



NORTHERN
IRELAND

OVERVIEW

WWF NI 2011 ELECTION MANIFESTO



ONE PLANET NORTHERN IRELAND



3X

If everyone in the world consumed natural resources and generated carbon emissions at the rate we do in Northern Ireland, we'd need three planet Earths – not just one - to support us. WWF strives for what we call a One Planet Future – where people and nature live in harmony, thriving within their fair share of the planet's natural resources.

**TO MAKE THIS
VISION A REALITY, WWF
HELPS INDIVIDUALS, BUSINESSES
AND ORGANISATIONS TO REDUCE THEIR
IMPACT ON THE PLANET, WHILE PRESSING
GOVERNMENTS AND INDUSTRY TO
MAKE THE CHANGES NEEDED FOR
US ALL TO LEAD A ONE PLANET
LIFESTYLE.**

GLOBAL CONTEXT



Geoff Nuttall
Head of WWF
Northern Ireland

The recent downturn in the global economy is a stark reminder of the consequences of living beyond our means. The social impacts of the recession are severe, yet they pale in comparison to the looming ecological credit crunch.

Our livelihoods and indeed our lives depend on the services provided by the Earth's natural systems. We know that we are consuming the resources that underpin those services much too fast – faster than they can be replenished. Just as reckless spending has caused recession, so reckless consumption is depleting the world's natural capital to the point where we are endangering our future prosperity.

The ecological crunch is a global challenge. We have only one planet. Its capacity to support a thriving diversity of species, humans included, is large but fundamentally limited. When human demand on this capacity exceeds what is available – when we surpass ecological limits – we erode the health of the Earth's living systems. WWF's 2010 Living Planet Report, showed a decline of almost 30% between 1970 and 2007 in the health of the 7,953 populations of more than 2,500 species measured⁽¹⁾. Yet our demands continue to escalate. Our global footprint now exceeds the world's capacity to regenerate by about 44 per cent⁽¹⁾. In 2008, the WWF Living Planet Report reported how, for the first time in recorded history, the Arctic ice cap was surrounded by open water – literally disappearing under the impact of our carbon footprint⁽²⁾.

**THE ECOLOGICAL
CRUNCH IS A GLOBAL
CHALLENGE. WE HAVE
ONLY ONE PLANET.**

If we continue with business as usual, by the early 2030s we will need two planets to keep up with humanity's demand for goods and services. If everyone on the planet lived as we do in Northern Ireland we would already need three planets to support us, such is our over dependence on unsustainable global resources such as imported fossils fuels on which we currently rely for around 99% of our energy needs⁽³⁾, despite our wealth of local renewable energy sources.

This manifesto identifies some key areas where we need to take transformative action in Northern Ireland in our lifestyles, economy and Government to put us on a more sustainable trajectory, and to equip Northern Ireland for the future to meet these global challenges.

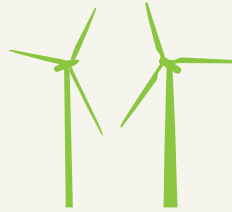
TOP 11 ENVIRONMENTAL COMMITMENTS TO DELIVER FOR 2011

- Introduce a Northern Ireland Climate Change Act within the life of the next Assembly, with a legally binding target to reduce greenhouse gas emissions by at least 40% by 2020 and 80% by 2050.
- Develop a long-term (i.e. 40 year) Energy Strategy which is costed and sets clear mandatory targets to reduce our over-dependence on fossil fuels and increase energy production from renewables, and matches the target in the EU Renewable Energy Directive of having 15% of energy generated from renewable sources by 2020 (thereby creating around 33,000 high value jobs in an industry worth approximately £989 million annually in Northern Ireland⁽⁴⁾).
- Introduce a Northern Ireland Marine Act by 2012 to ensure effective protection and management of Northern Ireland's seas through a locally accountable Northern Ireland Marine Management Organisation; a new system of integrated marine spatial planning and licensing; a new network of Marine Protected Areas (MPAs); and legislation to deliver sustainable fisheries management
- Ensure adequate resources are in place to support the full implementation of the Water Framework Directive through the development and delivery of 26 effective Local River Basin Management Plans which involve and draw on the resources of local stakeholders
- Develop coherent arrangements and adequate plans to manage Northern Ireland's flood risk, working with natural systems and using natural flood management techniques



- Introduce policies and incentives to reduce water (and related) energy consumption and introduce a fair system of universal water metering which does not penalise vulnerable households but provides a clear incentive to reduce water use and wastage
- Adopt Northern Ireland's Ecological Footprint (an internationally recognised measure of the sustainability of our resource use) as a key indicator in the Northern Ireland Sustainable Development Strategy's implementation plan and establish clear targets and plans for the reduction of Northern Ireland's ecological and carbon footprints
- Clearly identify in the next Programme for Government how public expenditure will be directed towards and invested in low-carbon, resource-efficient, local and sustainable aspects of the economy, supporting the delivery of both footprint reduction and economic development targets
- Ensure 50% of transport spending is allocated to public transport and/or sustainable forms of transport.
- Ensure Executive support for the greater use of electric vehicles powered by renewable electricity, and set a Northern Ireland level target that at least 10% of all vehicles and all of the public sector vehicles fleet is electric by 2020.
- Commit to establishing an independent environmental protection agency within three years.

CLIMATE CHANGE AND ENERGY



The current and projected global impacts of climate change have been clearly highlighted in increasingly stark terms in successive reports by the Intergovernmental Panel on Climate Change (IPCC). There is no doubt things are changing even on a local level. According to the Department of Environment's State of Environment (2008) report⁽⁵⁾, for example, "*Climate change is occurring at an increasingly measurable scale*" Air temperature is rising and the number of hot days is increasing; the proportion of rainfall in summer is decreasing, while winters are getting wetter⁽⁶⁾. These changes are expected to accelerate over the coming century. In light of recent flooding problems, this is a worrying scenario.

Our wildlife too is under threat from climate change. A report by the National Botanic Gardens in Ireland⁽⁷⁾ revealed a fifth of Ireland's native plant life is under threat from climate change with 171 species of flora facing possible extinction by 2050, with a further 74 species on the Irish endangered list at risk of being pushed closer to extinction.

The economic arguments for tackling climate change are also very clear. Winter storms, for example, one of key expected impacts of climate change for the UK, are a major economic concern since these are the cause of nearly 70% of all insured losses in Europe, costing an average of over €2 billion in financial losses a year⁽⁸⁾. Projections for the UK from the UK Association of British Insurers suggest that by 2050 the annual cost of weather claims will double to €3.3 billion while an extreme year might cost €20 billion⁽⁹⁾.

Our energy security in Northern Ireland is also threatened by our (over)reliance on imported fossil fuels which provide 99% of our energy needs, whilst we are not fully developing our vast local indigenous renewable energy resources from wind, tidal power and biomass. According to the BP Statistical Review of World Energy

2010 there is only 45.7 years supply of oil left at current rates of consumption⁽¹⁰⁾, and a recent report by Uppsala University⁽¹¹⁾ has concluded that global oil production has already peaked.



“CLIMATE CHANGE IS OCCURRING AT AN INCREASINGLY MEASURABLE SCALE”

Northern Ireland also needs to prepare for and capitalise upon the economic opportunities arising from moving to a low carbon economy. A 2009 HSBC evaluation⁽¹²⁾ of various recent economic stimuli packages from around the world concluded

“The low-carbon economy can also be a job-rich economy at a time of soaring unemployment, particularly through enhancing building efficiency, either via retrofit or new construction, and improving mass transit.”

This point is well illustrated by the example of Germany which, in 2009, had over 300,000 people employed in renewable energy industries (as compared to 12,000 in the UK in 2008) which supplied 16.3% of Germany’s electricity and 10.4% of Germany’s overall energy demands⁽¹³⁾. In order for Northern Ireland to respond effectively to these challenges and opportunities, the next Executive will need to:



- Introduce a Northern Ireland Climate Change Act within the life of the next Assembly, which has a legally binding target to reduce greenhouse gas emissions by at least 40% by 2020 and 80% by 2050.
- Develop a long-term (i.e. 40 year long) Energy Strategy which is costed and sets clear mandatory targets to reduce our over-dependence on fossil fuels and increase energy production from renewables while also reducing our absolute energy demand and allocating clear responsibilities for delivery
- Introduce statutory commitments to match the targets in the EU Renewable Energy Directive of having 15% of energy generated from renewable sources by 2020. In meeting this target, there is the potential to create around 33,000 jobs high value jobs in an industry worth approximately £989 million annually in NI⁽⁴⁾
- Rule out future exploitation of lignite reserves in Northern Ireland

MARINE

Half of Northern Ireland's wildlife, around 4,000 species, lives in the sea, yet less than 4% of it has any form of protection. Even where areas are designated, problems remain, as the unfortunate example of Strangford Lough illustrates. Despite having a number of national and international conservation designations, one of the key features underpinning the ecosystem of the lough, (the horse mussel beds which support over 100 species), was severely damaged. According to the Strangford Lough Ecological Change Investigation (SLECI) report carried out by QUB⁽¹⁴⁾, the cause of this damage was trawling.

Our marine environment is now under increasing pressure as a result of a range of human activities and impacts including pollution, commercial fishing, mineral extraction, and energy production. The current tangle of over 100 laws governing the coast and seas around Northern Ireland creates problems for marine wildlife protection and confusion and expense for sea users.

The UK Marine Act of 2009 and Scottish Marine Act have made important progress, but protecting and managing the marine environment of Northern Ireland urgently requires new Northern Ireland marine legislation, as well as substantial preparation, including significant data gathering and pilot projects involving all stakeholders, to inform the introduction of a new Marine Spatial Planning System and new system of Marine Protected Areas. New legislation is planned for 2012, leaving Northern Ireland three years behind the UK, while the EU Marine Strategy Framework Directive requires all EU Member States to put in place effective marine management arrangements to deliver marine waters with 'good ecological status' (GES) by 2020. A first step in this process, is the requirement by to produce by July 2012 an assessment of the current environmental status of the Member States' marine waters and to establish targets and indicators designed to show whether a Member State is achieving GES.





OUR MARINE ENVIRONMENT IS NOW UNDER INCREASING PRESSURE AS A RESULT OF A RANGE OF HUMAN ACTIVITIES AND IMPACTS INCLUDING POLLUTION, COMMERCIAL FISHING, MINERAL EXTRACTION, AND ENERGY PRODUCTION.

This underlines the urgent need for the following:

- The introduction of a Northern Ireland Marine Act by 2012 to ensure effective protection and management of Northern Ireland's seas through:
 - A locally accountable Northern Ireland Marine Management Organisation
 - A new system of integrated marine spatial planning and licensing of the varied activities that affect the marine environment.
 - The establishment of new network of Marine Protected Areas (MPAs) and within them a suite of Highly Protected Marine Reserves (HPMRs) to protect and promote recovery of marine habitats and species
 - As part of the Act (or through a separate parallel Fisheries Act) legislation to deliver sustainable fisheries management and a sustainable fisheries industry in Northern Ireland, matching and reflecting the changes to fisheries management in the UK Marine Act of 2009 based upon the ecosystem based approach, and implementing the recommendations of the Northern Ireland Review of inshore fisheries 2008
- The immediate development of pilot projects, led by government and involving all marine stakeholders, to inform the design and development of the new marine management arrangements in Northern Ireland to be introduced under the NI Marine Act (for example, a pilot marine spatial planning project, or pilot Marine Protected Area)

FRESHWATER

Our rivers and lakes are extremely valuable as they not only supply our drinking water but also support a thriving diversity of plants and wildlife. Many though, continue to suffer the impacts of pollution from agricultural, domestic and industrial sources, and in 2009 over 70% of our rivers and lakes still failed to meet the 'good ecological status' water quality standard required by the EU by 2015 under the Water Framework Directive. WWF Northern Ireland believes that achieving these improvements will require not just adequate investment by government, but also a clear willingness to involve and draw upon the expertise of local communities. Through WWF's RIPPLE River Basin Management Project in the Ballinderry River catchment around Cookstown, we are demonstrating how this can be done.



The management of Northern Ireland's flood risk is also a pressing issue. An estimated 63,000 homes in Northern Ireland lie within floodplains, with only half of these defended by flood defences⁽¹⁵⁾. According to research by the UK Climate Impacts Partnership⁽¹⁶⁾ (UKCIP) summer precipitation in Northern Ireland could decrease by as much as 50%, with winter precipitation increasing by to 24% and an increased risk of sudden heavy downpours which in turn increases the risk of flooding. There is a pressing need to ensure effective management of these risks including using natural flood management techniques which take into account whole river catchments, taking measures upstream to reduce flood risks and mitigation costs further downstream.

We also need to address the environmental impacts and costs of our water and related energy consumption. Over 6% of UK greenhouse gas emissions are associated with water pumping, treatment and domestic consumption⁽¹⁷⁾ and Northern Ireland Water is the largest single energy consumer in Northern Ireland⁽¹⁸⁾



- Government must ensure that adequate resources are in place to support the full implementation of the Water Framework Directive through development and delivery by 2015 of 26 effective Local River Basin Management Management Plans which involve and draw on the resources of local stakeholders
- Coherent arrangements and adequate plans must be developed to manage Northern Ireland's flood risk, working with natural systems and using natural flood management techniques
- Government should make it an urgent priority to invest in trialling and learning from natural flood management pilots in Northern Ireland, to inform how land management in river catchments can contribute to reducing flood risk and mitigation costs downstream, whilst bringing biodiversity benefits and providing incentives for farmers and landowners to manage land for flood risk
- Government needs to introduce policies and incentives to reduce water (and related) energy consumption and introduce a fair system of universal water metering which does not penalise vulnerable households but provides a clear incentive to reduce water use and wastage

ONE PLANET ECONOMY

Our over-dependence in Northern Ireland upon imported and unsustainable global natural resources such as fossil fuels and food produced through environmentally devastating land use overseas is not sustainable, either environmentally or economically. The costs of these resources are also subject to volatile global forces as demonstrated in 2007 when the price of home heating oil rose 30% in just 6 months, reaching double the price it was in 2002.

We urgently need to consider the sustainability of the resources on which our economy and lifestyles in Northern Ireland are based, not only for environmental reasons but for the sake of our future economic well-being and prospects in the future. Moving to a One Planet Economy based on sustainable, renewable and increasingly locally-derived resources (particularly our food and energy sources) is the best way to secure sustained and indeed increasing economic well-being in the future, turning the challenges of the 21st century into economic opportunities rather than threats.

The race is on, however, to capitalise on these new opportunities in the green economy. According to HSBC's analysis⁽¹²⁾ South Korea has recently allocated just over 80% of its fiscal stimulus to environmental sectors including low emission vehicles and China has allocated over a third (34%) of its economic stimulus package to green measures, including investing in high speed rail to boost its already impressive growth in the wind and solar power sectors and energy efficient lighting. Meanwhile in the US the proportion spent on green economy measures was just 12% and in the UK 7%. Northern Ireland must not squander the significant potential offered by our abundant renewable energy sources from wind, tidal, and biomass sources; leading edge research activity in our Universities; and our capacity to locally manufacture and assemble components for new and existing green technologies.

Also, we must not miss significant opportunities to support our agriculture and fisheries sectors to deliver sustainable and locally produced food, as well as playing a much more significant role in local energy supply through, for example, even more





© ANDREW KERR / WWF-CANON



strongly incentivising local heating and electricity supply from anaerobic digestion of agricultural waste. Similarly, we must not miss the opportunity to provide much needed opportunities for our construction sector by stimulating a major energy retrofit programme to make our current poorly insulated existing housing stock and buildings much more energy efficient, preventing the enormous cost to householders, organisations and the environment from wasted energy.

In order for Northern Ireland to move to a sustainable One Planet Economy a future Northern Ireland Executive should:

- Adopt Northern Ireland's Ecological Footprint (an internationally recognised measure of the sustainability of our resource use) as a key indicator in the Northern Ireland Sustainable Development Strategy's implementation plan
- Set clear targets and produce plans for the reduction of Northern Ireland's ecological and carbon footprint
- Clearly identify in the next Programme for Government how public expenditure will be directed towards and invested in low-carbon, resource-efficient, local and sustainable aspects of the economy, supporting the delivery of both footprint reduction and economic targets

TRANSPORT



Emissions from road transport represent 28.2% of Northern Ireland's total Carbon Dioxide (CO₂) emissions in 2008⁽¹⁹⁾, an increase of 39.5% since 1990⁽¹⁹⁾, second only to energy production (30%). Cars were responsible for 54% of the CO₂ emissions from the road transport sector in 2008 while HGVs contributed 36%. By contrast, road transport represents only 22% of the UK's total CO₂ emissions which grew by only 7% since 1990, so there is clearly a disproportionate problem in Northern Ireland⁽¹⁹⁾. At both a UK level and a Northern Ireland level, around 15% of an individual's ecological footprint is attributable to personal transport⁽²⁰⁾. Clearly we need to change our travel patterns, if we are to achieve a One Planet Future⁽²¹⁾.

The Northern Ireland Investment Strategy says (page 12 and 13) that there will be £195.3 million spent on public transport 2008-11 and £611.8 million spent on roads 2008-11. According to the indicative budgets for the period 2011/12 - 2017/18 a total of £3,095 million will be spent on roads and £725 million on public transport. WWF Northern Ireland views this balance, whereby approximately three quarters of all of the money spent on transport is allocated for roads and approximately one quarter allocated for public transport as, at best, inappropriate as it compounds an existing problem, namely the inadequate provision of alternatives to car use, and is likely to make the achievement of Northern Ireland's target to reduce GHG emissions by 25% by 2025 much more difficult to achieve.

This contrasts with the higher priority given to public transport in the Republic of Ireland which in the 2007-2013 National Development Plan (NDP) pledged just under €13 billion for public transport out of a total of €33 billion on infrastructure. There is an even sharper contrast with the plans announced by the Danish government in December 2008 of a "green traffic initiative" featuring infrastructure investments and transport measures costing DKr150bn (€20bn) over the next decade. According to the Danish plan, about two-thirds of the total will be spent on "renovating, improving and developing the railway network"



with the aim of converting motorists to public transport. High emissions charges, road pricing, and financial incentives for fuel-efficiency are among a raft of additional measures⁽²²⁾. Similar strategic thinking and investment in greater public transport would be welcome in Northern Ireland.

WWF Northern Ireland believes that as well as reducing the total distances travelled by personal transport means, there is a pressing need to make personal transport more efficient and less polluting. One means of doing this is to use alternative, sustainable fuels, including electricity. Any bioenergy sources used in the transport sector must be sustainable. As electric vehicles make use of up to 75% of electricity they take from the grid, they are up to 4 times more efficient than conventional mechanical vehicles where only 18-23% of the energy contained in the fuel is converted into motion and as such electric vehicles could help reduce transport emissions⁽²³⁾. WWF Northern Ireland recommends that at least 50% of future transport budgets be spent on public transport and sustainable transport options. This increased spending needs to be accounted for not only in the next Programme For Government but also the Regional Transportation Strategy (RTS) and the Regional Development Strategy (RDS). With the upcoming review of the RTS and RDS and the continued implementation of the Programme for Government 2009-2012 there is a clear and urgent need for more integrated decision making and co-operation as decisions likely to be made in the coming year will have a significant influence on Northern Ireland's transport system for many years to come.



Given the successful joint bid by DRD and DoE for funding to support the installation of an electric vehicle recharging infrastructure in Northern Ireland, which will also link in with the recharging network in the Republic of Ireland, where the target is to have 10% of the road fleet electrified by 2020, and the huge potential for wind generated electricity, WWF Northern Ireland believes Northern Ireland now should take the opportunity to develop its potential for electric vehicles, for example by setting a Northern Ireland target for 10% of vehicles to be electric by 2020, reflecting the target in the RoI. If, for example, all government vehicles were electric this could make a significant contribution to this target and to making the government estate carbon neutral by 2015.

Hydrogen is another fuel that should be considered as hydrogen powered vehicles emit only water vapour.

We call upon the next Northern Ireland government to:

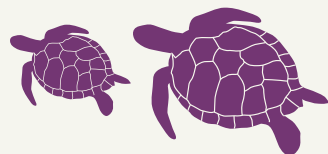
- Ensure 50% of transport spending is allocated to public transport and/or sustainable forms of transport.
- Ensure Executive support for the greater use of electric vehicles, powered by renewable generated electricity, expressed through the setting of Northern Ireland level target that at least 10% of vehicles are electric by 2020.
- Set a clear target for all public sector vehicles fleet to be electric by 2010.



ENVIRONMENTAL GOVERNANCE

The need for an independent Environmental Protection Agency (EPA) in Northern Ireland was recognised 20 years ago by the 1991 Rossi report on Environmental Issues in Northern Ireland (recommendation 26)⁽²⁴⁾. More recently, the review of environmental governance in 2006-2007 led by Professor Tom Burke,⁽²⁵⁾ concluded that responsibility for environmental regulation in Northern Ireland should be transferred to a new independent Environmental Protection Agency (EPA) which should be a non departmental public body (NDPB) sponsored by the Department of the Environment. Though this recommendation was not implemented, when the decision was made to rename the Environment and Heritage Service as the NI Environment Agency, the then Minister made a commitment to review the effectiveness of the Northern Ireland Environment Agency as a protector, regulator and enforcer in 2011.

WWF Northern Ireland believes that the need for an independent EPA is as great as ever, as exemplified by the unfortunate example of Strangford Lough, where, concerns remain over the capacity of the current environmental governance arrangements to ensure compliance with the EU Habitats Directive, leaving Northern Ireland at continued risk of legal action and substantial infraction fines. The commitment to review the Agency by 2011 must be reconfirmed and WWF Northern Ireland believes that all parties should reaffirm their commitment to establishing an independent EPA within three years.



IMPROVEMENTS IN THE PROTECTION AND MANAGEMENT OF PROTECTED AREAS AND THE BROADER LANDSCAPE.

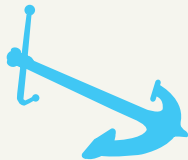


Northern Ireland's protected areas network needs better protection, management and monitoring. The designation schedule for our Areas of Special Scientific Interest (ASSIs) is already running around 15 years behind schedule - Target 2001 for the completion of ASSI designation was not met and according to NIEA it is anticipated the designation process will not be finished until 2016 – around 20 years behind the comparable process in England and Wales, which was finished in the mid 1990s. It is important to point out that designating and maintaining protected areas is not just a cost, as illustrated by The Economics of Ecosystems and Biodiversity research, which also referred to research which found that the public benefits of the European network of protected areas, the so called Natura 2000 network which consists of Special protection Areas (SPAs) and Special Areas of Conservation (SACs) are estimated to be more than seven times greater than the costs, including direct management and opportunity costs⁽²⁶⁾.

The value of ecosystems service in Ireland has recently been estimated at over €2.6 billion per annum⁽²⁷⁾. While no Northern Ireland specific figures are available for the value of ecosystem services in Northern Ireland, the analysis done by the National Trust⁽²⁸⁾ found that economic activities related to the environment of Northern Ireland contribute £573 million to the regional economy and that these environment-related economic activities support 32,570 full time equivalent jobs. Our environment is too precious on many levels to be allowed to degrade any further and we must now invest in a better protected, better managed, more sustainable, healthy environment.

BIBLIOGRAPHY

- (1) WWF Living Planet report 2010
assets.wwf.org.uk/downloads/wwf_lpr2010_lr_1_.pdf
- (2) WWF Living Planet Report 2008 available at
assets.wwf.org.uk/downloads/lpr_2008.pdf
- (3) Executive summary of a report on the assessment of the potential for bioenergy development in Northern Ireland a report to DETI by AEA Technology October 2008 available
www.detini.gov.uk/assessment_on_bioenergy_in_ni_oct_2008.pdf
- (4) NI Renewable Energy Supply Chain 2008, Carbon Trust report by Roger Tym and Partners. Figures also available in the Carbon Trust NI submission to the Environment Committee Inquiry into Climate Change February 2009, available at
www.niassembly.gov.uk/environment/2007mandate/envir_climateChangeSubmissions.htm
- (5) Department of Environment, State of the Environment Report, 2008 available at www.ni-environment.gov.uk/index/about-niea/state_of_the_environment/state_of_the_environment_report.htm
- (6) SNIFFER Preparing for a changing climate in Northern Ireland 2007 available at www.sniffer.org.uk/our-work/climate-change.aspx
- (7) National Botanic Gardens 2007 The potential impact of climate change on native plant diversity in Ireland, available at
www.bgci.org/resources/article/0571
- (8) WWF Stormy Europe (Munich Re 2000: Climate Risk Management Ltd., 2005) available at www.wwf.org.uk/filelibrary/pdf/stormyeuropereport.pdf



- (9) Climate Change and the Financial Sector: An agenda for action
Allianz group and WWF available at
www.wwf.org.uk/filelibrary/pdf/allianz_rep_0605.pdf
- (10) BP Statistical Review of World Energy 2010
www.bp.com/productlanding.do?categoryId=6929&contentId=7044622
- (11) The Peak of the Oil Age – analyzing the world oil production
Reference Scenario in World Energy Outlook 2008 published
Energy Policy Volume 38, Issue 3 March 2010 pages 1398-1414
- (12) HSBC *A Climate for Recovery* Climate Change Global
February 2009 available at [globaldashboard.org/wp-content/
uploads/2009/HSBC_Green_New_Deal.pdf](http://globaldashboard.org/wp-content/uploads/2009/HSBC_Green_New_Deal.pdf)
- (13) www.bmu.de/files/english/pdf/application/pdf/broschuere_ee_zahlen_en_bf.pdf
- (14) Strangford Lough Ecological Change Investigation (SLECI)
Report available at www.ni-environment.gov.uk/oexecsum.pdf
- (15) National Flood Risk Assessment for Northern Ireland
Flood Mapping Strategy (Interim) Executive Summary HR
Wallingford (2007) available at [www.riversagency.ni.gov.uk/
flood-mapping-strategy-executive-summary-4.pdf](http://www.riversagency.ni.gov.uk/flood-mapping-strategy-executive-summary-4.pdf)
- (16) UK CIP 2009 also SNIFFER Preparing for a changing climate
in Northern Ireland 2007, available at [www.sniffer.org.uk/
Webcontrol/Secure/ClientSpecific/ResourceManagement/
UploadedFiles/UKCC13.pdf](http://www.sniffer.org.uk/Webcontrol/Secure/ClientSpecific/ResourceManagement/UploadedFiles/UKCC13.pdf)
- (17) DETI Strategic Energy Framework 2010, available at
www.detini.gov.uk/strategic_energy_framework_sef_2010_.pdf

- (18) Future Water The Government's water strategy for England, DEFRA 2008 available at www.defra.gov.uk/environment/quality/water/strategy/pdf/future-water.pdf
- (19) AEA Greenhouse Gas Inventories for England, Scotland Wales and Northern Ireland 1990-2008 September 2010 available at www.airquality.co.uk/reports/cat07/1009070945_DA_GHGI_report_2008_maintext_Issue_1.pdf
- (20) Counting Consumption WWF 2006
www.wwf.org.uk/filelibrary/pdf/countingconsumption.pdf
- (21) One Planet Mobility WWF, CSCP and C4S available at www.wwf.org.uk/oneplanetmobility
- (22) ENDS Europe 10 December 2008, available at www.endseurope.com/17237
- (23) Gary Kendall Plugged In:The end of the oil age WWF International, available at assets.wwf.org.uk/downloads/plugged_in_report.pdf
- (24) House of Commons Session 1990-91 Environment Committee First Report Environmental Issues in Northern Ireland HC 39
- (25) www.doeni.gov.uk/foundations_for_the_future_-_final_report.pdf
- (26) Jacobs (2004) An Economic Assessment of the costs and benefits of Natura 2000 sites in Scotland Final Report available at www.scotland.gov.uk/Resource/Doc/47251/0014580.pdf
- (27) The Economic and Social Aspects of Biodiversity Benefits and Costs of Biodiversity in Ireland Department of Environment, Heritage and Local Government 2008, available at www.environ.ie/en/Heritage/PublicationsDocuments/FileDownload,17321,en.pdf
- (28) Valuing our Environment:The Economic Impact of the Environment in Northern Ireland, available at www.ni-environment.gov.uk/valuing_our_environment_summary_report.pdf



MAKE A DIFFERENCE TO THE FUTURE OF OUR WORLD

We believe that together we can all make a difference to the future of our world, the preservation of wildlife and ultimately our own lives.



EMAIL US

northernireland@wwf.org.uk

CALL US

028 9033 2869
Fax: 028 9033 3401



OUR OFFICE


Second Floor
7 Exchange Place
Belfast
BT1 2NA

ONLINE

ni.wwf.org.uk

Or tweet us:
[@wwfnireland](https://twitter.com/wwfnireland)

Find us on Facebook

 <p>WWF</p>	<p>Why we are here</p> <p>To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.</p> <p>ni.wwf.org.uk</p>
---	---



John Marks
CarbonNeutral.com
CO₂ emissions reduced to net zero in accordance with The CarbonNeutral Protocol

