

Alex McGarel Clerk to CoE Environment Committee Office Room 245 Parliament Buildings Stormont BT4 3XX

26th February 2009

Dear Sirs,

NORTHERN IRELAND ASSEMBLY ENVIRONMENT COMMITTEE INQUIRY INTO CLIMATE CHANGE

We wish to thank the Committee for including our organisation on the list of consultees for this important inquiry into Climate Change. We view Climate Change as the biggest challenge that will impact business, political and social issues over the 21st century. Our business involves providing sustainable solutions to the construction sector although my personal knowledge on this subject goes beyond through a degree directly related.

Climate Change is a misunderstood word. The climate of this planet has changed many times over the history of the earth. We have experienced Ice Ages and Warm Periods along with inter-glacial periods. These cycles in the climate have been analysed by leading world scientists through dendrochronology and ice core samples. From this it has been found that there are three main variables that affect the climate on earth; the eccentricity (orbit shape around sun), obliquity (Axis tilt i.e. 23.5 degrees) and the Axial rotation. Each one of these has a different cycle time frame which means that at certain periods in time when all three variables meet we can have an Ice-Age. In this century we are witnessing some Climate Change due to these Milankovitch Cycles. There is nothing that we as humans or especially in Northern Ireland we can do to prevent these cycles, however the impact of CO2 must be taken into consideration.

Since the Industrial Revolution we have savaged the earth of its natural resources without a thought as to its impact. The burning of oil, coal, gas and nuclear fuels is a fuel that is not replenishing as we use it. It also has emitted large amounts of CO2 into the atmosphere which Scientists have proven to be accelerating the impact of Climate Change from the Milankovitch



Cycles. Therefore it is right that when the Committee look at this Inquiry that they target CO2 to help alleviate the impact of Climate Change.

We are reaching levels of CO2 that is unprecedented in the history of the tree-rings or ice core samples previously mentioned. Therefore we are at a cross roads of uncertainty. We know we cannot stop Climate Change, but we have the power through tough economic, social, political and environmental decisions to alleviate the problems that will derive from the increase in CO2. We hope that some of our comments in the paragraphs below will give some thoughts on the future direction that the DOE can go into alleviating the effects of CO2 increases and prevent Climate Change refugees from Northern Ireland.

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

Northern Ireland Assembly must pass secondary legislation that encompasses the Climate Change Act from the UK and also The Carbon Emissions Reduction Target 2008-2011 paper. It is important to set core goals such as 3% reduction in CO2 pr year to 2050. This should be calculated from all buildings and industries currently through the effective use of Energy Performance Certificates (EPC's – DFP remit). From transport our bus services, trains and airports should be instructed to calculate their CO2 footprint. Calculations can be gathered from all sectors on the CO2 and then a 3% target reduction from each sector set per year. Every year in April the Finance Minister should publish the Green Budget for Northern Ireland detailing how each sector is performing in this target. This could be used as a good unique selling tool to attract global companies to Northern Ireland.

There should be a commitment to rebrand and expand the current Energy and Climate Change Committee at Stormont to include the following:

Stormont Sustainability Committee

- Address NI public on how to be more sustainable
- Set goals and standards for NI departments (link to EU targets and future International targets)
- Advise and scrutinise NIO, Govt Depts, and general public
- Advertise the need and cost effectiveness of reducing CO2



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)

Within Energy it is important that we pursue the use of Renewables and make Northern Ireland a Wold Leader. In Northern Ireland currently 4% of electric comes from Renewables and even less for heat from Renewables. In Sweden the Government has already exceeded its 40% European target of energy from Renewables – currently stands at 44%. The GDP of Sweden has continued to grow and has not cost the 1% GDP that the Stern Review mentions. We must have Invest NI help indigenous firms to promote and manufacture renewable energy technologies. We must see that our main centralised backbone for our electricity generation becomes Renewables, more large scale wind farms and the oil and gas plants changed to Biomass and other forms of non-fossil fuelled power stations.

Our transport network needs to be changed in Belfast and our other cities to electricity. We need a Belfast Rapid Transport network invested in for the future. We need to ensure that our train services and lines connect the surrounding towns of the main urban areas such as they did in years gone by. This will involved new train lines and the re-opening of old ones. These must be high speed trains and not the old smoke bumpy rides of years ago. Let's look at Japan for ideas on this. Translink needs to look at providing smaller buses in the rural areas at more frequent intervals rather than large doubledeckers such as that in Kilkeel with a handful of people on them due to the time to navigate un-passable roads for such large vehicles.

Agriculture needs more innovation. We need to see higher costs on food imports to promote local products being consumed locally. This will reduce the CO2 food miles. Every label coming into Northern Ireland should contain a CO2 rating based on its origin and methods of farming. This allows the consumer to make a choice. Agriculture too has a key place to play in terms of our energy future. There is ground that could be used for Bio fuels such as Willow trees and Eucalyptus trees for Wood Pellet and Wood Chip production. Also other crops as on test at Loughry can provide oil equivalents and generate some export industries. The Report by the DARD Committee touches on most of these. We need to look at Bio-Gas production to pump into our gas network also.

Businesses should be encouraged to develop new products and innovations that can decrease our imports of fossil fuels and materials from long



distances. AN example of this would be our own need for finance to develop Northern Ireland's first Biomass Boiler manufacturer which would decrease imports of other Biomass Boilers, oil and gas. Businesses should also be given tax incentives for using renewable energy for electricity form Airtricity or other such players in that market. The proposed Heat ROCS and Electric ROCS should apply to businesses.

The Public Sector must lead by example, key points below:

Assembly of Northern Ireland Departments

<u>OFMDFM</u>

 Sustainable Development Policy (First Steps – P. Hain May 2006) This document needs to be used to scrutinise and measure against performance – it should be developed in line with the Sustainability Committee in Stormont and also the DFP Minister Green Budge

<u>DARD</u>

- We need to have farm diversification (perhaps grants to biomass production or cottage industries re-use of old derelict mushroom houses for Pellet Production)
- Food needs to move to low mileage. Farm markets, co-ops in towns and education on the old techniques on growing vegetables in your own garden.
- The countryside management strategy needs to be implemented, with support and financial incentives to farmers to stay as our custodians of our countryside. More trees needs to be planted along with the use of the mountains more sustainably through farm diversification.

<u>DCAL</u>

- Waterways & Fisheries (inland) The waterways of Ireland need to be opened up again and used for eco-tourism as around the Shannon. Lough Neagh is perfect for eco-tourism if controlled as well as inland fishing
- Architecture & Built Environment DCAL need to be involved here to guide new architectural historic buildings. It is not sustainable to knock everything down and rebuild these impacts on CO2 wastage.

DE

• Children being educated in Sustainability - This is where it all starts. Sustainability needs to be part of the curriculum and recycling in



schools mandatory though the reasons must be taught if we are to avoid the damages of higher CO2

<u>DEL</u>

• Creating jobs local - One of the key points to sustainability is the creation of local jobs. It goes back to the whole ethos of acting local, thinking global. If we can live and work in the one area we reduce transport costs and improve work-life balances. This saves CO2 and alleviates Climate Change.

<u>Deti</u>

• Energy, Economic - This is a big issue as discussed previously. We need to reduce our energy consumption; Renewables need to be pushed harder into the mainstream

DoE

 Planning, Climate Change, Waste, Water, NIEA, PPS21 - Planning Policy Statement 21 and 18 need to be harmonised – we need aspect (house orientation) and tree cover at centre stage (south facing and window sizing) The waste hierarchy needs looked at in terms of reducing waste at the manufacturing stage to lower CO2 on sites. Water needs to be captured locally and distributed in estates locally – big area and is almost a policy on its own, this too will reduce the CO2 needed to move water through mains pipes across many miles.

<u>DFP</u>

 Building Regulations, Rates, Funding (EU, GB), Construction Building -Regulations need to be more proactive. There is a need to reduce the SAP rating in line with the Code for Sustainable Homes to have the highest energy performing buildings now. Rates are a good way of incentivising people. We should move to a Carbon Rating system asap – EPC's are the database to do this. We must not have the DFP Civil Servants persuading a minister to back down from the mandatory Renewables again as in April 2008. We are now left behind as in the rest of the UK the Planning System adopted Mandatory Renewables and in the Republic of Ireland the Building Regulations did so in July 2008.

DRD



- Public transport network, infrastructure, water & sewage, airports, seaports Public Transport needs increased to include inter-city fast connectors. We need to move our buses to electric as in Sweden. We could even have urban trains running on bio gas from animal waste
- Our water rates need to be introduced but the tax payer needs to know it's to improve our carbon emissions and CO2 so as we do not pay lump fines in later years. Sewage must all be treated before being passed into the system. There is technologies now were sewage can be adequately cleaned to be returned to allotments for organic vegetables. England has a plant operational.

DSD

- NIHE, HA (NIFHA), Warm Homes (Fuel Poverty), Urban Regeneration, Housing, travellers – Cosy Homes grants must allow Renewables to reduce CO2. Housing Associations should be encouraged to get higher Code Levels (CfSH – DEFRA)
- Warm homes must allow Renewables but set targets and a sliding scale for the % improvement in Energy Efficiency i.e. 15% in year 1, 20% in year 2 and 25% in year 3
- NIHE must remove their gas policy, then oil and promote more Renewables (cost effective if it was open tender instead of EGAN form of contract)

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

The costs will be Social, Environmental and Economical if these targets and route maps are not out in place. Therefore it is important that all three are used as cost identifiers. Within a charity that I am a Board Member of, <u>www.8020recycling.org</u> we measure our CO2. This social enterprise is where we need all of the economy to go and the Green Budget.

The Stern Review mentions 20% of world GDP will be the cost if we do not alleviate Climate Change. I beg to differ in that the Social costs to the way of life have not been measured. The amount of Climate Refugees is not taken into the equation. The depletion of Oxygen in the atmosphere has not been accounted for.

There is no cost to high to change our way of life to meet our continued existence.



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

The CO2 Costing Mechanism must take the Social, Economical and Environmental costs. We must look long term in what we procure. An example of failure to take all three costs into consideration is the current Warm Homes Procurement.



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

Please see above responses.

To ensure 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

Please see above under the section about the departments in the Northern Ireland Government and the need for a Green Budget

I hope that this short response has given the Environment Committee some considerations in this difficult inquiry. We remain available to provide any further comments or representations.

Yours faithfully

Myaccer

Mr Connaire McGreevy Director



ANNEX – GOALS AND AIMS

Immediate Term

- 1. Introduce Green Rebates for all houses that have Low-Zero Carbon Technologies (LZC)
- 2. Set-up a Committee (or rebrand and give new remit to existing) on Energy and Climate Change
- 3. Insist that all homes being bought from <u>private developers</u> for social homes meet the DSD commitment to Code Level 3 (Code for Sustainable Homes a Code assessment could be carried out)
- 4. Link PPS 18 & PPS 21 (PPS 14) to Building Regulations in terms of the Planning Service insisting on south facing aspects with large windows and small windows to the north to maximise solar passive gain which will help the SAP and SBEM ratings for buildings (lower Co2 and Energy)
- 5. DSD should remove the "gas where the gas line is and oil if no gas line" to allow the option to tenants for other forms of heating.

Medium Term

- 1. Introduce the Carbon Emissions Reduction Target to Northern Ireland as it has been in the rest of the UK
- 2. Convert all public transport to electricity run vehicles with power sourced from renewable energy
- 3. Match Building Regulations to the Code for Sustainable Homes and maybe even fast-track its implementation rather than the code always being ahead
- 4. Run an allotment programme for all Councils
- 6. Cooperate North South in terms of the two ports of South Down (Warrenpoint) and Louth (Greenore) competing against each other and not acting in the best efficient environmental manner. Same for



the two airports of Northern Ireland in terms of containers and all imports

7. Incentivise farmers for Farm Diversification to the Bio-Fuel sector and also the production of Bio-Gas from Anaerobic Digestion from on-farm effluent

Long Term

- Form an all-Ireland forum for reducing Co2 through cooperation (ecosystems do not stop at international borders)

 a. Geography of Ireland and Climate Change are all inclusive
 b. Marine life of Ireland is all inclusive
 c. We share a sea with the UK – East West axis is also important
- 2. Improve and extend the rail network, including the electrification of lines and a high speed intercity rail network across the island
- 3. Place Northern Ireland in a Carbon Credit position so as to enable the region to trade Carbon Reduction on the EU Emission Trading Scheme up to 2020. This could bring huge revenues to the Regional Assembly for direct investment in NI.
- 4. Attract key international partner businesses to the northern hub of Ireland by offering them the opportunity to be based in a Carbon Neutral and Sustainable Environment helping them promote their image worldwide.
- 5. Re-invent the agricultural and land use of Northern Ireland to promote a more sustainable and economic prosperous industry through the implementation of new micro industries on the land and diversification towards new farming methods, co-ops, new crops and new machines.