

INQUIRY INTO CLIMATE CHANGE

Evidence from Sustainable Northern Ireland



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“There is still time to avoid the worst impact of climate change if we take strong action now”

*Sir Nicholas Stern
STERN Review: The Economics of Climate Change HM Treasury, UK
30th October 2006*

SUMMARY POINTS

- There is a large **distortion** between the (early) costs associated with addressing climate change and the (late) benefits in reducing emissions
- The Assembly should categorically state its support for an **international climate change agreement** that limits global warming to no more than 2°C above pre-industrial temperatures.
- The Executive and Assembly should urgently make commitments **to introduce a NI Climate Change Act** with legally binding regional targets to reduce our CO₂ emissions by 80% from 1990 levels by 2050.
- The Executive should set an “intermediate” **target for emissions in 2020**, a series of legally binding **five year “carbon budgets”** and an **annual carbon reduction target** at an average of at least 3% per annum.
- The Committee on Climate Change’s role in Northern Ireland should be enhanced to facilitate the setting of **Northern Ireland-specific budgets and action plans** and monitoring performance against these.
- The Assembly should ensure that **all plans, programmes and policies are assessed to determine their contribution to, or impact on, achieving carbon budgets.**

- ***Each government department*** should investigate the ***opportunities and obstacles to carbon reductions*** within their competency areas and develop and deliver an action plan to ***decrease the emissions in line with targets***.
- Long-term holistic planning, setting specific NI carbon budgets and action plans, and using ***Climate Impact Assessments should provide a framework for adaptation resources***.
- Actions to reduce energy consumption and emission of GHGs need to be ***sector specific, realistic, cost effective, measurable, time bound and proportionate***.
- The new Sustainable Development Strategy Implementation Plan needs to include the ***same targets that have been signed up to by Northern Ireland***.
- Northern Ireland needs ***a Minister*** with joint responsibility ***for Sustainable Development and Climate Change***.

INTRODUCTION

Sustainable Northern Ireland (SNI) is a charity established in 1997 to assist district councils, the community and voluntary sector, central government departments and non-departmental public bodies in understanding and moving towards sustainable development. SNI is a member of the Climate Change Coalition (NI) and Northern Ireland Environment Link (NIEL) and supports the comments they have submitted, but would like to further highlight some of their comments and make additional comments of our own.

SNI welcomes the opportunity to submit evidence to the Environment Committee's inquiry into climate change. Climate change is an integral element of Sustainable Development and was included as a priority area in the previous Sustainable Development Strategy (it is assumed it will also be a key feature of the revised Strategy) along with actions and targets. Climate change must be a fundamental part of any Sustainable Development Plan, and it is important that central government provides the lead that can then be replicated by the entire public sector, as well as being filtered out to influence the private sector through example and via procurement and contract requirements.

Northern Ireland has committed itself to the UK Climate Change Bill but without agreement on specific actions this has the potential to be meaningless. Northern Ireland must agree legally binding targets as well as identifying specific roles and responsibilities for each sector – the NI Assembly, central government, local government, business and communities. ***Northern Ireland needs its own Climate Change Act with legally binding targets***.

SNI's comments are based primarily on the importance of addressing climate change within a long-term sustainability complex and include data from a recent survey (enclosed) undertaken by SNI on behalf of

the Northern Ireland Climate Change Impact Partnership (NICCIP). This survey showed that **92% of public respondents were willing to make changes to their lifestyles to help reduce the impacts of climate change**, especially if they were provided with clear leadership from the NI Assembly.

RESPONSE TO THE TERMS OF REFERENCE

- 1. To identify initial commitments for Northern Ireland that will ensure it plays a fair and proportionate role as part of the UK in meeting climate change targets.**

Global temperature depends not on the current flow of emissions but on the cumulative amount of greenhouse gases (GHGs) in the atmosphere, with emissions taking decades to have their full effect. This means that little can be done to stop the increase in temperatures and the likely impacts of climate change over the next decade. While we need to put in place measures that will allow us to adapt to the inevitable impacts of climate change within this decade, we must also use resources to mitigate against the additional long-term impacts of further GHG emissions for subsequent decades. ***There is a large distortion between the (early) costs associated with addressing climate change and the (late) benefits in reducing emissions¹.***

Northern Ireland will not be able to tackle climate change alone. Given the global nature of climate change, it cannot be tackled by any individual country. At the same time it is important that we play a fair and proportionate role in line with our commitments to the UK Climate Change Act. The Assembly should be committed to playing its part in the international process and work in partnership with the UK government, the other devolved administrations and the Republic of Ireland government in developing and implementing a suitable response. ***The Assembly should categorically state its support for an international climate change agreement that limits global warming to no more than 2°C above pre-industrial temperatures.***

Northern Ireland is a small country with our impact on climate change estimated at approximately 3% of UK GHG emissions. But small size of country or low amount of emissions cannot be an excuse for inaction. Northern Ireland needs to identify its 'share' based on the amount of carbon savings that should be made through its devolved policies to match savings from all developed policies in the UKCCP² on a per capita basis. This approach would provide clarification of Northern Ireland's climate change reduction commitments. It would also provide a method of benchmarking the effectiveness of the Executive's policies at delivering carbon savings against all policies across the UK, ROI and the rest of the world. ***The Executive and Assembly should urgently make commitments to introduce a NI Climate Change Act with legally binding regional targets to reduce our CO₂ emissions by 80% from 1990 levels by 2050.***

¹ Jones et al, 2007, "Climate Change: Economic Impact and Policy Responses," in **World Economic Outlook**, October (Washington: International Monetary Fund), Appendix 1.1

² UK Climate Change Programme – First published in 2000 and subsequently reviewed and updated

The Northern Ireland Sustainable Development Strategy, published in May 2006, committed Northern Ireland to a reduction of 25% in GHG emissions and 30% CO₂ emissions below 1990 levels by 2025. This Strategy is now being rewritten and all targets may be removed from it. But this is not the only place that NI has committed to reducing GHG emissions. The UK has a domestic goal of reducing emissions of carbon dioxide to 20% below 1990 levels by 2010. The UK Climate Change Act has now set legally binding targets for the UK to reduce greenhouse gas emissions by at least 80% by 2050, and CO₂ emissions by at least 26% by 2020, all set against a 1990 baseline. It also requires the Government to set five year carbon budgets, in order to set out a trajectory for emissions reductions to 2050. The first three budgets will cover the periods 2008-12, 2013-17 and 2018-2022, and must be set by 1st June 2009. ***The Executive should set an “intermediate” target for emissions in 2020, a series of legally binding five year “carbon budgets” and an annual carbon reduction target at an average of at least 3% per annum.***

Northern Ireland needs to develop a considered long-term response to climate change. If the UK and NI are to achieve an 80% reduction in carbon emissions by 2050 we will require a significant change in lifestyle and an imaginative approach to ensure these changes are recognised as opportunities rather than perceived as burdens. ***The Committee on Climate Change’s role in Northern Ireland should be enhanced to facilitate the setting of Northern Ireland-specific budgets and action plans and monitoring performance against these.***

A 2008 survey³ of attitudes to climate change conducted by SNI for NICCIP included MLAs. The results of this survey showed that, of the MLAs who responded, two of the incentives they supported were climate change impact assessments for all relevant government policies and Northern Ireland’s participation in the UK Climate Change Bill. ***The Assembly should ensure that all plans, programmes and policies are assessed to determine their contribution to, or impact on, achieving carbon budgets.***

Adaptation is intrinsically linked to mitigation, and it is essential that both be addressed as a matter of urgency ***The Northern Ireland Assembly should put in place cross-departmental policies and measures which will allow people, infrastructure, biodiversity and natural systems to adapt to changing climatic conditions.***

An adaptation strategy to detail how human infrastructure and natural systems will be managed to help them adapt to a range of climate change scenarios should be developed. It is particularly important that climate change impacts are a strong consideration in all decisions relating to nature conservation as new ways of looking at designated sites (e.g. buffer zones, corridors, low intensity networks and landscape scale actions) will be required for wildlife to adapt to changing climatic conditions.

³ 'Climate Change: What will you do' Northern Ireland Climate Change Impacts Partnership (NICCIP) written by Sustainable Northern Ireland, January 2009

2. To consider the necessary actions and a route map for each significant sector in Northern Ireland (energy, transport, agriculture and land use, business, domestic, public sector, etc.).

Climate change will have direct impacts in Northern Ireland. The impacts are already being felt and well thought-out planning for each sector will ensure they are better prepared to both adapt to the consequences of climate change and help to effectively mitigate against the long-term impacts.

Many sectors, in spite of a lack of leadership from Government, have already started taking steps to reduce their energy consumption and environmental footprint. It would be a reasonable comment that many sectors are in fact demonstrating more holistic and long-term strategic thinking than NI's decision makers. If the Executive continues to procrastinate over climate change rather than taking strong and decisive action it is going to weaken its reputation as a serious political body which follows behind the business sector rather than leading. ***Business leaders desire a firm and fair legislative framework to provide the basis for their actions.***

Each sector must be considered separately. A blanket approach to policies and actions is unlikely to have the necessary impact. Action to help reduce climate change will have wider benefits and these need to be factored into a sector-specific route map. For example, micro-generation of energy will have wider self-sufficiency benefits and provide lower energy costs in the long term, as well as ensuring greater security of supply.

Each government department should investigate the opportunities and obstacles to carbon reductions within their competency areas and develop and deliver an action plan to decrease the emissions in line with targets. Some departments will have larger scope for action than others and climate change will have different impacts and consequences for each department.

There may be a level of uncertainty over the exact impacts of climate change on each specific sector but no sector will remain unaffected. For example, in agriculture climate change may in the short-term provide some benefits to northern hemisphere crop production by increasing yields. But this is likely to only be in the first 2°C of climate change and does not take into account that extreme weather conditions (which we are already starting to experience) could reduce or eliminate any grain. This scenario also does not take into account the negative impacts of increased ozone at ground level, increased variability of temperature and precipitation and increases in levels of weeds, pests and diseases.

Improved energy efficiency and rapid deployment of renewable energy are mentioned by the Carbon Trust, Stern, WWF, RSPB, etc as key areas to target early in the decarbonisation plans. Energy efficiency is a mechanism in which all sectors and departments can have a significant

role. Stronger legislation and enforcement from the Assembly in this area will help cut Northern Ireland's CO₂ emissions in line with targets set out in the UK Climate Change Act.

- Approximately 500,000 homes in Northern Ireland have either no loft insulation or have insulation below the recommended levels of 270mm while some 70,000 homes would benefit from cavity wall insulation. ***The Assembly should set annual targets to upgrade the existing housing stock to recommended insulation levels: all new homes should be zero carbon by 2016.***

- ***The Assembly should set a Strategic Energy Framework target of sourcing 15% of all our energy (electricity, transport and heat) from renewable sources by 2020*** (this is the target set for the UK in the EU Climate and Energy Package) will act as the driving forces towards a low carbon society. ***Government will have to provide additional support*** such as:
 - Ensuring that renewables are included in the design requirements for new public buildings;
 - Providing funding packages for smaller scale technologies (such as extending the Environment and Renewable Energy Fund);
 - Requiring energy companies to generate an increased percentage of their energy from renewable sources (by increasing the NIRO; the obligation in the rest of the UK is significantly higher);
 - Guaranteeing good long term prices for units of energy generated from renewable sources to encourage greater uptake of microgeneration schemes (provisions to implement a system of feed-in tariffs for small renewable energy producers by 2010 are included in the UK Energy Bill, which was given Royal Assent on 26 November 2008); and/or,
 - Introducing mandatory micro-generation, including community heating schemes. It is estimated that by 2050 micro-generation could supply 30-40% of the UK's electricity needs.

Transport was responsible for around 30% of Northern Ireland's CO₂ emissions in 2004, highlighting the need for tailored transport solutions in Northern Ireland. At the moment highway measures have been allocated 80% of the transport spend. Only by increasing the share of the budget for other transport modes (walking, cycling and public transport) will significant strides be taken towards ending this reliance. ***The Assembly must increase the budget spent on creating a better public transport infrastructure for Northern Ireland.*** Consideration must be given to a government subsidised scheme to make non car related transport a viable alternative.

The survey SNI undertook regarding public attitudes to climate change³ found that 92% of public respondents felt that people are at least partially responsible for climate change, 87% thought that making changes to their lifestyle will help reduce climate change and **92% of respondents stated they were willing to make changes in order to help reduce climate change.**

This survey demonstrates that **the public are willing to act** now to help reduce climate change and do accept some responsibility. **It is important to remember in any plans developed that public acceptance and action are important prerequisites to successful implementation.** Action must include government departments, non-departmental public bodies and other stakeholders.

3. To identify the costs associated with meeting these obligations and compare them with the costs that will be incurred if they are not achieved.

Taking decisive action on climate change presents a win-win scenario. The economic costs of climate change mitigation are relatively well understood, as are the sectors and industries most likely to be affected by any mitigation policies and measures. By contrast, the economic costs of climate change impacts are not well understood – nor is how these balance with the cost of adaptation. It is essential that the economic assessment of climate change impacts are framed in the context of all the potential costs and benefits associated with climate change and our response to the situation. Once the net benefits are better understood then decisions can be made about the most appropriate combination of mitigation and adaptation measures needed in Northern Ireland. Lack of understanding on all the issues should not be used as an excuse for inaction.

Climate change and measures to respond to it have potentially significant macroeconomic effects. Government should see investment in a low carbon future as a way to stimulate the local economy. For evidence of this the Committee should look at the number of jobs created as a result of the Environment and Renewable Energy Fund (EREF) in NI. The renewable energy sector in Germany supports 170,000 people currently and it is anticipated that a future 130,000 new jobs will be created by 2020 as a result of the German government's support and promotion of renewable energy.

While action to help mitigate against and adapt to climate change may cost 1% of GDP in 2020 the cost of inaction will be much more. The SNIFFER report⁴ on the impacts of climate change on NI identified a number of direct effects, mostly negative, on human health, the economy, natural habitats and water resources. Warmer temperatures will encourage the spread of diseases and insects not currently experienced within NI. These impacts all have associated costs which will be greater than the cost of mitigation and adaptation measures.

⁴ SNIFFER "Implications of climate change for NI: Informing strategy development, 2002

Invest NI's *Maximising Business Opportunities from Sustainable Energy* recommends that Northern Ireland should focus its sustainable energy efforts on four technology areas:

- **Integrated Building Technologies** (as buildings account for around 40% of all energy usage in most countries)
- **Offshore Energy** (including wind, tidal and wave – GB backing for 7000 offshore wind turbines to generate 33GW of power at an estimated cost of £64 billion. ROI has formally committed 2000 MW of offshore wind turbine generation at a cost of €4 billion over the next 5 years. £36 million spent in the UK on Marine Current Turbine research in the last 5 years [50% of the world total]. £50 million spent on wave power research in the UK [90% of the world total])
- **Bioenergy** (including anaerobic digestion [AD] and biofuels from waste and sustainable sources. A DARD report estimates Northern Ireland has an AD potential of 292 MW heat + 146 MW electricity; DOE indicated 747,000 tonnes of biodegradable municipal waste was collected in 2004. A ROI study indicates the potential for 1590 MW heat + 530 MW electricity in the Republic of Ireland)
- **Energy Storage** (to help smooth out fluctuations in demand, intermittent supply, and quality of supply. This developing technology is seen as being a significant factor once renewables exceed 10% of the grid supply). The current annual £21 billion global energy storage market is set to grow by 55% to £33 billion by 2012.

4. To identify a formal cost effective mechanism for assessing the potential impact of new policies on climate change/CO₂ emissions (Akin to Regulatory Impact Assessment/Rural Proofing).

Northern Ireland needs to look to the other devolved administrations for models and assessments that are already being used. It is also important that existing policies are reviewed to identify their impacts on climate change and CO₂ emissions. Assessments should be based on net GHG impact – so those that will help reduce emissions are automatically viewed more favourably than those that will increase them. *Long-term holistic planning, setting specific NI carbon budgets and action plans, and using Climate Impact Assessments should provide a framework for adaptation resources.*

5. To make recommendations for appropriate targets/actions that could be included in the new Northern Ireland Sustainable Development Implementation Plan.

The target for reducing GHG emissions is already set and committed to by NI. We have committed to reducing our GHG emissions by 20% below 1990 levels by 2010⁵, 80% by 2050,

⁵ UK Domestic agreement a result of the Kyoto Protocol

and carbon dioxide emissions by at least 26% by 2020, all set against a 1990 baseline⁶. These are therefore the targets we should maintain and aim for and include in a Northern Ireland Climate Change Act. There is potential for assigning variable and specific targets to different sectors in order to ensure they contribute their fair share (or that this is at least included in determining who should play what part).

Actions to reduce energy consumption and emission of GHGs need to be sector specific, realistic, cost effective, measurable, time bound and proportionate. The new Sustainable Development Strategy Implementation Plan needs to include the same targets that have been signed up to by Northern Ireland. To ensure we deliver an immediate and sustained decline in NI's GHG emissions the Executive should set an 'intermediate' target for emissions in 2020, a series of legally binding five year 'carbon budgets' and an annual carbon reduction target at an average of at least 3% per annum.

The Plan needs to identify how these targets are to be met, who is responsible for measuring compliance and the percentage reductions that can be applied to each sector. The Plan also must have full accountability and scrutiny where non-compliance can have budgetary repercussions for failing departments.

- To make recommendations on a public service agreement for the DoE Climate Change Unit's commitments in the second Programme for Government that will ensure Northern Ireland will meet its climate change obligations.**

The DOE Climate Change Unit, along with NICCIP, needs to develop a detailed analysis of how NI is adding to human induced climate change, including a breakdown of sectors, but also an analysis of different policies, levies, and carbon trading impacts to give a net GHG figure. Every department in the Executive is part of the problem and therefore must be part of the solution. The additional problem we have in NI is that with a power sharing executive there is little co-operation between departments and there is no one individual to hold departments to account for not playing their fair share. ***For NI to have any impact on climate change the Executive must put in place a mandatory reduction target for each of the government departments (for their relevant sector, i.e. agriculture, business, homes, education, health, etc.) which is audited and monitored by the DOE CCU and the Committee for Climate Change and where non-compliance can have an impact on future budget allocations. Monies for each of the departments to undertake carbon reduction activities within their sector must be ring fenced.***

A public service agreement should be drafted for the DOE Climate Change Unit's role to help all government departments develop climate change Strategies that are linked to the agreed reduction targets for that sector. The legal responsibility to deliver targets set in a Northern

⁶ UK Climate Change Act

Ireland Climate Change Act and through the carbon budgets should fall collectively on the Executive. ***Specific responsibilities to deliver targets set in the Climate Change Act and in the carbon budgets should be identified in public service agreements for each Northern Ireland department.***

7. To consider what secondary legislation raising powers within the UK Climate Change Act would contribute to Northern Ireland's commitment to the UK Climate Change Bill.

Northern Ireland should have its own primary legislation in relation to climate change rather than considering what secondary legislation raising powers within the UK Climate Change Act would contribute to NI's commitment. This would better enable the Northern Ireland Assembly to set its own budgets in relation to climate change and include tax raising powers to incentivise all sectors to actively contribute. This will also enable secondary legislation to be introduced to set 5-year carbon budgets and annual carbon targets (3% annual emissions reductions is a minimum) for the region. Secondary legislation under a Northern Ireland Act should be used to impose public sector duties to deliver targets and to set sectoral targets for emissions reductions.

Northern Ireland needs its own Climate Change Act with a legally binding regional target to reduce our CO₂ emissions by 80% from 1990 levels by 2050. The Executive must also set an 'intermediate' target for emissions in 2020, a series of legally binding five year 'carbon budgets' and an annual carbon reduction target at an average of 3% per annum.

8. To express views on if and how the Assembly might conduct more effective scrutiny of climate change responsibilities across all relevant departments.

Sustainable Northern Ireland's experience of Assembly scrutiny committees is that they essentially have limited power to enact change. All power seems to lie with the Minister. Obviously in NI this creates a major problem as the Minister with responsibility for Climate Change does not believe any action to reduce atmospheric GHGs is necessary. In the UK there is a Minister dedicated to climate change. SNI has long called for a dedicated Minister for Sustainable Development. We now believe that ***a Minister with joint responsibility for Sustainable Development and Climate Change would make sense*** as both are cross-cutting inter-related issues for all departments so would require the same level of accountability, scrutiny and power.

Climate change is such a large, complex and pressing issue that it is imperative that when the Committee on Climate Change reports to the Executive and the Assembly that these reports are responded to and acted upon.

9. To produce a report on the findings and recommendations of the inquiry by September 2009.

Sustainable Northern Ireland is concerned that no action on climate change is going to be undertaken before September 2009 and that the length of time it takes to write legislation and implement change may make it too late for NI to play its fair share without large additional costs.

Even before the report is written and made public the Environment Committee must recommend that the Executive and Assembly urgently make commitments to introduce a Northern Ireland Climate Change Act with legally binding regional targets to reduce our CO₂ emissions by 80% from 1990 levels by 2050.

Thank you for giving us the opportunity to submit written evidence. We would be happy to meet the Committee to provide additional oral evidence. We will be following the actions the Environment Committee, the Assembly and the Executive take with great interest.



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