

for Places of Historic Interest or Natural Beauty

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028 9751 2330

Your Ref Our Ref

Date

20/02/2009

Dear Ms McGarel

Inquiry into Climate Change

Please find enclosed two copies of a response from the National Trust to the Committee's *Inquiry on Climate Change*. This is a paper copy of our submission made by email on 20/02/09. Also included is a copy of our summary report on the impacts of climate change on the coast, "Shifting Shores".

We commend the Committee on bringing forward this Inquiry and we wish it well in its deliberations. We hope this submission will make a constructive contribution to this important debate.

We would welcome the opportunity to expand on our written submission by providing oral evidence to the Committee, and/or hosting a fact-finding visit to a relevant National Trust property to see some of our initiatives at first hand.

Yours sincerely

Andrew McDowell
External Affairs Officer



THE NATIONAL TRUST

Northern Ireland Assembly Environment Committee Inquiry into Climate Change

A submission by the National Trust to the Northern Ireland Assembly consultation
February 2009

Summary

- i. The National Trust believes that climate change is a deep and defining challenge. We are committed to tackling its causes and adapting to its impacts in an integrated way, so as to inspire the public and others to act.
- ii. Climate Change will have a serious impact on Northern Ireland, as the National Trust has shown in its work on coastal change. While such impacts should not be overstated, we believe the Committee and others should pay greater attention to adaptation policy alongside the urgency for mitigation. Mitigation and adaptation efforts should be much better integrated.
- iii. On adaptation, more work needs to be done to identify the impact of climate change on natural resources soils, water and biodiversity. Impacts on priority species and habitats need to be better understood as do the roles of new and climate activated invasive species.
- iv. Northern Ireland should play a full part in achieving the UK target of an 80% reduction in greenhouse gases by 2050 (on 1990 levels). This would be best driven by new NI primary legislation, drawing on the advice of the UK's Climate Change Committee and others.
- v. We believe that the protection and restoration of land based carbon stores is an urgent priority for efforts to mitigate climate change in Northern Ireland. The Committee should recommend the Department and others rapidly increase their work in this area, including considering the impact of peatland restoration. Government should drive innovative and more sustainable land-management practices through incentives, regulation and advice.
- vi. An ecosystem approach would be helpful: assessing where ecosystem services (including climate change mitigation) are provided by natural habitats, and putting in place policies to ensure more sustainable land use as a result.
- vii. Changing our food system is a key part of mitigating and adapting to climate change. Food producers need to prepare for a future where less oil and water are available. Government needs to consider how to encourage this shift and start finding alternatives now.
- viii. Planning reform needs to take greater account of climate change: encouraging measures for adaptation and mitigation to be undertaken

- together and promoting much greater re-use of historic buildings to save embodied carbon and promote sustainable settlement.
- ix. High level and cross-cutting leadership should encourage a dramatic increase in the proportion of energy supplied from renewable sources and action on energy efficiency to reduce overall demand. Many of the necessary measures have already been mapped out: they now require political will across government to be implemented.
- x. The changes required for Northern Ireland to meet its obligations present an economic opportunity, as we have proved in our own business.
- xi. The provisions of the UK Climate Act may not provide a strong enough incentive for leadership and compliance on the part of NI Ministers and Departments. NI primary legislation would drive Departmental and sectoral targets and measures. Secondary powers on single use plastic bags should be taken up.

The National Trust in Northern Ireland

- xii. The National Trust is an independent environmental and conservation charity founded in 1895 to preserve places of historic interest and natural beauty permanently for the benefit of the nation. The Trust has over 3.5 million members, including nearly 50,000 members in Northern Ireland.
- xiii. In Northern Ireland we currently own 15 major countryside or coastal estates, over 60 miles of coastline, eight National Nature Reserves, the World Heritage Site at the Giant's Causeway and almost 4,500 hectares of land designated as Areas of Special Scientific Interest (ASSI). We care for nine major historic mansions and houses, five industrial heritage sites open to the public, over 200 listed buildings, 12 scheduled historic monuments, over 150 archaeological sites, most of the villages of Cushendun and Kearney, and two public houses.
- xiv. We are committed to promoting and opening up our properties as spaces which represent and reflect our shared cultural heritage. We accept a shared responsibility for increasing understanding of the environment and helping to motivate people from all sections of the community to enjoy, protect and sustain the natural and built heritage of Northern Ireland. We provide opportunities for both formal and informal learning experiences which are open, accessible and relevant to all.

Climate Change

- xv. As one of the leading champions of our natural and historic environment, the National Trust is working to inspire our visitors, members, staff and others with positive and innovative ways to meet the challenge of climate change.
- xvi. We are monitoring the effects of climate change on the countryside, buildings and historic collections for which we care. We work to adapt where possible to the impacts of climate change and to reduce our

contribution to its causes. We want to ensure that the special places we look after for everyone can continue to be enjoyed by future generations.

xvii. The evidence is clear: climate change is "the defining challenge of our generation". Warming of our climate system is unequivocal. Most of the observed increase in global average temperatures since the mid-20th century is *very likely* due to observed increases in man-made greenhouse gas emissions. Northern Ireland's climate is already changing and we should expect these changes to accelerate over the coming century.

Response to the Inquiry's Aims

On the "implications" of climate change for Northern Ireland

- While there is no longer any doubt that anthropogenic greenhouse gasses are having a critical impact on our climate system as a whole, there remains a degree of uncertainty as to how this impact will play out at a regional scale.
- Scientists have been able give a range of likely scenarios for the impacts of climate change on NI's future average temperatures and precipitation⁵ and on the island's biodiversity⁶. This information will be improved further by the forthcoming UK Climate Impacts Programme family of reports "UKCP09".
- 3. For our part, the National Trust commissioned a major study in 2006 on the implications of climate change for Northern Ireland's coastline (almost a third of which is cared for by the Trust). As well as revealing a worrying lack of public data and government monitoring of our coastline as a whole, our report examined potential impacts on three environmentally and economically important areas. (See box, "Shifting Shores" overleaf.)
- Overall, the evidence shows that several of the implications of climate change for NI directly are serious. All impacts will require timely planning

¹ UN Secretary General, Ban Ki-Moon – as quoted in *UNEP 2008 Annual Report* The United Nations Environment Programme (2008), pg.14

³ Ibid, pg. 3 – emphasis in the original: 'Very likely' indicates a scientific certainty of at least 90%
 ⁴ Preparing for a Changing Climate in Northern Ireland: summary report, Arkell, B., Darch G., and McEntee, P. (eds.) SNIFFER UKCC13A (2007), pg3

⁶ Biodiversity and Climate Change in Ireland, Briefing Paper, Coll, J., Maguire, C. and Sweeney, J.; submitted to Comhar SDC (2008)

² IPCC 2007, Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Millers (eds.)] Cambridge University Press, (2007) pg.5

⁵ See Climate Change Scenarios UKCIP02 (summary maps for NI can be accessed at http://www.ukcip.org.uk/index.php?option=com_content&task=view&id=174&Itemid=9); and http://www.ukcip.org.uk/index.php?option=com_content&task=view&id=174&Itemid=9); and http://www.ukcip.org.uk/index.php?option=com_content&task=view&id=174&Itemid=9); and <a href="http://www.ukcip.org.uk/index.php?option=com_content&task=view&id=174&Itemid=9); and <a href="https://www.ukcip.org.uk/index.php?option=com_content&task=view&id=174&Itemid=9); and <a href="https://www.ukcip.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.php.org.uk/index.p

and adaptation if we are to avoid damage to our society, economy and environment.

Shifting Shores - Living with a Changing Coastline

Shifting Shores draws on detailed research commissioned by the National Trust and undertaken by leading coastal experts from Queen's University and the University of Ulster. The coastal research report, entitled 'Future Coastal Scenarios for Northern Ireland' was undertaken by J.D. Orford, N. Betts, J.A.G. Cooper and B.J. Smith. The research focussed on the Giant's Causeway World Heritage Site, north-east Strangford Lough and Murlough National Nature Reserve. Key findings include:

- The Giant's Causeway is likely to experience increased storminess, with a
 greater area of the Causeway stones washed by waves by 2050, while by
 2100 access to parts of the Causeway could be more difficult, particularly in
 winter.
- At north-east Strangford Lough, sea level rise of up to 25cm is predicted by 2050, and possibly by up to 1 metre by 2100. This would result in significant loss of feeding and nesting grounds for the Lough's birdlife. Increased winter storms would result in sea walls being overtopped more often and undefended areas of coast experiencing greater erosion.
- At Murlough National Nature Reserve it is possible that between 50 and 400 metres of dunes could be eroded away, while tidal and storm flooding could reach one metre higher than present day extremes, with a profound impact on the habitats and species for which the Reserve is designated a Special Area of Conservation and an Area of Special Scientific Interest.

Shifting Shores highlights the importance of long-term planning to adapt effectively to climate change; the need to work with nature rather than against it; the importance of all stakeholders working together; and raising awareness and understanding of the public so that sustainable solutions to the challenges ahead can be reached by consensus. The crucial need for much better coastal data, and mapping of the coastline is also stressed.

On mitigation

- There is an urgent need to reduce greenhouse gas emissions by meeting or exceeding the UK government's target of an 80% reduction in greenhouse gases by 2050 (on 1990 levels).
- 6. The National Trust welcomes the Environment Committee's engagement with the UK Climate Act, and would strongly reaffirm its call to provide for specific NI targets. We believe that these would be most effective if enshrined in NI primary legislation.
- 7. We believe that the protection and restoration of land based carbon stores is an urgent priority for efforts to mitigate climate change in NI. The National Trust is working to understand our main stores and sources of land-based carbon as well as carbon sinks. Other devolved administrations have been working to map the extent of carbon storage and loss in their soils⁷. We would urge the Committee to recommend

⁷ Estimating Carbon in Organic Soils- Sequestration and Emissions (ECOSSE) Scottish Executive and Welsh Assembly Government (2007)

that government in Northern Ireland does the same, building on encouraging research already being undertaken⁸.

- 8. While the focus of the Committee and others on mitigation is both welcome and essential, we believe it is important that adaptation initiatives are given similar priority in any recommendations. The UK Climate Change Act requires NI Departments to bring forward timetabled measures for adaptation⁹, and requires these to be sustainable¹⁰. We would add that it is vital such measures do not contribute to further greenhouse gas emissions. Mitigation initiatives should also maximise efficiency savings by addressing adaptation simultaneously (e.g. when undertaking work to reduce a building's emissions it can also be made more resilient).
- 9. An ecosystem approach to mitigation (and adaptation) would be helpful. This involves assessing and valuing where ecosystem services (including climate change mitigation) are provided by natural habitats, and putting in place policies to ensure more sustainable land use as a result.

On economic implications

- 10. As a significant employer, substantial landowner and one of Northern Ireland's largest tourism businesses, the National Trust has a profound interest in the future health of the economy in Northern Ireland. In this context, we believe that initiatives for climate change adaptation and mitigation should be seen as an economic opportunity and not a threat.
- 11. We would urge the Committee to focus on the potential for job and wealth creation offered by a 'new green deal'— alongside counting the "costs of action and inaction" in mitigation and adaptation.
- 12. The current economic crisis means that increased ambition and resources will be required to help householders and businesses deal with the upfront costs of investing in carbon saving measures. Such measures make clear financial sense in the medium to long term and could be supported by interest free loans, feed in tariffs and other incentives.

On adaptation

13. The National Trust has worked over a number of years to understand and prepare for the impact of climate change on the countryside,

10 UK Climate Change Act 2008 60 (2)

⁸ See for example the recent work of the British Geographical Survey, Rothamsted Institute and AFBI - Airborne radiometric survey data and a DTM as covariates for regional scale mapping of soil organic carbon across Northern Ireland Rawlins, B. G., Marchant B. P., Smyth, D., Scheib, C., Lark, R. M., & Jordan C., European Journal of Soil Science, Vol 60, Issue 1 (Dec 2008)

⁹ UK Climate Change Act 2008 60 (1)

gardens, coastline, buildings and historic collections we look after - so that they can continue to benefit everyone for the long term¹¹.

- 14. As a result we, like others, have had to face difficult choices. Our pioneering work on UK costal change has led to an approach which emphasises the need to take a long term view and work with natural coastal change wherever possible while taking into account the social, economic and environmental impacts of our decisions. It is an approach based on direct experience and one we would urge government and others in NI to adopt.
- 15. Taking full account of future risks in this way and making sure that projects are able to adapt to future climate change need not lead to soulless compromise, as our new visitor facilities at Portstewart Strand demonstrate. Designed to be "de-mountable", they can ultimately be removed and relocated with minimal impact, as and when the coastline migrates at this point.
- 16. There should be integrated planning to adapt for the impacts of climate change on Northern Ireland's natural resources, building on the work of the NI Climate Change Impacts Partnership and others. The National Trust is particularly concerned that preparations are put in place for the changes in surface waters (due to increasing temperatures), increased soil erosion and run off, as well as more frequent storm events, floods and droughts.
- 17. Adaptation measures may need to include water conservation, the naturalisation of aligned rivers and catchment-level management of water resources. On this last point, we look forward to engaging with the Department's River Basin Management Plan process.
- 18. The impacts of climate change on Northern Ireland's plants and animals need special attention: they can not be adapted in the same way as a policy or building can. Specifically, we would ask that the committee recommends the Department and its agencies work to identify impacts of climate change on:

 a. priority species – including the impact on population dynamics and changes in distribution

- b. priority habitats to identify which areas will be physically lost and those that will experience habitat transformation from changing abiotic factors
- c. designated sites impacts on, and areas potentially lost/changed due to sea level rise
- d. new and climate activated invasive species.

¹¹ See for example, Forecast? – Changeable! Some examples of climate change impacts around The National Trust Watson, A. and Jarman, R., The National Trust (2005)

Response to specific points under the Inquiry's Terms of Reference

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.

- 19. The Committee on Climate Change was established by the UK Climate Change Act to advise how the UK can meet its target of an 80% reduction in greenhouse gases by 2050 (on 1990 levels), set interim targets, and scrutinise the UK's progress towards them.
- 20. It is also part of the Committee on Climate Change's remit to recommend how government in Northern Ireland can play its role in meeting UK targets. It recently advised that Northern Ireland could and should reduce its emissions by 2 MtCO2e to be on track for a fair and proportionate contribution¹² to the interim UK target of a *minimum* 34% reduction in greenhouse by 2020. This target already implies greater ambition than the aspiration adopted by the Assembly of a 25% cut by 2025: but it is one that can be achieved at marginal cost if timely and systematic action is taken.
- 21. We believe carbon reductions across NI government and society could be driven more effectively if Northern Ireland had its own binding legislative targets on reducing greenhouse gas emissions: set in parallel with (and certainly not lower than) other parts of the UK.
- 22. There are risks in relying solely on the UK Climate Act to drive NI mitigation efforts. The NI Executive and its Ministers have a lower degree of accountability and visibility to meet targets than is the case for Ministers at a UK level and Ministers in Scotland (which has its own primary legislation).
- 23. Specific leadership from within Northern Ireland on commitments/targets is vital if government, business and society here are to meet the challenge.

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)

- 24. Much of the work on mapping the necessary mitigation actions for different sectors in Northern Ireland has already been done 14, not least by the UK Climate Change Committee. It showed that:
 - Emissions from existing residential and non-residential buildings could be reduced by 0.9 MtCO2e in 2020.

¹² See http://www.theccc.org.uk/news/headline-news/n-irelands-emissions-can-be-reduced-at-manageable-cost-to-economy for a summary

This will increase to 42% by 2020 if international agreement can be reached at the UN

climate talks this December (UN COP15, Copenhagen)

¹⁴ See for example The Carbon Trust's Reducing our carbon footprint: An Initial plan for Northern Ireland – with annexes for each key area, produced in 2005; and the research done by SNIFFER (Scotland and Northern Ireland Forum for Environmental Research) for DoE/NIEA

- Energy-intensive industry may achieve savings of 0.1 MtCO2e in 2020
- Road transport has reduction potential of up to 0.7 MtCO2e in 2020
- d. Emissions from agriculture, land use and forestry and waste management sectors could be reduced by up to 0.5 MtCO2e in 2020.¹⁵

The focus now needs to be implementation, based on the political will to drive it.

- On energy

- 25. The National Trust supports a major increase in renewable energy generation. We emphasise the primary importance of energy saving through energy efficiency and conservation to reduce overall demand. We recently gave detailed proposals in this area while commenting on DETI's Scoping Paper on NI's Strategic Energy Framework (SEF) and would be happy to share these comments on request.
- 26. We welcome the SEF and the recent reviews of the NI Renewables Obligation (NIRO) and Energy Efficiency Levy (NIEEL). We have suggested changes to these to make them more effective as NI's current policy instruments for driving increased energy efficiency and renewable energy development.
- 27. We are also participating in the DETI led Strategic Environmental Assessment (SEA) for off-shore renewables. We would ask the Committee to back our call for government to commence a similar SEA process for the land-based grid upgrades required to support increases in both on-shore and off-shore renewable energy generation ¹⁶. This is necessary so that we can understand landscape and environmental impact in a timely way while rapidly increasing renewable energy generation.
- 28. The National Trust has made reducing our own energy consumption, increasing energy efficiency and switching to renewable sources of energy a key priority across our own work.
- 29. During 2007-8, we worked with support from NIE Energy (funded by the NIEEL) to install 8,855 square metres of insulation in a variety of National Trust buildings throughout Northern Ireland. NIE Energy had previously provided 1,330 low energy light bulbs which have been installed as part of the Trust's National 'Big Switch' project. It is estimated that the total carbon saved as a result of these projects is 956 tonnes (72 tonnes from lighting and 884 tonnes from insulation).

¹⁶ Building on the work of the *All Island Grid Study* - Department of Communications, Energy and Natural Resources/DETI (2008)

¹⁵ Abatement opportunities in Northern Ireland – Extended Ambition Scenario in *Building a low-carbon economy* – *The UK's Contribution to Tackling Climate Change* The UK Committee on Climate Change (2008). See presentation at http://hmccc.s3.amazonaws.com/pdfs/report%20launchpresentation_n-ireland.pdf

- 30. We have established renewable micro-generation projects on some of our buildings on Rathlin and are due to install systems at Murlough National Nature Reserve, Ardress House and Florence Court this year. We are also undertaking a feasibility study for micro-hydro generation at Patterson's Spade Mill.
- 31. We have proved in Northern Ireland and elsewhere in the UK that it is possible to use efficiency measures and renewable energy generation to save money and reduce emissions even in the most environmentally and historically sensitive locations.

- On agriculture and land use

- 32. As mentioned under 'mitigation' above, The National Trust believes that the protection and restoration of land based carbon is an urgent priority for efforts to tackle climate change. Soil is as important a resource as air and water, but the current level of protection for soil is inadequate.
- 33. There is a range of evidence and guidance that suggests which land management practices are best suited to retaining carbon in soil and other land based carbon stores. Thowever, agricultural practice will only change if land managers understand what is required and see a benefit in doing so. The National Trust believes that the reduction of emissions from rural land use should be driven by a combination of regulation, funding incentives and advice.
- 34. Incentives, for example, could be driven through adjustments to agrienvironment schemes, backed by a concerted effort from DARD and others to educate and encourage farmers of the benefits. In the future carbon markets and trading may provide additional funding for this necessary change in culture.
- 35. Peatlands are the single largest carbon reserve in the UK. They store around 3 billion tonnes of carbon, the equivalent of 20 years of UK CO2 emissions¹⁸. Damaged peat soils are believed to be a source of carbon emissions: it is possible that their restoration could contribute to mitigation efforts, but more research is needed. We would ask that the Committee recommends DOE and its agencies explore how this might apply to Northern Ireland as a priority.
- 36. The National Trust will play our part by restoring, creating and conserving carbon banks on our land in soils, peats and woodland.
- 37. Changing our food system is a key part of mitigating and adapting to climate change. The National Trust is facing up to these challenges: accepting that we cannot carry on as before. We are working to make the food we grow and serve in our restaurants more sustainable for

¹⁷ See for example, *Greenhouse Gas Mitigation in Agriculture*, Smith, P. et al in Philosophical Transactions of the Royal Society, B (2007)

¹⁸ Research for the Moors for the Future Partnership see http://www.moorsforthefuture.org.uk/mftf/research/Carbon.htm

people and the environment: supporting and challenging our tenants and suppliers.

38. Food producers need to prepare for a future where less oil and water are available. Our forthcoming report on food will ask government and others in GB and NI to consider what support and incentives can be given to farmers to help them use scarce resources more efficiently. It will urge a greater focus on the water and carbon footprint of the food we eat - to help identify the biggest risks and where we need to start finding alternatives to foods that are most 'thirsty'.

- On business

- 39. As a major business, the National Trust has proved the business case for mitigation and adaptation for climate change across our activities.
- 40. One particular example which we would commend to the Committee is our reuse of historic vernacular buildings. We have brought 15 of these buildings back into use in the past 5 years as holiday cottages and longer term rental properties in Northern Ireland. This has not only saved huge amounts of embodied energy but helped preserve our built heritage at the same time.
- 41. The National Trust believes ongoing planning reform presents an opportunity to strengthen the protection of historic buildings and reduce emissions by putting in place stronger incentives for their re-use. It should also be used to promote more sustainable settlement patterns. We remain deeply concerned about the weakness of planning regulations in Northern Ireland and their tendency to exacerbate greenhouse gas emissions and overall inefficient use of resources.

- On Domestic

- 42. With domestic property accounting for 25% of UK emissions (150MtCO2e), there is a huge potential for mitigation in the domestic sector: both in terms of energy efficiency and switching to less carbonintensive sources of energy. For example, the Energy Saving Trust has shown that with the right policies in place, up to 10 million microgeneration units could be installed by 2020 across the UK- saving up to 10MtCO2e. 19
- 43. Smart metering should be rolled out in Northern Ireland to allow customers to better monitor and reduce their energy use. The National Trust has experimented with the potential of smart metering with our tenants at the Wallington Estate in the north east of England, where we supplied some of our tenants with portable, 'real-time' electricity meters. Along with other measures, smart metering helped participants lower their carbon footprint significantly, and we hope to expand the project.

¹⁹ Emission Impossible? The Energy Saving Trust (2008), pg. 7

- 44. There is strong evidence that encouraging lifestyle change can work to reduce greenhouse gas emissions and significantly combat climate change. The Committee on Climate Change estimates that reducing washing temperatures, turning off unnecessary lights and turning down thermostats by 1°C could save UK consumers £690m per year and significantly reduce 'carbon footprint'.²⁰
- 45. The National Trust strongly backs efforts to educate the public on the part they can play in tackling climate change. We have worked with schools in Northern Ireland to help young people better understand climate change impacts.
- 46. Our key lifestyle campaign for 2009, promoted to millions of visitors, members and supporters across the UK, is 'Food Glorious Food'. This campaign will encourage people to eat local and seasonal produce and 'grow their own' to help fight climate change, support local producers and engage in healthier lifestyles. We are a leading member of a wider coalition (including businesses and NGOs) working to spread these messages as widely as possible in 2009.
- 47. Other devolved governments have acknowledged the fact that they are not always best placed to convince the public to act on climate change: community groups and NGOs may be more successful²¹. Trial initiatives like the joint DOE/Southern Environmental Health Group "Community Eco-Challenge" should be evaluated and refined, then rolled out to a much wider audience.
- 48. As well as driving much needed action on domestic mitigation, The National Trust would like to see government place much greater emphasis on educating and informing the domestic sector about adaptation. We welcome the Rivers Agency/DARD's recent publication of Strategic Flood Maps for Northern Ireland, but would urge government to bring such initiatives together in a more coherent and climate change-centred way.

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

- 49. The National Trust believes that it is best to focus on the positive value to the economy and environment of meeting mitigation and adaptation obligations.
- 50. Over 250,000 people are employed in the renewable energy sector in Germany (249,300 in 2007 a rapid increase on the 160,500 employed in 2004). As many as 1in 4 workers in the USA will be working in renewable energy or energy efficiency industries by 2030 (when

Attitudes to Climate Change and Environmentally Friendly Behaviours in Wales, COI and WAG (2007)

²⁰ See http://www.theccc.org.uk/sectors/buildings/abatement-2 for detail on these abatement opportunities

manufacturing, construction, accounting, and management are taken into account alongside engineering)²².

- 51. A recent Invest NI report focussing on energy highlights the fact that the "...generation of transferable skills and expertise would be the basis of a new economic sector" And Making energy more sustainable in Northern Ireland would not only create new jobs in large-scale renewable energy schemes, but also help re-skill the construction industry in retrofitting for efficiency and micro-renewables: something we would strongly encourage. The Reconnect scheme and the Renewable Energy Installers Academy had a very positive impact in this area. However, there is still a worrying lack of clarity over what should succeed these schemes. We welcome the formation of the Inter-Departmental Working Group on Sustainable Energy, and urge it to address these issues as rapidly as possible.
- 52. Considering the 'costs' of obligations directly, the Stern Review showed it takes \$25 or less to mitigate a tonne of CO2, whereas each tonne of CO2 emitted results in \$85 worth of damage. The Review calculated the net benefits of stabilising CO2 by 2050 to be in the order of \$2.5 trillion and above²⁴.
- 53. Alongside this, we need to consider the substantial opportunity costs for Northern Ireland in continuing to invest in new infrastructure that is not climate change proofed both in terms of mitigation and adaptation. The Committee should strongly recommend a new approach to investment across government, business and society in NI; lest we be left with higher long-term costs and redundant projects. There is a serious lack of over-arching leadership in this area at present.

To identify a formal cost effective mechanism for assessing the potential impact of new policies on climate change / CO 2 emissions. (Akin to Regulatory Impact Assessments/Rural Proofing)

- 54. As outlined above, we believe NI primary legislation could be a more effective driver for climate change policy, with each NI Department mandated to draw up plans for their respective sectors, and legally accountable to the Assembly for implementation.
- 55. In the absence of this, a process akin to Strategic Environmental Assessment could be useful, but needs to be more than a "tickbox" exercise. In Wales, climate change is included in Wales Assembly Government's Policy Integration Tool: a process used to see how any

²² Jobs from Renewable Energy and Energy Efficiency U.S. Environmental and Energy Study Institute (EESI) (2008)

(2006) pgs xvi-xvii

Maximising Business Opportunities from Sustainable Energy: Energy Technology & Service Sector Collaborative Opportunities in Northern Ireland Invest NI (2009) pg. 82

24 Executive Summary in The Stern Review: The Economics of Climate Change HM Treasury

policy meets cross-Government goals. However, it is not universally applied.

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

56. Again, we believe targets/actions could be better driven by a new central commitment enshrined in primary NI legislation - rather than trying to find a home for such a commitment in existing (and frequently fluid) plans and strategies. In such a context, targets and actions in the Sustainable Development and other strategies would become a means to help deliver an over-arching commitment which applies across NI government and society.

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.

- 57. The DOE's Climate Change Unit has and will have a vital role in providing scientific advice and expertise on climate change across government, and this should be reflected in any PSA.
- 58. However, The National Trust believes that what is required for climate change adaptation and mitigation measures is much greater in scope than what one Unit, one Department or one Minister can provide. While it is vital that there is an expert home for climate change science and policy in government, it is not fair or reasonable to expect DOE CCU to lead on this agenda across NI's economy and society. All Ministers and Departments, from OFMDFM outwards, should take responsibility for ensuring NI meets its obligations.

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.

- 59. As outlined above, we have concerns about the robustness of measures short of NI primary legislation for driving local commitment to tackling climate change.
- 60. That said, one secondary power that should be immediately taken up in Northern Ireland would be to introduce charges for single-use plastic carrier bags. ²⁵ The National Trust has unequivocally proved the effectiveness of this measure in our own operations: we introduced charging for plastic bags in May 2008 and saw demand for them drop by 95% in the first 100 days. We previously gave away 1.25 million bags every year.

²⁵ UK Climate Change Act 2008 77 (3)

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

61. The Assembly could conduct more effective scrutiny of Departments' climate change activities by ensuring they are legally bound to report on progress towards targets established under NI primary legislation.

Conclusion

The National Trust commends the Committee on bringing forward this Inquiry and we wish the Committee well in its deliberations. We hope this submission will make a constructive contribution to this important debate. We would welcome the opportunity to expand on our written submission by providing oral evidence to the Committee, and/or hosting a fact-finding visit to a relevant National Trust property to see some of our initiatives at first hand.

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