited to an absolute minimum and their use must be capped. Scotland should work to ensure these meet best practice guidelines¹⁵ with regard to their sustainability.

There are a number of reasons for being cautious about the use of international credits. Unconstrained use of international credits could put off domestic abatement and encourage investments in high-carbon infrastructure. This could lock us in to soaring greenhouse gas emissions for decades to come, putting the 2050 target out of reach. Furthermore, putting off action at home prevents innovation and stagnates employment opportunities that could be available as part of a shift towards a local carbon economy.

With specific regards to credits from the Clean Development Mechanism (CDM), there is growing concern that many so-called 'non-additional' projects are being approved. These are projects which would have taken place anyway and are therefore actually allowing an increase in emissions globally when they are used to 'offset' emissions in countries which have taken on caps. Indeed, a recent report commissioned by WWF suggested that approximately 20% of the emission reductions certified under the CDM may have happened anyway¹⁶. This is the equivalent of around 34 million tonnes of CO₂ per year - the emissions from four Longannet coal

¹⁵ see the Gold Standard criteria at

http://www.panda.org/about_wwf/what_we_do/climate_change/solutions/business_industry/offsetting/gold_standard/index.cfm

¹⁶ "Is the CDM fulfilling its environmental objectives? An evaluation of the CDM and options for improvement" a report for WWF by the Öko-Institut, November 2007.

fired power stations. Furthermore, the sustainable development aim of the CDM is frequently overlooked.

Concerns over the quality of credits and the impact that significant access could have on investment decisions - and hence the emissions trajectory - means that the Bill must ensure that a significant amount of the effort to meet emission reduction targets takes place within Scotland. As such, we note with interest the amendment to the UK Climate Change Bill that was recently passed in the House of Lords, which stated that the Secretary of State must ensure that at least 70% of the effort undertaken to achieve compliance with reduction commitments must be achieved by domestic emissions reductions. The term effort refers to the difference between emissions in one year and those allowed in the following year. The Scottish Climate Change Bill should provide enabling powers so the cap on the use of international credits can be varied following the advice of the Scottish Climate Change Commission.

The Scottish Government's current position of not proposing to set a statutory limit on the amount of international credits is not in line with the necessary emphasis on driving down the emissions in developed countries and showing the important leadership required to make this global shift to a low carbon future. Driving down emissions within Scotland will improve efficiencies, generate investment, jobs and economic opportunities. The purchasing of credits on the other hand will simply establish a financial flow out of our economy.

3.7 Should the Bill allow the level of the 2050 target to be changed through secondary legislation? If so, should this only be allowed on the basis of independent, expert advice, to reflect international developments or unforeseen consequences of the Bill? Should any changes to the target be limited to an increase in the target?

Any such change should only be based on independent, expert advice grounded in the latest scientific research and provided by the Scottish Climate Change Commission. The revision of the target should only allow for an increase in the percentage reduction and only come forward as an affirmative instrument, be subject to consultation, and approved by Scottish Parliament.

*The following four questions are focused on the emissions trajectory and the supporting framework in place to ensure the appropriate reductions pathway is followed. **WWF Scotland only supports the use of emissions budgets when in addition to statutory targets requiring annual reductions of at least 3% in Scotland's GHG emissions.** The use of budgets over and above the minimum 3% reduction provides flexibility in implementation while ensuring the minimum reduction is achieved.*

3.8 What factors should be taken into account when setting the level of budgets?

Budgets should be defined by the best available scientific advice as to what the rate of reduction should be and be guided by a cumulative budget. We know that we need to make significant reductions in the immediate term and this should be reflected in the budgets. The budgets must not lose sight of the aim of making a fair and equitable contribution to preventing dangerous climate change.

3.9 How long should interim budget periods be?

In order for the Climate Change Bill to drive the necessary reductions it must provide a clear framework for responsibility. The first and most important step to achieving this is to ensure accountability rests with the Government in power, so budget periods should be shorter than a single parliamentary term, or alternatively start with the new Government after each election and be aligned with the parliamentary term. Interim budgets should not be longer than four years.

3.10 How many years in advance should emissions budget periods be set in order to provide sufficient time to develop infrastructure?

If budgets are set in addition to annual statutory targets there will already be a clear forecast of required emissions reduction that should guide investment. Budgets set in addition to this annual reduction timetable could be set approximately twelve years in advance. Publishing budgets must also be seen alongside the publication of an Emissions Reduction Plan that must follow the Bill to provide the policy direction for delivering emissions reductions.

3.11 What should be the limit (in terms of absolute quantity or as a percentage of the budget period) on the amount of emissions which the Government can borrow from a following budget period?

Borrowing should be approached with caution and not form the basis of delivering the targets. It would significantly undermine both the moral imperative for the Bill and be logically inconsistent to allow any borrowing from future years without having previously banked 'additional' emissions reductions.

Borrowing of no more than 1% should occur between budgets and can only happen following a period of banking the same or more than the amount borrowed. This will ensure there is a significant incentive for early and substantial emission reductions and we never put ourselves in a position of going into overdraft.

The climate change we are witnessing today and is forecast to occur in coming decades is the product of unsustainable consumption and production. Since the industrial revolution, we have borrowed excessively from future generations, we have repeatedly postponed action for 'tomorrow' and now; faced with the critical time for opportunity we must not repeat the behaviour of the past and shift action to the future.

3.12. Should the Bill include an interim point target? If so, what year (or years) should it be for (2020, 2025, 2030, etc.)? How should the level be chosen?

A statutory annual target of at least a 3% reduction in ghgs would provide an interim target for every year between now and 2050. Following the reduction curve dictated by a 3% reduction path, identifies a 2020 target of at least 35% and 2025 target of at least 45%.

3.13 Should the Scottish Ministers be required to report on any other issues related to climate change in addition to the requirements already set out. If so, what and how often?

Alongside annual reporting on progress towards targets, the Bill should require reporting that allows an assessment of the effectiveness with which emissions are being reduced. The Bill should require the following to be set out in the annual report to Parliament.

a) Consumption based emissions

The 80% target is to be based on Scotland's territorial emissions, all those emissions *produced* within Scotland. However, these are not the total emissions Scotland is responsible for; our *consumption* of goods and resources generates emissions that are not counted under a production-based reporting system. WWF welcomes the fact that the current proposals for the Climate Change Bill include a clear description of our international responsibility to reduce those emissions caused by Scotland, not just those we produce.

Inclusion of a consumption-based reporting requirement within the Scottish Climate Change Bill would strengthen the Bill in the following ways:

Global Responsibility

Climate change is the response to a *global* change in the atmospheric concentration of greenhouse gases. Scotland's shift towards a service-based economy means it is increasingly important that we account for this burden shift of greenhouse gas emissions to other countries.

As the consultation on the proposed Bill says, ‘*Scottish policies should be designed to impact on the global emissions Scotland causes, not just those we produce*’. For instance, a recent study by the Tyndall Centre showed that in 2004 – the most recent year in which comprehensive data is available – net exports from China accounted for 23% of its total CO₂ emissions¹⁷. Distance from source cannot be used to divorce responsibility for emissions.

Policy levers

Both production and consumption-based reporting methods have their strengths in ensuring Scotland is able to target its policy levers to address climate change. Importantly, consumption-based reporting helps to identify the drivers behind changes in the worldwide impact of emissions from Scotland’s consumption patterns. It also allows for a much more subtle understanding of the critical drivers and behaviours behind Scotland’s emissions, breaking down for instance, emissions from travel into private transport, transport services, purchase of vehicles and operation of personal transport.

Visible Indicator

Consumption-based reporting can provide a valuable footprint-based representation of our contribution to climate change. Reducing climate change demands we all play a part in reducing our emissions; consumption-based reporting in terms of Scotland’s footprint provides an effective means of communicating this challenge and our shared responsibility.

Data availability

The data needed to provide a consumption-based report of Scotland’s emissions is available now and is being used to deliver the Scottish Government supported Local Footprints Project¹⁸. The necessary data is available at both a Scotland and local authority level, allowing for comparisons across the UK. The Local Footprints Project aims to support each of Scotland’s local authorities to make an effective contribution to reducing Scotland’s global environmental impact through the use of footprint analysis. The project recently published a report entitled ‘*Climate for Change*’ (<http://www.scotlandsfootprint.org/pdfs/WWFS-FullReportART.pdf>) that describes the current consumption-based emissions for Scotland’s local authorities and the actions needed in order to address these.

WWF supports the definition of the carbon footprint as given in the consultation paper (Weidmann) and supports the use of the REAP software tool (Resource Energy Analysis Programme) for its analysis. The REAP software tool has become one of the most recognised ways to measure the UK and devolved country carbon footprints, as well as the carbon footprint impact of policies and strategies. It is being used by DEFRA, regional governments, and local authorities throughout the UK, and versions of REAP are being developed for other countries. (see www.sei.se/reap).

Consumption emission example: When assessing the complex relationship between food and climate change, it is important to account for consumption emissions across a range of greenhouse gases rather than simply carbon dioxide emissions from direct energy use.

The agriculture sector produces 25% of Scotland’s total greenhouse gas emissions - across a range of individual greenhouse gases. In addition, at least 40% of Scotland’s food is imported - giving rise to emissions outside of Scotland. We must ensure we do not simply displace our emissions by shifting the source of their production.

17 See http://tyndall.webapp1.uea.ac.uk/publications/briefing_notes/bn23.pdf for the Tyndal Centre Briefing

18 See <http://www.sustainable-scotland.net/page.asp?pg=25> for more information about the Footprint project.

b) Forecast emissions

An annual description of anticipated emissions over the coming 12 months would allow for targeted and strategic planning to drive down emissions where most appropriate.

c) Contribution from international credits and the role of ETS

Scottish Climate Change Bill should require reporting on the contribution from international credits and the role of the EU ETS. This will be necessary to ensure we have not exceeded the 30% effort from international credits suggested above.

d) Assessment of risk and impacts

This is important to guide adaptation and ensure the sectors leading the mitigation effort are provided with the necessary support.

e) Assessment of effectiveness

If we are to make confident progress towards our 2050 goal, we must evaluate the effectiveness of our actions and policies. The Local Footprints Project (www.localfootprints.org) provides an example of how such assessment is being carried out right now in Scotland. The Local Footprints Project (www.localfootprints.org) provides an example of how such assessment is being carried out right now in Scotland. We must measure the effectiveness of policies in terms of their current and future impact on emissions reductions. The Local Footprints project is working with local authorities throughout Scotland to inform policies on planning, transport and energy¹⁹

f) Public sector contribution

It is important that in addition to placing a duty on the public sector to reduce emissions, the Bill requires the regular reporting of emission reductions against the targets set for the public sector. Responsibility for providing this report must rest with the Chief Executive Officer for each public body.

g) Spending review

The Climate Change Bill should require the greenhouse gas emission implications of the commitments within a spending review programme to be set out. This builds on the existing commitment to introduce a carbon accounting tool and links it to the Climate Change Bill, the carbon accounting tool must show that the intended budget spend is within the reduction target for that period.

h) NPF/large scale infrastructure implications

The Climate Change Bill should require the publication of the National Planning Framework to be accompanied by an account of the climate change implications arising from the infrastructure commitments.

i) Progress on Emissions Reduction Plan

Progress on commitments set out in the Emissions Reduction Plan should be reported on. This report should include a corrective plan of action where the Scottish Government has failed to meet the reductions required by the Emissions Reduction Plan.

3.14 Is a process of Parliamentary scrutiny the appropriate way of holding the Scottish Government to account if targets or budgets are not met?

The Scottish Parliament will have the primary role in holding government to account on delivering the requirements of the Bill. Parliament should have support and advice from the Scottish Climate Change Commission to assist it in this role and be able to employ effective sanctions upon

¹⁹ Other examples include the Welsh Assembly Government research on the policies required to reduce its Ecological Footprint by 10% by 2020 and the South East Regional Development Agency is testing policies against its commitment to reduce footprint – this could all go in a footnote with necessary links

Government to ensure there is a real incentive to reduce emissions. A robust process of scrutiny and sanction needs to be put in place to give confidence that targets will be achieved and ensure failure to deliver the necessary reductions are corrected through restorative action. The following suggestions are possible ways in which the Climate Change Bill could address the issue of scrutiny and sanction.

The following proposals are based on the assumptions that it is preferable to prevent targets being breached, than to rectify a breach afterwards; but that if a breach occurs, rectifying any emissions excess should be the aim of any sanction, in preference to imposing any form of punishment. In other words, we prefer the idea of 'restorative justice' to one of 'punitive justice'.

- An annual Ministerial statement should be made to the Scottish Parliament on presentation of the annual report on progress towards targets. As climate change cuts across government, this should be delivered by the First Minister.
- As with the UK Climate Change Bill, in the event of a failure to meet a target or budget as set out in the Emissions Reduction Plan, the responsible Minister must come forward with new policies designed to compensate for any shortfall, regardless of its cause.
- The Scottish Climate Change Commission should present an independent assessment to Parliament on the current science, advice and whether delivery of the targets is in line with or needs to be adjusted in light of international science.
- The Scottish Government should consider the development of a financial mechanism to incentivise reductions. This is potentially a complex area and is the subject of research by Stop Climate Chaos members. However, the establishment of a 'restorative action fund' paid into by Government departments and other publicly-funded bodies that fail to meet their Emissions Reduction Plan commitments could deliver both a powerful incentive and a method of ensuring emissions are delivered in the most cost-effective way.

3.15 What should be the primary source of advice to the Scottish Government for setting emissions targets or budgets and why? Options include: the proposed UK Committee on Climate Change, a new Scottish Committee on Climate Change, an existing public body in Scotland, or the Scottish Government itself.

The Climate Change Bill should require the establishment of a Scottish Climate Change Commission. This Commission should be enabled to provide the advice needed for the effective implementation of the bill and to monitor the steps taken by the Scottish Government and the reduction in emissions it achieves.

A Scottish Climate Change Commission is essential if the Scottish Government is to have access to advice that is informed by the policies and powers that define what is possible in Scotland. Within the UK, Scotland's devolved parliament, unique legal system, particular policy issues, (such as the huge potential for renewable energy or the implications of a rural population) ensure that the best advice and support can only be provided by a body based in Scotland. A Scottish Climate Change Commission will ensure the necessary proximity to Government to allow for effective scrutiny, a task that would be considerably more challenging for a UK body.

In comparison, the newly established UK Climate Change Committee would be required to provide advice to two Governments, on two Climate Change Bills, each with different targets and powers and operating under different laws. The UK Climate Change Committee has already indicated that it could not currently provide high levels of policy research and advice support to a Scottish Climate Change Bill and while Scotland should work with this Committee, it should not be the sole source of advice for distinctive Scottish legislation and context.

A Scottish Climate Change Commission could be made up from the many relevant high level experts in Scotland, but more over, the membership does not have to be sourced entirely from within Scotland. As potential international leaders on climate change, Scotland should be able to

attract members from the international climate change community. The Scottish Government has recently established a number of expert advisory groups whose membership has been drawn from an international pool.

The Scottish Climate Change Commission could be modelled in part on other Scottish Commissions like that for Information, and be an organisation that is independent of Government, established by statute, with the Commissioner nominated by Parliament and sitting on the UK Committee. A Scottish Climate Change Commission could be supported by existing public bodies, such as SEPA and the Sustainable Development Commission, in the provision of advice and monitoring.

The Climate Change Bill should therefore:

- Establish a Scottish Climate Change Commission with duties to advise ministers with regard to both consumption and production-based emissions on:
 - the current scientific understanding of targets (including those for sectors), carbon budgeting, policy options, reporting standards, trading and borrowing.
 - Advise on the proportion of emissions reductions that can be achieved outside Scotland (i.e. through trading).
- Require that the Scottish Climate Change Commission will include and address environmental and social expertise to ensure that any decisions deliver Climate change reductions in a sustainable manner that protects people and the environment at home and abroad.
- Require appointments to the Scottish Climate Change body to be approved by the Scottish Parliament.

3.16 If it were to be an existing Scottish public body, which public body is most suited to carrying out this task and why?

WWF supports the establishment of a new Scottish Climate Change Commission and does not currently recognise an existing public body as being appropriate for this role. An existing public body would have to be equipped with the necessary skills, expertise, and resources in order to be able to perform this important role adequately.

3.17 Which organisation should be tasked with monitoring the progress of the Scottish Government on reducing emissions and why? Options include: the proposed UK Committee on Climate Change, a new Scottish Committee on Climate Change, an existing public body in Scotland, or the Scottish Government itself?

As set out above, the Scottish Climate Change, supported where appropriate by existing public bodies, such as SEPA and the SDC, should monitor the implementation of the Scottish Climate Change Bill.

3.18 If it were to be an existing Scottish public body, which public body is most suited to carrying out this task and why?

WWF supports the establishment of a new Scottish Climate Change Commission and does not currently recognise an existing public body as being appropriate for this role. An existing public body would have to be equipped with the necessary skill, expertise, and resources in order to be able to perform this important role adequately.

3.19 Should additional independent mechanisms for scrutinising the effectiveness of the Scottish Government's policies in reducing emissions be created by the Bill (in addition to any scrutiny already provided by the Scottish Parliament)?

The Climate Change Bill should ensure the independent Scottish Climate Change Commission has the necessary powers for providing advice, scrutiny and reporting to ensure the Bill is fully implemented. The Bill should allow for any such mechanisms to be provided in the future if the evidence of implementing the Bill suggests they would be necessary.

3.20 If so, which organisation is best placed to carry out this function and why? Options include a new Scottish Committee on Climate Change or an existing public body in Scotland.

The Climate Change Bill should ensure the independent Scottish Climate Change Commission has the necessary powers for providing advice, scrutiny and reporting to ensure the Bill is fully implemented. The Bill should allow for any such mechanisms to be provided in the future if the evidence of implementing the Bill suggests they would be necessary.

3.21 If it were to be an existing Scottish public body, which public body is most suited to carrying out this task and why?

WWF supports the establishment of a new Scottish Climate Change Commission and does not currently recognise an existing public body as being appropriate for this role. An existing public body would have to be equipped with the necessary skill, expertise, and resources in order to be able to perform this important role adequately.

3.22 Are there any other functions related to climate change, existing or new, which should be carried out at arm's length from the Scottish Government and why?

N/A

Supporting Measures: It is important that all supporting measures needed to deliver the correct emissions reduction should be brought into force as quickly as possible. Wherever possible, this means enabling such measures through this primary legislation as opposed to triggering necessary delay in action that would accompany the secondary legislation process.

3.23 Should the Bill contain enabling powers to introduce a duty on certain parts of the public sector (i.e. local authorities and large public bodies) to take specified actions on climate change or other specified environmental issues? Why?

The Bill should place a duty on the public sector to further the reductions, in a sustainable manner, of emissions so they make a fair contribution to the annual reduction target of at least 3%. It is important that the public sector leads by example, just as it must do, for instance, on equal opportunities; this sector must demonstrate leadership. The Bill should then enable rolling targets to be set for the public sector that reflect the diversity of organisations and potential for reduction. These targets could be set down in a Ministerial Order; this secondary legislation tool ensures they can be reviewed to reflect changes in functions and our improving understanding of climate change. Such targets must cover both their operational activities and those activities they impact on through their functions.

Local authorities could be supported in complying with this duty by amendments to planning legislation. For instance, secondary legislation must set out how planning/regulatory authorities should treat climate change as a material consideration. This is not especially new; the Scottish Government recently described how one of the criteria for identifying a national development under the National Planning Framework must be the extent to which it contributes to tackling climate change.

In addition to introducing this secondary legislation, the Bill could also require Scottish Ministers to set down by order a list of critical activities. The use of a Ministerial Order would ensure this list remained relevant. Planning applications that relate to a critical activity, such as an airport expansion, or increased flight activity would then be able to be called in by the Minister if the planning authority chose to consent planning permission or provide a licence for increased activity. The Minister would then need to provide a justification of need, just as is the case for the NPF if they chose to consent the development.

3.24 What should such a duty (or duties) include?

The duty should include the following requirements (drawn from Scotland's Climate Change Declaration and signed by all of Scotland's local authorities):

- A duty to reduce emissions, in a sustainable manner, from operations and through delivery of its functions in line with national targets.
- A requirement to report on emissions and, in case of local authorities, also area-wide consumption emissions.
- A requirement to produce a plan to reduce emissions in line with national targets. This should include an account of how the spending budget delivers the emissions reduction.
- A requirement to ensure strategies and policies will deliver community-wide consumption-based emissions (carbon footprint) reductions, including engagement with communities.
- Publish an annual statement on implementation of the above requirements.
- Progress against this duty should be audited by Audit Scotland and form part of annual reporting.

One model for local authorities would be to look at South Lanarkshire Council, which is using the following approach:

- Carbon Trust Carbon Management Plan to measure and take action on its operational emissions.
- REAP to look at its community-wide emissions and exploring ways in which the community planning partners can work together to reduce the area emissions.

3.25 Should the Bill contain enabling powers to introduce statutory guidance for certain public sector bodies (i.e. local authorities and large public bodies) on specified climate change or other environmental measures? Why? Are there gaps in any existing guidance?

The bill should require the provision of statutory guidance to support the public sector in its implementation of the duty.

3.26 What should this guidance include?

Guidance should clearly state what must be measured and monitored - this will in turn provide the necessary guidance for selecting tools. Guidance should also ensure consistency of reporting across the sectors within the public sector.

Guidance should build on Scottish Local Authority Climate Change Programme which is developing support materials for implementation of the Scottish Climate Change Declaration.

3.27 Should the Bill contain enabling powers to create a requirement for certain public sector bodies (i.e. local authorities and large public bodies) to make regular reports on specific measures they are taking to tackle climate change (whether mitigation or adaptation) or other environmental issues? Why? What should be included in such reports?

The Bill should require regular reporting to be a condition of compliance with the duty to reduce emissions, as set out under Q24. Reporting is necessary to ensure transparency of action, confidence in reporting, shared learning across the public sector and accountability. Reports should feed in periodically to reporting to Parliament.

3.28 As a potential non-legislative measure, should current Best Value guidance be amended to take specific account of climate change mitigation and adaptation? If so, how should Best Value guidance be amended?

The duty to take action on climate change should be separate from Best Value to give it the prominence and priority it requires. The duty should be audited by Audit Scotland on an annual basis with a report provided to the Scottish Climate Change Commission.

At the same time, guidance on sustainable development and Best Value should be strengthened and clarified to ensure climate change is included as a factor in sustainable development, and links are made to the new duty on climate change.

The Local Government in Scotland Act (2003) attempted to redefine Best Value by including a duty to contribute to sustainable development. The success of this new duty is decidedly mixed:

- 'Contribution to sustainable development' is not easily measured or understood.
- Guidance appeared some time after the legislation and with little government support to implement.
- Audit Scotland had little capacity in this area, and initial audits approached sustainable development cautiously.
- Competing initiatives on efficient government sent conflicting messages as to what Best Value meant.
- Nearly five years since the legislation, there is little change in local authority contribution to sustainable development that can be attributed to this duty.

3.29 Are there any amendments to existing legislation or any enabling powers needed to allow for variable charging (for example by local authorities) to incentivise action or eliminate perverse incentives?

There are areas where changes could be made to allow for variable charging. Local authorities are in a good position to provide targeted incentives (and penalties) to reward sustainable behaviours. Incentives could be introduced in the areas of energy efficiency, public transport and waste reduction. These incentives have often proved very effective in changing behaviour. One such example is provided by the British Gas and Braintree flagship scheme: British Gas worked first with Braintree Council and has extended the scheme to 58 councils to offer council tax rebates to people who install energy efficiency measures.

The Climate Change Bill could also include provisions to enable any future trading system within Scotland, for instance between local authorities.

3.30 Are there any provisions to help Scotland adapt to the impacts of climate change which should be included in the Scottish Climate Change Bill?

The Climate Change Bill should require the production of a Scottish Climate Change Adaptation Strategy. This strategy and the requirement to report on its implementation should be rooted in this primary legislation. To do otherwise would risk undermining the credibility and implementation of what must be an essential complement to the mitigation effort described in the Bill.

3.31 Should provisions within the Environmental Assessment (Scotland) Act 2005, be amended in order to provide clearer links with emissions reduction? If so, how should this be done?

WWF would welcome the amendment of the Environmental Assessment (Scotland) Act 2005 so it was better placed to support the Climate Change Bill. Suggestions of how the Act could be amended include:

1. The Act should be amended to require the collation and presentation of data where the scoping study has identified that the plan/programme or strategy is likely to have a significant impact on climate change grounds. As it stands, the Act currently only requires the presentation of data where it already exists, this has the potential to provide an incomplete assessment of the climate change impacts.
2. The Scottish Climate Change Commission could be listed as a relevant consultee body where a scoping study identifies potentially significant climate change impacts.

3.32 What are the equalities implications of the measures in the proposals for the Scottish Climate Change Bill?

The biggest equality implications raised by the Climate Change Bill is the contribution it will make to intergenerational equity and global equality. If the Bill is to make a full contribution to ensuring we don't leave future generations a world under the grip of dangerous climate change, it must put in place the means for immediate cuts in green house gas emissions of at least 3%. This is equally necessary to ensure Scotland plays its part in addressing the impacts of climate change that are being felt hardest now by those that have done the least to cause them and have very limited resources to tackle them. It is worth bearing in mind the emissions from Edinburgh Airport are approximately equivalent to those from Malawi (a country over 13.5 million people) and The Gambia (1.5million people) combined. The same is true for Glasgow airport. We have to take responsibility for our unequal contribution to climate change.

Within Scotland, it is important that mitigation and adaptation policies are held against criteria of social and environmental justice. For instance, efforts to reduce emissions or adapt to the impacts of climate change should not contradict the vital work to lift people out of fuel poverty or compound existing examples of environmental injustice. The points below clearly illustrate the work that must be done to address the inequality of fuel poverty.

- In 2004/5, 18.2% of households (419,000) were estimated to be in fuel poverty
- In 2005/6, 23.5% households (543,000) were found to be fuel poor; a statistically significant increase of 5.3% on the 2004/5 figure. Of these 7.5% of households (173,000) were estimated to be in extreme fuel poverty.

Removing people from fuel poverty can work with the effort to reduce emissions, for instance, installation of efficiency measures and insulation can significantly reduce energy demand, lowering both costs and emissions.

3.33 Is there any existing legislation within the competence of the Scottish Parliament (devolved) which needs to be amended so that appropriate action on climate change can be taken by sectors in society?

The Scottish Government should review all existing legislation to ensure it not only takes account of climate change but seeks to make a positive contribution to the goal of an 80% reduction.

Examples of existing legislation which should be introduced or amended include:

- The Scottish Government needs powers to establish a Scottish road user charging scheme for the trunk road network, which requires amendment to the Transport (Scotland) Act 2004.
- Legislation governing landlords should be amended to allow Scottish Ministers to set minimum energy efficiency standards in private rented accommodation.
- Local taxation legislation should be amended to allow local authorities to give local tax or business rates rebates for householders or businesses that take steps to reduce their climate impact.
- Legislation on housing sales and transfers should be amended to allow Ministers to impose housing improvement orders and set minimum energy efficiency standards that must be met before a sale or rental can progress.
- Legislation to enable landfill bans on (and separation of) biodegradable wastes for use in anaerobic digestion.
- Legislation to establish renewable heat obligations
- Legislation to enable the setting of minimum efficiency standards for sectors or practices (such as standards for thermal power generation efficiency which require heat recovery).
- Planning legislation should be amended to clarify the scope for planning obligations on developments designed to reduce the need to travel.
- The Local Government Act should be reviewed to ensure it supports local authorities in

- the implementation of a climate change duty.
- The Climate Change Bill could incorporate the post-HECA provisions to ensure that the interest, expertise and progress accumulated by local authorities under HECA are built on and benefited from.