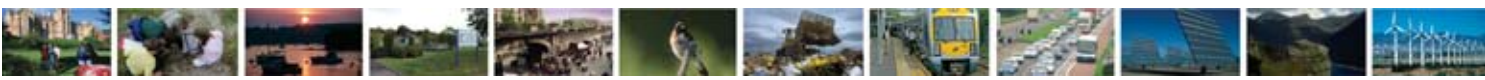




A Sustainable
Development
Strategy
for Northern Ireland

steps towards sustainability
first





Contents

	<i>Page</i>
Foreword	2
Introduction	4
Chapter 1 Sustainable Consumption and Production	24
Chapter 2 Natural Resource Protection and Environmental Enhancement	38
Chapter 3 Sustainable Communities	68
Chapter 4 Climate Change and Energy	91
Chapter 5 Learning and Communication for Sustainable Development	114
Chapter 6 Governance and Sustainable Development	123
Appendix 1 Delivery	133
Appendix 2 Impact Assessments	135
Appendix 3 Strategic Objectives and Targets for Sustainable Development	139
Appendix 4 Acknowledgements	153
Appendix 5 Glossary	157
Appendix 6 Bibliography	164

Foreword



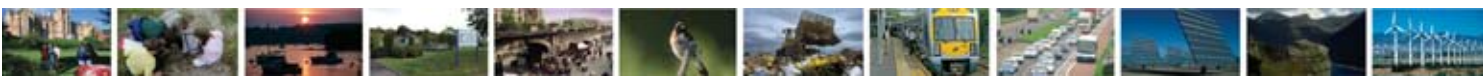
This the first ever Northern Ireland Sustainable Development Strategy, represents our first steps in establishing the focus for tackling the challenges ahead toward our long term objective of securing a better future for the present generation and protecting the future for generations to come. A healthy environment, a thriving economy, prosperity and quality of life are all inextricably linked, and the principles underpinning the strategy recognise the need to ensure that our decision making processes recognise that linkage.

Respecting the limits of the planet's environment, including its resources and biodiversity, is one of the key principles of the Strategy and we will work to encourage everyone – be they farmers, businessmen and women, voluntary groups or individuals - to live, work and enjoy their leisure time in an environmentally sustainable way. Targets are included to improve how we manage our landscape and built heritage, improve our water and air quality as well as protect and enhance the richly diverse array of plants and animals in Northern Ireland.

It is an inescapable truth that we only have one planet. Yet it is clear that we are living well beyond its means to support us. Our current model of development – based as it is on the erosion of our natural resources – is unsustainable and research has highlighted that if everyone in the world lived the way we do in Northern Ireland it would take the resources of three planets to support us. We must achieve a strong and stable economy but in doing so we must, above all, make sure it is a sustainable economy. We must become more resource efficient both in our production and our consumption to reduce the amount of material we use and, just as important, the amount we waste. In this way we will improve business competitiveness, stimulate innovation, create new markets and encourage sustainable product design and processes. I am determined that Government will take a lead on this and we will use the annual public procurement budget of £1.8 billion as an opportunity to lead and galvanise change in other sectors, to influence markets and to achieve a real shift towards sustainable development.

Climate change is the most severe problem we are facing today and it is inextricably linked to our demand for energy derived from fossil fuels such as coal, oil and gas and the emissions of greenhouse gases in its generation. We must therefore look more critically and imaginatively





at how we generate and use energy. Northern Ireland has enormous potential to develop renewable energy sources as alternatives to burning coal, oil or gas – or to deploying nuclear - and it is one of my priorities to foster opportunities and build on the existing successes and abilities of companies in Northern Ireland to develop innovative ideas and new technologies in this field. The Strategy contains very challenging targets for the reduction of our greenhouse gas emissions and Government will make a major contribution to these targets by aiming to make the Government estate carbon neutral by 2015. But climate change is not just a problem for Government. Each of us must take a long hard look at how we use energy - at home, at work, when travelling, and in the products we make and consume so that our everyday activities become more sustainable in the long term and reduce the greenhouse gas emissions.

One of the guiding principles of sustainable development is to ensure a strong, healthy and just society. Often it is people who are most economically and socially disadvantaged who live in the most degraded environments with fewer jobs, unsafe and unattractive streets and whose health and life expectancy suffer as a consequence. The strategy recognises as a priority the need for regeneration and to build sustainable communities with objectives centred around economic well-being, attractive, healthy, high quality environments and greater community engagement and civic leadership. We will therefore strengthen the governance arrangements to ensure that sustainable development lies at the heart of mainstream Government policy making and is a central feature of the new local government arrangements to improve the quality of life for everyone and reduce the inequalities that exist across our society.

The sustainable development agenda represents big challenges and big opportunities for everyone in Northern Ireland and this new Strategy represents a new level of commitment across departments. Government will take a clear lead in delivering this challenging programme but sustainable development cannot be delivered by Government alone. We all – Government, the wider public sector, businesses, voluntary and community organisations, communities and families - need to make more responsible choices if we are to achieve the vision of sustainable development. This is the agenda we must pursue if we are to have a truly shared, prosperous and happy future for our children.

Rt Hon Peter Hain MP
Secretary of State for Northern Ireland

9 May 2006



Introduction

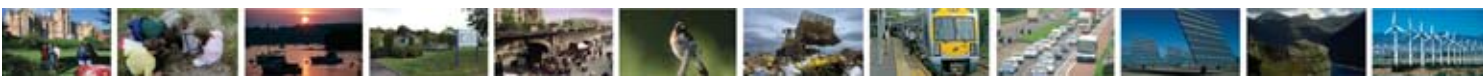
At the start of the 21st century countries across the world are facing up to the global threat of unsustainable development that risks causing damage to such an extent that the planet would no longer have the capability to support human life.

Unsustainable development across the world is overexploiting resources and creating pollution, changing habitats and driving species to extinction. It is creating social problems which are exacerbated by the inequalities in health, wealth, education and employment which accompany it.



This first sustainable development strategy for Northern Ireland, along with the subsequent implementation plan, represents our first steps towards tackling these challenges and presents the opportunity to achieve a better balance between social, environmental and economic progress. It provides us with a framework that allows us to refocus our efforts on building sustainable communities and applying our renowned history of industrious and innovative engineering skills to environmental technologies such as renewable energy or the recycling of waste.





Moving to a sustainable economy will help drive the social progress which reduces deprivation and inequalities and improves the quality of life for everyone whilst protecting the environment and its resources. The emerging environmental technology sector is a growing international market which brings with it the prospect of job creation and wealth and the opportunity for Northern Ireland companies to take their place as market leaders.

We must all play our part in implementing this strategy so that future generations will inherit an environment and its natural resources which have been adequately protected, not one that will cost the earth to put right.

Definition of Sustainable Development

Sustainable development is a concept which, because of its wide ranging and cross-cutting nature, is hard to define and even harder to put into practice.

The most widely known international definition is “Development which meets the needs of the present without compromising the ability of future generations to meet their own needs¹”

In principle this involves safeguarding and using existing resources in a sustainable way to enhance the long-term management of, and investment in, human, social and environmental resources.

Sustainable development is itself sustained within a given society by the skills, knowledge innovation and creativity of its citizens, while the protection of natural resources and the safeguarding of health are essential to the development and prosperity of every society.

A truly sustainable society must operate within a policy framework which supports social and environmental justice in every country, between countries and between generations.

Background

At International level

Sustainable development has its international origins as far back as the World Conservation Strategy in 1980 but it was not until the Earth Summit in Rio in 1992 that Governments around the world committed to the concept.

A key turning point followed at Kyoto in 1997 where over 160 nations met to discuss climate change and signed up to the Kyoto protocol for limiting greenhouse gas emissions.

¹ *Our Common Future (The Brundtland Report) – Report of the 1987 World Commission on Environment and Development.*

Further international action on sustainable development has been framed by the Millennium Development Goals, the Doha Development Agenda of the World Trade Organisation, the Monterrey Consensus on Financing for Development and the Plan of Implementation of the 2002 World Summit on Sustainable Development in Johannesburg.

At European Level

The European Union Sustainable Development strategy (EU SDS)² was published in 2001 with its six key objectives being to tackle climate change; natural resource protection; sustainable transport; ageing population; public health and the global dimension of sustainable development.

In 2005 the EU consulted widely in order to review and further develop the strengths of the 2001 strategy and tackle its weaknesses. The main lessons that emerged to date were that the European strategy needed a stronger focus, a clearer division of responsibilities, wider ownership, broader support and more effective follow-up. The revised strategy will be published later this year.

At UK Level

The first UK sustainable development strategy “A Better Quality of Life³” was published in 1999. However the devolution of power to the Scottish, Welsh and Northern Ireland administrations which shortly followed its launch resulted in the transfer of many of the associated functions.

A review of the UK strategy led to the publication of the UK Framework “One future different paths⁴” in March 2005 which recognised the need for a consistent approach across the UK and provides the framework under which the separate SD strategies of each of the Devolved Administrations will translate its aims and objectives into action based on their different responsibilities, needs and views.

Launched alongside the UK Framework was the UK Government strategy “Securing the future⁵” which encompassed the sustainable development strategy for England along with the non-devolved matters, such as taxation and international issues.

The following purpose which has been agreed by the UK Government and the Devolved Administrations has been adopted as the Framework goal for sustainable development.

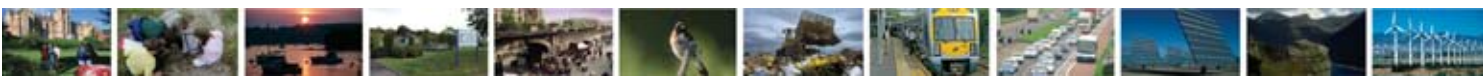
² Further information at: <http://europa.eu.int/comm/environment/eussd/>

³ Further information at: <http://www.sustainable-development.gov.uk/publications/uk-strategy99/index.htm>

⁴ Further information at: <http://www.sustainable-development.gov.uk/publications/uk-strategy/framework-for-sd.htm>

⁵ Further information at: <http://www.sustainable-development.gov.uk/publications/uk-strategy/index.htm>





The goal of sustainable development is to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life, without compromising the quality of life of future generations.

For the UK Government and the Devolved Administrations, that goal will be pursued in an integrated way through a sustainable, innovative and productive economy that delivers high levels of employment; and a just society that promotes social inclusion, sustainable communities and personal wellbeing. This will be done in ways that protect and enhance the physical and natural environment, and use resources and energy as efficiently as possible.

Government must promote a clear understanding of, and commitment to, sustainable development so that all people can contribute to the overall goal through their individual decisions.

Similar objectives will inform all our international endeavours, with the UK actively promoting multilateral and sustainable solutions to today's most pressing environmental, economic and social problems. There is a clear obligation on more prosperous nations both to put their own house in order, and to support other countries in the transition towards a more equitable and sustainable world.

Shortly after devolution in 1999 the Welsh Assembly published its original sustainable development scheme which was followed in 2003 by the 'Starting to Live Differently' consultation on the way forward for sustainable development in Wales. This resulted in the production of an Action Plan on which progress is reported annually⁶.

In April 2002 the Scottish Executive published its strategy 'Meeting the Needs...Priorities, Actions and Targets for sustainable development in Scotland'. This strategy was reviewed in 2005 resulting in the publication of 'Choosing our Future: Scotland's Sustainable Development Strategy'⁷.

⁶ Further information at: <http://www.wales.gov.uk/themessustainabledev/>

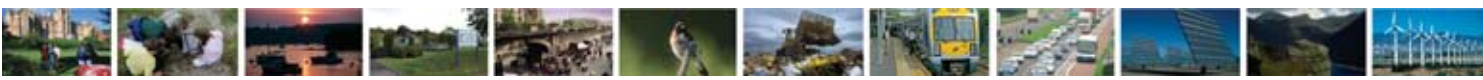
⁷ Further information at: <http://www.scotland.gov.uk/Topics/Environment/SustainableDevelopment>



Working with the Republic of Ireland

Northern Ireland is the only part of the UK which shares a land border with another EU Member State, a situation which can both create difficulties and afford opportunities. We are acutely aware of the need to look at sustainability issues on an All-Island basis and we are working with colleagues in the Republic's Environmental Protection Agency to develop an All-Island ecological footprint. We are also liaising to produce an All-Island energy market development





framework⁸. To benefit from economies of scale whilst pursuing our sustainable development objectives requires a co-ordinated approach with our counterparts in the Republic of Ireland. This is particularly true in the area of environmental protection where issues such as river basin management, air quality, waste and biodiversity do not stop at the border and where there is already a good deal of liaison and co-operation. Similarly we should seek where possible to harmonise fiscal measures to avoid market distortions and unwanted or illegal cross border activities

The Global Challenge

Sustainable development is a global issue with the media reporting almost daily on the consequences of unsustainable living such as extreme poverty, famine, health issues and inequalities, climate change and more severe weather events, the loss of natural resources and biodiversity (including species faced with extinction).

Increasing globalisation means that our escalating consumption and quality of life are achieved at a price and to the detriment of those in developing countries whose labour force and natural resources are compromised to provide us with the products and services we desire at a price which fails to recover the true environmental and social cost of its provision. Inequalities and the gap between the richest and poorest nations and people are becoming much more marked.

The global population is rapidly increasing and with it comes an increasing demand for water, for energy and natural resources. It took almost 100,000 years for the world's population to reach the 1st billion people but only twelve years to move from 5 billion to the current population of 6 billion⁹.

⁸ Further information at: <http://www.detini.gov.uk/cgi-bin/moreutil?utilid=343>

⁹ Source: www.acrr.org/resourcities/waste_resources/waste_did.htm#menu5

Global Facts and Figures - Population, Poverty, Health & Inequality

Population

- Currently 6 billion;
- Expected to rise to 8 billion by 2025;

Poverty

- Half of the world, almost 3 billion people, live on less than \$2 a day¹⁰ ;
- 30,000 children die each day because of poverty; that's almost 11 million children under 5 years of age each year ¹¹ ;

Health

- 40 million people are living with HIV with 4.9 million new infections every year¹²;
- 3.1 million die from AIDS each year ;
- 3,900 children die each day because of a lack of drinking water and sanitation¹³ ;
- Global life expectancy is 65 years compared with the UK average of 78 years;

Inequality

- The Gross Domestic Product (GDP) of the poorest 48 nations (a quarter of the world's countries) is less than the wealth of the world's richest 3 countries combined¹⁴;
- 20% of the population in developed countries consume 86% of the world's goods;
- One in five children do not have access to even the most basic education;
- Almost 65% of HIV sufferers and 77% of those who die from AIDS live in Sub Saharan Africa¹⁵ .

¹⁰ Source: www.globalissues.org

¹¹ Source: <http://www.unicef.org/sowc05/english/sowc05.pdf>

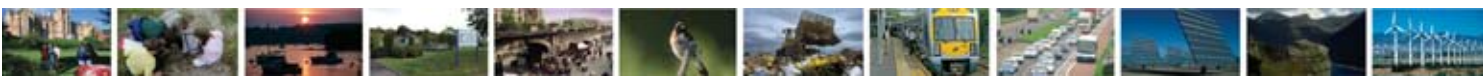
¹² Source: <http://www.globalissues.org/health/aids>

¹³ Source: <http://www.unicef.org/sowc05/english/sowc05.pdf>

¹⁴ Source: www.globalissues.org

¹⁵ Source: <http://www.globalissues.org/health/aids>





UNICEF reports that 30,000 children die each day because of poverty and that they “die quietly in some of the poorest villages on earth, far removed from the scrutiny and the conscience of the world. Being meek and weak in life makes these dying multitudes even more invisible in death.¹⁶” Most of these deaths could have been prevented.

Climate change is one of the most pressing global issues with the potential to cause major, and in some cases, catastrophic changes to the environment in which we live and work. It is not the only major problem being faced by the world. Finite resources such as fossil fuels and even water which we take for granted are creating difficulties now which will be grossly exacerbated in the future. Our lifestyle threatens the very planet that supports us:

Resources and Biodiversity

Water¹⁷

- **People need 50 litres a day for drinking, washing, cooking and sanitation. In 1990 over 1 billion people did not even have that;**
- **By 2025 two-thirds of the population will live in water stressed countries (currently one-third); Water consumption rose six-fold between 1900 and 1995, double the rate of population growth;**

Freshwater and Marine Ecosystems¹⁸

- **Freshwater ecosystems are lost at a rate of 6% per year, marine at 4% per year;**
- **We have fished up to the limits or beyond of two thirds of the marine fisheries and altered the ecology of a vast range of marine species;**

Biodiversity

- **70% of all ecosystem services are in decline¹⁹ ;**
- **Around 100 species are being lost every day²⁰ ; and**
- **571 species are classed as threatened in Europe.**

¹⁷ Source: <http://news.bbc.co.uk/1/hi/sci/tech/3747724.stm>

¹⁸ Source: http://www.acrr.org/resourcities/waste_resources/res_worldwide.htm

¹⁹ Source: <http://countdown2010.net/>

²⁰ Source: <http://www.fern.org/pages/cbd/bioloss.html>

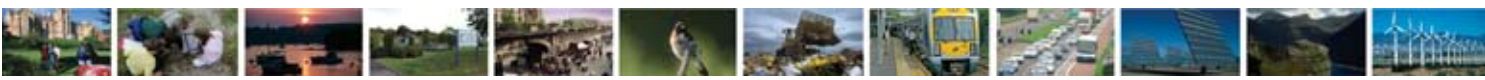


The challenge before us is clear. However in order to develop sustainable global solutions we require a co-ordinated approach on a global level. This is necessary to ensure that we effectively tackle the numerous issues that our unsustainable lifestyles have produced, most markedly experienced by the developing world.

To fully embrace sustainable development requires us to look at the broad picture and assess the environmental, economic and social impacts (both direct and indirect) of what we are doing.

As many of our raw materials and finished products come from global markets it is hard to make the connection between what we consume and the negative impacts in other countries. Not many of us associate the growing of cotton as something which has the capacity to create an ecological catastrophe but the example below shows the knock on effect of demand for cotton in the western world.





The Aral Sea²¹

50 years ago, Muynak was a prosperous fishing port on the edge of Uzbekistan's Aral Sea.

Today, Muynak is 70km away from the water. Its 3000 fishermen now number 250, catching 4 species rather than 2 dozen.

Pollution has caused human health problems such as cancers, kidney & liver diseases, typhoid and hepatitis.

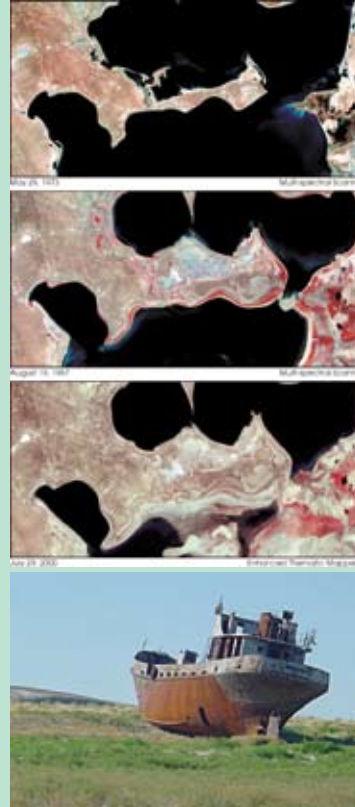
The Aral, once the world's fourth biggest inland lake is now the tenth, it has halved in depth and lost 90% of its volume in 40 years. Latest estimates suggest that the Aral Sea is receding so rapidly it could vanish within the next 15 years.

The reason – cotton. The sea has been drained by a poorly managed irrigation system that supplies water to cotton crops, its two major feeder rivers diverted to irrigate export cotton.

So the Aral Sea has become one of the world's gravest ecological catastrophes but it's more than that - above all, it's a human catastrophe.

Consequences of shrinkage:

- Aral has moved 100-150km away from the original shore
- Fishery - 44,000 tonnes per year has totally collapsed
- 42,000 sq km of new salty desert emerged since 1966
- Diseases - cholera, typhus, gastritis, blood cancer
- Highest child mortality rate in the former USSR



²¹Source: <http://news.bbc.co.uk/1/hi/sci/tech/3846843.stm>



From Global to Local - The Challenge for Northern Ireland

For many people the case for sustainable development is fully accepted. There is now widespread recognition that our current model of development – based as it is on the erosion of our natural resources and ecosystems – is untenable. How to ensure prosperity without such destruction is the great challenge faced by government, business and society as a whole.

Ecological footprinting provides an indication of our environmental sustainability by assessing the demand on the earth's natural resources. The Living Planet Report²², produced by the World Wildlife Fund (WWF), shows that since the mid 1970's we have globally been exceeding the earth's available capacity. In effect, the footprint is the total area of land and sea required to produce all the crops, meat, seafood, wood and fibres that a country uses, as well as the land to provide its energy resources, accommodate its waste and provide space for its infrastructure.

In Northern Ireland itself the extent of our unsustainable lifestyle has been highlighted by the recent Northern Limits Report²³ which provided an estimate of our Ecological Footprint. At over 5.6 global hectares per person we have a slightly higher footprint than anywhere else in the UK, principally as a result of our over reliance on imported oil and coal for energy, imported food and food processing on transport and our reliance on the private car and our poor waste management and reliance on land fill.

However, when we look at this in global terms, a fair share of the earth's productive capacity would represent 1.8 global hectares per person. We are therefore trying to live a three planet lifestyle within only one planet's finite resources. Clearly this model of development and consumption is unsustainable.

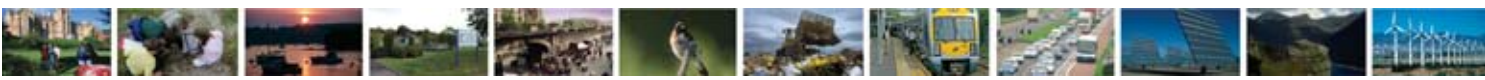
A joined up approach is needed to tackle this challenge and the launch of the UK Framework will act as an umbrella under which all parts of the UK can focus attention on the key areas for action for the UK as a whole but in a manner reflecting their own responsibilities, views and priorities.

In this way sustainable development has the potential to be a very powerful mechanism for delivering more coherent, more joined up government. But we need to ensure that this joined up approach delivers policy coherence that is integrated horizontally across government as well as vertically through government

22 Further information on The Living Planet Report at: http://www.panda.org/news_facts/publications/key_publications/living_planet_report/index.cfm

23 Further information on The Northern Limits report at: <http://www.northern-limits.com/>





Sustainable development is not only a challenge for Government. We want to encourage not just businesses but everyone in Northern Ireland to look more critically and imaginatively at production processes and the resources they consume. Considerable cost savings can be made through energy and waste efficiency.

Science and technology will be key to unlocking the opportunities this presents and exploiting the many synergies that exist between innovation for quality and performance and innovation to optimise energy and resource use and waste minimisation.

Through sustainable development our society can create a vital economy that uses radically less material and energy and promotes the growth of valuable social capital. This must be what we strive to achieve.

What is required for a sustainable society?

A sustainable society must be instilled with democratic values. Its citizens must share a sense of effective participation in the decision-making process. They must feel they have a say in their society's development and the skills, knowledge and ability to assume responsibility for that development.

A sustainable society is one which is prepared to invest over the long term in its two key resources: people and the environment. It must take account of what the environment and the health of its citizens can tolerate, and be designed accordingly.



A sustainable society must create conditions that are conducive to good health on equal terms for its entire population and its population must enjoy the same wider opportunities irrespective of gender, socio-economic class or ethnic/cultural background.

A sustainable society is distinguished by a system of governance that focuses on mainstreaming and balancing social, economic and environmental progress ensuring sound management and efficient use of its natural resources. Major environmental problems are solved by reducing the impact on the environment to levels that are sustainable in the long term.

A sustainable society will encourage sustainable economic growth and have a business sector that is both thriving and competitive. Its welfare systems will be established on an equitable basis and can readily be adapted to demographic changes.

Vision of a sustainable Northern Ireland

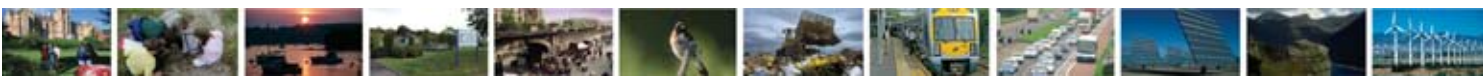
Now imagine a Northern Ireland which had these essential requirements, where there is full employment, economic stability, social justice, and a cohesive cooperative society. The sense of social well being created by these conditions would be supported by access to a countryside that was clean and attractive. The water in our rivers and lakes would be clean and clear. There would be ample wildlife and plenty of trees and woodland.

Most people would walk or cycle to work or use public transport because it was clean, efficient and readily accessible. They would live in houses that needed very little energy to run, because they were built or refurbished specifically to save on energy, and most of the energy used would come from renewable sources.

In our homes water would be easily recycled so our water demands would be much lower than they are now. People would live in thriving communities where sectarian division was recognised as a destructive thing of the past. Education for sustainability would begin early and young people would develop the skills necessary to participate in the new sustainable economy.

A high proportion of our waste would be recycled and recycled products would be the first choice of purchasers. Our businesses and industry would be highly resource efficient, able to compete in the most competitive of markets and supply local communities with many of their needs. We would have a global reputation for innovation with new technologies providing increasingly better processes to ensure a minimum of waste. Northern Ireland would be recognised as a world leader in environmental technologies and in particular in renewable energy.





Importantly our children and grandchildren would also be able to experience this fulfilling way of life.

This vision sounds utopian but it is realisable. It is the vision of a sustainable Northern Ireland. This vision is possible if we all - Government, business, industry, voluntary and community sectors and individuals - work together to bring about the changes needed to achieve it.

Achieving Sustainable Development Together

Achieving sustainable development is a formidable task and cross cutting in its scope. Government has a significant role to play by mainstreaming sustainable development into its work and practices. Many positive steps have been made in moving towards the three pillars of sustainable development through key policies, such as the Investing for Health²⁴ Strategy, “A Shared Future”²⁵, The Regional Development Strategy “Shaping Our Future”²⁶, Economic Vision for Northern Ireland²⁷, A Racial Equality Strategy for Northern Ireland, “Towards Resource Management”, the waste management strategy and others.

We are committed at all levels to moving closer to sustainable development though much work remains to be done and it is for this reason that we will put in place a legal duty requiring relevant public bodies to take account of sustainable development in the exercise of their functions. The Review of Public Administration will also place sustainable development at the heart of local Government reform and will ensure that it is a central feature of local Government policy in the future.

We recognise that we are at the start of a long process which cannot be achieved in isolation and without the co-operation of all parties, we all - Government, business, families and communities - have a responsibility to deliver sustainable development. We can begin to achieve this by working together. For example, the business community can contribute to sustainable development by introducing infrastructure that is modern and efficient, by developing a highly skilled and flexible labour force, incorporating new environmental technologies into the work place, introducing long-term measures aimed at supporting employees and

²⁴ Further information on Investing For Health at: www.investingforhealthni.gov.uk

²⁵ Further information on A Shared Future at : www.asharedfutureni.gov.uk

²⁶ Further information on the Regional Development Strategy at: http://www.drdsn.gov.uk/DRDwww_FOISearch/details.asp?docid=308

²⁷ Further information on the Economic Vision at: <http://www.detini.gov.uk/cgi-bin/downutildoc?id=936>

²⁸ Further information on the Review of Public Administration at: <http://www.rpani.gov.uk/>



assuming global responsibility for their operations.

Voluntary associations such as advocacy groups, religious societies, sports clubs and other organisations can play a vital role in the development of sustainable communities through community engagement, re-educating, developing and forging links between Government and the public.

Communities and families can help tackle climate change by minimising waste, improving the quality of the local environment and promoting fair trade and sustainable consumption and production.

Individuals are now becoming more aware that their activities, actions and choices have a major affect on not only the local environment but on global environmental challenges and through enabling, encouraging and engaging we can make an impact on the local issues that will ultimately have an impact on the global position.

How was the Northern Ireland strategy developed?

There was recognition of the need for strong vertical integration with the UK Framework for sustainable development and the European sustainable development strategy. Likewise we recognise the need to work in partnership with and learn from the other Devolved Administrations and the Republic of Ireland.

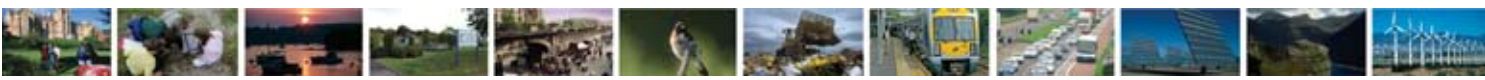
This Northern Ireland strategy, which has been agreed across all Government Departments, has been shaped and greatly strengthened through discussion and public consultation. A stakeholder group with a membership of over 40 representatives from all sectors of Northern Ireland society and which included the UK Government's independent advisor on sustainable development the Sustainable Development Commission (SDC), was involved in helping to influence and develop the direction of the strategy building on previous public consultation, including 'Promoting Sustainable Living – A Discussion Paper on Proposals for a Sustainable Development Strategy for Northern Ireland'²⁹ in 2002 and the UK wide 'Taking it On'³⁰ consultation in 2004.

The stakeholder group agreed the adoption of the UK Framework guiding principles and priorities and proposed extending these with the addition of two further specific Northern Ireland priority areas and one further specific Northern Ireland guiding principle. The group also agreed on a set of key issues for Northern Ireland and were involved in the development of the key actions to meet the challenges identified. The Government has adopted the stakeholders' proposed set of guiding principles and priority areas in full and has sought to address in this strategy the key issues for Northern Ireland.

²⁹ Further information on Promoting Sustainable Living at: http://www.ehsni.gov.uk/pubs/publications/Promoting_Sustainable_Living.pdf

³⁰ Further information on Taking It On at: www.sustainable-development.gov.uk/taking-it-on/finalsummary.htm





Guiding Principles

The principles underpinning the strategy recognise the connectedness between a healthy environment, a thriving economy and our well-being and quality of life. The first five of these principles are those shared across the UK and which are contained within the UK Framework “One future, different paths”.

Consultees in Northern Ireland proposed that one further principle be added to the Northern Ireland set – that of opportunity and innovation. Opportunity and Innovation is about seeing sustainable development not as a threat but as an opportunity for the innovation for which Northern Ireland is renowned, to tackle the key issues through imaginative community based or cutting edge technological solutions. It is about seeing sustainable development as an area of risk which, when managed effectively, can create opportunities to innovate and enhance reputation that are fundamental to long-term success. This is a significant addition that helps support the attitudes and approach needed to deliver this strategy.

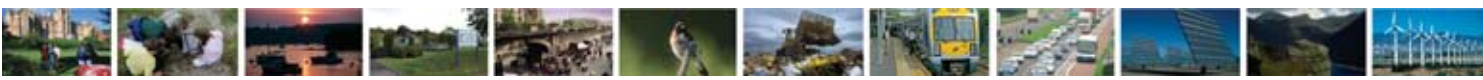


The Guiding Principles:

- **Living Within Environmental Limits**
Respecting the limits of the planet's environment, resources and biodiversity – to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations
- **Ensuring a Strong, Healthy & Just Society**
Meeting the diverse needs of all people in existing and future communities, promoting personal well-being, social cohesion and inclusion, and creating equal opportunity for all.
- **Achieving a Sustainable Economy**
Building a strong, stable and sustainable economy that provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them (polluter pays), and efficient resource use is incentivised.
- **Promoting Good Governance**
Actively promoting effective, participative systems of governance in all levels of society – engaging people's creativity, energy and diversity
- **Using Sound Science Responsibly**
Ensuring policy is developed and implemented on the basis of strong scientific evidence, whilst taking into account scientific uncertainty (through the precautionary principle) as well as public attitudes and values.
- **Promoting Opportunity & Innovation**
Innovation is the successful exploitation of new ideas; incorporating new technologies, design and best practice. Opportunities lie in the development of new markets in environmental technologies and other sustainable development related areas/fields.

These principles will form the basis for Government policy in Northern Ireland. For a policy to be sustainable, it must respect these principles, though it is recognised that some policies, while underpinned by all six, will place more emphasis on some principles than others. Any trade-offs should be made in an explicit and transparent way. We want to achieve our goals of living within environmental limits and a just society, and we will do it by means of promotion of opportunity and innovation driving a sustainable economy, good governance and sound science.





Priority Areas for Action

The UK Framework identified four priority areas for action. Consultees in Northern Ireland adopted these and extended them by adding a further two priority areas for action; Governance for Sustainable Development and Learning and Communication.

Priority Areas For Action:

- **Climate Change and Energy**

The effects of climate change can already be seen. We are experiencing more frequent incidences of severe weather, temperatures and sea levels are rising, ice and snow cover is declining all with potentially catastrophic consequences for the natural world and society.

- **Sustainable Consumption and Production**

Sustainable consumption and production is about improving resource efficiency and achieving more with less, which means not only looking at how goods and services are provided but also the impacts of products and materials across their whole lifecycle, building on people's awareness of social and environmental concerns.

- **Natural Resource Protection /Environmental Enhancement**

Natural resources are vital to our existence and that of communities throughout the world. We need a better understanding of environmental limits, environmental enhancement and recovery where the environment is most degraded to ensure a decent environment for everyone, and greater integration in policy development.

- **Sustainable Communities**

Our aim is to create sustainable communities that embody the principles of sustainable development at the local level. This will involve working to give communities more power and say in the decisions that affect them. Working in partnership at the local level to provide cleaner, greener, safer, thriving and well-connected communities where people want to live and work.

- **Governance for Sustainable development**

Governance is about placing a real emphasis on the mechanisms which will deliver sustainable development in Northern Ireland. It is not just environmental governance, it also includes corporate and political governance. It is about joined up Government, better regulation and synergy between local and central Government.



- **Learning and Communication**
An essential element to achieve the necessary behavioural change is the need to communicate what sustainable development is about providing clear information appropriately targeted to audiences.

These priority areas will help to form the basis for business planning and decision-making by Departments and their Agencies. Some Departments will have a greater role to play in some of the areas and may be involved in more than one area but all Departments will have a part to play in at least one of the priority areas. The guiding principles and priority areas for action will also be extended to local Government.

Each of the priority areas is dealt with separately in a chapter below, each containing a number of strategic objectives, with associated targets and important steps.

Delivery

The delivery mechanisms to achieve the key targets and actions within the Northern Ireland Sustainable Development strategy are an essential feature in ensuring that we move towards sustainability.

The need for sustainable development to become integrated into the Comprehensive Spending Review³¹, future spending reviews and subsequently into relevant Public Service Agreements (PSAs)³² has been identified as key in helping to ensure that Government contributes to the delivery of the objectives and targets identified in the strategy.

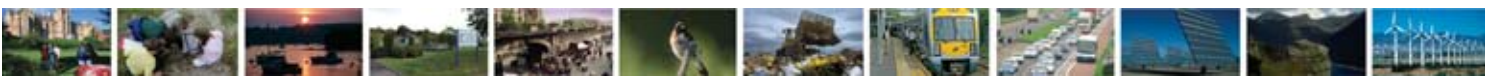
Efficient and effective implementation and monitoring of targets within the strategy is essential and will be accomplished in a number of ways including developing an implementation and monitoring role for the existing Ministerial-led group. We will also review the current remit of the sustainable development commission and the need for an independent watchdog function along with consideration of the establishment of a sustainable development forum and its roles. These issues will be an important feature to be addressed during the development of the implementation process.

Another important feature of the monitoring and reporting process will be the development of key sustainable development indicators along with baseline data for Northern Ireland. While some work has already been carried out into potential indicators of sustainable development specific to Northern Ireland, this work will need to be reviewed to

³¹ Further information on Comprehensive Spending Review at: http://www.hm-treasury.gov.uk/spending_review/spend_index.cfm

³² Further information on Public Service Agreements at: <http://www.pfgbudgetni.gov.uk/>





ensure they can adequately measure progress against the objectives and targets contained within the strategy and to ensure that gaps are identified and addressed.

It is intended that appropriate monitoring and reporting procedures for the strategy will have been identified by late 2006.



Chapter 1

The Challenge

The simple and self-evident truth is that we have only one planet, the planet which, ultimately, supplies the ingredients for everything we produce and consume and into which our waste is returned and pollution absorbed. Ecological footprinting expresses the relationship between humans and the natural environment and accounts for the use of natural resources by a region's population. The Northern Limits Project³³ established that in terms of materials used, energy consumed and waste produced, Northern Ireland per head of population has the largest footprint of any of the four UK countries. The problem is that if everyone lived the same way we do in Northern Ireland, it would take three planets to support us. The Northern Limits project also identified that our resource efficiency (a measure of how productively we use materials and how much waste is produced) was 65%.

Clearly this is unsustainable and it carries major environmental, social and economic costs and consequences. These include the depletion of finite resources, the creation of large quantities of waste and associated pollution, the destruction of habitats and the impact on biodiversity. Some of these issues impact directly upon us and often they fall disproportionately on those in the poorest communities. Our growing reliance on imports of materials and products means that, importantly, the effects of our consumption are not confined to our shores.

Vision

Our Vision is of Northern Ireland as a one planet economy.

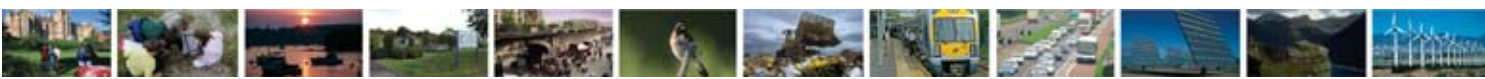
Our priority is to reduce dramatically the amount of resources we consume and, just as important, the amount we waste and to get much more from the resource we use in production. In this way we will improve business competitiveness, stimulate innovation, create new markets and encourage sustainable product design and processes.

The long-term outcome we seek is to make Northern Ireland an exemplar of one planet living. In other words that we in Northern Ireland will live our lives within the carrying capacity of one planet. This will be an extremely challenging task but reducing our ecological footprint must be our fundamental goal to help address the damaging impacts on society and environment at home and abroad caused by our way of life. Helping consumers make more responsible choices is part of all of this and is an area where the Consumer Council³⁴ is playing a key role. Public procurement policy, supply chain management and the

³³ Further information on The Northern Limits report at: <http://www.northern-limits.com/>

³⁴ Further information on the Consumer Council at: <http://www.gccni.org.uk>





Government's waste management strategy are strong levers for and ways to lead change. But every sector of society has a stake in meeting the challenge, seizing the opportunities and accepting a share of the responsibility.

Strategic Objectives:

Three strategic objectives on sustainable consumption and production have been chosen for the strategy.

- **To become more resource efficient;**
- **To make the Northern Ireland public sector a UK regional leader in sustainable procurement;**
- **To minimise the unsustainable impacts of consumption.**

The strategic objectives and key targets are set out below. Some of the important steps that need to be taken to enable, encourage and build capacity to deliver on the objectives and targets are also identified below. These will be developed in more detail in the implementation plan.



Strategic Objective 1

To become more resource efficient

Key Targets

- Northern Ireland economy will achieve 85% resource efficiency by 2025;
- Stabilise the Northern Ireland ecological footprint by 2015 and reduce it thereafter

Important Steps

- Progressive reduction of quantities of biodegradable waste going to landfill and reduction of waste in general across all sectors.
- Encourage and incentivise the business case for resource efficiency and waste minimisation.
- Promote materials recovery, re-use, and recycling through initiatives such as the Waste and Resources Action Plan (WRAP)³⁵
- Progressive reduction in leakage of mains water.

Strategic Objective 2

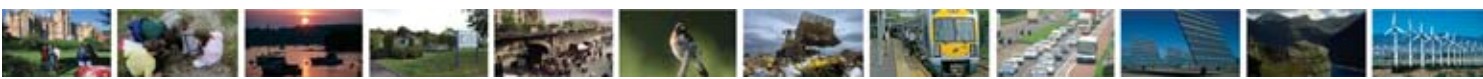
To make the Northern Ireland public sector a UK regional leader in sustainable procurement.

Key Targets

- By 2008 ensure that all public sector procurement is channelled through recognised Centres of Procurement Expertise (COPEs);
- By 2008 ensure that sustainable development principles guide capital investment decisions on all major publicly funded building and infrastructure projects;
- By 2008 produce a Sustainable Procurement Action Plan for Northern Ireland.

³⁵Further information on WRAP at: www.wrap.org.uk





Important Steps

- Training and guidance on sustainable procurement for all public sector purchasing officers.
- Embed whole life costing into procurement decisions and policy.
- Underpin the Investment Strategy for Northern Ireland³⁶ with excellence in construction programmes that integrate sustainable development principles.
- Ensure that public sector housing and public properties are constructed or refurbished to maximise sustainability and flexibility of use.
- Consider how the recommendations from the Sustainable Procurement Task Force can be applied to Northern Ireland with particular reference to access for Small Medium Enterprises and Social Economy Enterprises.
- Promote market transformation initiatives and the work of WRAP

Strategic Objective 3

To minimise the unsustainable impacts of consumption.

Key Targets

- By 2008 produce a Sustainable Consumption Action Plan for Northern Ireland
- By 2008 put in place measures which optimise the flexibility of retained and refurbished public buildings.

Important Steps

- Work with the Food Standards Agency³⁸ and other partners to promote more sustainable food procurement in the public sector.
- Consider how the recommendations from the Sustainable Consumption Roundtable³⁹ can be applied to Northern Ireland.

³⁶ Further information on the Investment Strategy 2005-2015 at: www.sibni.org./isnifulldocument141205.pdf

³⁸ Further information on the Food Standards Agency at: www.foodstandards.gov.uk

³⁹ Further information on Sustainable Consumption Roundtable at: www.sd-commission.org.uk/pages/work_streams/SCR.html



- Make it easier for consumers to make more responsible, less damaging choices
- Implement Workplace 2010 on the Government estate
- Implement Sustainable Development action plans for each Government Department
- Reduce demand for potable water
- Press for amendments to VAT rates for new versus refurbished buildings and support amendments to planning and building regulations.

Tackling the objectives

Resource efficiency

The research and data used in the Northern Limits Report to establish the ecological footprint for Northern Ireland was also used to estimate our resource efficiency as 65%. The UK average is 51.7% while the figure for Scotland is 79%. Although we are more resource efficient than the UK average our ecological footprint at over 5.6 global hectares per person is the highest of the four UK administrations, principally as a result of our domestic energy use (with less gas and more oil and coal used), food, transport and poor waste management.

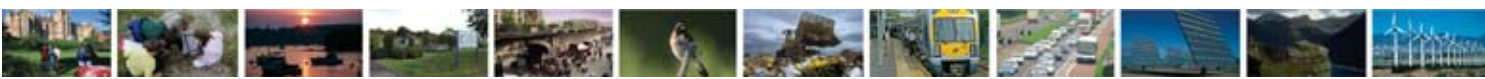
With the global average of 1.8 global hectares per person we are living the equivalent of a three planet lifestyle and we must take steps to reverse this unsustainable trend and make progress towards “one-planet living”.

The concept of “one-planet living” was inspired by World Wildlife Fund research and is set out in their 2004 Living Planet Report. **We will communicate and promote the one-planet living concept and will regularly update the ecological footprint for Northern Ireland to illustrate impact and to measure progress.**

Waste

Much of what we buy in Northern Ireland is thrown away. At present around 80% of what we discard goes to landfill which incurs a further cost which we either directly or indirectly pay. Fly tipping and thoughtless behaviour by individuals mean that waste is often simply discarded for others to clean up from fields, waterways, roadsides and streets adding to pollution and generating a further cost, which again, is indirectly passed on to us.





“Towards Resource Management³⁹” the new waste management strategy for Northern Ireland, launched in March 2006, recognises the need for an approach that realises the resource potential and opportunities in waste. Waste prevention is the fundamental principle with disposal being the last resort and this approach needs to become integral to our thinking at home and for business. The increasing cost of disposal is a driver in both cases but there are other factors. The waste streams we produce contain enormous quantities of materials that can be recovered for reuse, recycling or composting.

To capitalise on this potential, we must support the recovery and reuse of basic materials such as metals and glass and the development of innovative new products from other waste streams such as plastics, textiles and chemicals. The search for alternative uses for waste and the development of new markets is being supported by the Waste and Resources Action Plan (WRAP) initiative in partnership with Government and business. WRAP receives £800k from Government and is specifically designed to help create recycling markets.

Local councils have responsibility for the collection and recycling of municipal waste. The recent significant investment in their civic amenity sites, separate wheelie bins for different waste streams and their use of kerbside collections has successfully increased the recycling rate from 10% in 2002 to 18.9% in 2004/05.



³⁹ Further information on “Towards Resource Management” at: <http://www.ehsni.gov.uk/pubs/publications/wms.17.pdf>



Bryson House Recycling Services⁴⁰

Bryson House provides convenient kerbside recycling services for 25% of Northern Ireland's homes. Councils currently served are the Antrim, Armagh, Ballymena, Banbridge, Belfast, Carrickfergus, Castlereagh, and Newtownabbey areas.

What happens to the waste collected?

Paper - sent to a recycling mill in Wales, some of it returning as newspapers;

Glass - recycled into glass packaging in Co. Fermanagh;

Plastic bottles – recycled in the Far East into t-shirts, fleeces and duvet fillings;

Aluminium – recycled into new cans and aluminium products;

Steel - recycled into new steel products in a Welsh factory;

Card/cardboard - recycled into cardboard and low grade paper packaging;

Hand tools – (saws, hammers, chisels, pliers, etc) repaired and sent to Africa;

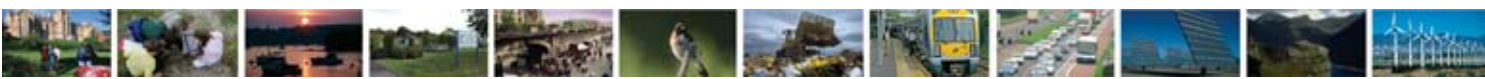
Textiles - transported to Africa, or used in production of automobile sound-proofing.

By the end of 2005, 170,000 households were able to recycle from home using kerbside boxes.

Further potential lies in treating waste to recover energy, for example, through the use of anaerobic digestion of organic waste and through combined heat and power (CHP) units which would also displace some of the need for fossil fuels such as oil and would align well with the objectives of the Strategic Energy Framework for Northern Ireland⁴¹. These and other energy issues are dealt with in Chapter 4 within the context of climate change and energy.

⁴⁰ Further information on Bryson House Recycling at: <http://www.brysonhouserecycling.co.uk/>





In addition to creating new opportunities, greater resource efficiency will help business keep a competitive edge and in turn safeguard jobs, support the local economy and society while reducing environmental impact. **We will promote the wider use of Environmental Management Systems (EMS) and the uptake of environmental reporting such as the annual survey of the largest Northern Ireland companies.**

The STEM Project⁴²

The STEM project is a cross border initiative funded by the INTERREG III Programme and is the largest of its kind in Europe. Its primary function is to facilitate use of Environmental Management Systems in nine border councils and 270 Small Medium Enterprises. To date 160 organisations have signed up.

One construction business participating in the STEM project has significantly reduced their waste disposal costs. By obtaining a waste management licence they are now able to sort waste on-site before taking it to be recycled. This has significantly reduced the amount of waste going to landfill and, in turn, has reduced their waste management costs by over £35,000 per annum.

Water

Water is an increasingly valuable resource which can again be used more efficiently. Government is currently undertaking, through the Water Reform programme⁴³, a radical reform of the delivery of water sewerage services in Northern Ireland. This will provide the secure financial basis on which investment of £3 billion in our water and sewerage infrastructure over the next 20 years can take place resulting in real improvement in the delivery of a potable water supply and in the treatment and disposal of sewerage. This infrastructure investment will contribute to efficiencies in water supply and **we will significantly reduce leakage of mains water and develop campaigns to encourage reductions in the demand for consumption of potable water.** Water quality and sewerage are further discussed in Chapter 2 under the Water Framework Directive.

Water Reform will also result in the introduction of direct charges upon all customers for the recovery of the costs of water and sewerage services, thereby helping to reinforce the public's appreciation of water

⁴² Further information on the STEM Project at: <http://www.stemproject.com/>

⁴³ Further information on Water Reform at: <http://www.waterreformni.gov.uk>



as a finite and valuable resource. Such direct charging also provides opportunity to reinforce the “polluter pays” principle and to promote incentives for efficient water use. Metering will continue to be the preferred basis for levying non-domestic charges. Government is also committed to the long-term goal of introducing widespread domestic metering as a means of addressing environmental and sustainability obligations.

Public procurement

Public procurement policy in Northern Ireland is centrally driven and overseen by a high level Procurement Board chaired by the Minister with responsibility for the Department of Finance and Personnel and supported by a Central Procurement Directorate (CPD). The annual Northern Ireland public procurement budget is approximately £1.8 billion and thus represents a significant share of the local economy. It buys a diverse range of goods and services, spanning stationery, food, fleet vehicles and energy, as well as building and maintaining schools, hospitals and other capital projects.

The opportunity to lead change in other sectors, to influence markets and to achieve a real shift is therefore considerable. **We will pursue sustainable development objectives through purchasing and expenditure decisions and make Northern Ireland a regional leader in sustainable public procurement.**

Notable progress has been made in establishing a network of Centres of Procurement Expertise (COPEs) through which all public sector buying will be channelled. The aim is essentially to promote excellence, innovation and consistency, to take advantage of economies of scale and to create opportunities for collaboration and market influence. More efficient supply chains are an important aspect of this. **We will therefore boost training in sustainable procurement for purchasing professionals.**

Another important step is to learn from the UK Sustainable Procurement Task Force⁴⁴ work, in which CPD is participating, and this will be used to produce a Northern Ireland Sustainable Procurement Action Plan.

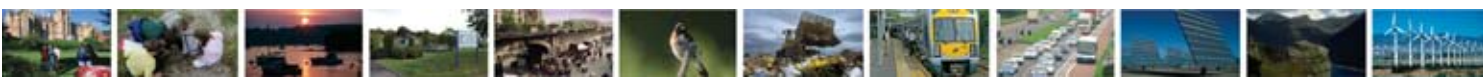
Recycling and Fair Trade Products

Recent decisions on recycling and on the purchase of Fair Trade⁴⁵ products across Government in Northern Ireland have signalled a change of direction to the market. Fair (and ethical) Trade is about improving the conditions faced by small producers in developing

⁴⁴ Further information on the UK Sustainable Procurement Task Force at: <http://www.sustainable-development.gov.uk/government/task-forces/procurement/index.htm>

⁴⁵ Further information on Fair Trade at: http://www.oxfam.org.uk/what_we_do/fairtrade/index.htm





countries and in helping to reduce poverty and exploitation, for example, by guaranteeing a fair minimum price for goods such as coffee and monitoring supply chains to eliminate child labour in the production of goods.

New guidance will signal a move to use of sustainable timber products. **We will also ensure new contracts specify that Fair Trade products must be available in catering facilities in all newly occupied buildings and used for official hospitality.**

All Departments are buying recycled paper and the collection of recyclables has been expanded to include cardboard, dense plastic and redundant IT equipment. There is also a requirement for 90% of office furniture to be made from recycled material which shows how specification can deliver sustainable outcomes. A 'quick wins' list of more sustainable versions of commonly used products across the Government estate has already been promulgated and will help reinforce the market for such products here.

We are committed to revolutionising the approach to public procurement by the development of electronic systems (eCommerce). The gains include reduced costs, better efficiency, monitoring information and resource freed up for other uses. Innovations such as the Government Purchasing Card enable on-line transactions and avoid the high administrative burden associated with low value frequent purchases. Other initiatives will support access to Government contracts by Small and Medium-sized Enterprises (SMEs) and Social Economy Enterprises (SEEs). **We are developing a database to monitor the implementation of existing guidance on integrating environmental, social and economic considerations into procurement decisions.**

Consumption

Consumption, in effect, drives production; if we didn't want something manufacturers would not produce it. Consumption therefore cannot be considered separately from production and processing and the link means sustainability principles have to be applied across all stages to have any significant impact. But we believe much progress is possible.

Food

While food production is a key part of the rural economy with its own particular impacts on the environment, food consumption is directly linked to other issues of sustainability such as health and well-being. In Northern Ireland historically diet has been a contributory factor in our high incidence of coronary heart disease. More recently diet (along with a lack of exercise) is linked to the growing problem of obesity, and the



potential for an explosive increase in diabetes, particularly among our children and young people. Additives in processed food are thought to contribute to behavioural problems such as hyperactivity and poor attention span. The opportunities to provide better nutrition from more sustainable and healthy diets are now well established and “Healthy Breaks” (a primary school scheme to encourage children to eat fruit instead of junk food) is a fine local example. **We will work with the Food Standards Agency and other partners to promote healthy eating.**

The local Northern Ireland food economy has the potential to expand and is estimated to be £200 million – just under 10% of the total retail market. Northern Ireland also has an extensive network of local convenience stores with significantly less penetration by the major multiples. But we recognise that applying sustainability principles to food production and consumption will present significant challenges.

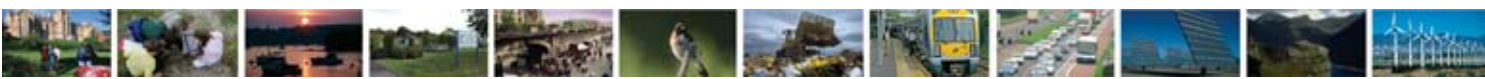
Sustainable Choices

It is crucial to help consumers make better and more sustainable choices and to change unsustainable habits. Helping to change consumer behaviour and engaging all sectors including the retail sector is a key strand of this strategy which is discussed in more detail in Chapter 5 Learning and Communication.

We welcome the work and report by the Sustainable Consumption Roundtable “I Will If You Will” published in May 2006, which drew on the experience of the Sustainable Development Commission, the UK Government’s independent advisor on sustainable development, and the continuing valuable work by the Northern Ireland Consumer Council, which participated in the Roundtable. The Report concluded that working within ecological limits is the basis for our social and economic development and that public policy should be to enable Government, business and individuals to move progressively towards sustainable consumption.

We will draw on the Report and other bodies of evidence to develop a sustainable consumption action plan for Northern Ireland and will work on this in partnership with the Consumer Council and other stakeholders. As part of this we will consider how the consumption of locally produced food can be increased and food miles reduced. We will also seek to promote more sustainable food procurement in the public sector. We will also produce specific sustainability action plans for each Government Department and carbon reduction will be an important feature in each.





Government Leadership

The Government estate is an obvious area for demonstrating leadership in consumption and incorporating sustainability principles into the design, construction and refurbishment of public buildings will have a significant impact.

We have introduced across the Northern Ireland Civil Service a wide-ranging programme known as Workplace 2010⁴⁶ which aims to make better use of space and reduce energy consumption.

This will result in the reduction in the number of buildings occupied by the Northern Ireland Civil Service whilst the supporting programme of refurbishment of the estate will result in maximising flexibility of use and minimising energy consumption.



This work and the construction of new buildings are guided by a framework and a Sustainability Action Plan and, with leadership by the Sustainable Construction Group (in CPD), is making gains in embedding sustainability.

⁴⁶ Further information on Workplace 2010 at: <http://www.workplace2010ni.org/>



The Action Plan promotes schemes such as the Building Research Establishment's Environmental Assessment Method (BREEAM)⁴⁷ and the Civil Engineering Environmental Quality Assessment (CEEQUAL)⁴⁸. BREEAM is regarded by the UK's construction and property sectors as the measure of best practice in environmental design and management of buildings. CEEQUAL is a UK-wide awards scheme assessing the environmental quality of civil engineering projects - the civil engineering equivalent to BREEAM for buildings - to help reduce environmental impacts. **We will implement a rolling plan to require public sector office accommodation to achieve a BREEAM rating of at least "very good".**

We will also embed the use of NEAT⁴⁹ (a bespoke NHS environmental assessment tool) which is already being used successfully by the Health Estates Agency on buildings procured for the Health Service to ensure best practice in all such projects.

Government is also reviewing the Building Regulations (Northern Ireland) Order 1999 with a view to including the promotion of sustainable development and the enhancement and protection of the environment to the list of purposes. (See Chapter 4 on Climate Change and Energy) The explicit inclusion of sustainable development in the purposes for which building regulations can be made is a direct recognition of the importance of a sustainable construction sector to the achievement of a sustainable Northern Ireland.

Kirkcubbin & Greyabbey : Waste Water Treatment Works

This project achieved an 'excellent' rating when assessed under CEEQUAL. The project scored highly in its use of local materials and the harmonious use of materials that complemented the local environment.

The design used an innovative treatment process, which is low energy and cost efficient. The client, designer and contractor made considerable efforts to inform and consult with the local community. There was also an appropriate site management plan.

The project is a good example of waste and energy minimisation, and respect for people.

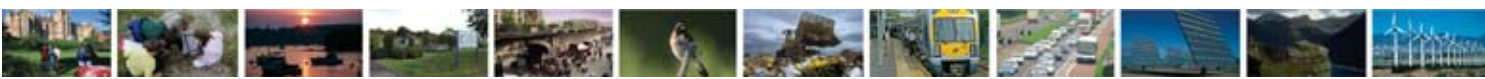
⁴⁷ Further information on BREEAM at: <http://www.breeam.org/>

⁴⁸ Further information on CEEQUAL at: <http://www.ceequal.com/>

⁴⁹ Further information on NEAT at:

http://www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/EstatesAndFacilitiesManagement/SustainableDevelopment/SustainableDevelopmentArticle/fs/en?CONTENT_ID=4119587&chk=r2HHYe





One of the factors taken into account during BREEAM assessment is waste management. Each Department already has a waste action plan in place and waste stream audits have been undertaken in a number of locations to make further improvement. **Environmental Management Systems (EMS) will reinforce the progress made.**

We will promote the Travelwise⁵⁰ initiative to achieve a modal shift in terms of how staff travel to and from work. Introduction of car sharing schemes, provision of facilities for cyclists and travel planning are aspects of this. A car-sharing scheme has been piloted in the Northern Ireland Civil Service since June 2005 and over 1,000 civil servants have signed up so far. Access to the scheme is now being promoted among other employers.



⁵⁰ Further information at: www.travelwisenicarshare.com



Chapter 2

The Challenge

Northern Ireland has a rich and varied natural environment with outstanding landscapes and habitats that support a wealth of species. Our built heritage is equally rich, containing a varied and complex array of archaeological sites, monuments and buildings, reflecting the diversity of our history.

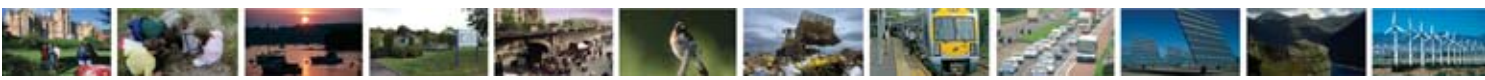
In Northern Ireland within a relatively small geographical area we have:

- **9 Areas of Outstanding Natural Beauty (AONBs)**
- **An outstanding coastline, 75% of which is protected with some form of conservation designation**
- **226 Areas of Special Scientific Interest (ASSIs)**
- **8,500 listed buildings**
- **59 Conservation Areas**
- **15,000 archaeological sites**
- **1,700 scheduled monuments**

Taken together these are significant assets which help define our cultural identity and characteristics of our communities helping to drive local economies through tourism and jobs.

Stewardship and other aspects of the environment employ thousands more people. A healthy environment is also inextricably linked to the health of our population which relies for survival on clean air and water and the crops we are able to grow in uncontaminated soil. Places such as Forest Parks and Country Parks provide opportunities for recreation and add to our understanding of the environment thus supporting healthier lifestyles while contributing to our well-being.





We should be proud of all of this and make its protection, enhancement and sustainable management a key long-term priority while capitalising on the obvious value of our environment as an economic driver. This however poses a challenge.

There have been great advances in the material welfare of people in the developed world over the last number of decades. But it is increasingly recognised at national and global level that our economic and social development is placing increasing pressure on our environment, such as: consumption of scarce raw materials; demand for additional infrastructure and services; increasing risk of pollution; visual impact on our landscape; threats to our traditional buildings; and loss of agricultural land and habitats threatening the continued survival of many species of plants and animals.

Respecting the limits of the planet's environment, including its resources and biodiversity, has therefore been adopted as a key principle underpinning the new approach to sustainable development in Northern Ireland. We must help to control adverse human impacts upon the environment, working in partnership with others to put in place the necessary measures to protect and conserve our natural resources and ensure that they may be enjoyed by future generations.



Striking the right balance between economic development, social progress and environmental protection is vital. To achieve this we need a better understanding of environmental limits, the need for environmental enhancement and recovery where the environment is most degraded to ensure decent surroundings and opportunities for everyone, and a more integrated policy framework to deliver this.

Evidence to date shows that:

In the UK

- **In 2002 around 30% of the 391 priority species were declining or lost and 38% of the 45 priority habitats were declining⁵¹ ;**
- **Populations of the more common farmland and woodland birds have been declining over the last 2 decades. Rare bird populations have been stable or rising reflecting conservation efforts focused on these species⁵¹;**
- **In 2003, pollution in UK led to over half of natural and semi-natural habitats to exceed harmful levels of acidity⁵²**

In Northern Ireland

- **Forests and woodland cover 6% of Northern Ireland compared with 12% in Great Britain and 33% in Europe⁵³ ;**
- **In 2004 only 51% of our rivers were classified as of good biological quality and only 58% classified as of good chemical quality⁵¹;**
- **272 local priority species require conservation action and 457 species of conservation concern require monitoring⁵⁴.**

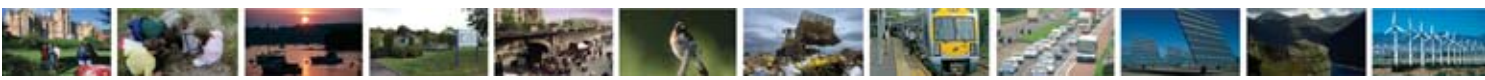
⁵¹ *The Environment in Your Pocket 2005, Further information at: www.defra.gov.uk/environment/statistics/eiyp/index.htm*

⁵² *Source Defra - Further information on Defra at: www.defra.gov.uk/news/2006/060405b.htm*

⁵³ *Source DARD NI Forestry – A Strategy for Sustainability and Growth. Further information on at: www.forestserviceni.gov.uk/frames/publications/misc/stategy_for_forestry_06.pdf*

⁵⁴ *Source EHS: www.ehsni.gov.uk/natural/biodiversity/priority_species.shtml*





Vision

Our vision is of a Northern Ireland with a diverse, healthy and resilient natural environment

In support of the vision Government will review its own actions but cannot deliver the vision by working alone or acting unilaterally.

We will work with representatives from all sectors – farming, business, voluntary groups, plus the wider community in order to encourage people to live, work and enjoy their leisure time in an environmentally sustainable way. All of these groups and individuals have a stake in the outcome.



Strategic Objectives

Five strategic objectives on natural resource protection and environmental enhancement have been chosen for the Strategy.

- **To conserve our landscape and manage it in a more sustainable way;**
- **To protect and enhance the freshwater and marine environment;**
- **To improve our air quality;**
- **To conserve, protect, enhance and sustainably re-use our historic environment;**
- **To protect and enhance biodiversity.**

The strategic objectives and key targets are set out below. Some of the important steps that need to be taken to enable, encourage and build capacity to deliver on the objectives and targets are also identified below. These will be developed in more detail in the implementation plan.

Strategic Objective 1

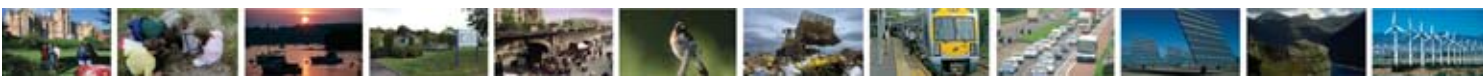
To conserve our landscape and manage it in a more sustainable way.

Key Targets

- Complete the review of Areas of Outstanding Natural Beauty (AONB) and programme of designation by 2016;
- Introduce enabling legislation for the designation of national parks by 2009;
- Increase Northern Ireland's forested area by at least 500 hectares per annum in line with recently published Forestry Strategy – A Strategy for Sustainability and Growth.

⁵⁵ Further information on the Forestry Strategy – A Strategy for Sustainability and Growth at: www.forestserviceni.gov.uk/frames/forest01.htm





Important Steps

- Management plans for all AONB's to be put in place and implemented;
- Develop policy and appropriate legislation for national park areas;
- Ensure the reviews of the Northern Ireland Regional Development Strategy⁵⁶ and other relevant planning policies, reinforce sustainable development and provide for appropriate protection of the landscape;
- Optimise Northern Ireland Rural Development Regulation Plan⁵⁷ funds to increase afforestation and review the Woodland Grant Scheme to encourage planting in the most desirable locations; and
- Support the UK approach to adopting the European Thematic Strategy for Soil Protection⁵⁹ and the likely Soil Framework Directive⁶⁰ including implementation of the appropriate national measures where required.

Strategic Objective 2

To protect and enhance the freshwater and marine environment.

Key Targets

- Meet the environmental objectives of the Water Framework Directive⁶¹ by 2015;
- 90% compliance with Water (Northern Ireland) Order 1999⁶² consent standards;
- Develop a policy and legislative framework for protecting the marine environment by 2008;

⁵⁶ Further information on the Regional Development Strategy at: www.drni.gov.uk/shapingourfuture

⁵⁷ Further information on Northern Ireland Rural Development Regulation Plan at: www.dardni.gov.uk/core/dardni0380.htm

⁵⁹ Further information on the EU Thematic Strategy for Soil Protection at: www.defra.gov.uk/environment/land/soil/Europe/index

⁶⁰ Further information on the EU Soil Framework Directive at: www.defra.gov.uk/environment/land/soil/Europe/index

⁶¹ Further information on the Water Framework Directive at: www.ehsni.gov.uk/environment/watermanage/policy/policy.shtml

⁶² Further information on the Water (Northern Ireland Order) 1999 at: www.ehsni.gov.uk/environment/watermanage/waterpollution/intro.shtml



- Minimise the number of properties at risk from flooding; and
- Complete permitting of existing installations subject to the current Northern Ireland Pollution Prevention and Control Regulations⁶³.

Important Steps

- Agree river basin management plans by 2009 and ensure that the programme of measures they contain are fully implemented by 2012;
- Implement the Nitrates Directive Action Programme⁶⁴ to help reduce nitrate and phosphate inputs to waterways and the levels of eutrophication within them;
- Encourage nutrient management plans to assist farmers to plan nutrient application according to crop requirement and soil nutrient status;
- Fully implement the Urban Waste Water Treatment Directive⁶⁵ to reduce the quantity of untreated effluent being discharged to waterways;
- Increase the overall percentage of houses connected to mains sewers and the effectiveness of effluent treatment for those properties not connected to mains sewers. Promote the introduction of sustainable urban drainage systems (SuDS)⁶⁶ in future developments;
- Implement an Integrated Coastal Zone Management Strategy⁶⁷ ;
- Develop new planning policy to help protect and manage the Northern Ireland coastline; and
- Develop a new policy framework for river/coastal flood risk management.

⁶³ Further information on the Pollution Prevention and Control Regulations at: www.ehsni.gov.uk/environment/industrialpollution/ippc.shtml

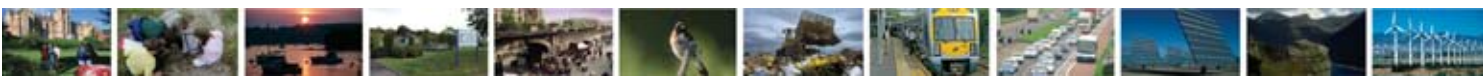
⁶⁴ Further information on the Nitrates Directive Action Programme at: www.doeni.gov.uk/epd/policies_leg/details.asp?docid=2571

⁶⁵ Further information on the Urban Waste Water Treatment Directive at: www.defra.gov.uk/environment/water/quality/uwwtd.htm

⁶⁶ Further information on Sustainable Urban Drainage Systems at: www.sepa.org.uk

⁶⁷ Further information on Integrated Coastal Zone Management Strategy at: www.doeni.gov.uk/epd/policies_leg/details.asp?docid=3134





Strategic Objective 3

To improve our air quality.

Key Targets

- Meet the health based objectives for the seven key pollutants in the Air Quality Strategy⁶⁸ by 2010;

Important Steps

- Evaluate district council air quality reports/action plans, make recommendations and provide grant support to ensure that Air Quality Strategy objectives are met; and
- Assist in the current review of the Air Quality Strategy which outlines new measures to help extend life expectancy and cut environmental damage.

Strategic Objective 4

To conserve, protect, enhance and sustainably re-use our historic environment.

Key Targets

- Advance the Second Survey of Buildings of Architectural and Historic Interest⁶⁹ : to increase our knowledge of the built environment and to identify structures worthy of protection by listing by 2016;
- Rescue at least 200 structures on the Built Heritage at Risk in Northern Ireland Register⁷⁰ by 2016; and
- Complete survey records of 1500 historic monuments by 2010.

Important Steps

- Review the policy (including level of grant) on grant-aiding works, to retain and restore listed buildings;

⁶⁸ Further information on the Air Quality Strategy at: www.ehsni.gov.uk/environment/air/standards.shtml

⁶⁹ Further information on Second Survey of Buildings of Architectural and Historic Interest at: www.ehsni.gov.uk

⁷⁰ Further information on the Built heritage At Risk in Northern Ireland Register at: www.ehsni.gov.uk



- Consider the possible extension of the grant-aid scheme to the majority of listed buildings, and its expansion to include applications for 'maintenance' work as well as 'repair';
- Increase the retention of historic fabric in listed buildings;
- Ensure protection and conservation of historic buildings and monuments through planning policy and Buildings and Monuments at Risk strategy;
- Support the voluntary sector in developing building preservation trusts;
- Commit to adopting the "Protocol for the Care of the Government Historic Estate 2003"⁷¹ by all Northern Ireland Government departments and its application to all publicly funded construction projects;
- Complete and publish an archaeological survey of County Fermanagh by 2010.

Strategic Objective 5

To protect and enhance biodiversity.

Key strategic targets

- Significantly reduce biodiversity loss by 2010; and
- Halt biodiversity loss by 2016.

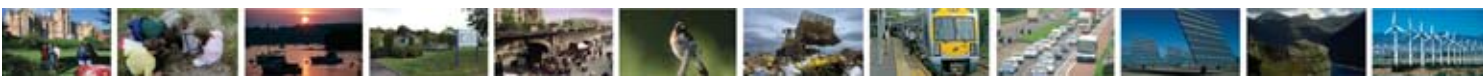
Important Steps

- Complete Countryside Surveys to help determine achievement of overall biodiversity targets by 2007 and 2017;
- Ensure full and timely implementation of the Northern Ireland Biodiversity Strategy⁷² and all national and international nature conservation legislation;
- Complete the declaration of Areas of Special Scientific Interest by 2016;

⁷¹ Further information on the Protocol for the Care of the Government Historic Estate 2003 at www.culture.gov.uk/global/publications/archive_2003/protocol_government_historic_estate2003.htm

⁷² Further information on the Northern Ireland Biodiversity Strategy at www.ehsni.gov.uk/pubs/publications/nibs2002.pdf





- Ensure 95% of features on statutory designated sites are in, or approaching, favourable condition by 2016;
- Create a statutory duty in the 1985 Northern Ireland Wildlife Order⁷³ for Northern Ireland Departments and public bodies to further the conservation of biodiversity;
- Identify and designate marine protected areas;
- Prepare management statements for key invasive species; and
- Increase the emphasis on biodiversity and water quality issues in agri-environment schemes.

Conserve our landscape and manage it in a more sustainable way

The Northern Ireland Landscape Character Assessment

The Northern Ireland Landscape Character Assessment 2000 identified no fewer than 130 distinct landscape character areas reflecting the richness and influence of geology, soil, climate and man.

These are fragile landscapes which cannot absorb new developments indefinitely without changing their distinctive character. The key to conserving them is understanding this character and seeking to manage change in ways which ensure that their quality and value are sustained for future generations to use and enjoy.

“Shared Horizons⁷⁴” is the Government’s Statement of Policy on Protected Landscapes in Northern Ireland. The statement sets out the issues associated with the protection and sustainable use of Northern Ireland’s finest landscapes and indicates the way in which we plan to address them. These areas fall within the internationally recognised description of ‘Protected Landscapes’ and are usually recognised by some form of designation, which sets them apart from the wider countryside.

Areas of Outstanding Natural Beauty⁷⁵

The only designation currently in use in Northern Ireland to identify areas of high landscape quality is that of Area of Outstanding Natural Beauty (AONB). The Causeway Coast and the Mourne are two examples of the nine AONBs in Northern Ireland.

⁷³ Further information on the 1985 Northern Ireland Wildlife Order at www.ehsni.gov.uk/natural/legs/legs.shtml

⁷⁴ Further information on Shared Horizons at www.ehsni.gov.uk/pubs/publications/shared_horizons.pdf

⁷⁵ Further information on Areas of Outstanding Natural Beauty at www.ehsni.gov.uk/natural/designated/aonb.shtml



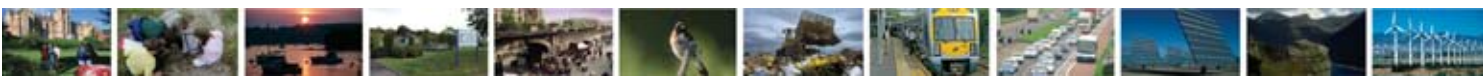
Progress in the review of AONBs and programme of designation under the 1985 Nature Conservation and Amenity Lands (Northern Ireland) Order has been slow in recent years but we are committed to completing this work by 2016. Appropriate local management arrangements for AONBs are of vital importance to their sustainable use. We will work in partnership with relevant agencies, district councils and the wider community to establish and implement appropriate and inclusive management plans for all AONBs in order to safeguard the important natural and cultural heritage of the area.



National Parks

Studies have confirmed that a number of our landscapes are of sufficient landscape quality and have sufficiently complex management requirements to be considered as national parks. **We are committed to bringing forward legislation by 2009 to enable the designation of national parks in Northern Ireland.** Sustainable development will be at the heart of these proposals as national park management will not just be about landscape conservation and enhancement; it will also be about supporting park communities in an integrated and shared way and about promoting the sustainable use of natural resources.





Planning for the countryside

The Regional Development Strategy (RDS) 'Shaping Our Future' provides an overarching strategy for the physical development of Northern Ireland up to 2025. Protecting landscapes of regional and national importance for both aesthetic and economic reasons is included within the strategic guidance on the environment contained within the RDS. The Strategy will be subject to a review after 10 years to consider if major changes of direction are required in the light of new trends and circumstances. **We will ensure that this review along with other relevant planning policies takes account of sustainable development and afford appropriate protection to the landscape and natural resources.** A Focussed Assessment of the RDS is being undertaken at present to identify any aspects where 'in-course' adjustments might be appropriate.

Draft Planning Policy Statement 14: Sustainable Development in the Countryside,⁷⁶ currently out for consultation reinforces the commitment to conserve the landscape and natural resources of the rural area and to protect them from excessive, inappropriate or obtrusive development and from the actual and potential effects of pollution.

Forestry and Reform of the Common Agricultural Policy

Forestry policy is now a matter of international importance, driven by concerns about deforestation and the impact of this on global climate, the loss of habitats and biological diversity.

The recently published Forestry Strategy – A Strategy for Sustainability and Growth focuses on how more forests can be created and the sustainable management of existing forests. **We are committed through the Strategy to ensuring that all forests are managed to national standards and reinforce our desire to see the area of forests increased to that of other parts of the United Kingdom.** This national standard requires us to deliver a programme of habitat restoration, conservation, environmental enhancement and social engagement whilst ensuring economic viability.

Changes in agriculture, notably reform of the Common Agricultural Policy (CAP)⁷⁷ and the introduction of the Single Farm Payment (SFP)⁷⁸ will provide additional confidence that forestry can be a credible option for land use. Subject to overall spending priorities **we will support an increase in afforestation by optimising funding available under the**

⁷⁶ Further information on PPS14: Sustainable Development in the Countryside at <http://consultations.drdni.gov.uk>

⁷⁷ Further information on the Common Agricultural Policy (CAP) at www.defra.gov.uk/farm/capreform/index.htm

⁷⁸ Further information on the Single Farm Payment at www.dardni.gov.uk/grantsandsubsidies/gas0019.htm



Northern Ireland Rural Development Regulation Plan⁵⁷. Our target at present is to secure an additional 1,500 hectares of forest area by 2008. The Rural Development Regulation Plan will be reviewed again in 2013 and measures to provide afforestation can be reviewed again at that time.

We will also revise the existing Woodland Grant Scheme⁵⁸ to encourage an increased rate of new planting in locations where certain types of forestry seem particularly desirable.

We are considering agro-forestry systems that provide a fresh opportunity for introducing trees into farmed landscapes. Such systems can help create a healthy environment - enhancing the soil and improving wildlife habitat and harbouring birds and beneficial insects. **We will ensure that afforestation enhances landscape quality and biodiversity is conserved or enhanced.**

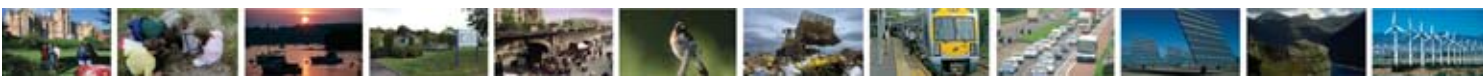
Restoration of Native Woodland on Plantations on Ancient Woodland Sites (PAWS)

Sensitive management of our ancient woodland sites is an important component of Sustainable Forest Management. Some of these sites have been planted with conifers during the 20th Century and are referred to as Plantations on Ancient Woodland Sites. Forest Service has carried out systematic surveys to identify PAWS and has prioritised those sites which should be restored to native woodland. By 2005/06, Forest Service had initiated restoration projects in 117 hectares which will not only enhance biodiversity but will also provide a cultural and educational resource.

Soil

Soil is essentially a non-renewable resource that performs many functions vital to human activities and the survival of ecosystems. Over recent decades soil has come under increasing pressures because of past and present land uses including agriculture, forestry, industry and urban and industrial developments. These activities can have negative impacts, preventing soil from effectively supporting human activities and the ecosystems. The resultant negative impacts on soils include loss of soil fertility, carbon and biodiversity, reduced water retention, disruption of the nutrient cycle and reduced capacity to attenuate contamination. Such impacts affect water and air quality, biodiversity, and climate change, in addition to health and food safety.





The European Commission (EC) is developing a Thematic Strategy for Soil Protection. The aim of this new strategy is to ensure the protection and sustainable use of soil based on the principles of preservation of soil functions, prevention of threats to soil, mitigation of their effects, restoration of degraded soils and integration into other policies.

It is expected that the Commission will propose a Soils Framework Directive to ensure a comprehensive approach is taken that recognises that certain threats such as erosion, organic matter decline, compaction, salinisation and landslides are greater in specific high risk areas. A national approach is expected to be considered more appropriate for dealing with other threats such as contamination and sealing.

We will support the UK approach to adopting the European Thematic Strategy for Soil Protection and the likely Soil Framework Directive and ensure implementation of the appropriate national measures where required.

Protect and enhance the freshwater and marine environment

Northern Ireland, compared with England and Wales, has significantly greater access to freshwater, a markedly lower population density with a correspondingly lower demand for water which means we tend to take our supply of water very much for granted. However, despite this apparent abundance, increasing pressures exerted by continued urban expansion and prolonged dry periods can create water supply problems in the summer. This is a situation which has the potential to be further exacerbated by changes to rainfall and temperature patterns as a result of climate change.

Protecting and enhancing our water environment is however more than just ensuring a supply to support business or a clean, safe potable supply for domestic consumers. Clean rivers, lakes and streams are not only an environment worth protecting for people to enjoy they are also an essential requirement to provide a healthy aquatic environment which will support a range of biodiversity.

There is a need to prevent or reduce the impact of incidents in which water is accidentally polluted. Measures with the aim of doing so are included in the Water Framework Directive. With regard to pollution prevention and control, water policy should be based on a combined approach using control of pollution at source through the setting of emission limit values and of environmental quality standards.



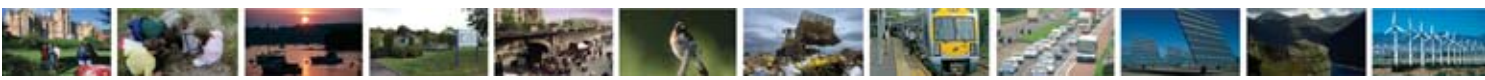
Integrated Pollution Prevention and Control (IPPC)

Integrated Pollution Prevention and Control (IPPC) is a regulatory system that employs an integrated approach to control the environmental impacts of certain industrial activities. It involves determining the appropriate controls for industry to protect the environment through a single permitting process. To gain a permit, operators have to show that they have systematically developed proposals to apply the Best Available Techniques to prevent pollution and meet certain other requirements, taking account of relevant local factors. IPPC operates in Northern Ireland under the Pollution Prevention and Control Regulations (NI) 2003 . Each installation requires a PPC permit issued by the Environment and Heritage Service, Some 80 industrial installations have been permitted under PPC in Northern Ireland so far. **We will increase this to have some 300 installations subject to IPPC controls when permitting of existing installations has been completed.**



Water Framework Directive

The EU Water Framework Directive (WFD) establishes a new and integrated approach to the protection, improvement and sustainable use of rivers, lakes, transitional waters (estuaries), coastal waters and groundwater within Europe. It impacts on the management of water quality and water resources and affects conservation, fisheries, flood defence, planning and environmental monitoring.



WFD represents a new, holistic approach to sustainable water use, balancing social and economic factors with the need to protect and improve our water environment. WFD will integrate the requirements of all existing EU water Directives and other Directives like Birds and Habitats, where these are dependent on water.

Under the WFD each EU Member State must designate administrative areas, known as River Basin Districts, to serve as a unit for management of river basins. A programme of measures to achieve specified environmental objectives for the water resources within each river basin must then be prepared. **We will agree river basin management plans by 2009 and ensure that the programme of measures they contain are fully implemented by 2012. We will also work to ensure that the aims of WFD to achieve the relevant environmental objectives for all surface waters and groundwaters by 2015 are met.**

The implementation of WFD in Northern Ireland will build on many existing programmes across Government to protect and improve the water environment including;

- The Water Reform⁸⁰ process which includes an extensive capital investment programme by the Department for Regional Development Water Service in updating waste water treatment works and sewerage infrastructure to standards required by the Urban Waste Water Treatment Directive;
- The introduction of water abstraction controls to encourage sustainable water consumption; and
- The Nitrates Action Programme and controls on the use of phosphorus fertilizers to tackle diffuse pollution from agriculture.

Government is responsible for taking action to prevent or minimise the effects of polluting discharges made to our waterways and for instigating enforcement action where appropriate. Under the Water (Northern Ireland) Order 1999, Environment and Heritage Service consent is required to discharge any trade or sewage effluent or any other potentially polluting matter from commercial, industrial or domestic premises to waterways or underground strata. Such discharge consents include conditions relating to the quality and quantity of effluent discharges. **We are committed to ensuring at least 90% compliance with Water (Northern Ireland) Order 1999 consent standards.**

There is concern that the proliferation of septic tank usage in the countryside is contributing to diffuse pollution loadings and is a factor in the increasing levels of eutrophication apparent in our waterways. There

⁸⁰ Further information on Water Reform at: www.waterreformni.gov.uk



is also concern about the possibility that tanks are not being desludged as required by the Consent to discharge. We will work to increase the overall percentage of houses connected to main sewers and the effectiveness of effluent treatment for those properties not connected to mains sewers.

Sustainable Urban Drainage Systems

In the past, the key function of surface water drainage systems has been perceived as transporting surface water away from one place to another. There is now widespread agreement that we need to ensure that surface water drainage systems perform a wider range of functions to achieve our aim to make human activity more sustainable. It has been strongly argued that the approach taken with Sustainable urban Drainage Systems (SuDS) supports this suggested aim, by slowing down the flow of water and by reproducing a pre-development pattern of discharge. This decreases the risk of downstream flooding, improves water quality and has potential benefits for water supplies and wildlife.

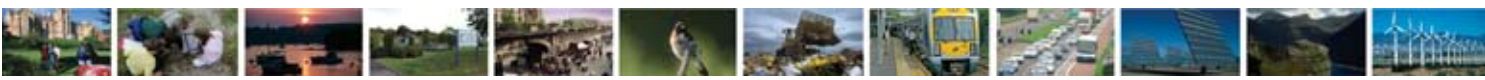
A Northern Ireland SuDS Working Party has been established, with representation from across Government. This group is looking at what needs to be done to facilitate a much wider use of SuDS across Northern Ireland, including any necessary changes to legislation, with the aim of Government adopting a Northern Ireland SuDS strategy during 2007 which will enable further promotion of the introduction of sustainable drainage systems in future developments.

Marine Bill

With the wide range of pressures on our seas we need a new integrated framework for the improved management and protection of our marine environment. The UK Government and devolved administrations are working together to achieve the best means for managing the marine environment around the UK. Consultation is currently underway on proposals for a Marine Bill⁸¹ which will introduce mechanisms for integrated planning, management and protection of the marine environment and the creation of a new fit-for-purpose framework founded on the principles of sustainable development, good regulation and modern Government. Northern Ireland Ministers are committed to the Bill and the legislation will apply to Northern Ireland. The European Commission is also considering a Marine Strategy Directive modelled on the WFD, and designed to achieve Good Environmental Status for Europe's marine environment by 2021.

⁸¹ Further information on the Marine Bill at: www.doeni.gov.uk/epd/cons_response_forms/details.asp?docid=3338





Integrated Coastal Zone Management

Northern Ireland's coast is highly valued for its scenic beauty, rich wildlife and economic importance to local communities. However there are increasing pressures being placed on this natural resource and a growing recognition within the EC that coastlines should be managed in a strategic, integrated and sustainable way. The 1999 assessment report of the European Environment Agency indicates a continuing degradation of conditions in the coastal zones of Europe as regards both the coasts themselves and the quality of coastal water. Coastal zones are further threatened by the effects of climate change, in particular rising sea level, changes in storm frequency and strength and increased coastal erosion and flooding. We are addressing these issues through the implementation of WFD together with the Northern Ireland Integrated Coastal Zone Management (ICZM) strategy and the development of a new policy framework for river/coastal flood risk management. The objective of ICZM is to establish sustainable levels of economic and social activity in our coastal areas while protecting the coastal environment. ICZM seeks to reconcile the different policies that have an effect on the coast and to establish a framework that facilitates the integration of the interests and responsibilities of those involved in the development, management and use of the coast. **We will introduce an ICZM strategy for Northern Ireland in 2006.**



Rathlin Island:

Some six miles off Ballycastle in Co. Antrim it has been inhabited since Mesolithic times and is the only still populated island within Northern Ireland's coastal zone. It is rich in cultural and natural history and is part of a designated ASSI. The island has special significance for nesting sea birds, heathland, habitat and rare plants.

A groundbreaking project which is part of a sustainable tourism masterplan for the Causeway Coast and Glens Area includes a ten-point action plan for the island.

A key action is to "Maintain in its character, natural capital, built heritage and environmental quality" by amongst other things:

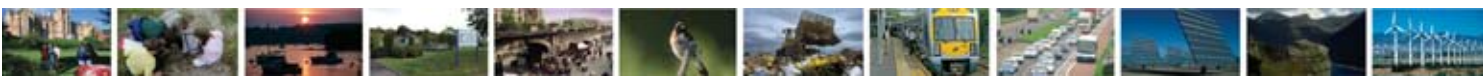
- **Monitoring condition of designated sites;**
- **Encouraging accreditation under the wise scheme (www.wisescheme.org) for compliant wildlife trip operators;**
- **Developing a Rathlin specific Code of Good Environmental Practice;**
- **Considering solutions to waste disposal other than dumping at sea or incineration; and**
- **Looking at the feasibility of improvements to sewage system**

Planning for the coast

The environment in the coastal zone is subject to a range of particular development, economic and leisure pressures. This entire coastal zone with its wealth of natural and cultural resources needs a range of continuing actions to ensure its conservation for future generations.

Government is currently preparing a Planning Policy Statement for the Coast (PPS20) . The underlying aim of PPS20 is to manage coastal development in a manner likely to achieve the long-term objectives contained in the Regional Development Strategy, Strategic Planning Guidelines, and particularly "to protect and manage the Northern Ireland coastline."





The Statement will supersede existing coastal planning policies and will take into account recent European and national developments in the area of marine spatial planning.

The main objectives of PPS20 are:

- to manage coastal development in a sustainable manner and protect the natural character and landscape of the coast;
- to adopt the precautionary approach and prevent inappropriate development in areas at risk of erosion and land instability, and respond to the implications of climate change in the coastal zone, and;
- to enhance the undeveloped coast and protect those areas of the coast of recognised biodiversity and landscape quality.

We will aim to publish the draft PPS20 by March 2007.

Improve our air quality

The quality of the air we breathe is important to all of us. Many significant improvements in Northern Ireland's air quality have been made over the last decades with a significant reduction of pollutants associated with burning solid fuels. However, despite these reductions air pollution still harms our health and is known to have detrimental effects on sensitive habitats and ecosystems. In 2005 it is estimated that within the UK the level of man-made particulate pollution reduces average life expectancy by up to 8 months⁸³.

Air Quality Strategy

The Air Quality Strategy (AQS) 2000 provides a UK framework for improving air quality and sets health based air quality objectives for nine key pollutants e.g. carbon monoxide, ozone, lead, etc. Although its main focus is on protecting the health of the population at large, the UK AQS also sets objectives for the protection of vegetation and ecosystems. The Strategy's range of measures has delivered a significant reduction in emissions from transport, commercial and industrial sources since its inception. However, although our air is cleaner in overall terms, air pollution is not declining as quickly as expected and we need to move faster and take further measures to move us closer to meeting our objectives.

⁸³ Source Defra: www.defra.gov.uk/news/2006/060405b.htm



The current Strategy is under review and a consultation paper⁸⁴ was published by the UK Government in April 2006 for comment. The current review seeks to address air quality at sites which are specifically designated for conservation purposes such as: Areas of Special Scientific Interest; Special Areas of Conservation; Special Protected Areas; and RAMSAR⁸⁵ sites, with exceptions for those sites which lie within certain 'exclusion zones', defined by proximity to urban settlement or motorways. It offers new measures to help cut environmental damage from acidic air pollution. **We will liaise with the UK Government and the other Devolved Administrations to assist in the production of an updated Air Quality Strategy to be published at the end of 2006 drawing conclusions from this consultation and providing a clear, long-term vision for air quality, which will be a significant step forward in improving public health and our environment.**

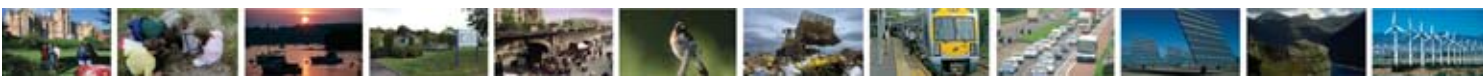
The UK Government and Devolved Administrations propose to adopt a European target objective for protecting vegetation and ecosystems from the harmful effects of ozone, and it is expected that the UK will meet this objective by 2010.

Over the last few years Local Government has taken on an increasingly important role in air quality management. District Councils are required to regularly review and assess the air quality in their areas and take decisive action when the objectives cannot be met. The Department of the Environment (DoE) has provided grant funding to enable District Councils to carry out their air quality management responsibilities. The first round of review and assessment of local air quality by District Councils has now been completed. Eleven councils have identified areas at risk of exceeding health based air quality objectives and have now declared these areas as Air Quality Management Areas (AQMAs). Councils and Relevant Authorities are currently in the process of drawing up local action plans aimed at delivering air quality improvements to meet air quality objectives in these AQMAs.

⁸⁴ Further information on the Air Quality Strategy consultation at: www.doeni.gov.uk/epd/policies_leg/details.asp?docid=3380

⁸⁵ Further information on RAMSAR sites at: www.ehsni.gov.uk/natural/designated/ramsar.shtml





Westlink - Local Air Quality Management

An air quality monitoring station funded under the Local Air Quality Management Grant Scheme (LAQMG) and the EU Building Sustainable Prosperity Programme⁸⁶ operates in Belfast. It is located within a designated Air Quality Management Area. Air quality is currently poor in this area and is largely attributable to emissions from cars and other vehicles.

The LAQMG scheme aims to support air quality improvement initiatives including:

- **Air quality reviews and assessments;**
- **Preparing and implementing air quality action plans; and**
- **Management of local air quality.**

The IPPC regulatory system (mentioned under Strategic Objective 2) also covers industrial activities that may have an impact on air quality standards.

Conserve, protect, enhance and sustainably re-use our historic environment

Our built heritage is a precious asset and a powerful reminder of the work and way of life of earlier generations. The richness of our architectural heritage plays an influential part in our sense of national and regional identity. It provides a sense of place, which, through sensitive planning, promotes well-being and makes Northern Ireland a better place to live and work.

Listed Buildings and Conservation Areas

Government has the task of identifying and protecting our built heritage in Northern Ireland. Our main means of doing this is by listing, i.e. recommending buildings for inclusion on statutory lists of buildings of 'special architectural or historic interest' in accordance with Article 42 of the Planning (Northern Ireland) Order 1991⁸⁷. In addition Government also protects areas of 'special architectural or historic interest' by designating them as conservation areas under Article 50 of the Planning Order.

⁸⁶ Further information on EU Building Sustainable Prosperity Programme at www.dfpni.gov.uk/bsp_compaug02.pdf

⁸⁷ Further information on the Planning (NI) Order 1991 at: www.opsi.gov.uk/si/si1991/Uksi_19911220_en_1.htm



Between 1969 and 1993 all of the buildings in Northern Ireland were assessed for their architectural and historic interest and some 8500 buildings are presently included in the Statutory Listing. The first Conservation Area⁸⁸ designated in Northern Ireland was Gracehill in 1975 and since then a further 58 areas have been added, the latest in Lurgan in 2004.

A Second Survey of Northern Ireland's building stock has begun to re-assess current listings and to identify additional buildings and features worthy of protection. We are committed to progressing this work as speedily as possible and will aim to have it substantially completed by 2016. We will also consider further Conservation Area designations to protect our special townscapes.

In carrying out the above work we will consult with the Historic Buildings Council and District Councils.

Built Heritage at Risk Register

In conjunction with the Environment and Heritage Service, the Ulster Architectural Heritage Society⁸⁹ has compiled an online Register of Buildings at Risk in Northern Ireland (BARNI). The Register highlights buildings of architectural and historic interest whose future seems threatened and may be suitable for restoration and repair. A small number of scheduled monuments whose condition gives cause for concern are also included. The project aims to heighten public awareness of structures that appear to be 'at risk'; provide help and advice for existing owners who may wish to engage upon a suitable scheme of repair; and offer assistance to potential new restoring owners who are looking for suitable properties.

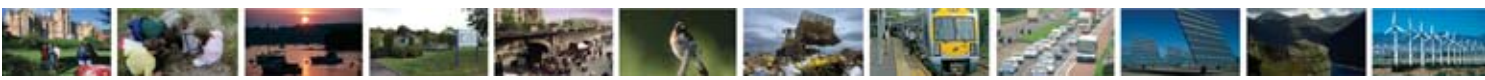
While there are some 400 structures on the BARNI **we are working to reduce this number and at present are committed to rescuing 200 structures on the register by 2016.**

To assist with the retention of the important features of listed historic buildings Government has offered financial assistance to owners through a grant-aid scheme on construction costs and associated professional fees. Each year, around 150 historic buildings are conserved through work grant-aided by the Environment and Heritage Service. **We are currently reviewing the policy on grant-aiding works to retain and restore listed buildings in Northern Ireland and will consider the current level of grant-aid; possible extension of the scheme to the majority of listed buildings; and expansion of**

⁸⁸ Further information on Conservation Areas at: www.planningni.gov.uk/areaplans_policy/Conservation/CA.htm

⁸⁹ Further information on Ulster Architectural Heritage Society at: www.uahs.org.uk





the scheme to include applications for ‘maintenance’ work as well as ‘repair’.

The re-use and adaptation of empty and disused buildings not only helps restore the character of run down areas but also limits the need for energy-intensive demolition and construction activity. Maintaining and converting historic buildings conserves the resources used to build them, and minimises the carbon emissions associated with demolition and redevelopment. It is a fundamental principle of conservation strategies that historic buildings are repaired with natural materials and that as much original material is retained as possible. **We will work to increase the retention of historic fabric in listed buildings.**



Historic Monuments

Historic Monuments are relics of a cultural heritage extending back in time for 9,000 years and the Government through the Environment and Heritage Service is guardian of 185 state care sites and protects some 1,700 archaeological features. A range of measures are in place to identify, record, monitor and protect these features working along with other Government departments and agencies and through management agreements with private owners.



We will monitor public and private development to ensure that the loss of archaeological remains is minimised and **we will complete survey records of 1,500 historic monuments by 2010.**

Planning for the historic environment

Planning Service will continue to make appropriate use of PPS6, "Planning, Archaeology and the Built Heritage"⁹⁰ to safeguard archaeological features, ensure the conservation and re-use of historic buildings and protect our townscapes and other important elements of our historic environment.

Heritage Lottery Fund

The Heritage Lottery Fund (HLF)⁹¹ has had a tremendous positive impact on the heritage of Northern Ireland. The Fund distributes money raised by the National Lottery to support all aspects of heritage. The Planning Service co-ordinates the Townscape Heritage Initiative (THI) programme in Northern Ireland, a grant programme approved by the Heritage Lottery Fund that focuses on designated Conservation Areas. The main aim of the programme is to make possible the continued viable use of the buildings which make up the special architectural character of historic urban areas. **We welcome the opportunity to work with HLF in contributing to the future conservation and appreciation of our local heritage.**

Building Preservation Trusts such as Hearth⁹², which led to the restoration of the historic Portrush Town Hall, also have a valuable role to play. We will support the voluntary sector in furthering development of such trusts.

Protocol for the Care of the Government Historic Estate

The Government has an extensive historic estate encompassing buildings and landscapes, buried remains and historic areas. **We are committed to setting a good example in the care of our historic estate and will ensure a consistent and co-ordinated approach to protecting these assets in the course of our estate management, disposal and procurement activities.**

Protect and enhance biodiversity

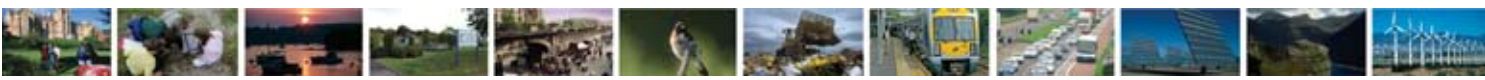
Biodiversity is the Earth's life support system. Its conservation is inextricably linked to the quality of our air, water, soil, food and biological

⁹⁰ Further information on PPS 6 Planning, Archaeology and the Built Heritage at: www.planningni.gov.uk/AreaPlans_Policy/PPS/pps6/pps6.pdf

⁹¹ Further information on the Heritage Lottery Fund at: www.hlf.org.uk

⁹² Further information on Hearth at: www.hearth-housing.org.uk





resources and is of paramount importance to the health of our wildlife, people and economy. Over the past 20 years development has altered the landscape with a dramatic effect on the wildlife in Northern Ireland.

Our freshwaters suffer from nutrient enrichment arising in the main by the increasing use of inorganic fertilisers and slurry application. The environmental impact of tourism, the construction, manufacturing, and commercial fishing sectors and the effects of climate change have all added to the damage.

Stricter controls on pollution and changes in agricultural support payments have greatly reduced the rate of loss of biodiversity and in some cases reversed it. However much remains to be done and the impacts of climate change on our native flora and fauna must also be addressed.

The Northern Ireland Biodiversity Strategy(NIBS)⁹³

A comprehensive Biodiversity Strategy for Northern Ireland was launched in 2002. The Strategy contained 76 recommendations aimed at halting Northern Ireland's biodiversity loss by 2016. The majority of the recommendations are for Government to achieve and an independent Biodiversity Group has been appointed to oversee the achievement of these recommendations.



⁹³ Further information on the Northern Ireland Biodiversity Strategy at www.ehsni.gov.uk/natural/biodiversity/issues.shtml

Since the publication of the Northern Ireland Biodiversity Strategy a European target has been set which seeks to halt and reverse the decline of biodiversity by 2010 (the Gothenburg Declaration)⁹⁴. This revised target is the subject of discussions within the EC and, depending on the outcome it is proposed to realign the existing objectives within the NIBS.

Other key recommendations contained in the 'First Report of the Northern Ireland Biodiversity Group – Delivery of the Northern Ireland Biodiversity Strategy'⁹⁵ September 2005 include the agreement of clear lines for biodiversity delivery in Government, the development of departmental biodiversity implementation plans and a large scale campaign to build awareness of biodiversity and the work being undertaken by the various sectors in achieving recovery.

We will take action to progress the implementation of the Northern Ireland Biodiversity Strategy and all national and international nature conservation legislation and regulations.

Areas of Special Scientific Interest (ASSIs)

Areas of Special Scientific Interest (ASSIs)⁹⁶ are areas of land that have been identified by scientific survey as being of the highest degree of conservation value. They have a well-defined boundary and by and large remain in private ownership. The underlying philosophy is to achieve conservation by co-operation and the part played by landowners is fully recognised and encouraged.

We have embarked on a programme of site surveys with the aim of establishing a network of sites that together guarantee the survival of Northern Ireland's wildlife and geological features by representing (and protecting) an adequate sample of the diversity of plants, animals and earth science features that are present. **We are committed to completing the ASSI designation programme by 2016.** These additional ASSIs will add a predicted 40,000 hectares of land to the existing suite of sites.

Effective nature conservation involves more than site designation. For conservation to be successful, management and monitoring systems must be established. Site condition assessment and site integrity monitoring are now in place and incentives for landowners to manage ASSIs in the most appropriate way are available under the Management of Sensitive Sites scheme (MOSS)⁹⁷. The scheme, administered

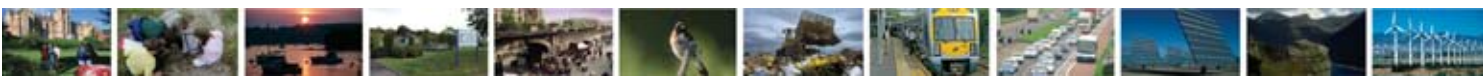
⁹⁴ Further information on the Gothenburg Declaration at www.europa.eu.int/scadplus/leg/en/s15006.htm

⁹⁵ Further information on First Report of the Northern Ireland Biodiversity Group – Delivery of the Northern Ireland Biodiversity Strategy at: www.doeni.gov.uk/uploads/nibs2005.pdf

⁹⁶ Further information on Areas of Special scientific Interest at: www.ehsni.gov.uk/natural/designated/area_interest.shtml

⁹⁷ Further information on Management of Sensitive Sites at: www.ehsni.gov.uk/pubs/publications/moss_guidance_notes.pdf





by EHS targets farmers within, or adjacent to ASSIs. MOSS was developed as a means of encouraging the proactive conservation of our most valuable natural heritage sites. Under the scheme landowners can receive payment for carrying out conservation work within the framework of a written agreement. Further support is also available under agri-environment schemes (see below). **We are committed to making substantial progress in this work and ensuring that 95% of features on statutory designated sites are in, or approaching favourable condition by 2016.** Tackling many of the problems of unfavourable condition is directly linked with current policy changes developed to encourage environmentally friendly farming practices. We recognise that we need management agreements and agri-environment schemes working together to achieve the condition targets.

Agri-environment schemes

With some 80% of Northern Ireland's land surface being dominated by agriculture and most of its sea areas impacted by fisheries, the Department of Agriculture and Rural Development (DARD) has a key role to play in biodiversity issues. The Department has taken a proactive role in delivery for biodiversity driven by EU changes in agricultural policy.

A range of voluntary agri-environment schemes are available to support farmers at different levels depending on the amount of commitment the individual farmer is prepared to offer, and on the types of habitats/species the holding can, or could, support.

DARD has designated 5 Environmentally Sensitive Areas (ESAs) in Northern Ireland covering 220,000 hectares where farmers receive payments to reflect the additional cost /income foregone of farming in an environmentally sensitive way. Its aim is to assist farmers in balancing production with environmental protection in areas of the countryside where landscape, wildlife or heritage is of particular importance.

DARD's Countryside Management Scheme (CMS)⁹⁸ provides similar payments to participant farmers outside the ESAs and is designed to encourage landowners and farmers positively to manage habitats, improve water quality, enhance the landscape and protect heritage by integrating good farming practice with care and protection of the environment.

This work is also complemented by the MOSS scheme administered by EHS. DARD and EHS recognise that existing schemes need to be

⁹⁸ Further information on Countryside Management schemes at: www.ruralni.gov.uk/environment/countryside/schemes



improved and are working in partnership to refine them so that features of protected sites can be brought into favourable condition and then maintained in that state through optimum management.

We are aware of the impact that such initiatives can have on biodiversity conservation and are committed to increasing the biodiversity and water quality focus of agri-environment schemes. We will have some 12,500 farms with a total land area in excess of 400,000 hectares under ESA/CMS management prescriptions by October 2006.

Countryside Surveys

The Northern Ireland countryside has a wide range of wildlife habitats that are important for the economy and are valued by people. To make wise decisions on how to manage countryside biodiversity, reliable information is needed on how habitats change with time. Providing this information is the main objective of the Northern Ireland Countryside Survey research programme.

The last Northern Ireland Countryside Survey⁹⁹ was published in 2000 and describes the amount, distribution and types of habitats and shows how they have changed during the 1990s. It is an independent review of performance and progress towards sustainable development and contributes to assessing the effectiveness of countryside policies.

We will complete further Countryside Surveys in 2007 and by 2017 to help determine the achievement of overall biodiversity targets.

Statutory Duty

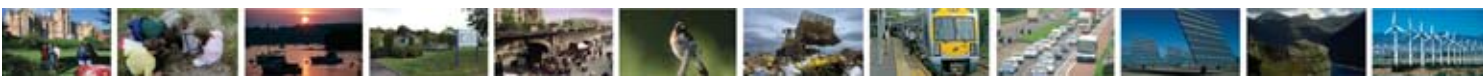
It is proposed to give statutory recognition to the duty upon Government to further the conservation of biodiversity and to underpin the key mechanisms established. This duty will be similar to legislative changes adopted in the rest of the UK (Countryside and Rights of Way Act 2000 for England and Wales and the Nature Conservation (Scotland) Act 2004). This is designed to strengthen biodiversity conservation, which in turn should help to encourage a culture change within public bodies so that biodiversity issues become a natural consideration in policy development. **We will be holding a formal policy consultation exercise on the draft Order by Summer 2006.**

Priority Species

We recognise the need to provide greater protection for priority species and those already subject to statutory protection. **We will update the**

⁹⁹ Further information on the Northern Ireland Countryside Survey at: www.science.ulster.ac.uk/nics





list of protected species in proposed amendments to the 1985 Wildlife (Northern Ireland) Order. Individual Species Action Plans (SAPs) will be developed to provide specific actions to address species at risk and some will be developed on an all-Ireland basis.

Horse Mussel Beds in Strangford Lough

An example of Government's commitment to species restoration and protection is the reef community based on aggregations of the Horse Mussel in Strangford Lough. The Horse Mussel beds are a distinctive feature of the Lough's marine ecosystem on which hundreds of other organisms may depend.

Following concerns that the Horse Mussels in Strangford Lough were in serious decline and the reef feature 'no longer in favourable conservation status', Government expressed its commitment to halting this deterioration and taking urgent and decisive action to fully protect the site and restore the Horse Mussel beds.

A ban on the use of mobile fishing gear has been imposed and a restoration plan for the Horse Mussel beds has been prepared.

Invasive Species

Invasions by non-native species are a major threat to global biodiversity. Northern Ireland and the Republic of Ireland have international obligations to address invasive species issues, principally under the Convention on Biological Diversity¹⁰⁰ and the Habitats Directive¹⁰¹. Specific habitat types currently under threat in Ireland from invasive species include freshwater river systems, native woodland, coastal saltmarsh and coastal sand dunes. A variety of native species are also threatened by introduced species, including red squirrels, which are being ousted by the American grey squirrel, red deer and earthworms. **We will prepare management statements for the key invasive species that affect our local biodiversity.**

¹⁰⁰ Further information on the Convention on Biological Diversity at: www.biodiv.org/convention/default.shtml

¹⁰¹ Further information on the Habitats Directive at: www.jncc.gov.uk/page-1374



Chapter 3

The Challenge

Sustainable development is about ensuring a better quality of life for everyone and reducing the inequalities that exist across our society. Often those people who are most economically and socially disadvantaged also live in the most degraded environments with fewer jobs, unsafe and unattractive streets. The disparity has been exacerbated by decades of sectarian conflict which has divided communities at a time when they should be uniting to face the bigger challenges of the future.

The link between environment and health is well established with those from more deprived communities suffering higher incidence of serious illness and lower life expectancy. Similarly there are inequalities in employment between urban and rural areas and between the more deprived and more affluent sectors of our society. The challenge therefore is to build community relations; tackle poverty and social exclusion; provide good quality employment opportunities and regenerate our urban and rural environments in order to successfully build sustainable communities.

The aim of Government is to help create sustainable communities that embody the principles of sustainable development at the local level. This will involve working to give communities more power and influence in the decisions that affect them and working in partnership at the right level to get things done. It means ensuring that people have the skills and qualifications necessary to support and develop a thriving sustainable economy within their community and it means ensuring that they have an environment that promotes a healthy lifestyle.

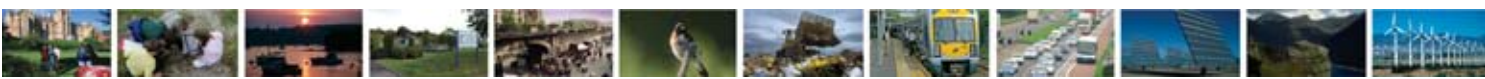
It also means creating a network of well connected sustainable communities with decent homes in places with clean, safe and green public spaces, where people are able to lead healthy lives, enjoy the environment around them and where people want to come to live and work.

The scale of the challenge is larger in Northern Ireland where in comparison with the rest of the UK we experience higher levels of deprivation both within our urban areas and equally acutely within some of our more remote rural communities.

¹⁰² Further information on the Homeless at: <http://www.nics.gov.uk/press/sd/040928a-sd.htm>

¹⁰³ Further information on Housing Stock at: http://www.dsdni.gov.uk/housing_statistics_2004-2005.pdf





Housing

- In Northern Ireland 17,362 households were presented as homeless in 2004-05, a rise of 1.2% on 2003-04 following a 4.4 % increase from 2002-03.¹⁰²
- The number of vacant dwellings now constitute 5.2% of the total housing stock.¹⁰³

Poverty

- 153,530 households (25%) suffer fuel poverty, the highest rate in the United Kingdom.

Crime

- Recorded crime levels are more than double (135 per 1,000 population) the Northern Ireland average (63 per 1,000 population) in some of the most deprived areas.¹⁰⁴

¹⁰⁴ Further information on the Crime levels at:
http://www.psni.police.uk/index/statistics_branch.htm

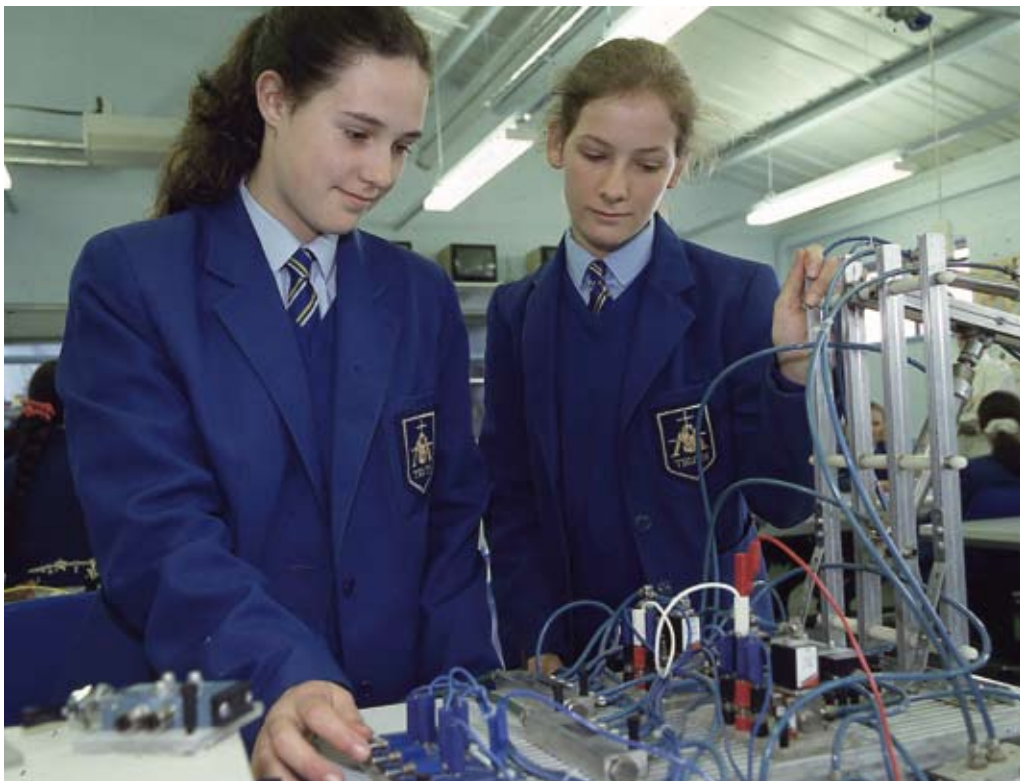


The wider impacts of deprivation and indeed some of the causes are related to inequalities in education and skills attainment.

Education/Skills.

- **Compared with England and Wales we have a higher proportion of pupils who achieved 2 or more A levels and 5 or more GCSEs at grades A*-C in 2002-03. However, 24% of our working population has no qualifications compared with 15% in the UK.¹⁰⁵**
- **In the most deprived wards in Northern Ireland up to 75% of persons aged 16-74 have no qualifications, compared with as few as 8% in the least deprived wards¹⁰⁶**
- **83.9% of economically active adults are qualified to NVQ level 1 or above, the UK figure is 89.6%¹⁰⁷.**

This in turn leads to inequalities in employment and health and a significant gap both between Northern Ireland and the UK and between the most deprived wards in Northern Ireland and the more affluent.

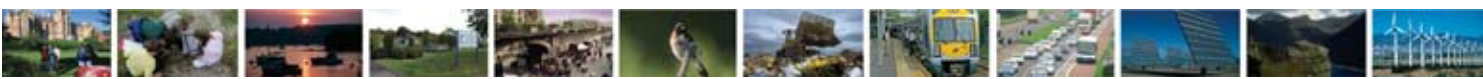


¹⁰⁵ Source NI Annual Abstract of Statistics 2004. Further information at: http://www.nisra.gov.uk/Uploads/publications/pre_annual_abstract_2004.pdf#search='ni%20annual%20abstract%20of%20statistics%202004'

¹⁰⁶ Source Census 2001. Further information at: www.nicensus2001.gov.uk

¹⁰⁷ Source BSP Annual Implementation Report 2004, page 32. Available on <http://www.europe-dfjni.gov.uk/downloads.htm>





Employment

- In 2005, 286,000 people were classed as economically inactive, 27.2% of those aged 16-59/64.¹⁰⁸
- In the most affluent wards 3% of people are excluded from work through unemployment, sickness or disability, compared with up to 30% in the most deprived wards.¹⁰⁹
- In 2005, 31% of the unemployed had no formal qualifications, compared with 18% of those in employment.¹⁰⁸
- The Northern Ireland working age inactivity rate is the highest of all the UK regions. At November 2005, the seasonally adjusted working age inactivity rate in Northern Ireland was 27.4% compared with 21.4% for the UK as a whole.¹⁰⁸

Health

- Health inequalities are predominant in the most deprived wards where life expectancy for men is 3.5 years and for women 2.2 years lower than the Northern Ireland average.¹¹⁰
- A person aged under 75 living in a deprived area is 34% more likely to die than a similar person in Northern Ireland overall.¹¹¹
- Lung cancer incidence rates for all persons are 57% higher in deprived areas than in Northern Ireland overall.¹¹¹
- Respiratory disease accounts for nearly 15% of deaths in Northern Ireland.¹¹²
- During the period April 2000 and March 2003, admission rates for respiratory diseases were higher in deprived areas than in Northern Ireland overall, particularly for females (33% higher).¹¹¹

¹⁰⁸ Source DETI NI Labour Force Survey Autumn 2005 <http://www.detini.gov.uk/cgi-bin/downutildoc?id=1423>

¹⁰⁹ Source Noble 2001: <http://www.nisranew.nisra.gov.uk/Census/Census2001Output/KeyStatistics/keystatrep1.html>

¹¹⁰ Source: Investing for Health Update 2005, DHSSPS: www.dhsspsni.gov.uk/show_publications?txtid=12579

¹¹¹ Source: NISRA – Health & Social Care Inequalities Monitoring System Update Bulletin 2004: http://www.dhsspsni.gov.uk/hsc_inequalities_monitoring.pdf

¹¹² Source: DSD PS Press Release 15 March 2006: <http://www.nics.gov.uk/press/hss/150302b-hss.htm>



Vision

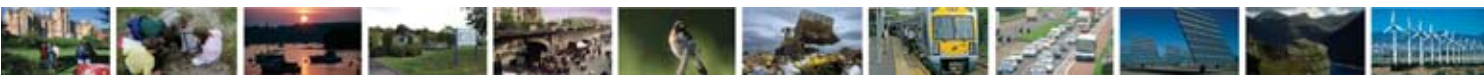
A Northern Ireland built around a network of sustainable communities encompassing urban and rural areas, where existing settlements and any new developments are designed to be more sustainable.

A sustainable community balances and integrates the social, economic and environmental components of the neighbourhood; it meets the needs of existing and future generations; and respects the needs of others in the wider region and internationally to live more sustainably.

The ideal sustainable community should be:

- **Thriving** – with a flourishing and diverse local economy and high levels of fitness and health
- **Well served** – with public, private, community and voluntary services that are appropriate to people's needs and, where possible, available locally
- **Well connected** – with good transport services and communication linking people to jobs, schools, health and other services while minimising the need to travel
- **Well designed and built** – featuring a quality built and natural environment that respects and complements the natural capital of the area.
- **Environmentally sensitive** – providing places for people to live that are considerate of the environment and are carbon neutral
- **Well run** – with effective and inclusive participation, representation and leadership
- **Active, safe and inclusive** – fair, tolerant, welcoming and cohesive with opportunities for culture, leisure, recreation and other shared community activities





Strategic Objectives

Three strategic objectives on sustainable communities have been chosen for the strategy.

- **To increase the economic well-being of the people of Northern Ireland**
- **To create an attractive, high quality environment where people feel safe and which provides the conditions for health and social well-being**
- **To promote the development of community engagement, civic leadership and responsible citizenship.**

The strategic objectives and main targets are set out below and will be supported by actions to enable, encourage and build capacity to deliver. These will be developed in more detail in the implementation plan



Strategic Objective 1

To increase the economic wellbeing of the people of Northern Ireland.

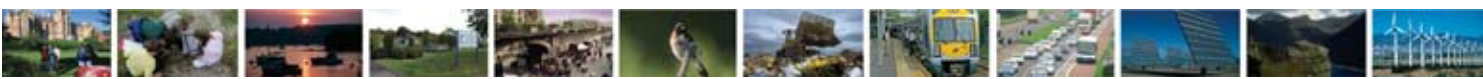
Key Targets

- Reduce the productivity gap between Northern Ireland and other UK regions and between the Northern Ireland average and the most deprived communities.
- Reduce the skills gap between Northern Ireland and other UK regions and between the Northern Ireland average and the most deprived communities.
- Invest in modern infrastructure to support the needs of the people of Northern Ireland

Important Steps

- Reduce economic inequalities through targeted regeneration programmes leading to a net increase in jobs in the most deprived communities.
- Increase the skills and qualifications of the Northern Ireland workforce, (including the Essential Skills of numeracy, literacy and ICT), and encourage higher value-added jobs and enhancements to productivity
- Increase Northern Ireland's employment rate taking account of the economic cycle.
- To develop a strong diverse rural economy
- Use technology and land use planning to improve employment opportunities for all and access to jobs in remote areas
- Increase investment in R&D and promote innovation
- Promote a culture which supports enterprise and entrepreneurship.
- Develop a globally competitive sustainable tourism industry





Strategic objective 2

To create an attractive, high quality environment where people feel safe and which provides the conditions for health and social well-being.

Key Targets

- By 2009 ensure planning policy and guidance fully reflects the sustainable communities approach, integrates health objectives, incorporates greater consideration of crime prevention and permits development only within local environmental capacity.
- By 2010 implement the Neighbourhood Renewal Strategy – People and Place¹¹³
- By 2020 all major towns and cities in Northern Ireland to have developed regeneration masterplans based on sustainable development principles.
- Address housing need in line with the Regional Development Strategy¹¹⁴ targets to 2015.
- Ensure that all social housing meets the Decent Homes Standard¹¹⁵ by 2010
- Improve health and life expectancy of the population overall, and reduce health inequalities.
- Work in partnership to achieve improvements in health and reduction in neighbourhood crime and antisocial behaviour by developing and implementing a “Cleaner, Safer, Greener Communities” agenda.

Important Steps

- Ensure urban and rural regeneration aligns with the principles of sustainable development and is carried out in a holistic manner targeting the most deprived communities.

¹¹³ The Neighbourhood Renewal Strategy can be downloaded on this site:
http://www.dsdni.gov.uk/neighbourhood_renewal_phase_2_funding

¹¹⁴ Regional Development Strategy, 'Shaping Our Future'
http://www.drdni.gov.uk/DRDwww_Strategies/current.asp?id=str16

¹¹⁵ More information on the Decent Homes Standard can be found at:
<http://www.odpm.gov.uk/index.asp?id=1153924>



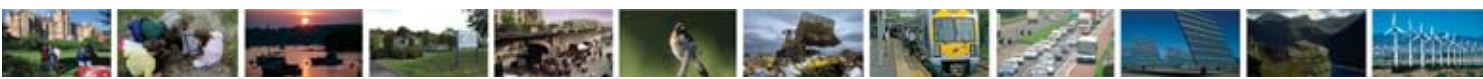
- By 2007 establish a programme of urban and rural regeneration schemes
- Ensure future development maximises use of brownfield sites, includes appropriate targets for affordable housing and that developers provide appropriate contributions towards the community and infrastructure costs arising from their proposals.
- Eliminate fuel poverty by 2016
- Eradicate child poverty by 2020
- Address the needs of homeless people and improve the living conditions of the Traveller Community
- Achieve measurable improvement in the quality and accessibility of public services particularly in disadvantaged and rural areas.
- Deliver key “Investing for Health”¹¹⁶ targets to reduce death from cancer, coronary heart disease, respiratory disease, stroke, accidents and suicides and reduce health inequalities
- Promote PSNI Secured by Design¹¹⁷ guidance and encourage greater involvement of the planning system in crime prevention to help make neighbourhoods safer places
- Encourage healthy outdoor activities by improving accessibility to green spaces
- Locate new development in areas which are accessible by means of walking, cycling and public transport thereby reducing reliance on the private car.
- Implement the Road Safety Strategy 2002 – 2012¹¹⁸ to reduce the overall number of people killed and seriously injured (KSI) as a result of road traffic collisions by 33% and the number of child KSIs by 50% from the average for the period 1996-2000.

¹¹⁶ Department of Health, Social Services and Public Safety (March 2002) *Investing for Health*
<http://www.investingforhealthni.gov.uk>

¹¹⁷ Further information on Secured by Design at

¹¹⁸ Department of the Environment's NI Road Safety Strategy 2002-2012:
http://www.doeni.gov.uk/roadsafety/pdfs/roadsafetystrategy_051102.pdf





Strategic Objective 3

To promote the development of community engagement, civic leadership and responsible citizenship.

Key Targets

- By 2009 strengthen the involvement of communities and better reflect local views through community planning powers.
- Modernise the voluntary and community sector to strengthen the service delivery role of organisations.
- Build capacity in disadvantaged communities to develop the active participation of local people in achieving positive change.

Important Steps

- Bring forward a statement setting out Government's policy for involving the community in development control and development plan making functions
- By 2009 ensure that community planning is implanted within the revised local authority system
- Promote active citizenship and good relations within and between communities
- Build community capacity and deliver training for constructive and effective participation in decision making.
- Engage and empower local people to drive forward regeneration projects in their neighbourhoods
- Ensure public services are delivered in a more integrated way which recognises the active involvement and engagement of local communities
- Improve the quality of and access to information on the local environment including options such as "one-stop-shops".
- Consider use of consultative and stakeholder forums to allow citizens to be involved in decision-making on sustainable development issues at a local level.



To increase the economic well-being of the people of Northern Ireland.

Economic Vision

The Economic Vision for Northern Ireland¹¹⁹ articulates a vision of Northern Ireland as “a high value-added, highly skilled, innovative and enterprising economy which enables us to compete globally leading to greater wealth creation and better employment opportunities for all.” While Northern Ireland is prospering in many areas there are still serious weaknesses to be tackled: productivity is below the UK level, more people here are unemployed for longer periods and average gross weekly earnings for full-time employees are the second lowest of all the UK regions. **We will take action to close the productivity gap and increase the employment rate as key priorities.**

It is imperative that the Northern Ireland economy continues to improve its competitiveness and moves from a position which relies less on low costs to one based on higher value-added products and services, innovation, creativity and high workforce skills. **We will support enterprise and infrastructure investment, which is key to securing a sustainable globally competitive economy and which will drive forward growth and prosperity offering better employment opportunities for all.**

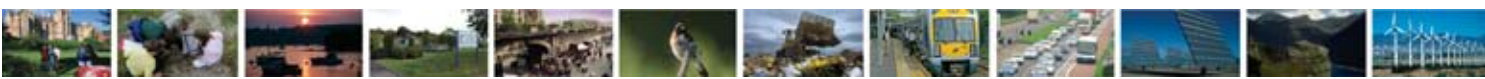
The Neighbourhood Renewal Programme aims to develop economic activity in the most deprived neighbourhoods and connect them to the wider economy. Typical activities involve encouraging investment and business development in the most deprived communities; helping people in the most deprived communities overcome barriers to work such as poor transport or lack of suitable childcare; supporting training and transport schemes that can help people get to the jobs that are available elsewhere; and supporting social economy programmes that can encourage community and social enterprises.

In relation to rural areas, **we are developing a Rural Strategy for the period 2007-2013 with the overall aim to build a diversified rural economy and sustainable rural communities.** The Strategy recognises that rural areas face particular challenges as regards growth, jobs and sustainability in the coming years. It also recognises the opportunities for growth in new sectors such as renewable energy production, the provision of rural amenities and rural tourism. It will include programmes such as the LEADER+ Programme¹²⁰ that will increase the economic and employment contribution which very small businesses, including small farms, make to the rural economy by

¹¹⁹ Department of Enterprise, Trade and Investment *The Economic Vision for Northern Ireland* available at: www.detini.gov.uk/vision

¹²⁰ Department of Agriculture and Rural Development *Leader + Programme:* www.dardni.gov.uk/file/pubs/leader/leader00.doc





encouraging local partnerships to test out new approaches to micro-business development.

Improving Employability

Educating, training and increasing the skills levels of the workforce plays a vital role in raising productivity and increasing competitiveness. Increasing individuals' employability skills including the Essential Skills of literacy, numeracy and ICT and addressing barriers to work are important in promoting social inclusion, since for individuals, they provide a route to stable employment, better wages and long-term prosperity, as well as to personal development and fulfilment.

The Skills Strategy for Northern Ireland¹²¹ published in February 2006 provides, for the first time, an overarching framework through to 2015 for the development of skills at regional, sub-regional and community levels. It draws together other major related strategies and strands of work such as the Further Education Strategy ("FE Means Business")¹²² so that the skills policy is developed and implemented in a co-ordinated

¹²¹ Department of Employment and Learning :Skills Strategy for Northern Ireland
<http://www.delni.gov.uk/index/publications/pubs-sectoral/skills-strategy-ni.htm>

¹²² Further information on the FE strategy at www.delni.gov.uk/imdex/further-and-higher-education/further-education/further-education-review-programme.htm



way. Through this Strategy **we will help people progress up the skills ladder and, by doing so, will improve the skill levels of the entire workforce.**

We will also improve the quality and relevance of education & training and tackle the skills barriers to employment. All of this will raise productivity, improve competitiveness and make those excluded from the workforce more employable.

Promoting Innovation

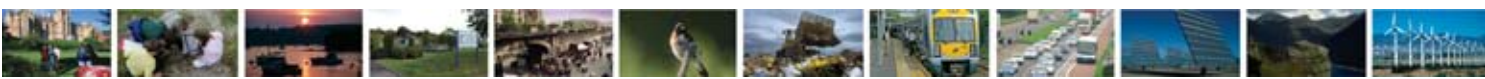
There is a need for Northern Ireland to achieve higher levels of innovation and entrepreneurship if it is to become a vibrant, balanced and competitive society. The Regional Innovation Strategy¹²³ is based on research that shows sustainable growth in a modern competitive economy is more dependent on the economy's ability to access knowledge and high value added skills than it is on the region's natural resources, physical capital and low-skill labour.

The application of new technologies, products and processes play an important part in the economic performance of a region. The extent of innovation in a region is related to the resources devoted to researching and developing new products and processes. In Northern Ireland the resources devoted to research and development (R&D) are particularly low. In terms of Government expenditure on science and technology Northern Ireland exhibits the lowest spend relative to other UK regions – approximately 60% below the UK average. **We will support and encourage innovation and seek ways to accelerate technological change within the local economy. We will also give greater priority to investment in innovation in order to address the gap in public resources devoted to areas such as Research & Development and science and technology.**

The Accelerating Entrepreneurship Strategy presents a framework that builds on existing achievements and support for entrepreneurs and is aimed at encouraging greater number of entrepreneurs to become involved in sustainable new business starts. Through this Strategy **we plan to support the establishment of 10,000 new businesses during the period 2005-2008, of which 40% will be in “New Targeting Social Need” areas.**

¹²³ Further information on the Regional Innovation Strategy at www.dsdni.gov.uk/publications/documents/regional_innovation_strategy_for_ni.pdf





Investment in Infrastructure

Everyone in Northern Ireland should have access to high quality public services. This requires major investment in our social assets. Through the implementation of the Investment Strategy for Northern Ireland over the period 2005-2015 we aim to create an efficient, cost effective and high quality public service infrastructure to provide the highest levels of service delivery and increase the attractiveness of Northern Ireland as an investment location. Major investment programmes include:



- refurbishment, upgrading and renewal of our schools and improvements in health service infrastructure;
- investment in our road network and in our bus and rail infrastructure;
- investment in our Water Service to enable it to meet EU directives on water quality and waste water treatment facilities;
- investment to ensure compliance with EU directives on waste management including the improvement of our recycling infrastructure;
- investment in social housing and urban regeneration projects to improve the physical, economic and social environments of our major towns and cities;
- encouraging inward investment and business development to stimulate the Northern Ireland economy;
- support for agriculture, forestry and fisheries; and
- support for culture, arts and sport.

The implementation of the strategy will help create social cohesion, tackle regional disparity and, ultimately deliver better public services for everyone. For example, it will address the needs of rural communities and their access to services and transport links and increase social



and community cohesion. It also has the potential to provide new employment and training opportunities for disadvantaged groups.

In 2005 tourism contributed around £500 million to the Northern Ireland economy with out-of-state (non-NI resident) visitors spending £354 million and domestic tourism generating £152 million (£115 million from domestic holidays). However, the tourism industry in Northern Ireland is still under-developed compared with Scotland, Wales, and the Republic of Ireland, which are comparable in terms of landscape and climate. In a post conflict society, tourism is an important indigenous industry that has the potential to generate considerable economic and social benefits, particularly in rural areas. **We will maximise the potential of Northern Ireland's "clean and green" image to develop a globally competitive sustainable tourism industry which balances economic growth, impact on the environment and community support.**

To create an attractive, high quality environment where people feel safe and which provides the conditions for health and social well-being

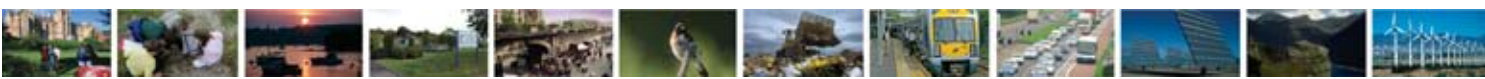
Our quality of life is strongly influenced by the quality of our local environment. A healthy environment is one that has minimal ecological impact, minimal waste or pollution and maximum recycling. Attractive streets and buildings, low levels of traffic, noise and pollution, green spaces and community safety are fundamental to a good quality of life whether in a city, town or village and social well-being emanates from a sense of security, a feeling of belonging, neighbourliness, cohesion and integration of different social groups, cultures and traditions.

Investment in programmes to support local environmental improvements in the most deprived communities can make a major contribution to achieving environmental justice as it is often the most deprived communities that live in the worst environments.

Planning – helping to achieve sustainable communities

Planning design, density and layout influences the shape of a community, the level of services and the way people interact with each other and their environment. For example, low density sprawl makes utility infrastructure, public transport, and local shops uneconomic; higher densities can support shops, buses, neighbourhood schools and the other services which generate a sense of community. **We will ensure that new development is planned in ways, which revitalise our urban areas, ensure thriving rural communities, conserve our historic environment and natural heritage and maintain and where possible improve the character and quality of our townscapes and countryside.**





Sustainable development is built into every stage of the planning process. The Regional Development Strategy for Northern Ireland (RDS), 'Shaping Our Future', provides the overarching strategy for the development of the Region up to 2025. The principles of accommodating development in a sustainable manner are embedded in the Guiding Principles of the RDS. The Strategy provides the spatial planning context for:

- strengthening the competitiveness of the regional economy and tackling social and economic disadvantage;
- protecting and enhancing the physical, natural and man-made assets of the Region; and,
- housing, transport, air and water quality, energy and waste strategies, and for infrastructure providers and public service providers.

The sustainable development themes of the RDS and its spatial framework, inform the preparation of development plans, which deliver the spatial planning strategy at a local level. There is a statutory requirement for these plans to be in general conformity with the RDS.

There are a range of other planning policies, set out in Government Planning Policy Statements (PPS) that also help the delivery of sustainable development:

- Policies for housing require the use of brownfield land for new development, and that new housing is built at higher densities than previously, reducing the need for development on greenfield sites
- Policies for enhanced quality and sustainability in new residential environments ensure that development is more in harmony with its townscape or landscape setting and makes a positive contribution to the character and appearance of settlements
- Policies to protect open space and ensure the delivery of new green spaces
- Policies to promote the location of new developments in areas, such as town centres, which are accessible by means of walking, cycling and public transport thereby reducing reliance on the private car



- Policies for the natural and built heritage, to conserve and promote biodiversity, ensure the protection of important landscapes, townscapes and archaeological features, and the conservation and reuse of historic buildings
- Policies for development at risk of flooding ensure a precautionary approach is adopted to decision making.

We are currently consulting on a new planning policy for the countryside which aims to promote development in a more sustainable manner, while protecting and enhancing natural resources and the rural environment.

This key role of the planning system in delivering sustainable development has been further underpinned by new legislation. The Planning Reform Order 2006 has introduced a requirement for development plans and planning policy prepared by DOE to contribute to achieving sustainable development. **We will now undertake a review of PPS 1 to provide guidance on this new statutory duty and make it clear that sustainable development is at the heart of the planning system.**

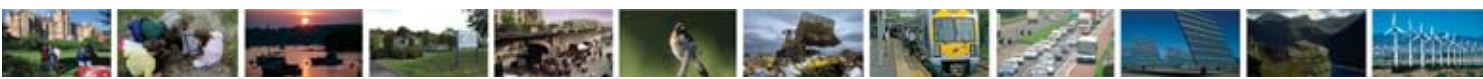
Regeneration of the most deprived communities

The Neighbourhood Renewal Strategy, which was launched by the Department for Social Development in June 2003, is a 7-10 year strategy that aims to close the gap between the quality of life in the most deprived neighbourhoods of Northern Ireland and the rest of society. It combines the efforts of Government Departments and agencies, and works in partnership with local communities with the aim of improving sustainable economic activity, producing better social conditions through enhanced public services and providing attractive and safe living conditions in the targeted areas. This Strategy means that by 2008 some 280,000 people, living in the most deprived neighbourhoods will see improved economic activity, better social conditions and safer more attractive living conditions. **We will ensure that this Strategy is fully implemented by 2010.**

Master Planning of major towns and cities

Masterplans of Guiding Regeneration Principles and Concept Plans for the North East and North West Quarters of Belfast City Centre were issued in August 2005 following a public consultation exercise; communities adjacent to the Masterplan areas were included in the consultation process. The guiding development principles for this area include promoting sustainable economic and social regeneration. There has been Masterplanning work in other areas such as Londonderry, Lurgan and Antrim. **We will extend these Masterplans out to all major towns and cities across Northern Ireland.**





Housing

Housing has a major role to play in terms of regeneration and sustainability. It is a basic human need — its quality, cost and availability are crucial to individuals' quality of life. It is vital in enhancing sustainability i.e. from using environmentally-friendly building materials through to locating homes where they do not make unnecessary demands on the environment.

The Regional Development Strategy includes an assessment of regional housing need. A key challenge will be to achieve this need in a way which respects the principles of sustainable development by creating homes in communities with the infrastructure, jobs and services needed to support them whilst being sensitive to the needs of the environment. Planning policy for housing will ensure maximum use of brownfield land for new development at higher densities to reduce the need for development on greenfield sites.

With a social housing stock of over 100,000 homes, and a new build programme of around 1,300-1,700 units per year, the Northern Ireland Housing Executive and Regional Housing Associations have a major role to play in helping deliver high quality, highly efficient, low carbon affordable homes. **We will aim to achieve the Decent Homes Standard for all social housing by the end of 2010.** To be defined as "decent" a home must meet 4 specific criteria, one of which is that it provides a reasonable degree of thermal comfort and has effective insulation and efficient heating.

The availability of good quality accommodation is a key requirement for the Traveller Community. In 2006/07 we will fund a programme of Traveller accommodation schemes including two additional group housing schemes, service sites and transit facilities.

Homelessness is one of the most extreme forms of social exclusion and the problem has increased in recent years in Northern Ireland, particularly between 1999 and 2003. Over this period, the number of households who made homelessness applications to the Northern Ireland Housing Executive (NIHE) increased by 49%. The NIHE has introduced a Homelessness Strategy to tackle this and improve the service delivered. Some of the service improvements which have already been implemented include the introduction of a Multi-Needs Homelessness Assessment Team in conjunction with the Health Trusts in Belfast; development of a Rough Sleeper Strategy; introduction of homelessness support schemes through Supporting People; and the appointment of a housing/homelessness advice worker for offenders.



Fuel poverty

Northern Ireland has the highest level of fuel poverty in the UK. A household is in fuel poverty, if, in order to maintain an acceptable level of temperature throughout the home, it would have to spend more than 10% of its income on all household fuel use.

The 3 main causes of fuel poverty are low incomes, high fuel costs and poor energy efficiency. The “Ending Fuel Poverty: A Strategy for Northern Ireland”¹²⁴ aims to eliminate fuel poverty in vulnerable households and the social rented sector by 2010 and in non-vulnerable households by 2016. The strategy recognises that responsibility for tackling the causes of fuel poverty falls to a number of Government Departments. An Inter Departmental Group on Fuel Poverty has therefore been established to promote and facilitate joined up working across government. A Fuel Poverty Advisory Group was established in April 2005 to monitor and review the strategy and to promote a partnership approach to tackling fuel poverty.

Child poverty

Children and young people make up almost a quarter of the population of Northern Ireland. Poverty affects the lives of a significant proportion of these children and young people. It has been calculated that almost two in five (38%) of children live in households that are below 30% of the average household income.

We are currently consulting on a 10-year strategy for children and young people which will aim to ensure that their rights and needs are co-ordinated, monitored and promoted within Government. A key objective of this strategy will be to progressively reduce the levels of child poverty in Northern Ireland in line with the overall UK target to eradicate child poverty by 2020.

Health in the community

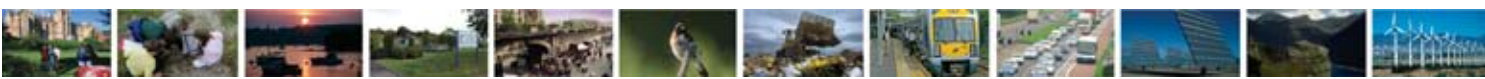
Good health and well-being are essential for people to get the most out of their lives. A healthy population will also contribute to a prosperous economy.

Health is largely determined by the social, economic, physical and cultural environment. Investing for Health¹²⁵ (IFH) seeks to tackle the factors that adversely affect health and perpetuate health inequalities. There is a strong focus on targeting the most disadvantaged neighbourhoods and groups.

¹²⁴ Further information on “Ending Fuel Poverty” A Strategy for Northern Ireland at www.dsdni.gov.uk/publications/documents/fuel_poverty.pdf

¹²⁵ Investing for Health – further information can be found at: <http://www.investingforhealthni.gov.uk/>





The strategy recognises that the factors that cause poor health and health inequalities are inter-related and cannot be addressed by the health sector alone. Therefore, the IFH strategy contains a framework for action based on multi – sectoral partnership working amongst Government Departments, public bodies, District Councils, local communities, voluntary bodies and others. Key principles of the strategy include encouraging community involvement in improving health, working in partnership with local communities and promoting coping skills.

In addition, research has shown that in socially deprived areas there is a significantly increased incidence of child casualties resulting from road traffic collisions and the Northern Ireland Road Safety Strategy¹²⁶ contains a range of measures, particularly in relation to road safety education, aimed specifically at reducing these child casualties.

Cleaner, Greener, Safer Neighbourhoods Agenda

People want to live in neighbourhoods that are clean and attractive and where they feel safe. Good quality local environments reduce anti-social behaviour and the fear of crime and have a positive impact on our health and well-being. It is understandable, therefore, why people have major concerns with issues which can degrade the local environment – issues such as litter, abandoned or nuisance vehicles, fly-posting, dog-fouling and graffiti.

Much good work is already being done in local neighbourhoods to create cleaner, safer and greener public spaces through, for example, the Neighbourhood Renewal Programme and the work of the Northern Ireland Office's Community Safety Unit and District Councils who have introduced measures to reduce crime, tackle anti-social behaviour and reduce fear of crime. We want to build on this good work and we are seeking ways to improve local environmental quality to bring us nearer to our aim of sustainable communities. **During 2006, we will develop and consult on measures to deliver improvements in local environmental quality, personal well-being and safer communities.**

Community Safety

Community Safety means preventing, reducing or containing the social, environmental and intimidatory factors which affect people's lives. It includes measures to reduce crime, tackle anti-social behaviour and reduce fear of crime.

¹²⁶ Department of the Environment's NI Road Safety Strategy 2002-2012: http://www.doeni.gov.uk/roadsafety/pdfs/roadsafetystategy_051102.pdf



Northern Ireland's Community Safety Strategy was launched in Spring 2003 and through this strategy **we will run a series of regional projects, such as "Lock Out Crime" and "Operation Clean Up" to address key issues such as domestic burglary and abandoned vehicles.**

We have established Community Safety Partnerships in each local council area and they have recently completed local strategies and are developing local action plans for their areas. The engagement of local residents is fundamental to the success of Community Safety Partnerships and projects such as Neighbourhood Watch are an example of the active involvement of local people in making their communities safer.

To promote the development of community engagement, civic leadership and responsible citizenship

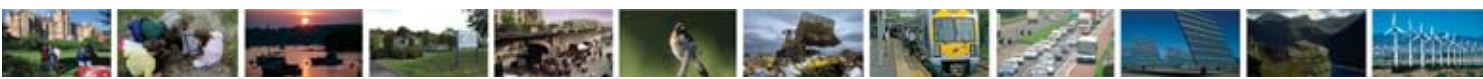
Fostering community engagement and participation

Community engagement and participation in decision-making is essential for a truly sustainable community. The participation of local people in decision-making is vital to ensure that social and environmental as well as economic considerations are fully taken into account.

Effective participation involves a commitment by community leaders to establishing trust, sharing expertise and working towards consensus. Our challenge, therefore, is to bring diverse groups together in partnership, build their capacity to achieve practical outcomes through the development of local cohesion, vision and aspirations. We will create a framework for collaborative relationships between local communities and those responsible for local development, regional planning and service delivery.

While there is already a great deal of partnership working at the local level in Northern Ireland, there is scope to improve the effectiveness of community participation by improving access to information and providing training to develop the skills, knowledge and confidence of both the community and their local leaders. We will introduce changes that will improve access to information on the local environment and make it easier for individuals and communities to take part in the decision-making process. Key programmes will include the modernisation of the planning system to emphasise the need for Government policies to strengthen community involvement in development control and development planning processes; and providing "one-stop-shops" as an effective mechanism for providing the public with accessible information and advice.





Local Government delivering sustainable development in the community

The importance of the role of district councils in delivering sustainable development has been recognised within the Review of Public Administration (RPA)¹²⁷. Under the new arrangements councils will be at the centre of service delivery and civic life. They will be key to the planning and delivery of services within their areas and to engagement with communities. **To achieve this we will introduce a new power of community planning with a statutory duty on councils to initiate, maintain and facilitate a community planning process which aims to draw together all service providers within the council boundary to address community needs in a strategic and sustainable way.** In drawing up their plans councils will consult widely within their communities drawing on the views of all sectors to create a vision for their area.

The devolvement of powers to local councils will provide greater opportunities for local political and civic leadership. The promotion of equality, human rights and good relations are integral to the delivery of quality public services and will be at the heart of the new institutional arrangements. “A Shared Future”¹²⁸ is Government’s strategy for improved community relations and community cohesion at all levels of society in Northern Ireland. Key strands of the strategy include the elimination of sectarianism, racism and all forms of prejudice; and the development of shared communities where people of all backgrounds can live, work, learn and play together, **Through “A Shared Future” we will establish mechanisms that will enable Northern Ireland to become a society where the promotion and protection of shared space, shared education, shared communities and shared public services are standard Government policy and practice.**

Support for the voluntary and community sectors

We believe passionately that sustainable communities need a voluntary and community sector that is strong, independent and has the capacity to work in partnership with Government to deliver high quality public services and reinvigorate civic life. **To help achieve this, we will develop and strengthen voluntary and community sector infrastructure to improve the capacity of communities.**

Through the Modernisation Fund¹²⁹ we will invest £3m over a 3-year period to support and facilitate the voluntary and community sector to become more efficient and effective in the delivery of public services

¹²⁷ Further information on the Review of Public Administration can be found at: www.rpani.gov.uk

¹²⁸ Further information on A Shared Future at: www.asharedfutureni.gov.uk/

¹²⁹ Further information on the Modernisation Fund at: www.dsdni.gov.uk/voluntary_and_community-modernisation_fund



and a further £15 million Modernisation capital fund to improve the physical infrastructure for enhanced services.

Developing community capacity

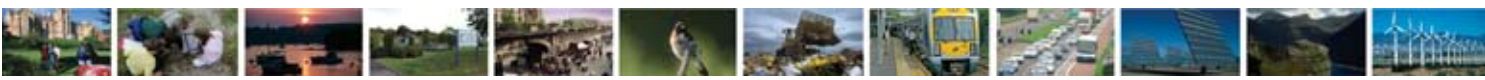
We will, through a range of strategic support programmes, continue to strengthen and support communities. **Through the Community Investment Fund¹³⁰ we will provide strategic funding for the support of generic community activity with an emphasis on building more cohesive and sustainable communities.**

Voluntary activity can do much to promote social inclusion and cohesion in a community to the benefit of the recipients, participants and society as a whole. **Through the Volunteer Centres and the Community Volunteering Scheme we will encourage participation in voluntary activity and active citizenship, especially amongst those most at risk of social exclusion.**

The Community Support Programme, which is delivered through the district council network, is the principal mechanism for supporting Councils in their community services role and in particular the local provision of advice services. **We are currently consulting on the development of a long-term strategy for supporting the delivery of voluntary advice services in Northern Ireland. As part of this process we will assess the level of provision of information and training for sustainable development.**

¹³⁰ Further information on the Community Investment Fund at: www.dsdni.gov.uk/index/voluntary_and_community/funding_programmes/community_investment_fund.htm



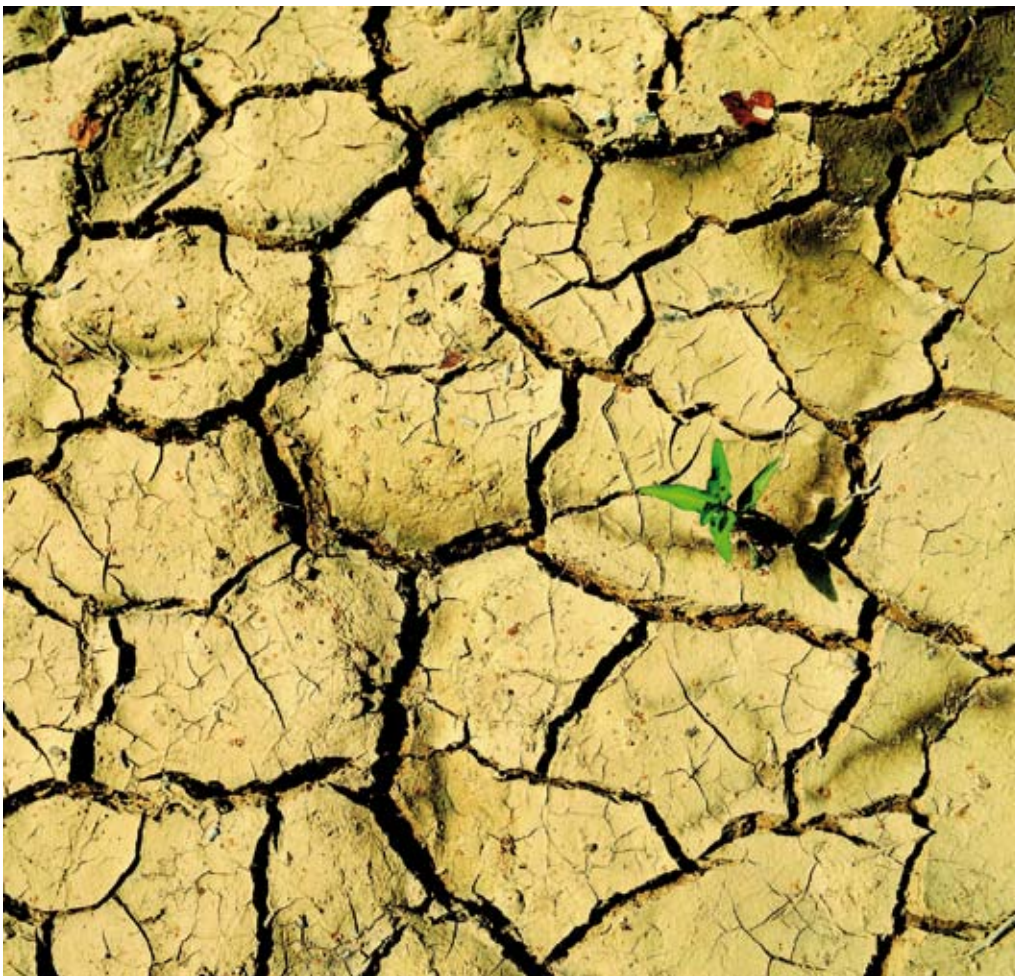


Chapter 4

The Challenge

Climate Change is the most severe problem we are facing today. While the world has been warming over the last century, the rate at which it has been doing so has significantly increased in the last 30 years. Scientific consensus is that most of the warming is attributable to human activity that causes the release of so called greenhouse gases, in particular carbon dioxide (CO²).

If we do not limit the release of greenhouse gases, temperatures around the world will continue to rise and the future climate will become more unpredictable. Not only are extreme weather events expected to be more frequent and indeed more severe but there are consequences with respect to gradual physical changes such as temperature variations or a potential rise in sea level which will impact on and radically change our way of life. In Northern Ireland we could expect drier summers, wetter winters, increased flood risk and storm damage. This is likely to impact on our water resources, wildlife, agriculture, infrastructure, transport, and on our health.



Evidence to date shows that:

- Average worldwide temperatures have risen by more than 0.6° centigrade over the last 100 years;¹³¹
- Globally the 10 warmest years on record have occurred since 1990 and the 1990s was the warmest decade since records began;¹³²

In Northern Ireland:

- 9 of the 15 warmest years recorded since 1841 have occurred since 1990;¹³³
- In 2005 nine days in December were hotter than in the preceding summer;
- The average sea level is now about 10 cms higher than it was in 1900;¹³⁴
- Over 40,000 properties are currently at risk of river flooding;¹³⁵

Projections of future climate change indicate that:

- World temperatures could increase between 2° and 6° centigrade by 2100;¹³⁶
- By 2080 the number of people at risk from coastal flooding worldwide could increase from 10 million now to as many as 80 million;¹³⁷
- In Northern Ireland average annual temperatures could increase by up to 3°C by 2080;
- By 2080 estimates suggest that mean sea levels around Northern Ireland could rise by between 9cm and 69cm¹³⁸

¹³¹ Source "Taking it on – developing the UK Sustainable Development Strategy together" document, page 22. Available for download on the UK government's sustainable development web-site: <http://www.sustainable-development.gov.uk/publications/index.htm>

¹³² Source <http://www.statistics.gov.uk/cci/nugget.asp?id=368> Second part on World Meteorological Organization (sic) web-site: <http://www.wmo.ch/web/Press/Press644.html>

¹³³ Source "Securing the future – delivering UK sustainable development strategy" document, page 72. Available for download on the UK government's sustainable development web-site: <http://www.sustainable-developments.gov.uk/publications/index.htm>

¹³⁴ UK Climate Impacts Programme at www.ukcip.org.uk/climate_change/how_uk_change.asp

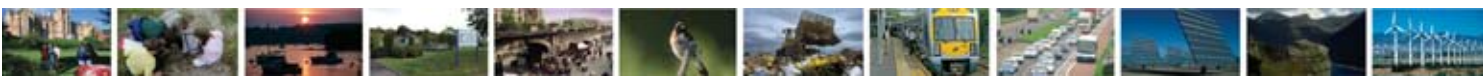
¹³⁵ Source http://www.foresight.gov.uk/Previous_Projects/Flood_and_Coastal_Defence/Reports_and_Publications/Volume1/Chapter8.pdf

¹³⁶ Defra funded research, Nicholls R.J., 2004 'Coastal Flooding and Wetland loss in the 21st Century Global Environmental Change' Volume 14

¹³⁷ "Securing the Future" www.sustainable-development.gov.uk/publications/index.htm

¹³⁸ <http://data.ukcip.org.uk/resources/publications/documents/14.pdf>





Climate change is inextricably linked to our demand for energy which, as the main producer of CO², contributes the vast bulk of our greenhouse gas emissions.

In Northern Ireland:

- **Around 75% of greenhouse gas emissions are accounted for by the 16 million tonnes of CO² produced annually through the burning of coal, oil and gas;¹⁴⁰**
- **Housing alone consumes 44% of all energy use and most of this (84%) is used for space and water heating;¹⁴¹**
- **In 2003 transport accounted for around 27% of the total CO² emissions;¹⁴²**
- **Agricultural activity contributes around 22% of the total emissions mainly in the form of methane and nitrous oxide;¹⁴³**
- **Energy costs in Northern Ireland are higher than in the rest of the UK and are an issue of real significance for industry, commerce and the domestic sector;¹⁴⁴**
- **Nearly 154,000 households suffer from the effects of fuel poverty;¹⁴⁵**
- **Electricity demand is rising by around 2% per annum¹⁴⁶**

Energy issues affect us all, as individuals we rely on energy in our home, work and social environments. The availability of a secure and affordable energy supply is central to our future economic and social well-being and is critical given that our current demand for energy continues to grow.

Northern Ireland's peripheral location and lack of indigenous energy sources means it is highly dependent on a finite supply of imported fossil fuels which not only increases the cost but raises questions over the security of supply in the future as the reserves of fossil fuels

¹⁴⁰ Source Greenhouse gas inventories www.naei.org.uk/reports.php?list=ghg

¹⁴² Source Greenhouse gas inventories (see above)

¹⁴³ Source (see above)

¹⁴⁵ Source www.nics.gov.uk/press/sd/060130e-sd.htm

¹⁴⁶ Source Northern Ireland Electricity



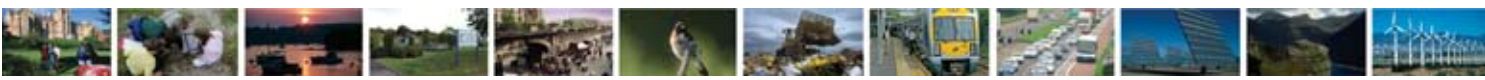
are depleted. High energy costs not only have direct implications for business and industrial competitiveness but also for the many households in Northern Ireland suffering from fuel poverty.

We therefore need to make profound changes to the way we generate and use energy - at home, at work, when travelling, and in the products we make and consume so that our everyday activities become more sustainable in the long term and secure immediate reductions in greenhouse gas emissions.

Northern Ireland's potential wind energy resource, which is generally regarded as being the strongest regime in Europe, offers an opportunity to make this step change through increasing the proportion of our energy requirement that is met from indigenous renewable sources. Wind is not the only renewable resource that can be exploited. Other national sources including solar, biomass, wave and tidal stream, geothermal and waste can contribute to an increased renewables sector.

In conjunction with this approach we must also prepare for and adapt to the impacts of climate change. Some degree of climate change resulting from past and present emissions of greenhouse gases is already inevitable. In order to cope with the impacts of climate change we need to adapt – this action is complementary to our efforts to reduce emissions to avoid dangerous levels of climate change.





Vision

Our vision for Northern Ireland is that it adapts to the impacts of climate change and operates as a highly energy efficient society using a sustainable energy system.

Government will drive and support progress towards this vision through the strategic objectives identified below. Achieving them will also depend on innovation and action on the part of business and wider society in Northern Ireland to help reconcile some of the apparent conflicts and radically change our existing pattern of unsustainable behaviour.

Strategic Objectives

Three strategic objectives on climate change and energy have been chosen for the strategy.

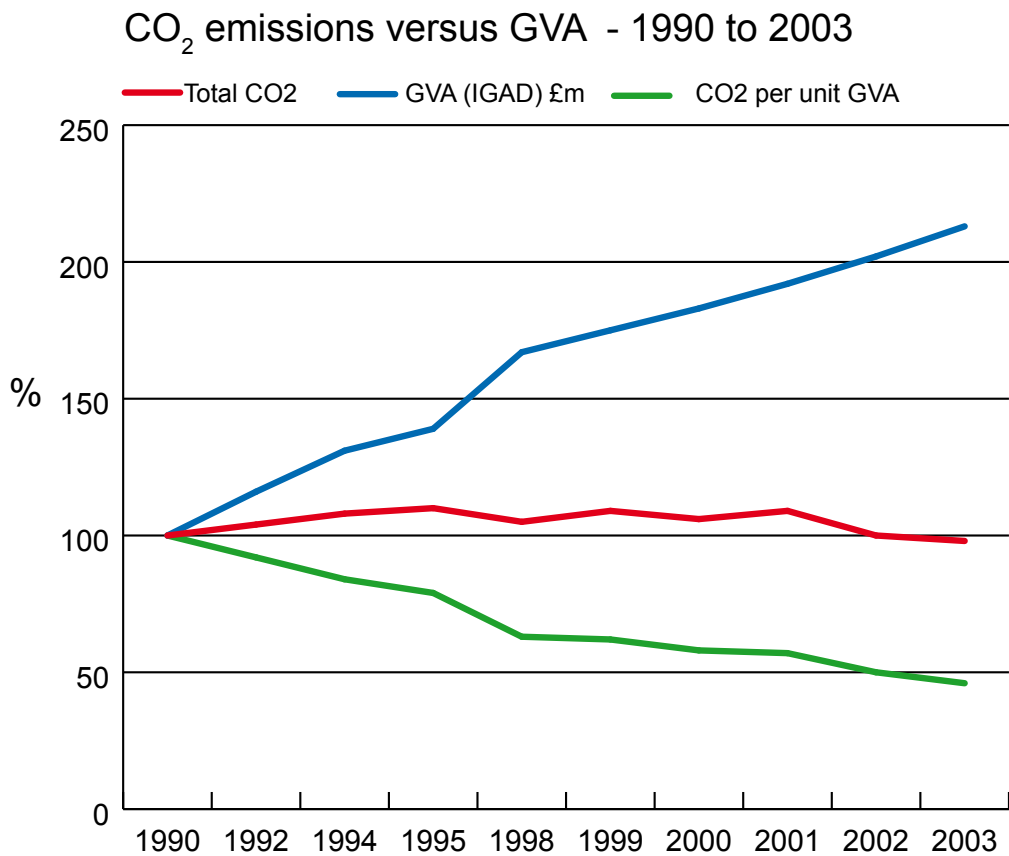
- **To reduce greenhouse gas emissions, principally by promoting energy efficiency and the use of renewables;**
- **To establish Northern Ireland as a world class exemplar in the development and use of renewable energy;**
- **To plan and prepare for climate change impacts in Northern Ireland.**



Reduce greenhouse gas emissions

The Kyoto Protocol¹⁴⁷, which came into effect in February 2005, sets targets for the 140 industrialised countries that have signed up to cut their greenhouse gas emissions. The UK is a signatory to the Protocol but has gone further by establishing more stringent national targets for reducing CO₂. We will ensure that Northern Ireland makes its full contribution to the achievement of these UK targets.

A key requirement will be to reduce greenhouse gas emissions whilst maintaining economic progress by breaking the link between GDP and CO₂ emissions. An indication of progress to date is demonstrated in the graph below which, using data from the Greenhouse Gas Inventories Report¹⁴⁸, shows the significant decrease in CO₂ emissions per unit of Gross Value Added (GVA)¹⁴⁹.

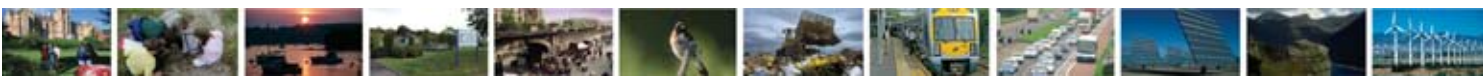


¹⁴⁷ Further information on the Kyoto Protocol: <http://unsc.int/resource/docs/convkp/kpeng.html>

¹⁴⁸ Further information on the Greenhouse Gas Inventories Report: see page 93

¹⁴⁹ Gross Value Added is a measure of sectoral economic output





Northern Ireland as a world class exemplar in the development and use of renewable energy

Northern Ireland has an abundance of renewable energy options available from the sun, wind, water and land to provide heat and power and thereby reduce our dependence on imported fossil fuels. Increasing the use of renewable energy sources will not only contribute to a more sustainable energy sector but will also create opportunities for economic progress in Northern Ireland and help to support diversification in the rural economy.

The renewables technology sector is still very much in its infancy but starting to grow quickly. Further innovation and investment in development and promotion will not only lead to improvements in the efficiency of renewables but also reduce their cost and expand the market.

Already we have the skills in the engineering and agricultural sectors which are necessary to grasp these opportunities and new skills can and will be developed. **We will put Northern Ireland at the forefront of renewables technology at this early stage by supporting knowledge transfer and innovation to ensure Northern Ireland businesses become influential players in the fast growing European market for renewable energy technologies, logistics, research and demonstration.**

Plan and prepare for climate change impacts in Northern Ireland

Climate change is happening currently. No matter what we do to reduce emissions now, our climate has been, and over the next 30 to 40 years will be, influenced by our greenhouse gas emissions in the past. We need to adapt so that we can prepare for the changes that are already in the climate system and to reduce our vulnerability to more extreme weather events and to the gradual changes such as temperature change, seasonal change, potential rise in sea level, that will impact and may radically change Northern Ireland.

The strategic objectives and main targets are set out below. Also described are some of the important steps that need to be taken to enable, encourage and build capacity to deliver. These will be developed in more detail in the implementation plan.



Strategic Objective 1

Reduce greenhouse gas emissions, principally by promoting energy efficiency and the use of renewables.

Key Targets

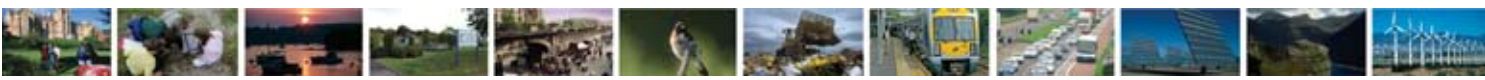
- Reduce greenhouse gas emissions by 25% below 1990 levels by 2025
- Make the Government estate carbon neutral by 2015

Important Steps

- Reduce CO² emissions by 30% below 1990 levels by 2025
- Reduce the amount of greenhouse gas emissions from landfill as a result of the landfill reduction target of 45% of household waste by 2020
- Take steps and identify targets to reduce the emissions from transport;
- From 2007 reduce consumption of electricity in Northern Ireland by 1% annually until 2012;
- Improve overall average energy efficiency of Northern Ireland households by 25% and that of NIHE housing stock by 40% by 2025 (base date 1990);
- Where technologically and economically feasible ^{150*}, to ensure that beyond 2025 40% of all electricity consumed in Northern Ireland is obtained from indigenous renewable energy sources with at least 25% of this being generated by non-wind technologies;

¹⁵⁰ Technical and economic feasibility will form part of the comprehensive study being undertaken as part of the All Island "2020 Vision" for renewable energy





Strategic Objective 2

Establish Northern Ireland as a world class exemplar in the development and use of renewable energy technology.

Key Targets

- By 2008 establish a renewables centre of excellence (Agri Food and Biosciences Institute) at Hillsborough;
- By 2008 provide an exemplar of biomass Combined Heat and Power in Stormont Estate;
- By 2008 complete research into grid constraints and investment needs to support 2020 vision for renewables;
- By 2008 research potential of Northern Ireland geology to store energy /underpin renewables;
- By 2008 complete a pilot assessment of tidal stream turbines in Strangford Lough.

Important Steps

- Encourage and support the development of new industry in renewable and alternative sustainable energy technologies.
- Encourage and support pilot projects to facilitate research and demonstrate renewable energy technology;
- Government will continually develop its long term approach to renewables to ensure that technology to encourage confidence and promote investment and innovation in sustainable energy remains at the leading edge.



Strategic objective 3

Plan and prepare for climate change impacts in Northern Ireland

Key Targets

- Prepare an Northern Ireland specific Climate Change Impacts report by February 2007 and update every 5 years;
- Develop and implement changes to Government policies and strategies to address adaptation issues.

Important steps

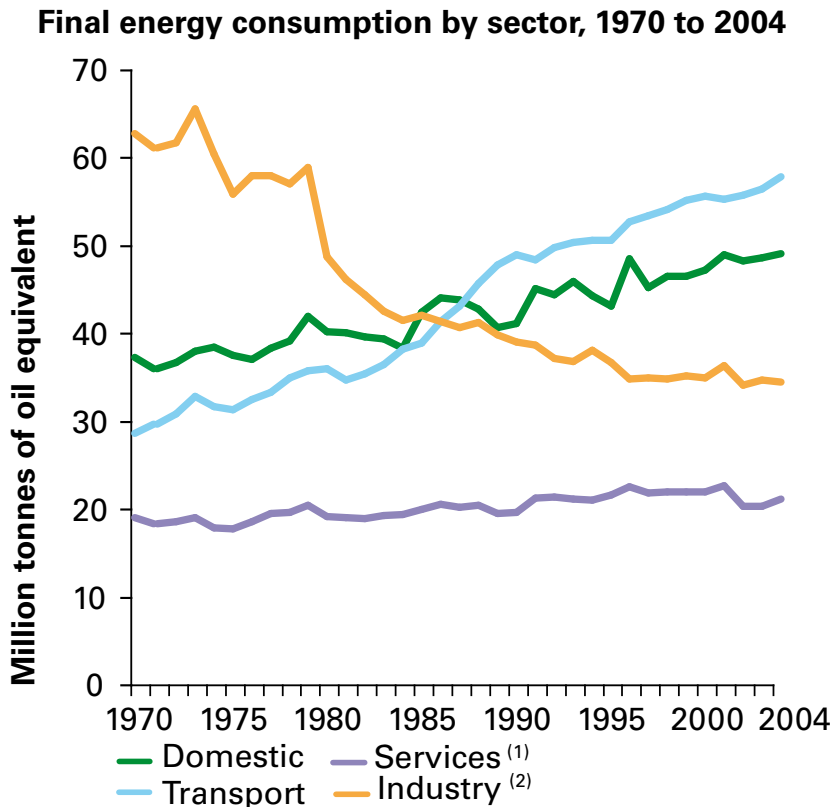
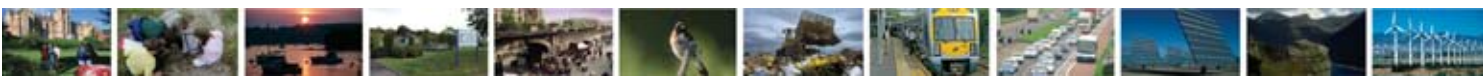
- Perform an integrated assessment of how energy strategies impacts on climate change and take action to mitigate/adapt to issues identified.
- Identify areas and sectors at risk of climate change impacts and develop adaptation strategies to comprehensively address impacts.
- Encourage research to develop new technologies to identify, warn of, and mitigate climate change impacts.

Reducing greenhouse gas emissions

A lot is currently happening and will happen to reduce the rate of greenhouse gas emissions in Northern Ireland and help contribute to the UK's Kyoto and domestic emission reduction targets. We have set challenging targets in this Northern Ireland strategy for the reduction of overall greenhouse gas emissions and for the reduction in particular of CO² emissions. The graph below gives an indication of the relative contributions of several key sectors on a UK wide basis:

We can see that whilst emissions from services have risen very little and those from industry have been falling there has been a significant increase in emissions from transport and the domestic sector. We will need to focus on these areas and there are a number of key actions which will help us to meet the target for reduction in greenhouse gas emissions.





⁽¹⁾ Services include the commercial sector, public administration and agriculture.

⁽²⁾ Industry includes construction.

Source: Department of Trade and Industry

Improving energy efficiency

We all use far more energy than we need to because we use it inefficiently. Combined with the higher cost of energy, this damages the competitiveness of our industry and business. Domestically, poorly insulated buildings together with poor control of heating and lighting all waste energy, while many of our appliances are less energy efficient than they could be.

According to the EC Green Paper¹⁵¹ on energy efficiency “Energy saving is without doubt the quickest, most effective and most cost-effective manner for reducing greenhouse gas emissions as well as improving air quality, in particular in densely populated areas. It will therefore help Member States in meeting their Kyoto commitments. Secondly, it will constitute a major contribution to the longer term EU efforts in combating climate change through further emissions reductions, as part of a future post 2012 regime within the United Nations Framework Convention on Climate Change¹⁵² .”

¹⁵¹ Further information on EC Green Paper on Energy Efficiency at http://europa.eu.int/comm/energy/efficiency/index_en.htm

¹⁵² Further information on the United Nations Framework Convention on Climate Change <http://unccc.int>



It is well recognised that as well as reducing greenhouse gas emissions energy efficiency will also help to improve the competitiveness of our businesses and increase the security of our energy supplies. It is estimated that within the EU at least 20% of the present consumption of energy could be saved in a cost effective manner. In Northern Ireland the Carbon Trust estimate that businesses and public sector organisations could save around £100 million per annum through the deployment of existing energy efficiency technologies and practices.

Domestic Use

This strategy identifies long term targets to improve the overall energy efficiency of Northern Ireland households and that of NIHE housing stock. These targets take account of a range of initiatives which will support progress towards this objective. In this context energy advice to consumers is critical in the drive to improve energy efficiency in homes.

The Energy Savings Trust¹⁵³ (EST) Advice Centre provides a one-stop shop for consumers providing information and advice on energy efficiency and on the use of renewable energy. The (EST) in Northern Ireland also works in partnership with the Housing Executive and other agencies to grant aid, monitor and evaluate innovative energy saving schemes.

Business

Business must also recognise the contribution it can make to improving energy efficiency and recognise the benefits both in terms of improved competitiveness and in reducing negative environmental impacts.

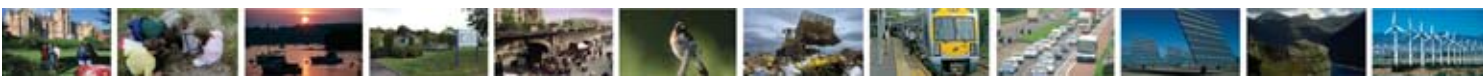
It is estimated that business could reduce its energy consumption by 30% through energy efficiency measures alone. The implementation of energy saving measures by individuals and businesses across the UK could save around £12 billion annually.

The Carbon Trust¹⁵⁴ helps businesses and public sector organisations to reduce energy consumption and cut energy costs through a range of programmes including energy surveys, design advice, interest free loans, enhanced capital allowances and clean technology venture capital. In 2004-2005 potential annual savings of £20m to businesses were identified with a total implementation cost of £43m and a simple pay back period of just over 2 years.

¹⁵³ Further information on The Energy Saving Trust at www.est.org.uk/northernireland/

¹⁵⁴ Further information on The Carbon Trust at www.thecarbontrust.co.uk/





Government

Government must lead by example to improve the energy efficiency of the entire Government estate and there are several initiatives currently underway which will contribute to that goal. **We will seek to make the Government estate carbon neutral. Increasing our energy efficiency and reducing our consumption will be key elements in reducing our carbon footprint.**

Chapter 1 refers to Workplace 2010¹⁵⁵ the 3-5 year programme of work to transform the Northern Ireland Civil Service office estate by introducing new ways of working. An integral element of this programme is that offices will be designed and used with a focus on minimising energy consumption.

The Department of Health, Social Services and Public Safety through its Health Estates Agency, encourages Health and Personal Social Service bodies to improve their energy efficiency and has recently launched a good practice guide on energy efficiency called ENCO²DE¹⁵⁶, to which all Health Trusts are required to adhere.

The Department of Enterprise, Trade and Investment has undertaken to co-ordinate development of a Northern Ireland Energy Efficiency Strategy to help meet the target of reducing electricity consumption by 1% per annum from 2007 to 2012. This will involve working in partnership across Government as statutory responsibility for energy efficiency in Northern Ireland is split between a number of Departments.

Buildings

The Carbon Trust¹⁵⁴ has introduced a Low Carbon Design Initiative (LCDI) which seeks to ensure that new buildings are of a world class standard with respect to low energy – carbon design. A number of Government departments are currently deploying LCDI principles in their new build projects. **We will use this leadership by Government to help accelerate the market transformation needed to ensure that new buildings in Northern Ireland offer significant energy cost and carbon savings over their design life.**

Through the proposed Government policy on Architecture and the Built Environment for Northern Ireland, due to be published in 2006, we will also advocate a range of actions aimed at minimising energy in the construction and use of buildings.

¹⁵⁴ Further information on The Carbon Trust at www.thecarbontrust.co.uk/

¹⁵⁵ Further information on Workplace 2010 www.workplace2010ni.org/.

¹⁵⁶ Further information on ENCO²DE at www.dh.gov.uk



The EU Energy Performance of Buildings Directive¹⁵⁷ will be implemented by 2006. It will require Member States to set minimum requirements on the energy performance of new buildings and of large buildings undergoing major renovation, and the certification of all buildings at the point of sale and rental, within the European Community.

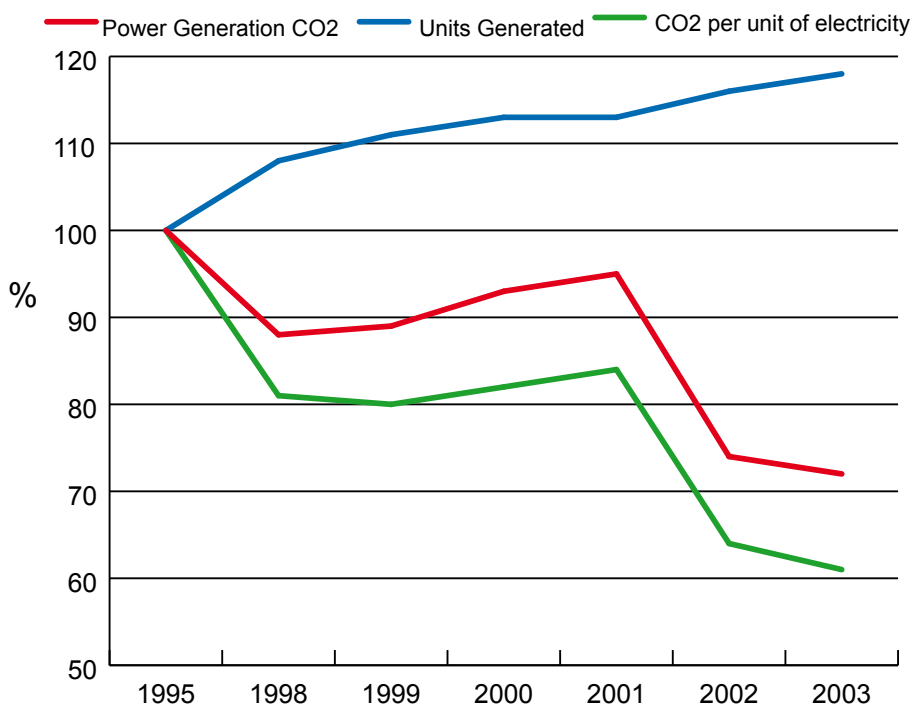
We will make amendments to the Northern Ireland Building Regulations on minimum standards for the conservation of fuel and power, in new buildings, extensions to buildings and, where appropriate, for certain alterations to buildings which will come into operation in 2006 to increase the energy performance of buildings by 40%.

Further associated activities which contribute to improvements in energy efficiency are outlined in Chapter 1 on sustainable consumption and production.

Power Stations

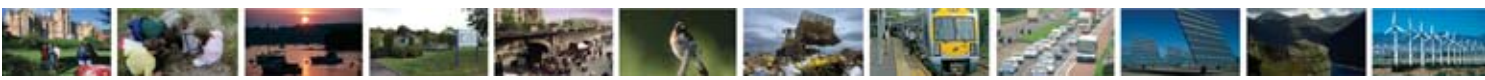
In the UK there has been a notable decline in the intensity of emissions in the power generation sector due to improved efficiency of generation and the contribution of renewable and lower carbon alternatives to coal and oil fired stations. In Northern Ireland structural changes in the industry including the replacement of Ballylumford and Coolkeeragh

Power Station CO₂ emissions per unit of electricity 1995 - 2003



¹⁵⁷ Further information on the EU Energy Performance of Buildings Directive at www.diag.org.uk/documents.jsp





with more efficient gas fired stations should continue to help reduce the CO² intensity of generation, which is already 16% less than in the 1990s. An indication of progress to date is demonstrated in the graph below, which, using data from the Greenhouse Gas Inventories Report shows the decrease in CO² emissions per unit of electricity generated.

Transport

Transport emissions alone are now the second largest source of carbon dioxide emissions, amounting to around 27% of the total Northern Ireland CO² emissions in 2003, and this proportion is likely to increase further as road traffic continues to grow and emissions from other



sources decline. While there is considerable opportunity to develop and use more efficient cars and cleaner fuels, technology alone can not deliver sufficient emissions savings in time. Changes in personal lifestyle and business planning are also required. Land use planning will be a key element in determining travel behaviour.

Regional Transportation Strategy¹⁵⁸ and Transport Plans

Through the Northern Ireland Regional Transportation Strategy (RTS) 2002/2012 we aim to encourage a strategic move away from a transport system that is dominated by car use. The RTS is being progressed by three Transport Plans: the Belfast Metropolitan Transport Plan, the Regional Strategic Transport Network Transport Plan and the Sub-Regional Transport Plan. These Transport Plans

¹⁵⁸For further information on the Regional Transportation Strategy at www.drdni.gov.uk



propose investing in more balanced and integrated transport systems in which walking, cycling and public transport will be more viable and attractive options.

Planning Policy

Planning Policy Statement 13¹⁵⁹ on Transportation and Land Use provides strategic policy guidance on the integration of transportation and land use. Planning Policy Statement 3¹⁵⁹ on Access, Movement and Parking translates the strategic guidance on these issues into operational policies. Both planning policy statements introduce an assessment of the potential transport impacts of the proposed development and seek to integrate transport policy and planning.

Travelwise¹⁶⁰

The Department for Regional Development is promoting a “Travelwise” scheme across the Northern Ireland Civil Service to encourage staff to rely less on private cars and make greater use of more environmentally friendly modes of travel. (See Chapter 1).

UK Transport Initiatives and Fiscal Measures

UK wide initiatives will also support efforts to reduce transport emissions in Northern Ireland. The UK has been working with the European Commission and car manufacturers to improve the fuel efficiency of new cars and at the same time working to improve consumer information on fuel efficiency by means of colour coded fuel efficiency labels.

The Budget 2006 announced that the 20 pence per litre duty incentive for bioethanol and biodiesel will be maintained to 2008-9 whilst reforms to the vehicle excise duty introduce graduated duties which penalise the most polluting cars. Reform of company car taxation based on carbon emissions will further promote environmentally friendly vehicles.

The Renewable Transport Fuel Obligation (RTFO) requires transport fuel suppliers to ensure that a percentage of their sales are from a renewable source. The RTFO will be introduced in 2008-9 with the obligation level set at 2.5% rising to 5% in 2010-11.

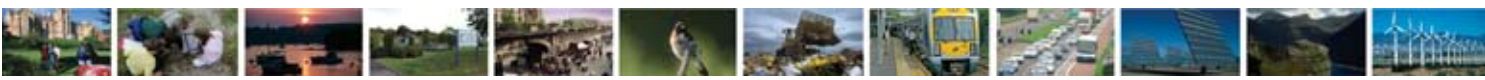
Increased forest cover

Forestry practices can make a significant contribution to reducing greenhouse gas emissions through increasing the amount of carbon removed from the atmosphere by the national forest estate, by

¹⁵⁹ Further information on Planning Policy Statements at www.planningni.gov.uk/areaplans_policy/pps/pps.htm

¹⁶⁰ Further information on Travelwise at www.travelwiseni.com





burning wood for fuel, and by using wood as a substitute for energy-intensive materials such as concrete and steel. DARD has a long-standing programme to increase the level of forest cover in Northern Ireland by expanding the publicly owned estate and supporting private landowners.

We will support a number of incentive schemes for planting trees that will help reduce carbon emissions including the Farm Woodland Premium Scheme that encourages tree planting on land currently in productive agriculture.



Switching to Renewable Energy

Currently only 3% of electricity consumed in Northern Ireland is indigenously generated from renewable energy sources with a further 2.6% imported, although this is twice the 2004 level. Renewable energy crops such as biomass have the potential to replace fossil-fuel based electricity, heat or transport fuels. The development of the renewable energy sector in Northern Ireland is critical as this will help to reduce our dependence on fossil fuels and significantly reduce emissions of carbon dioxide and other greenhouse gases. This is why this strategy seeks to set challenging targets by 2025 of having 40% of electricity consumed in Northern Ireland to be obtained from indigenous renewable energy sources, of which at least 25% must be generated by non-wind technologies. However, we wish to ensure that these targets are realistic and achievable and therefore will be subject to the outcome of the comprehensive study being undertaken as part of the All-Island '2020 Vision' for renewable energy.

All-Island '2020 Vision' for renewable energy

In July 2005 Angela Smith MP, Minister for Enterprise, Trade and Investment and her RoI counterpart Noel Dempsey TD, Minister for Communications, Marine and Natural Resources, issued a consultation paper on a '2020 Vision'¹⁶¹ for renewable energy which sought views on the development of a joint Northern Ireland/Republic of Ireland strategy for the renewable energy aspects of the All-island Energy Market leading up to 2020 and beyond. A key aspect of this work is a comprehensive study of the electricity grid, which will require selective adaptation and different management protocols, to maximise the penetration of renewables for the future. We will conclude this work in 2007.

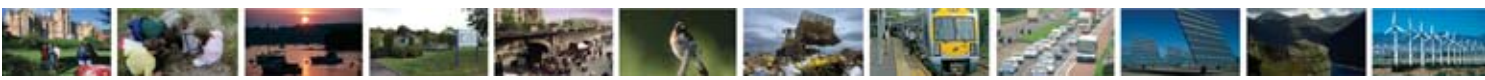
Renewables Obligation

In April 2005 DETI introduced a renewables obligation as the main support mechanism for incentivising renewables development. The Renewables Obligation¹⁶² places a legal requirement on electricity suppliers to provide evidence that a specified and annually increasing proportion of their electricity supplied to final customers has been generated from renewable sources or to pay a buy-out fee that is proportionate to any shortfall. The level of renewable energy connected in Northern Ireland is already twice the legal requirement which indicates the Obligation is operating effectively.

¹⁶¹ Further information on All-Island 2020 Vision at www.detini.gov.uk

¹⁶² Further information on the Renewables Obligation at www.detini.gov.uk





Wind Energy

Wind energy offers significant potential in Northern Ireland and currently produces electricity at the lowest cost of all the renewable options. There are currently ten wind farms supplying the grid as well as commercial scale wind turbines installed to serve specific businesses. Large scale wind projects are expected to make the largest contribution to electricity generation from renewables over the next decade.



Antrim Hospital: In 2005, with the assistance of the Central Energy Fund and Health Estates, United Hospital Trust became the first in Northern Ireland, Scotland and Wales to erect a 600kW Wind turbine, on the hospital site, generating its base electrical loading and giving an estimated reduction in annual CO₂ emissions of over 1300 tonnes.



Non Wind Renewable Energy

In addition to large-scale wind related technology and small scale wind turbines, there are a number of other technologies on the market which can be installed in organisations or individual homes. These include solar water heating, ground source heat pumps, biomass boilers and solar photovoltaics (PV).

Action Renewables¹⁶³ plays a key role in raising awareness of renewable energy for both domestic and industrial users. It manages an expert renewable energy advice and support service for householders and not-for-profit groups. In partnership with Sustainable Energy Ireland, Action Renewables is creating a renewable energy installer academy that will improve the quality of small scale renewable energy installations and increase market competitiveness.

Waste

DOE's Waste Management Strategy "Towards Resource Management"¹⁶⁴ sets out a clear vision for the development of renewable energy from waste facilities as part of the development of an integrated network of treatment and disposal facilities for Northern Ireland. **We will create an integrated network of facilities will contribute to the achievement of EU targets to reduce the amount of biodegradable waste going to landfill and, as a consequence, reduce the emission of greenhouse gases from landfill.**

Agriculture

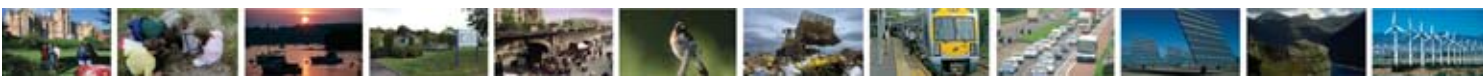
Recent reform of the Common Agriculture Policy and the promotion of a range of Agri-Environment Schemes will have a significant impact on the pattern of farming in Northern Ireland over the coming years. This will generate a positive effect in reducing greenhouse gas emissions directly through reduced stocking densities and indirectly through lower fertiliser inputs, whilst also creating opportunities for greater diversity of land use, including the production of energy crops

There is also potential for anaerobic digestion solutions for farm, agri-food, commercial and municipal waste management strategies. Anaerobic digestion is the breakdown of organic material to produce methane, carbon dioxide, and heat which can be utilised as an energy supply.

¹⁶³ Further information on Action Renewables at www.actionrenewables.org/

¹⁶⁴ Further information on the DoE Waste Management Strategy at www.ehsni.gov.uk





We will develop a policy and action plan for developing the renewable energy potential of the agri-food and forestry sectors to ensure that these technologies are properly exploited.

Planning

Renewables deployment will continue to be supported by the Northern Ireland planning process. Work has recently commenced on a new Planning Policy Statement on Renewable Energy together with a review of planning controls for small-scale renewable energy developments. This will be taken forward in the context of wider Government commitments to promote and encourage greater deployment of renewable technologies.

Northern Ireland as a world class exemplar in renewable energy technology

Northern Ireland is already establishing itself at the cutting edge of renewables technology. We have in operation the world's only combined heat and power wood pellet production facility opened at the Balcas plant in Enniskillen, to develop the world's first commercial marine current turbine has now got underway at Strangford. Already Thermomax in Bangor is a world leader in solar heating technology, the Copeland plant in Cookstown is the world's largest supplier of compressors which are increasingly being used in heat pumps and Harland & Wolff has captured an important part of the specialised market in offshore windfarm logistics.

The demand for renewable energy technologies in Europe is growing fast. **We will support and encourage businesses to seize the opportunities this brings.** The renewable energy achievements of the past year have seen Northern Ireland become a leader in the UK and the time is now right to build on this success to position Northern Ireland as a world class exemplar in this field and make use of tomorrow's energy today.

Environment and Renewable Energy Funding Package 2006-08

The £59.2 million Environment and Renewable Energy Fund (EREF)¹⁶⁵ has been established primarily to enhance and accelerate the development of renewables in Northern Ireland whilst contributing to a reduction in the level of emissions that impact adversely on our environment.

¹⁶⁵ Further information on the Environment and Renewable Energy Fund at www.detini.gov.uk



It will improve the long term sustainability of the Northern Ireland energy system in a manner which increases security and diversity of supply, encourages innovation and the development of new skills, underpins employment and creates new job opportunities, particularly in the rural community whilst helping to reduce energy costs which aids both industrial competitiveness and the alleviation of fuel poverty. **Through this initiative we also aim to help establish Northern Ireland as an exemplar region in renewables development.**

The Fund will support action in four programmes Research and Demonstration; Building Market Capacity through the Provision of Infrastructure and Supply Chain Development; Accelerated Deployment; and Underpinning Knowledge and Raising Awareness.

To date support for renewable energy has been focused mainly on larger scale renewables electricity generation through the Northern Ireland Renewables Obligation. **This new fund is unique in the UK as it is being taken forward by five Northern Ireland Departments working together to encourage the development of a renewables infrastructure, growing energy crops, waste to energy and importantly micro generation at household level.**

The EREF is expected to leverage a further £300 million of private investment in local energy infrastructure. **We will install renewable energy systems in 4,600 households, encourage the uptake of renewable energy in industry and commerce, ensure two waste to energy flagship projects are developed, set up a renewable energy centre of excellence, support the infrastructure development for bio and geothermal energy, and develop the use of renewable energy within the Government estate.**

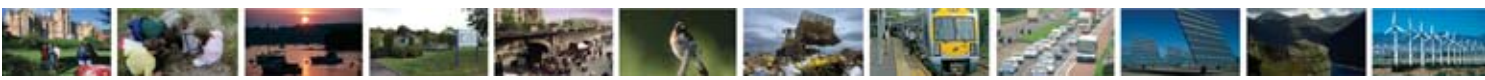
Plan and Prepare For Climate Change Impacts in Northern Ireland

We have already detailed above the measures which will be required to reduce our emissions of greenhouse gases and mitigate the future impacts of climate change. We also need to adapt so that we can prepare for the changes that are already in the climate system and to reduce our vulnerability to the more extreme weather events and to the gradual changes such as temperature change, seasonal change and potential rise in sea level, that will impact and may radically change Northern Ireland

Research

In order to develop informed climate change adaptation policy it will be necessary to keep information on climate change impacts up to date. We have therefore commissioned further research to provide updated





information on climate change impacts. The study will incorporate a risk assessment approach and will recommend adaptation strategies for the key impacts. **We will complete this work by the February 2007.** This should help to increase awareness and understanding of potential impacts of climate change for Northern Ireland and enable organisations across the public sector to lead in responding to climate change.

Adaptation

DOE will continue to maintain a database on 13 indicators of climate change¹⁶⁶. These indicators are specific to Northern Ireland, and will give us a good idea of how climate has been changing up to the present and how our environment has been responding. This information can then be used to inform the measures used to combat climate change now and in the future.

As a result of the uncertainties associated with climate change and flood estimation the Government's Planning Policy Statement 15 'Planning and Flood Risk'¹⁶⁷ has adopted a precautionary approach to ensure that development is not unduly exposed to flood risk, wherever it arises. It seeks to minimise development in flood plains to secure and promote their natural role as a form of flood defence and as an important environmental and social resource. It also acknowledges that hard-engineered drainage solutions are not always an appropriate response to dealing with flooding or drainage issues.



¹⁶⁶ Further information on Climate Change Indicators at www.ehsni.gov.uk/environment/climatechange/air-indicators.shtml



Chapter 5

The Challenge

Sustainable Development is a concept and research shows it is poorly understood by the vast majority of the population. However as evidenced by the previous chapters the problems it reflects are all too real, affect everyone and need collective effort to find lasting solutions. We need to help people understand the problems, the need to act and how. The challenge is therefore to overcome these barriers through effective communication and learning.

National media attention on related issues such as climate change, waste and health issues has begun this process through signalling to the public the long-term consequences of our activities on the natural world. Media promotions including the “Wake up to Waste” campaign¹⁶⁸ sponsored by the Department of the Environment and the ‘Save your 20%’ energy efficiency adverts, run by the Energy Savings Trust¹⁶⁹, have been successful in increasing awareness and communicating to the general public how they, both individually and collectively, can make a difference.

We all – Government, local communities, the private sector, voluntary and community organisations - need to change to make alternative choices founded on reliable information, if we are to achieve our vision of a sustainable society. This will require a major transformation in our current thinking and behaviour.

Changes in behaviour can be effected through the use of communication techniques, for example:

‘Wake up to Waste’ Campaign ¹⁶⁸

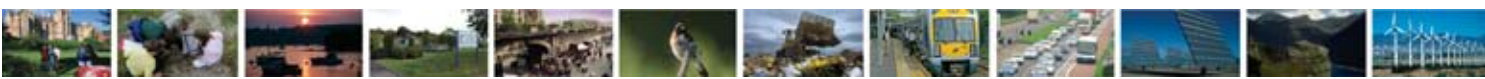
Almost 928,000 tonnes of household waste was produced in Northern Ireland in 2004, equivalent to around one tonne of waste from each household. Although the household recycling rate has been low it has increased from 10% in 2002 to 18.9% in 2004/05.

The Wake up to Waste campaign played a role in this increase in recycling rates through targeted advertising campaigns, supporting the roll out of kerbside collections and improvements to council civic amenity sites.

¹⁶⁸ Further information on the ‘Wake up to Waste’ campaign can be found at:
<http://www.wakeuptowaste.org/>

¹⁶⁹ Further information on the Energy Savings Trust ‘Save Your 20%’ campaign can be found at:
<http://www.est.org.uk/myhome/20percent/>





Vision

Our vision for Northern Ireland is of an informed society committed to the co-ordinated pursuit of sustainability.

This vision needs to be understood and translated into practical and improved sustainable behaviour across a range of activities including education, transport, waste management, water conservation, energy consumption and consumer patterns.

For its part Government will embed sustainable development principles and priorities throughout its policy and decision-making and undertake to raise awareness and engage with people on sustainable development issues using a targeted and co-ordinated approach. The role of the private sector in complementing Government policies and in facilitating the development of an individual social conscience must be recognised and supported.



Strategic Objectives

Two strategic objectives on learning and communication have been chosen for the strategy

- **To provide access for all citizens to gain sustainable development skills and knowledge;**
- **To bring about the behavioural changes necessary to progress towards a sustainable society.**

The strategic objectives and main targets are set out below. Also shown are some of the important steps that need to be taken to enable, encourage and build capacity to deliver. These will be developed in more detail in the implementation plan.

Strategic Objective 1

To provide access for all citizens to gain sustainable development skills and knowledge.

Key Targets

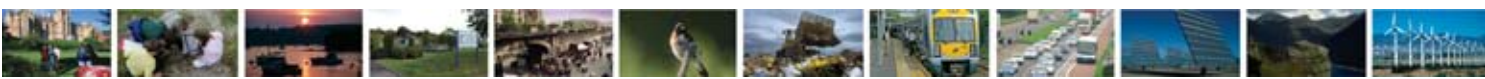
- To formally incorporate sustainable development into the Northern Ireland school curriculum from 2007;
- Trainee educators to be trained in sustainable development by 2008;
- Promote the use of the Education for Sustainable Development (ESD) Good Practice Guidance¹⁷⁰ in schools by 2006;
- By 2008 school development plans should incorporate the promotion of ESD;
- To support by 2007 the implementation of agreed action points as defined by the HEFCE¹⁷¹ sustainable development publication across the Higher Education Sector;

¹⁷⁰ The ESD Good Practice Guide for Primary, Secondary and Special Schools 2005 is available for download at:

<http://www.welb-cass.org/site/cass/mfc/downloads/ESD%202005%2001%20Dec%2005.pdf>

¹⁷¹ Further information on the Higher Education Funding Council for England's publication, Sustainable Development





- By 2008 implement revised guidance for the restructured Further Education Sector that embraces all aspects of sustainable development including the estate and curriculum;
- By 2009 25% of Northern Ireland schools to achieve Eco-Schools¹⁷² accreditation.

Important Steps

- Ensure ESD is fully embedded into the Northern Ireland curricula at key stages and comprises knowledge & understanding, skills, attitudes and values;
- Encourage use of the education environment as an exemplar of sustainable development.

Strategic Objective 2

To bring about the behavioural changes necessary to progress towards a sustainable society.

Key Targets

- Develop a sustainable development communication strategy by 2007;
- Use current research into behavioural change to identify short and long-term behavioural targets and appropriate indicators by 2009;
- Determine the barriers to behavioural change for sustainability and identify opportunities for appropriate drivers for change by 2009.

Important Steps

- Unify all communication messages into a framework to optimise behavioural change.
- Translate and update where necessary existing research to provide a Northern Ireland context.

¹⁷² Further information on Eco-Schools: www.eco-schools.org.uk



Access for all citizens to sustainable development skills and knowledge

The UN 'Education for Sustainable Development Decade (ESD) (2005-2014)¹⁷³ sets the vision of 'all having the opportunity of benefit from quality education and to learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation.'

Education, whether formal or informal, is an indispensable requirement for changing people's attitudes. Placing sustainable development within the formal curriculum represents a major step in ensuring that everyday learning instils the concept into the citizens of tomorrow during their formative years.

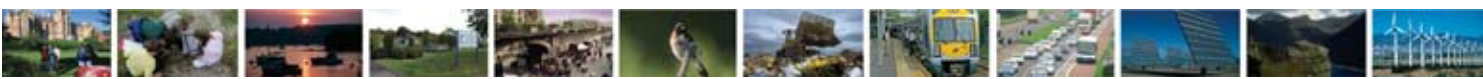
In Northern Ireland the Education & Library Boards' Inter-board ESD Group launched a good practice guide for schools in December 2005¹⁷⁰. Communication and learning are integral parts of this guide, which provides the framework for ESD in schools and identifies the learning outcomes for children at each key stage in their education.

Education for Sustainable Development aims to give young people the tools to make their own informed decisions and act, individually and collectively, to achieve the positive behavioural change required to live more sustainably. **We will embed and promote sustainable development through school development plans and in the curriculum. We will also train our educators in sustainable development to help our children take their first steps towards sustainability.**



¹⁷³ Further information on the UN Education for Sustainable Development Decade 2005-2014 can be found at: http://portal.unesco.org/education/en/ev.php-URL_ID=27234&URL_DO=DO_TOPIC&URL_SECTION=201.html





The Higher Education sector also has an important contribution to make in advancing sustainable development in the curriculum, in research and in partnership with professional bodies and other stakeholders in the community. Northern Ireland's approach will be informed by the Higher Education Funding Council for England's (HEFCE) recent publication, 'Sustainable Development in Higher Education'¹⁷¹ which is being adopted by Higher Education Institutes in Northern Ireland. **We will support the implementation of agreed action points as defined by the HEFCE SD publication across the Higher Education Sector.**

The education estate can provide great opportunities for children and young people to learn in an environment where they can see sustainable development in action. This involves using building and procurement procedures, which demonstrate a best practice approach to education for sustainable development. Schools such as Cavehill Primary School exemplify this approach.

Cavehill Primary School – Eco building

The new Cavehill Primary School has been designed to combine best practice in energy efficient passive solar school design, high efficiency boilers and sustainable building techniques which incorporate maximum daylight usage and rainwater harvesting within a robust and educationally holistic design.

The project is a particularly good example of sustainable development in action. The innovative and creative design of the school building not only mitigates the negative impacts of development but also, more importantly, helps children understand and connect with sustainable development.

Education outside the classroom brings the environment closer to children and young people by encouraging an active lifestyle whilst enriching and broadening learning experiences. In essence the outdoor classroom can help bring a subject to life and complement learning in the classroom.

Magilligan Field Centre

This is an outdoor learning centre located in one of the most unspoilt parts of the north coast and is the last centre remaining in Northern Ireland. It offers courses to meet a variety of subject needs across the key stages; foundation, key stages 1-4 and post 16.



In 2003 the Centre won the Eco-Centres Award in recognition of the efforts of staff to manage and operate an educational establishment, which promotes sustainability while minimising its own impact upon the environment.

Further Education Colleges have also embraced Sustainable Development. In particular, work with partners in a variety of projects has a beneficial impact on the curriculum offered to students. For example, Northwest Institute of Further and Higher Education has established a dedicated research unit on Sustainable and Renewable Technologies and has been commissioned by the Western Regional Energy Agency & Network (WREAN)¹⁷⁴ to develop training materials on Solar Thermal Technology.

Omagh Biomass Project

Omagh College is involved in a project entitled Renewable Energy Network For Environmental Welfare (RENEW) and involves establishing and producing a short rotation coppice willow to provide a renewable energy fuel for conversion to heat in a range of boiler systems in the Republic of Ireland and Northern Ireland.

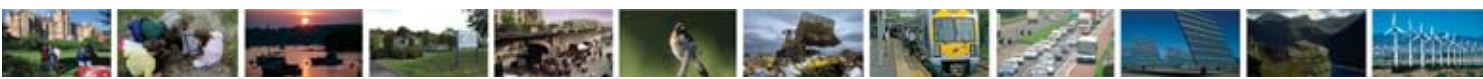
The College has installed a 150kw biomass boiler which is feeding into an under floor heating system to the industrial wing of the new campus building. The fuel source is willow chip from rural generation. After a three year period it is anticipated that this willow chip will be purchased from a local farmer.

A key element of the project is the development of curriculum materials in this area and the dissemination of research results arising from the project which is a practical and living example of Sustainable Development in action.

Beyond formal education there are opportunities for members of society to be informed, to make choices, to influence and to make an impact through informal education, community action, volunteering and by simply adopting sustainable behaviour and a social conscience. This underlines the importance of learning, which takes place outside of a dedicated learning environment and the key is tapping into this valuable reserve.

¹⁷⁴ Further information on: www.wrean.co.uk





Using the environment to develop learning derived from experiences (experiential learning) is fundamental to the work of the Pushkin Trust¹⁷⁵ based in Baronscourt, Co. Tyrone. The Trust runs a variety of successful schemes on an all-island basis, including an annual award scheme for children in the 9-14 age group. Over 16,400 children, drawn from primary, secondary, special needs and Irish medium schools, have participated.

The Partners in Education Programme caters for student teachers in eight of Ireland's Teacher Training Colleges. Stranmillis, St Mary's and Queens University from Northern Ireland all participate; St Patrick's College and Marino Church of Ireland College of Education are two of the five participants from the Republic of Ireland. A novel element brings students and lecturers together for an intensive weekend. The activities make a valuable contribution to mainstreaming of sustainable development principles.

Bringing about the behavioural changes necessary to progress and contribute towards a sustainable society.

In order for sustainable development to become part of everyday life, it must be understood and embraced by all sections of the community. We aim to achieve this through the development and implementation of a co-ordinated and targeted communications strategy, which will provide a framework for the way forward.

The main aims of the communication strategy will be:

- To encourage and support sustainable development within key areas of the public sector and private sectors;
- To communicate progress towards sustainable development to key observers and opinion formers;
- To encourage and assist others to communicate sustainable development effectively;
- To promote the concept of sustainable development to potentially receptive sectors of Northern Ireland society;
- To facilitate stakeholder engagement and participation in the development and delivery of the implementation plans.

¹⁷⁵ Further information on the Pushkin Trust: www.barons-court.com

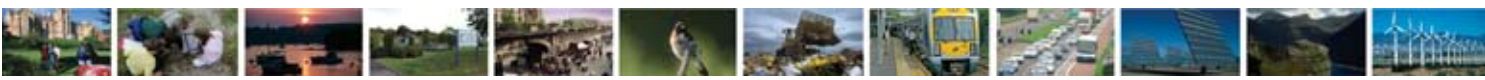


Encouraging behavioural change will be a central theme of this communication strategy as it is fundamental to the success of sustainable development. It will make the messages of sustainable development as accessible as possible to as many people as possible through all forms of medium.

To augment the communication process we will use current research into behavioural change to identify short and long-term behavioural targets and appropriate indicators. We will also determine the barriers to behavioural change for sustainability and identify opportunities for appropriate drivers for change.

These are only the first steps in changing the mindset. But by unifying and focusing our communication messages we will make the concept of sustainable development more understandable, tangible and attainable for all.





Chapter 6

The Challenge

Governance can be defined as the process of decision making and implementation. Central Government though is only one of the key components of good governance other players include local Government, Non-Governmental Organisations, business, trade unions and the community at large.



Sustainable development has profound implications for governance. A society committed to sustainable development will be characterised by a system of governance that focuses on mainstreaming and balancing social, economic and environmental progress.

The contested nature of society in Northern Ireland has forged a culture that is not yet fully adapted to the new demands which sustainable development will place upon it in order to make the transition from global problems to inclusive local solutions. In some ways we have a steep learning curve compared with the rest of the UK or the Republic of Ireland, where sustainable development strategies and policies have been in place since the late 90's. Where there is challenge however there is also opportunity and we can and should learn from the lessons and experiences elsewhere.



This will require the ongoing evolution of a system of governance which improves the level of democratic accountability and increases the engagement and participation of stakeholders in the decision-making process. Encouraging and enabling more citizens to actively participate in the decision-making process will mean they can make a more tangible contribution to the way in which their local areas and services are managed. This will also require us to develop and nurture a culture of leadership, innovation and transparency.

New concepts such as 'environmental justice' and 'active citizenship', underpinned by innovative and participatory mechanisms for decision-making, need to be developed as part of a commitment by Government to deepening citizens' understanding and responses to calls for sustainability.

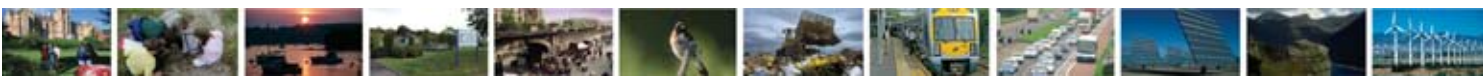
The environmental justice agenda affects both urban and rural communities and it seeks to put people at the centre of the environment. It recognises that it is often the poorest and least powerful people who live in or near to areas of environmental degradation. In developing the environmental justice agenda, further research into environmental inequalities is needed. We will explore ways in which individuals and communities can enjoy a better quality of life by living in clean and healthy environments. Chapter 3 on Sustainable Communities links closely to this agenda.

Review of Public Administration

Northern Ireland has commenced a far-reaching exercise in the modernisation of governance. A central example is the Review of Public Administration¹⁷⁶. The overall purpose of the review is to develop an efficient system of public administration which fully meets the needs of the people in Northern Ireland and is accountable to them. The review is necessary because comparisons with the rest of the UK would suggest that Northern Ireland is both over-governed and over-administered. Public expenditure per head is nearly one-third higher than in the rest of the UK. A better balance is therefore needed between resources which support structures of administration and those which are directed towards frontline services.

¹⁷⁶ Further information on the Review of Public Administration can be found at: www.rpani.gov.uk





With a population of 1.7 million Northern Ireland has:

- **3 MEPs**
- **18 Westminster MPs**
- **108 MLAs**
- **582 Councillors in 26 Councils**
- **11 Departments, 33 Health bodies, 5 Education & Library Boards and a further 90 or so quangos**

Regulation

Consistent and effective regulation plays an important part of the governance agenda however, this should not translate into unnecessary regulatory and administrative burdens. Rather it is to ensure that regulation and its enforcement are proportionate, accountable, consistent, transparent and targeted.

Behavioural Change

It is recognised that Government alone cannot achieve sustainable development. Effective governance for sustainability rests fundamentally on a responsibility for behavioural change that is shared by Government and its wider social partners, including individual citizens. Behavioural change is dealt with in Chapter 5 on Learning and Communication.

Vision

Our vision is of a Northern Ireland where good governance enjoys a strong relationship with its social partners and supports a thriving, innovative and sustainable business community.

Through this vision it is envisaged that we will modernise and enhance the current system of governance, so that it is better able to take forward the principles of sustainable development.

In doing so we will develop a system which cultivates integrity, transparency, continuity, participation and acceptance of responsibility,



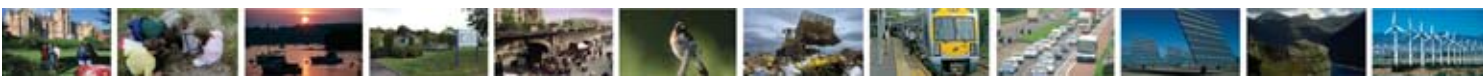
coupled with a strong culture of innovation and partnership. The challenge for the region is to ensure that we take into consideration in all our processes and policies the implications of sustainable development.

We will therefore ensure that sustainability is properly recognised as the overarching policy framework for building a post-conflict society in Northern Ireland and that social and environmental objectives are incorporated into the decision making process alongside economic objectives.

If we rise to the challenge we could become a region characterised by innovation, partnership and inclusive governance, where leadership is clearly evident both from Government and its social partners.

We recognise that sustainable development cannot be achieved without a high level of environmental quality and the existence of an effective system of environmental law and regulation. **We will therefore, put in place a robust system of environmental governance that is capable of developing and enforcing effective and better regulation.**





Governance for sustainable development should not, and must not, be seen as a threat to business but rather as an opportunity. Consequently we will ensure that our vision of a competitive economy is aligned with the demands of sustainability and is best placed and supported to seize the economic opportunities arising from the sustainable development agenda and the emerging markets in environmental technologies.

Most importantly sustainable development is about engagement and participation in decision making and **we will build the capacity and develop the innovative mechanisms necessary for effective participation and feedback.**

Strategic Objectives

Two strategic objectives on governance have been chosen for the strategy.

- **To mainstream sustainable development across Government;**
- **To strengthen the network of accountability for governance for sustainable development.**

The strategic objectives and main targets are set out below. Some of the important steps are also shown that need to be taken to enable, encourage and build capacity to deliver. These will be developed in more detail in the implementation plan.

Strategic Objective 1

To mainstream sustainable development across Government.

Key targets

- By 2007 introduce a statutory duty on relevant public bodies to contribute to the achievement of sustainable development;
- By 2007 ensure that all policy development actively considers sustainable development;



- By 2007 link sustainable development objectives to the Priorities and Budgets¹⁷⁷ and Comprehensive Spending Review¹⁷⁸ processes;
- By 2007 ensure all Departments have a SD Action Plan in place.

Important Steps

- Embed sustainable development principles into the governance arrangements of the new councils
- Develop a revised sustainable development input to the Office of First Minister and Deputy First Minister Practical Guide to Policymaking¹⁷⁹
- Deliver a training programme focusing on sustainable development knowledge and skills across the Northern Ireland Civil Service;
- By 2007 develop and pilot the use of an Integrated Impact Assessment¹⁸⁰ for use by all Government Departments;
- By 2007 have in place a system of information provision, support and guidance on sustainable development for those involved in policy and decision-making.

Strategic Objective 2

To strengthen the network of accountability for governance for sustainable development.

Key Targets

- By 2009 ensure that community planning is implanted within the revised local authority system
- By 2008 strengthen and modernise environmental regulation

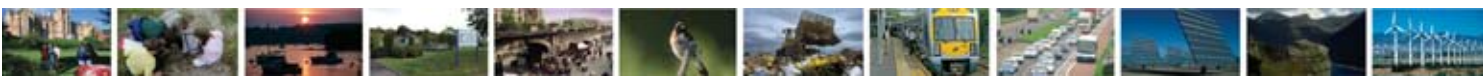
¹⁷⁷ Further information on the Priorities and Budget document can be found at:
<http://www.pfgbudgetni.gov.uk/>

¹⁷⁸ Further information on the Comprehensive Spending Reviews can be found at:
http://www.hm-treasury.gov.uk/spending_review/spend_index.cfm

¹⁷⁹ Further information on OFMDFM's Practical Guide to Policymaking can be found at:
www.ofmdfmi.gov.uk/practical-guide-policy-making.pdf

¹⁸⁰ Further information on the Integrated Impact Assessment tool can be found at:
<http://www.ofmdfmi.gov.uk/policylink-integrated-impact-assessment>





- By 2006 finalise appropriate monitoring and reporting arrangements for sustainable development and establish an implementation role for the Ministerial-Led Group
- Agree the role of a Sustainable Development Forum by 2006.
- Agree the way forward on the review of environmental governance in respect of sustainable development by Summer 2007
- By 2009 build capacity to enable meaningful civic participation and identify participatory mechanisms for decision-making.

Important Steps

- By 2006 ensure that the principles and objectives of sustainable development have been incorporated into the Regional Development Strategy and planning legislation;
- Determine how best to develop an appropriate audit/scrutiny role to ensure implementation of the objectives of the strategy;
- Determine how best to utilise the role of the Sustainable Development Commission in Northern Ireland;
- Ensure planning legislation and PPS's (Planning Policy Statements) are updated to reflect sustainable development principles and provide guidance on key areas;
- Consider the outcomes of the review of environmental governance in respect of sustainable development by 2007.

Mainstreaming sustainable development across Government

There are a number of complementary actions which will help to mainstream sustainable development both within Government and across wider society. Government obviously needs to take the lead and the initial step is to ensure that the principles of sustainable development are fully embedded throughout Government to help deliver the joined up approach required for effective policy development and ultimately effective decision making.

Statutory Duty

It is for this reason that we recognise the importance of having a statutory duty to promote sustainable development enshrined within legislation. **By 2007 we will therefore have in place a legal duty requiring relevant public bodies to take account of sustainable development in the exercise of their functions.**



Integrated Impact Assessment

There are a number of overarching policy issues already integrated into the Government's policy development and decision-making processes. These include Equality, Targeting Social Need and Human Rights¹⁸¹. These together with other proofing policies seek to ensure that a range of factors and impacts are taken into account and a holistic approach is adopted to policy development.

We will strengthen this approach in Northern Ireland by developing an Integrated Impact Assessment Tool¹⁸² that will incorporate sustainability criteria to ensure that all new or revised policies take full account of sustainable development. This will provide a more detailed assessment framework which will in turn complement any strategic assessment required under the Strategic Environmental Assessment Directive¹⁸³.

Training

We will ensure that all those involved in developing Government policy will also be trained in the necessary skills to be able to apply sustainable development principles.

Linkage to Government Priorities

We will go further in placing sustainable development at the heart of all Government policy by integrating sustainable development priorities and principles into the annual Priorities and Budget¹⁷⁷ exercise and into future Comprehensive Spending Reviews¹⁷⁸.

Strengthening the network of accountability

Ministerial Led Group

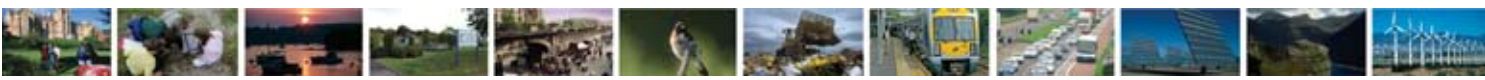
Government will continue to develop more effective co-ordination and policy integration arrangements between Departments through the Ministerial-led Group for Sustainable Development. Establishing a monitoring and reporting role for this Group as part of their work in helping to guide implementation will further increase accountability.

¹⁸¹ Further information on these issues can be found on the following web-sites:
<http://www.equalityni.org>, <http://www.newtsnni.gov.uk>, <http://www.nihrc.org>

¹⁸² Further information on the Integrated Impact Assessment tool can be found at:
<http://www.ofmdfmi.gov.uk/policylink-integrated-impact-assessment>

¹⁸³ Further information on the SEA Directive can be found at:
<http://www.odpm.gov.uk/pub/290/>





Central Government

By having the corporate and business plans of Departments, agencies and local government linked to sustainable development principles and objectives we will both strengthen Government commitment and be able to monitor and report progress.

Local Government

Local Government is a key mechanism for delivering sustainable development on the ground and the Review of Public Administration¹⁸⁴ will be a significant factor in the future development of governance in Northern Ireland. **We will therefore ensure that sustainable development is fully taken into account in creating the new local Government structures.** This will place sustainable development at the heart of local Government reform and will ensure that it is a central feature of local Government policy in the future.



¹⁸⁴Further information on the Review of Public Administration can be found at:
www.rpani.gov.uk



Environmental Governance

An Independent Review of Environmental Governance¹⁸⁵ has recently been launched and will bring forward proposals for the future environmental governance arrangements in Northern Ireland. These will specifically cover environmental protection, natural heritage and built heritage. The review is scheduled to publish its final report in the first quarter of 2007. It will include recommendations and the proposed timescale for implementation for the future of environmental governance in Northern Ireland and **we will agree a way forward on the recommendations from the review team by summer 2007.**

Participation

Good governance and citizenship rests upon real and meaningful participation. **In developing our approach to sustainable development we will build capacity to promote meaningful civic participation in an attempt to develop a relationship in which citizens become partners in the decision making process.**

As part of the development of the first of the series of implementation plans we will also be giving consideration to the role of a Sustainable Development Forum whose members could be drawn from all sectors of Northern Ireland society. Through this process we will also establish how best to utilise and strengthen the role of the Sustainable Development Commission in Northern Ireland.

¹⁸⁵ Further information on the Independent Review of Environmental Governance can be found at: www.regni.info/



Appendix 1

Delivery

The Government's *Priorities and Budget* reflects the environmental, social and economic priorities of Government policy. It represents the spending needed to put policy into practice. The Central Finance Group of the Department of Finance and Personnel (DFP) is responsible for providing advice to Ministers in relation to Budget proposals with the Economic Policy Unit within OFMDFM providing advice to Ministers in relation to developing priorities and Public Service Agreements. This advice focuses on the spending priorities at a strategic level and on the total amounts to be allocated to programmes.

We have identified through this strategy the need for sustainable development to be linked to the Priorities and Budgets and Comprehensive Spending Review Process. Mainstreaming sustainable development into this process has a number of benefits, none more so than ensuring that it becomes a key consideration during the Comprehensive Spending Review and future spending rounds which set PSA targets and allocate resources to each of the Government departments.

To implement effectively the key targets within the strategy will require the deployment of current mainstream funding and whilst the immediate effect will be largely neutral, as sustainable development becomes embedded into the policy process it will become a priority within existing funding programmes.

To ensure effective delivery of the strategy, a clear, concise approach to monitoring is essential. The identification of such a process is a key target in the Governance chapter (6) and will be accomplished via a number of avenues including use of the formally established Ministerial-led group currently chaired by the DoE Minister. We will also consider the role and establishment of a sustainable development forum, with part of its remit to provide an effective governance role over the strategy.

Appropriate monitoring and reporting procedures for the strategy will be finalised by the end of 2006.

The six priority areas identified in the strategy each have their own strategic objectives and associated targets and delivery of these will be progressed through a series of implementation plans. We will continue to work with the Sustainable Development Commission to develop these plans, the first of which will be published in late 2006 and updated regularly thereafter.

An important aspect of the monitoring and evaluation framework will be the establishment of key sustainable development indicators for Northern Ireland. These will be developed in a manner consistent with the UK approach contained in the 'Quality of Life Counts' which provided a baseline assessment and indicators for the UK SD strategy.

Whilst an initial set of indicators has been identified for the strategy covering each of the key priority areas, it will be necessary to assess these further, identify gaps in the information needed to assess progress towards the strategy's vision/s and

Appendix 1

strategic objectives. Baseline data for some of the indicator set will also require to be established.

We also intend through this process to develop a system of continuous monitoring and reporting on these indicators which in time will enable us to identify trends; key challenges that lie ahead and highlight where further progress is needed in the achievement of sustainability.



Appendix 2

SECTION 75 – Assessment of Equality Impact

Background

Under Section 75 of the Northern Ireland Act 1998, the Department¹⁸⁶ is required to have due regard to the need to promote equality of opportunity:

- Between persons of different religious belief, political opinion, racial group, age, marital status or sexual orientation;
- Between men and women generally;
- Between persons with a disability and person without; and
- Between persons with dependants and persons without.

In addition, without prejudice to its obligations above, the Department is also required, in carrying out its functions relating to Northern Ireland, to have regard to the desirability of promoting good relations between persons of different religious beliefs, political opinion or racial group.

The Northern Ireland Sustainable Development Strategy (NISD) is a major cross cutting strategy which will provide a broad strategic direction and framework for Government to direct policy and decision-making in Northern Ireland in order to facilitate a co-ordinated and co-operative approach to sustainable development.

The key priority areas for the strategy are:

- Sustainable Consumption and Production;
- Natural Resource Protection;
- Sustainable Communities;
- Climate Change;
- Learning and Communication; and
- Governance and Sustainable Development.

Screening Analysis

The purpose of this appraisal is to assess whether or not the policy proposals for the NISD may or may not have a differential impact on any of the Section 75 (S75) categories. The appraisal has been performed in accordance with the Department's Equality Scheme approved in 2001. It is based upon the criteria contained in the guidance for performing the 'screening' to identify, if any of the nine categories of groups identified in S75 might be affected by the policy proposals, (religion, political opinion, race, age, marital status, gender, sexual orientation, disability, dependents).

The screening appraisal is summarised in the following table.

¹⁸⁶Department of the Environment

Appendix 2

Question

Is there any indication or evidence of higher or lower participation uptake by S75 groups?

Answer

There is no evidence that any of the particular groups is, or will be more affected by these proposals than any other, or that any particular group would be disproportionately affected by the policy proposals.

Question

Is there any indication or evidence that any of the S75 groups have different needs, experiences, issues and priorities in relation to this policy issue?

Answer

There is no evidence of this and no reason to suspect that any of the particular groups would gain advantage or be disadvantaged by this policy in terms of their particular needs and priorities. The strategy is intended to promote the three pillars of sustainable development namely social, economic and environmental.

Question

Have consultations with the relevant representative organisations or individuals within any of the S75 categories, indicated that policies of this type create problems specific to them?

Answer

The strategy has been developed in conjunction with key stakeholders. No S75 issues were identified as being problematic throughout this process

Question

Is there an opportunity to better promote equality of opportunity or community relations by altering the policy, or by working with others, in Government, or in the larger community in the context of this policy?

Answer

The NISD is a major cross cutting initiative, the goal of which is to enable all people to satisfy their basic needs and enjoy a better quality of life, without compromising the quality of life of future generations. The strategy's objectives should promote better community relations as it is intended that people will become more closely involved in the decision making process.

Conclusion

In respect of the Statutory Duty requirement under Section 75 of the Northern Ireland Act 1998, this Department will retain responsibility for equality screening of strategies which fall under its ownership. The Department has screened the NISD and has



Appendix 2

found that the high level status of the document indicates that a full Equality Impact Assessment is not required. Equality considerations in relation to the strategies and policies of other departments, which are referenced within the overarching framework, are a matter for the relevant department.

Rural Proofing

Rural Proofing is a process that aims to ensure that Government policies are examined carefully and objectively to ensure that they treat rural dwellers fairly and in particular to make public services accessible on a fair basis to people wherever they live in Northern Ireland.

Departments are encouraged to think through their policies in relation to how they will affect people in rural areas differently. Key areas of difference include accessibility and distance to services, restricted choice of services, transport issues, social and economic factors. Policymakers are asked to consider what options will be open to rural dwellers or what impacts will arise from the potential closure of a service – where else can they obtain that service, how much additional burden (financial or social) will be placed on them to access that service, what difference the removal of a service makes to the social and economic heart of a rural community.

The Department of the Environment has considered the guidance on rural proofing provided by the Department of Agriculture and Rural Development and the checklist developed by the Rural Development Council that was included in the Second Rural Proofing Annual Report. This checklist sets out what impacts should be considered under the headings of service provision, mobility, economic vibrancy, social well-being, social capital and natural & cultural capital.

Sustainable Development is a major cross cutting initiative, the principal purpose of which is to provide a comprehensive analysis and framework which will allow sustainable development to be taken forward systematically throughout Northern Ireland. The goal of sustainable development is to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life, without compromising the quality of life of future generations.

The NISD will provide the overarching framework for government to direct policy and decision-making in Northern Ireland, in order to facilitate a coordinated and co-operative approach to deliver sustainable development.

Conclusion

DoE has considered the issues set out in the rural proofing checklist but has not completed a step-by-step version against the Northern Ireland Sustainable Development strategy, as it is considered that the strategy has been developed to recognise the characteristics of sustainable communities in both the rural and urban areas. It is also the case that many of the key targets and actions in the NISD will be taken forward and implemented by other departments and it will be their individual responsibility to rural proof those policies and ensure the needs of rural communities are addressed.

Appendix 2

Strategic Environmental Assessment

European Directive 2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment” requires a Strategic Environmental Assessment (SEA) of a wide range of plans and programmes. The objective of the Directive is “to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and with a view to promoting sustainable development”

Conclusion

DoE has considered the issues set out in the Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 (Statutory Rule 2004 No. 258) and “practical guidance on applying European Directive 2001/42/EC and has concluded that a full SEA is not required in this instance.



Appendix 3 - Strategic objectives and targets for sustainable development

Chapter 1 – Sustainable Consumption and Production

Strategic Objectives		Key Targets	Important steps
To become more resource efficient	Northern Ireland economy will achieve 85% resource efficiency by 2025; Stabilise Northern Ireland ecological footprint by 2015 and reduce it thereafter	Progressive reduction of quantities of biodegradable waste going to landfill and reduction of waste in general across all sectors. Encourage and incentivise the business case for resource efficiency and waste minimisation. Promote materials recovery, re-use, and recycling through initiatives such as the Waste and Resources Action Plan (WRAP). Progressive reduction in leakage of mains water.	
To make the Northern Ireland public sector a UK regional leader in sustainable procurement	By 2008 ensure that all public sector procurement is channelled through recognised Centres of Procurement Expertise (COPE's); By 2008 ensure that SD principles guide capital investment decisions on all major publicly funded building and infrastructure projects; By 2008 produce a Sustainable Procurement Action Plan for Northern Ireland.	Develop training and guidance on sustainable procurement for all public sector purchasing officers. Embed whole life costing into procurement decisions and policy. Underpin the Investment Strategy for Northern Ireland with excellence in construction programmes that integrate SD principles. Ensure that public sector housing and public properties are constructed or refurbished to maximise sustainability and flexibility of use. Consider how the recommendations from the Sustainable Procurement Task Force can be applied to Northern Ireland with particular reference to access for Small Medium Enterprises and Social Economy Enterprises. Promote market transformation initiatives and the work of WRAP	



Appendix 3 - Strategic objectives and targets for sustainable development

Strategic Objectives	Key Targets	Important steps
<p>To minimise the unsustainable impacts of consumption.</p>	<p>By 2008 produce a Sustainable Consumption Action Plan for Northern Ireland</p> <p>By 2008 put in place measures which optimise the flexibility of retained and refurbished public buildings.</p>	<p>Work with the Food Standards Agency and other partners to promote more sustainable food procurement in the public sector.</p> <p>Consider how the recommendations from the Sustainable Consumption Roundtable can be applied to Northern Ireland.</p> <p>Make it easier for consumers to make more responsible, less damaging choices</p> <p>Implement Workplace 2010 on the Government estate</p> <p>SD action plans for each Government department</p> <p>Reduce demand for potable water</p> <p>Press for amendments to VAT rates for new versus refurbished buildings and support amendments to planning and building regulations;</p>



Appendix 3 - Strategic objectives and targets for sustainable development

Chapter 2 : Natural Resource Protection and Environmental Enhancement		
Strategic Objectives	Key Targets	Important Steps
To conserve our landscape and manage it in a more sustainable way	<p>Complete the review of Areas of Outstanding Natural Beauty (AONB) and programme of designation by 2016;</p> <p>Introduce enabling legislation for the designation of national parks by 2009;</p> <p>Increase Northern Ireland's forested area by at least 500 hectares per annum in line with Northern Ireland Forestry – A Strategy for Sustainability and Growth</p>	<p>Management plans for all AONB's to be put in place and implemented;</p> <p>Develop policy and appropriate legislation for national park areas;</p> <p>Ensure the review of the Northern Ireland Regional Development Strategy and other relevant planning policies, reinforce sustainable development and provide for appropriate protection of the landscape.</p> <p>Optimise Northern Ireland Rural Development Regulation Plan funds to increase afforestation and review the Woodland Grant Scheme to encourage planting in the most desirable locations;</p> <p>Support the UK approach to adopting the European Thematic Strategy for Soil Protection and the likely Soil Framework Directive including implementation of the appropriate national measures where required.</p>



Appendix 3 - Strategic objectives and targets for sustainable development

Strategic Objectives	Key Targets	Important Steps
<p>To protect and enhance the freshwater and marine environment</p>	<p>Meet the environmental objectives of the Water Framework Directive by 2015;</p> <p>90% compliance with Water (Northern Ireland) Order 1999 consent standards;</p> <p>Develop a policy and legislative framework for protecting the marine environment by 2008;</p> <p>Minimise the number of properties at risk from flooding;</p> <p>Complete permitting of existing installations subject to the current Northern Ireland Pollution Prevention and Control Regulations.</p>	<p>Agree river basin management plans by 2009 and ensure that the programme of measures they contain are fully implemented by 2012;</p> <p>Implement the Nitrates Directive Action Programme to help reduce nitrate and phosphate inputs to waterways and the levels of eutrophication within them;</p> <p>Encourage nutrient management plans to assist farmers to plan nutrient application according to crop requirement and soil nutrient status;</p> <p>Fully implement the Urban Waste Water Treatment Directive to reduce the quantity of untreated effluent being discharged to waterways;</p> <p>Increase the overall percentage of houses connected to mains sewers and the effectiveness of effluent treatment for house properties not connected to mains sewers. Promote the introduction of sustainable drainage systems in future developments;</p> <p>Implement an Integrated Coastal Zone Management Strategy;</p> <p>Develop new planning policy to help protect and manage the Northern Ireland coastline;</p> <p>Develop a new policy framework for river / coastal flood risk management.</p>
<p>To improve our air quality</p>	<p>Meet the health based objectives for the seven key pollutants in the Air Quality Strategy by 2010.</p>	<p>Evaluate district council air quality reports / action plans, make recommendations and provide grant support to ensure that Air Quality Strategy objectives are met;</p> <p>Assist in the current review of the Air Quality Strategy which outlines new measures to help extend life expectancy and cut environmental damage.</p>



Appendix 3 - Strategic objectives and targets for sustainable development

Strategic Objectives	Key Targets	Important Steps
<p>To conserve, protect, enhance and sustainably re-use our historic environment</p>	<p>Advance the Second Survey of Buildings of Architectural and Historic Interest: to increase our knowledge of the built environment and to identify structures worthy of protection by listing by 2016;</p> <p>Rescue at least 200 structures on the Built Heritage at Risk in Northern Ireland Register by 2016;</p> <p>Complete survey records of 1500 historic monuments by 2010.</p>	<p>Review the policy (including level of grant) on grant-aiding works, to retain and restore listed buildings</p> <p>Consider the possible extension of the grant-aid scheme to the majority of listed buildings, and its expansion to include applications for 'maintenance' work as well as 'repair';</p> <p>Increase the retention of historic fabric in listed buildings</p> <p>Ensure protection and conservation of historic buildings and monuments through planning policy and Buildings and Monuments at Risk strategy</p> <p>Support the voluntary sector in developing building preservation trusts;</p> <p>Commit to adopting the 'Protocol for the Care of the Government Historic Estate 2003' by all Northern Ireland Government departments and its application to all publicly funded construction projects;</p> <p>Complete and publish an archaeological survey of County Fermanagh by 2010.</p>



Appendix 3 - Strategic objectives and targets for sustainable development

Strategic Objectives	Key Targets	Important Steps
To protect and enhance biodiversity	<p>Significantly reduce biodiversity loss by 2010;</p> <p>Halt biodiversity loss by 2016.</p>	<p>Complete Countryside Surveys to help determine achievement of overall biodiversity targets by 2007 and 2017;</p> <p>Ensure full and timely implementation of the Northern Ireland Biodiversity Strategy and all national and international nature conservation legislation.</p> <p>Complete the declaration of Areas of Special Scientific Interest by 2016;</p> <p>Ensure 95% of features on statutory designated sites are in, or approaching favourable condition by 2016;</p> <p>Create a statutory duty in the 1985 Northern Ireland Wildlife Order for Northern Ireland Departments and public bodies to further the conservation of biodiversity;</p> <p>Identify and designate marine protected areas</p> <p>Prepare management statements for key invasive species;</p> <p>Increase the emphasis on biodiversity and water quality issues in agri-environment schemes.</p>



Appendix 3 - Strategic objectives and targets for sustainable development

Chapter 3: Sustainable Communities		
Strategic Objectives	Key Targets	Important Steps
To increase the economic well-being of the people of Northern Ireland.	<p>Reduce the productivity gap between Northern Ireland and other UK regions and between the Northern Ireland average and the most deprived communities.</p> <p>Reduce the skills gap between Northern Ireland and other UK regions and between the Northern Ireland average and the most deprived communities.</p> <p>Invest in modern infrastructure to support the needs of the people of Northern Ireland.</p>	<p>Reduce economic inequalities through targeted regeneration programmes leading to a net increase in jobs in the most deprived communities.</p> <p>Increase the skills and qualifications of the Northern Ireland workforce, (including the Essential Skills of numeracy, literacy and ICT), encourage higher value-added jobs and enhancements to productivity</p> <p>Increase Northern Ireland's employment rate taking account of the economic cycle</p> <p>To develop a strong diverse rural economy</p> <p>Use technology and land use planning to improve employment opportunities for all and access to jobs in remote areas</p> <p>Increase investment in R&D and promote innovation</p> <p>Promote a culture which supports enterprise and entrepreneurship.</p> <p>Develop a globally competitive sustainable tourism industry</p>
To create an attractive/ high quality environment where people feel safe and which provides the conditions for health and social well-being	By 2009 ensure planning policy and guidance fully reflects the sustainable communities approach, integrates health objectives, incorporates greater consideration of crime prevention and permits development only within local environmental capacity.	<p>Ensure urban and rural regeneration aligns with the principles of sustainable development and is carried out in a holistic manner targeting the most deprived communities.</p> <p>By 2007 establish a programme of urban and rural regeneration schemes.</p>



Appendix 3 - Strategic objectives and targets for sustainable development

Strategic Objectives	Key Targets	Important Steps
	<p>By 2010 implement the Neighbourhood Renewal Strategy – People and Place.</p> <p>By 2020 all major towns and cities in Northern Ireland to have developed regeneration masterplans based on sustainable development principles.</p> <p>Address housing need in line the Regional Development Strategy targets to 2015.</p> <p>Ensure that all social housing meets the Decent Homes Standard by 2010</p> <p>Improve health and life expectancy of the population overall, and reduce health inequalities.</p> <p>Work in partnership to achieve improvements in health and reduction in neighbourhood crime and antisocial behaviour by developing and implementing a “Cleaner, Safer, Greener Communities” agenda.</p>	<p>Ensure future development maximises use of brownfield sites, includes appropriate targets for affordable housing and that developers provide appropriate contributions towards the community and infrastructure costs arising from their proposals.</p> <p>Eliminate fuel poverty by 2016</p> <p>Eradicate child poverty by 2020</p> <p>Address the needs of homeless people and improve the living conditions of the Traveller Community.</p> <p>Achieve measurable improvement in the quality and accessibility of public services particularly in disadvantaged and rural areas.</p> <p>Deliver key “Investing for Health” targets to reduce death from cancer, coronary heart disease, respiratory disease, stroke, accidents and suicides and reduce health inequalities</p> <p>Promote PSNI Secured by Design guidance and encourage greater involvement of the planning system in crime prevention to help make neighbourhoods safer places</p> <p>Encourage healthy outdoor activities by improving accessibility to green spaces</p> <p>Locate new development in areas which are accessible by means of walking, cycling and public transport thereby reducing reliance on the private car.</p> <p>Implement the Road Safety Strategy 2002 – 2012 to reduce the overall number of people killed and seriously injured (KSI) as a result of road traffic collisions by 33% and the number of child KSIs by 5% from the average for the period 1996-2000.</p>



Appendix 3 - Strategic objectives and targets for sustainable development

Strategic Objectives	Key Targets	Important Steps
<p>To promote the development of community engagement, civic leadership and responsible citizenship.</p>	<p>By 2009 strengthen the involvement of communities and better reflect local views through community planning powers.</p> <p>Modernise the voluntary and community sector to strengthen the service delivery rate of organisations.</p> <p>Build capacity in disadvantaged communities to develop the active participation of local people in achieving positive change.</p>	<p>Bring forward a Statement setting out Government's policy for involving the community in development control and development plan making functions</p> <p>By 2009 ensure that community planning is implanted within the revised local authority system</p> <p>Promote active citizenship and good relations within and between communities</p> <p>Build community capacity and deliver training for constructive and effective participation in decision-making.</p> <p>Engage and empower local people to drive forward regeneration projects in their neighbourhoods</p> <p>Ensure public services are delivered in a more integrated way which recognises the active involvement and engagement of local communities</p> <p>Improve the quality of and access to information on the local environment including options such as "one-stop-shops".</p> <p>Consider use of consultative and stakeholder forums to allow citizens to be involved in decision-making on sustainable development issues at a local level .</p>



Appendix 3 - Strategic objectives and targets for sustainable development

Chapter 4 – Climate Change and Energy		
Strategic objectives	Key targets	Important steps
Reduce greenhouse gas emissions principally by promoting energy efficiency and the use of renewables	<p>Reduce greenhouse gas emissions by 25% below 1990 levels by 2025</p> <p>Make the Government estate carbon neutral by 2015</p>	<p>Reduce CO₂ emissions by 30% below 1990 levels by 2025</p> <p>Reduce the amount of greenhouse gas emissions from landfill as a result of the landfill reduction target of 45% of household waste by 2020</p> <p>Take steps and identify targets to reduce the emissions from transport;</p> <p>From 2007 reduce consumption of electricity in Northern Ireland by 1% annually until 2012;</p> <p>Improve overall average energy efficiency of Northern Ireland households by 25% and that of NIHE housing stock by 40% by 2025 (base date 1990);</p> <p>Where technologically and economically feasible*, to ensure that beyond 2025 40% of all electricity consumed in Northern Ireland is obtained from indigenous renewable energy sources with at least 25% of this being generated by non-wind technologies;</p> <p>*technical and economic feasibility will form part of the comprehensive study being undertaken as part of the AllIreland “2020 Vision” for renewable energy.</p>



Appendix 3 - Strategic objectives and targets for sustainable development

Strategic Objectives	Key Targets	Important Steps
<p>Establish Northern Ireland as a world class exemplar in the development and use of renewable energy technology</p>	<p>By 2008 establish a renewables centre of excellence (Agri Food and Biosciences Institute) at Hillsborough;</p> <p>By 2008 provide an exemplar of biomass Combined Heat and Power in Stormont estate;</p> <p>By 2008 complete research into grid constraints and investment needs to support 2020 vision for renewables;</p> <p>By 2008 research potential of Northern Ireland geology to store energy/underpin renewables</p> <p>By 2008 complete a pilot assessment of tidal stream turbines in Strangford Lough.</p>	<p>Encourage and support the development of new industry in renewable and alternative sustainable energy technologies.</p> <p>Encourage and support pilot projects to facilitate research and demonstrate renewable energy technology;</p> <p>Government will continually develop its long term approach to renewables to ensure that technology to encourage confidence and promote investment and innovation in sustainable energy remains at the leading edge.</p>
<p>Plan and prepare for climate change impacts in Northern Ireland</p>	<p>Prepare an Northern Ireland specific Climate Change Impacts report by February 2007 and update every 5 years;</p> <p>Develop and implement changes to Government policies and strategies to address adaptation issues.</p>	<p>Perform an integrated assessment of how energy strategies impacts on climate change and take action to mitigate/adapt to issues identified.</p> <p>Identify areas and sectors at risk of climate change impacts and develop adaptation strategies to comprehensively address impacts.</p> <p>Encourage research to develop new technologies to identify, warn of and mitigate climate change impacts.</p>



Appendix 3 - Strategic objectives and targets for sustainable development

Chapter 5 : Learning and Communication for Sustainable Development

Strategic Objectives	Key Targets	Important Steps
<p>To provide access for all citizens to gain sustainable development skills and knowledge.</p>	<p>SD to be formally incorporated into the Northern Ireland school curriculum from 2007</p> <p>Trainee Educators to be trained in SD by 2008</p> <p>Promote the use of the ESD Good Practice Guidance to schools by 2006</p> <p>By 2008 school development plans should incorporate the promotion of ESD</p> <p>To support by 2007 the implementation of agreed action points as defined by the HEFCE SD publication across the Higher Education Sector.</p> <p>By 2008 implement revised guidance for the restructured FE Sector that embraces all aspects of Sustainable Development including the estate and curriculum.</p> <p>By 2009 25% of NI schools to achieve Eco-schools accreditation</p>	<p>Ensure ESD is fully embedded into the Northern Ireland curricula at key stages and comprises Knowledge & Understanding, Skills, attitudes and values</p> <p>Encourage use of the education environment as an exemplar of SD</p>
<p>To bring about the behavioural changes necessary to progress and contribute towards a sustainable society.</p>	<p>Develop a SD communication strategy by 2007</p> <p>Use current research into behavioural change to identify short and long-term behavioural targets and appropriate indicators by 2009</p> <p>Determine the barriers to behavioural change for sustainability and identify opportunities for appropriate drivers for change by 2009</p>	<p>Unify all communication messages into a framework to optimise behavioural change</p> <p>Translate and update where necessary existing research to provide an Northern Ireland context</p>



Appendix 3 - Strategic objectives and targets for sustainable development

Chapter 6 : Governance and Sustainable Development

Strategic Objective	Key Targets	Important Steps
<p>To mainstream sustainable development across Government.</p>	<p>By 2007 introduce a statutory duty on relevant public bodies to contribute to the achievement of sustainable development.</p> <p>By 2007 ensure that all policy development actively considers sustainable development.</p> <p>By 2007 link sustainable development objectives to the Priorities and Budgets and Comprehensive Spending Review Processes.</p> <p>By 2007 ensure all Departments have a sustainable development Action Plan in place.</p>	<p>Embed sustainable development principles into the governance arrangements of new councils</p> <p>Develop a revised sustainable development input to OFMDFM Practical Guide to Policymaking</p> <p>Deliver a training programme focusing on sustainable development knowledge and skills across the NICS;</p> <p>By 2007 develop and pilot the use of and</p> <p>Integrated Impact Assessment for use by all Government Departments;</p> <p>By 2007 have in place a system of information provision, support and guidance on sustainable development for those involved in policy and decision-making.</p>



Appendix 3 - Strategic objectives and targets for sustainable development

Strategic Objective	Key Targets	Important Steps
<p>Strengthen the network of accountability for governance for sustainable development.</p>	<p>By 2009 ensure that community planning is implanted within the revised local authority system</p> <p>By 2008 strengthen and modernise environmental regulation</p> <p>By 2006 finalise appropriate monitoring and reporting arrangements for sustainable development and establish an implementation role for the Ministerial- Led Group</p> <p>Agree the role of a sustainable development Forum by 2006.</p> <p>Agree the way forward on the review of environmental governance in respect of sustainable development by Summer 2007</p> <p>By 2009 build capacity to enable meaningful civic participation and identify participatory mechanisms for decision-making.</p>	<p>By 2006 ensure that the principles and objectives of sustainable development have been incorporated into the Regional Development Strategy and planning legislation;</p> <p>Determine how best to develop an appropriate audit/scrutiny role to ensure implementation of the objectives of the strategy;</p> <p>Determine how best to utilise the role of the Sustainable Development Commission in Northern Ireland;</p> <p>Ensure planning legislation and Planning Policy Statements are updated to reflect sustainable development principles and provide guidance on key areas;</p> <p>Consider the outcomes of the review of environmental governance in respect of sustainable development by 2007</p>



Appendix 4 - Acknowledgements

The Sustainable Development Division of the Department of the Environment would like to thank all of those who contributed to the development of this strategy:

Action Renewables
Antrim Hospital
Arena Network (Business in the Community)
Belfast Education and Library Board
Belfast Healthy Cities
Bryson House
Building Control Services, Craigavon Borough Council
Carbon Trust
Cavehill Primary School
Confederation of British Industry
Council for Nature Conservation and the Countryside
Council for the Curriculum Examinations and Assessment
David Ferran & Sons
Department of Agriculture and Rural Development
Department of Culture, Arts and Leisure
Department of Education
Department of Employment and Learning
Department of Enterprise, Trade and Investment
Department of Environment, Heritage and Local Government, Dublin
Department of Finance and Personnel
Department of Health, Social Service and Public Safety
Department for Regional Development
Department for Social Development
Department of the Environment
Energy Saving Trust
Energy Saving Trust Advice Centre
Federation of Small Businesses
Friends of the Earth Northern Ireland
General Consumer Council for Northern Ireland
Geological Survey of Northern Ireland
Groundwork Northern Ireland
Health Estates Agency, Department of Health Social Services and Public Safety
Invest Northern Ireland
Kirkcubbin & Greyabbey: Waste Water Treatment Works
Magilligan Field Centre
National Trust
Northern Ireland Chamber of Commerce and Industry
Northern Ireland Chief Environmental Health Officers' Group
Northern Ireland Council for Voluntary Action
Northern Ireland District Councils
Northern Ireland Environment Link
Northern Ireland Housing Executive
Northern Ireland Local Government Association
Northern Ireland Office



Appendix 4 - Acknowledgements

Northern Ireland Statistics and Research Agency
Northern Ireland Tourist Board
Office of the First Minister and Deputy First Minister
Royal Society for the Protection of Birds
Southern Group Building Control Committee
Southern Group Environmental Health Committee
Stakeholder Group
Sustainable Development Commission
Sustainable Energy Ireland
Sustainable NI
Sustrans
Ulster Architectural Heritage Society
Ulster Farmers' Union
Ulster Wildlife Trust
Western Education and Library Board
Wildfowl & Wetlands Trust
World Wildlife Fund Northern Ireland

In addition, we also offer our thanks to everyone who supplied photographs for use in this strategy:

Environment and Heritage Service
Translink
Queen's University of Belfast
Magilligan Field Centre, Western Education and Library Board
Derry City Council



Appendix 4 - Acknowledgements

Stakeholders who assisted with the development of the Northern Ireland Sustainable Development strategy:

John Anderson (Council for Nature Conservation and the Countryside)
Zoe Anderson (Northern Ireland Council for Voluntary Action)
David Babington (General Consumer Council for Northern Ireland)
John Barry (Queen's University of Belfast)
Richard Black (Historic Monuments Council)
Lucinda Blackiston-Houston (Council for Nature Conservation and the Countryside)
David Browne (Carbon Trust)
Jonathan Buick (Action Renewables)
Noel Casserley (Irish Department of Environment, Heritage and Local Government)
Sue Christie (Northern Ireland Environment Link)
Robert Colvin (Building Control Services, Craigavon Borough Council)
John Coney (Western Education and Library Board)
George Dawson (Arena Network (Business in the Community))
Joan Devlin (Belfast Healthy Cities)
Michael Donnelly (Second Nature)
Peter Doran (Queen's University of Belfast)
Geraint Ellis (Queen's University of Belfast)
Diane Forbes (National Trust)
Sinead Furey (General Consumer Council for Northern Ireland)
Scott Ghagan (Sustainable Development Commission)
John Gilliland (Sustainable Development Commission)
Bryan Gregory (RPS Consulting Engineers)
Brian Hanna (University of Ulster)
Stephanie Harcourt (Northern Ireland Statistics and Research Agency)
Frank Hewitt (Northern Ireland Chamber of Commerce)
Dermot Hughes (Ulster Wildlife Trust)
Brian Jack (Queen's University of Belfast)
Fiona Johnson (Action Renewables)
Ian Keating (Irish Department of Environment, Heritage and Local Government)
Jim Kitchen (World Wildlife Fund Northern Ireland)
Sam Knox (Southern Group Environmental Health Committee)
Aidan Lonergan (Royal Society for the Protection of Birds)
Des Loughbridge (Northern Ireland Housing Executive)
David Lyndsey (Chief Environmental Health Officers' Group)
Catherine Martin (Department for Social Development)
Frances McCandless (Northern Ireland Council for Voluntary Action)
Grace McGuinness (Department of the Environment)
Mary McKee (Groundwork Northern Ireland)
Clare McKeown (Sustainable Development Commission)
John McMullan (Bryson House)
Gary McNally (Groundwork Northern Ireland)
Ian Mc Quiston (Historic Buildings Council)
Wilfred Mitchell (Federation of Small Businesses)
Heather Moorhead (Northern Ireland Local Government Association)
Donagh Moorehead (Belfast Education and Library Board)



Appendix 4 - Acknowledgements

Geoff Nuttall (National Trust)
James Orr (Wildfowl and Wetlands Trust)
Geraldine Quinn (Federation of Small Businesses)
James Robinson (Royal Society for the Protection of Birds)
Neil Robinson (Northern Ireland Statistics and Research Agency)
Geoff Smyth (Carbon Trust)
Deirdre Stewart (Confederation of British Industry)
Alan Strong (University of Ulster)
Heather Thompson (Ulster Wildlife Trust)
Sharon Turner (Queen's University of Belfast)
Campbell Tweed (Ulster Farmers' Union)
Liz Wallace (Western Education and Library Board)
Tony Weekes (SD consultant)
David Wilcock (Council for Nature Conservation and the Countryside)
Noel Williams (Energy Saving Trust)
Janet Wilson (Royal Society for the Protection of Birds)
John Woods (Friends of the Earth Northern Ireland)
Tom Woolley (Queen's University of Belfast)
David Thompson, National Trust



Appendix 5 - Glossary

Term	Definition
AFBI Hillborough	Agri-food and Biosciences Institute
Aggregate	The mineral materials, such as sand or stone, used in making concrete.
Agri-environment schemes	These provide the government's main mechanism for compensating farmers for income lost when establishing or improving environmentally beneficial practices on farmland.
Agroforestry	A system of land use in which harvestable trees or shrubs are grown among or around crops or on pastureland, as a means of preserving or enhancing the productivity of the land.
Anaerobic digestion	The breakdown of organic matter by bacteria in the absence of oxygen. Anaerobic digestors use the natural process of anaerobic digestion to treat waste, produce energy or both. It is a fairly simple process that can greatly reduce the amount of organic matter which might otherwise end up in landfills or waste incinerators.
AONB	Area of Outstanding Natural Beauty
ASSI	Area of Special Scientific Interest
Biodiversity	The diversity of plant and animal life in a particular habitat (or in the world as a whole). A high level of biodiversity is desirable for sustainable development.
Biomass	Plant material, vegetation, or agricultural waste used as a fuel or energy source.
Biomass boilers	Devices which burn biomass sources to generate heat energy, which can then be converted into electricity.
Brownfield	A piece of industrial or commercial property that is abandoned or underused and often environmentally contaminated, especially one considered as a potential site for redevelopment.
Built heritage	Archaeological sites, historic monuments and buildings, industrial remains, designed historic landscapes and features of the shores and sea-bed in and around Northern Ireland.
Capacity building	Development work that strengthens the ability of community organisations to build their structures, systems, people and skills.
Civil engineering	A broad field of engineering that deals with the planning, construction, and maintenance of fixed structures, or public works, as they are related to earth, water, or civilization and their processes. Most civil engineering today deals with roads, structures, water supply, sewer, flood control and traffic.

Appendix 5 - Glossary

Combined heat and power or CHP	The use of a power station to simultaneously generate both heat and electricity. CHP captures the excess heat for domestic or industrial heating purposes, either very close to the plant, or distributed through steam pipes to heat local houses.
Community	A group of people living in a geographically defined area within which may be several communities of interest
Community of interest	A group of people with a characteristic, cause, need or experience in common
Comprehensive Spending Reviews	See spending reviews.
Consumption	Goods and services being used up by consumer purchasing or in the production of other goods.
Corporate Social Responsibility (CSR)	This concept requires that a responsible company will take into full account the impact on all stakeholders and on the environment when making decisions. This requires them to balance the needs of all stakeholders with their need to make a profit and reward their shareholders adequately. This holistic approach to business regards organisations as (for example) being full partners in their communities, rather than seeing them more narrowly as being primarily in business to make profits and serve the needs of their shareholders.
Ecological footprint	A way of measuring our consumption of renewable natural resources in a way that is easy to understand and to communicate.
Economically active	A person is economically active if they are either employed or unemployed in a particular period - usually the survey reference week. Economically active people supply, or want to supply, their labour to produce goods and services within the production boundary, defined by the UN System of National Accounts.
Economically inactive	The UK labour market comprises of three main groups: the employed, the unemployed and the economically inactive. This latter group consists of those people who are out of work, but who do not satisfy all of the International Labour Organisation criteria for unemployment. This is because they are either not seeking work or are unavailable to start work.
EHS	Abbreviation for Environment and Heritage Service.
Energy crops	Crops grown specifically to be used as an energy source to generate heat, which can then be converted into electricity. They are considered a renewable source of energy, as they can be re-grown year after year.

Appendix 5 - Glossary

Environment	The totality of circumstances surrounding an organism or group of organisms, especially the combination of external physical conditions that affect and influence the growth, development, and survival of organisms.
Environmental management standard/system/protocol	These schemes attempt to reduce environmental impact as measured by some objective criteria. The ISO 14001 standard is the most widely used standard for environmental risk management and is closely aligned to the European Eco Management & Audit Scheme (EMAS).
Estuary	A semi-enclosed coastal body of water which has a free connection with the open sea and within which sea water mixes with fresh water.
Eutrophication	Term used of a lake or pond, having waters rich in mineral and organic nutrients that promote a proliferation of plant life, especially algae, which reduces the dissolved oxygen content and often causes the extinction of other organisms.
Fuel Poverty	A household is in fuel poverty if, in order to maintain an acceptable level of temperature throughout the home, the occupants would have to spend more than 10% of their income on all household fuel use.
Fossil fuels	Also known as mineral fuels, these are hydrocarbon-containing natural resources such as coal, oil and natural gas. Energy from the combustion of fossil fuels is often used to power a turbine.
GDP (Gross Domestic Product)	GDP is one of several measures of the size of a country's economy. The most common approach to measuring and understanding GDP is the expenditure method: GDP = consumption + investment + government spending + (exports - imports)
Global hectare	One hectare (2.47 acres) of biologically productive space with world-average productivity.
Globalisation	The worldwide phenomenon of technological, economic, political and cultural exchanges, brought about by modern communication, transportation and legal infrastructure as well as the political choice to consciously open cross-border links in international trade and finance.
Governance	The persons (or committees or departments etc.) who make up a body for the purpose of administering something. It also refers to the act of governing and exercising authority.
Greenfield	A piece of usually semi-rural property that is undeveloped except for agricultural use, especially one considered as a site for expanding urban development.

Appendix 5 - Glossary

Greenhouse gases	Gaseous components of the atmosphere that contribute to the greenhouse effect. Examples include carbon dioxide, methane, and nitrous oxide.
Ground source heat pumps	Devices which transfer heat from the ground into a building to provide space heating and, in some cases, to pre-heat domestic hot water.
Groundwater	Water located beneath the ground surface in soil pore spaces and in the fractures of geologic formations.
GVA	Abbreviation for Gross Value Added. This is a type of measure of national income and output. It is used in economics to estimate the value of goods and services produced in an economy. GDP - taxes on products + subsidies on products = GVA
HEFC	Higher Education Funding Council
ICT	Information and Communication Technology
Inactivity Rate	The proportion of the population that is not in the labour force.
Indicators	Any system or device used to measure specific statistical data, which can then show whether or not set targets on a specific project are being met.
Integrated Impact Assessment	This tool is intended to help departments and other public sector bodies take forward in one exercise a range of policy proofing processes, including Equality Impact Assessment, Rural Proofing, Health Impact Assessment, and Environmental Impact Assessment.
Key Stage	A stage of the state education system in the UK. (There are 6 key stages, numbered 0 to 5)
Microgeneration	The generation of zero or low-carbon heat and power by individuals, small businesses and communities to meet their own needs. It generally refers to solar power and wind power. There are also numerous additional zero carbon sources including gravity driven hydroelectric, tidal, geothermal, heat-pumps and ocean-currents.
Natural capital	A metaphor for the mineral, plant, and animal formations of the Earth's biosphere when viewed as a means of production of oxygen, water filter, erosion preventer, or provider of other natural services.
Natural Heritage in Northern Ireland	The Natural Heritage Directorate of Environment and Heritage Service is concerned with both wildlife species and their habitats and with rural landscapes on a broader scale.
NGO	Non-governmental Organisation. (an organisation that is not part of the local or state or federal government)
NICS	Abbreviation for Northern Ireland Civil Service

Appendix 5 - Glossary

NIHE	Abbreviation for Northern Ireland Housing Executive
Organic	A material that originated as a living organism, found in soil and elsewhere.
Particulates	Of, relating to, or formed of minute separate particles.
Planning	The planning system exists to regulate the development and the use of land in the public interest.
Planning Policy Statements (PPS)	Documents containing policies on land-use and other planning matters, for example telecommunications or the built heritage, and apply to the whole of Northern Ireland. They set out the main planning considerations that the Department takes into account in assessing proposals for the various forms of development and are also often relevant to the preparation of development plans.
Policy proofing	Proofing a policy refers to a system whereby various social issues are taken into consideration during policy making, even on themes different to those being debated for the actual policy. This is to avoid unintentional adverse impacts on health, environment, rural areas, poverty, equality, etc.
Priority Habitats/ Priority Species	There are action plans to conserve habitats and species considered to be of high priority. The criteria used to select these priority habitats included international obligations, rarity, high rates of decline, and critical roles in supporting mobile or key species.
Public Procurement	The government purchase of services or products for use in the public sector.
Production	Manufacturing or mining or growing something (usually in large quantities) for sale.
Ramsar	The Ramsar Convention is an international treaty for the conservation and sustainable utilization of wetlands. It is named after the town of Ramsar in Iran, where the treaty was signed.
RDS	Abbreviation of the Regional Development Strategy for Northern Ireland, 'Shaping Our Future'. The document can be found at: http://www.drdni.gov.uk/DRDwww_regionalplanning/
Renewable energy (sources)	Renewable energy sources capture their energy from existing flows of energy, from on-going natural processes, such as sunshine, wind, flowing water, biological processes, and geothermal heat flows. Modern interest in renewable energy development is linked to concerns about exhaustion of fossil fuels and environmental, social and political risks of extensive use of fossil fuels and nuclear energy.

Appendix 5 - Glossary

Renewable energy technologies, or “renewables”	Devices which convert energy from natural sources, such as sunlight, wind power, wave power, etc. into electricity. Their use results in much lower greenhouse gas emissions than those of coal, oil or gas fired power stations.
Renewable energy installations	See renewable energy technologies above
Retail	The sale of goods or commodities in small quantities directly to consumers.
Rural Areas	All parts of Northern Ireland outside the Belfast metropolitan area, the city of Derry/Londonderry and towns of populations greater than 5,000 people
Sectoral nuances	Slight variations on a theme, depending on the context where the theme is applied.
Short rotation coppice willow	See willow chip
Social capital	The relationships between individuals and firms, leading to a state in which each will think of the other when something needs to be done. Along with economic capital, social capital is a valuable mechanism in economic growth.
Social partners	Organisations working in tandem with the government, such as business representative organisations, trade unions, agriculture and the voluntary and community sector.
Solar photovoltaics (PV)	Devices which use energy from the sun to create electricity to run appliances and lighting.
Spending Reviews	These set firm and fixed three-year Departmental Expenditure Limits and, through Public Service Agreements (PSAs), define the key improvements that the public can expect from these resources.
Stakeholders	Any party that has an interest in an organisation. Stakeholders of a company include stockholders, bondholders, customers, suppliers, employees, and so forth.
Statute/statutory	A formal, written law of a country or state, written and enacted by its legislative authority, perhaps to then be ratified by the highest executive in the government, and finally published. Typically, statutes command, prohibit, or declare something.
Strategic objective	An overall goal of an organisation based around its agreed strategy for action.
Supply chain	The network created amongst different companies producing, handling, and/or distributing a specific product.
Sustainability principles	The steps that need to be taken to ensure that sustainable development is best achieved.

Appendix 5 - Glossary

Sustainable consumption and production	<p>The purpose of sustainable consumption and production is to achieve more with less. This means not only examining how goods and services are produced, but also investigating the impacts of products and materials during their lifecycle. It also means improving people’s awareness of social and environmental concerns.</p> <p>The aim of this is to ensure that resources are conserved and wastage minimised during the manufacture, distribution and usage of all goods and services.</p>
Sustainable development/ sustainability	Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.
Transitional waters	Bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater flows.
Urban Areas	The Belfast metropolitan area, the city of Derry/Londonderry and town of populations greater than 5,000 people
UNICEF	Abbreviation for the United Nations Children’s Fun . UNICEF provides long-term humanitarian and developmental assistance to children and mothers in developing countries. A voluntarily funded agency, UNICEF relies on contributions from governments and private donors. Its programmes emphasise developing community-level services to promote the health and well-being of children.
WFD	Abbreviation for “Water Framework Directive”
Whole life cost	Term used during the procurement process. It concerns the consideration of the price of a product over its whole life cycle, including its acquisition, maintenance, operation and finally its disposal.
Willow chip/short rotation coppice willow	Willow species grown as crops for the provision of biofuels.

Appendix 6 - Bibliography

Anderson, Jane, Building Research Establishment, Shiers, David E, Oxford Brookes University, Sinclair, Mike (January 2002):
BRE Green Guide to Specification
<http://www.bre.co.uk/greenguide/section>

Armagh Observatory Climate Papers: Butler C.J., García-Suárez A.M., Coughlin A.D.S., and Cardwell, D. (2005)
Meteorological Data Recorded at Armagh Observatory - Daily, Mean Monthly, Seasonal and Annual, Maximum and Minimum Temperatures, 1844-2004

Baggott et al 2005
Greenhouse Gas Inventories for England, Scotland, Wales and Northern Ireland: 1990 – 2003

Central Co-ordination Group for Action against Drugs
Department of Health, Social Services and Public Safety
Department of Education
Drugs Strategy for NI
<http://www.nics.gov.uk/drugs/pubs/strat.pdf>

Central Procurement Directorate, Department of Finance and Personnel:
Achieving Sustainability in Construction Procurement - Sustainability Action Plan
http://www.cpdni.gov.uk/sustainability_action_plan.pdf

Central Procurement Directorate, Department of Finance and Personnel (April 2004):
Environmental Issues and Public Procurement
<http://www.cpdni.gov.uk>

Department of Agriculture and Rural Development (2004):
Nitrates Directive - A summary of the Action Programme measures in the Consultation Paper
<http://www.dardni.gov.uk/consultations/con05004a.htm>

Department of Agriculture and Rural Development (March 2006)
Northern Ireland Forestry – A strategy for sustainability and growth
<http://www.dardni.gov.uk/frames/forest01.htm>

Department of Agriculture and Rural Development
Rural Development Programme 2001-2006
<http://www.dardni.gov.uk/frames/rdpni01.htm>

Department of Agriculture and Rural Development
Leader + Programme
www.dardni.gov.uk/file/pubs/leader/leader00.doc

Department of Agriculture and Rural Development
Vision of the Agri Food Industry
www.dardni.gov.uk/file/vision/visionx.pdf

Appendix 6 - Bibliography

Department of Agriculture and Rural Development:
The Rural Development Plan (Accompanying Measures) For Northern Ireland 2000-2006 (NIRDP)
<http://www.dardni.gov.uk/core/dard0380.htm>

Department of Culture, Arts and Leisure (June 2001)
Unlocking Creativity: Making it Happen (Joint initiative from DCAL, DE, DEL, DETI and Invest NI)
<http://www.dcalni.gov.uk/allpages/allpages.asp?pname=creativity>

Department of Culture, Arts and Leisure (June 2005):
Good Design Supplement: Architecture and the Built Environment for Northern Ireland
<http://www.dcalni.gov.uk>

Department of Education
Lifelong Learning - A New Culture for All.
www.deni.gov.uk/about/strategies/learning.pdf

Department for Education and Skills, London (November 2005):
Education Outside the Classroom Manifesto
<http://www.dfes.gov.uk/consultations>

Department of Employment and Learning (July 2002):
Essential Skills for Living Strategy: Equipped for the Future, Building for Tomorrow.
www.delni.gov.uk/docs

Department of Employment and Learning (March 2003)
Entrepreneurship and Education Action Plan - joint initiative with DEL, DETI and DE.
Available on DETI web-site:
<http://www.detini.gov.uk>

Department of Employment and Learning (March 2004):
Further Education Means Business for People, Communities and the Economy in Northern Ireland
<http://www.delni.gov.uk/index/consultation-zone>

Department of Employment and Learning (February 2006):
Skills Strategy for Northern Ireland
<http://www.delni.gov.uk/index/publications>

Department of Enterprise, Trade and Investment (March 1999):
Strategy 2010 - Report by the Economic Development Strategy Review Steering Group
<http://www.detini.gov.uk>

Appendix 6 - Bibliography

Department of Enterprise, Trade and Investment (June 2003):
think_create_innovate: The Regional Innovation Strategy for Northern Ireland
<http://www.detini.gov.uk/thinkcreateinnovate/>

Department of Enterprise, Trade and Investment (October 2003):
Renewable Energy in NI: Realising the Potential
www.detini.gov.uk

Department of Enterprise, Trade and Investment (June 2004):
Strategic Energy Framework (SEF)
<http://www.detini.gov.uk>

Department of Enterprise, Trade and Investment (September 2004):
Developing a Successful Social Economy
<http://www.detini.gov.uk>
<http://www.detini.gov.uk>

Department of Enterprise, Trade and Investment (December 2004):
Broadband Northern Ireland – Fully Connected
<http://www.detini.gov.uk>

Department of Enterprise, Trade and Investment:
Environment and Renewable Energy Funding Package - Northern Ireland Priorities and Budget 2006 - 2008
<http://www.detini.gov.uk>

Department of Enterprise, Trade and Investment:
Economic Vision for Northern Ireland
www.detini.gov.uk/vision

Department of the Environment (September 2000):
Groundwater Monitoring Strategy for NI
<http://www.ehsni.gov.uk/pubs/publications>

Department of the Environment (January 2001):
River Conservation Strategy
<http://www.ehsni.gov.uk/pubs/publicationsf>

Department of the Environment (May 2001):
River Quality Monitoring Strategy for Northern Ireland
<http://www.ehsni.gov.uk/pubs/publications>

Department of the Environment (November 2002):
Air Quality Management Reports for NI
www.ehsni.gov.uk/pubs/publications



Appendix 6 - Bibliography

Department of the Environment (May 2003):
Biodegradable Waste Strategy for Northern Ireland
<http://www.ehsni.gov.uk/pubs/publications>

Department of the Environment (June 2004)
Hazardous Waste in Northern Ireland - An Action Plan for its Environmentally Sound Management. (NI Hazardous Waste Forum)
<http://www.ehsni.gov.uk/pubs/publications>

Department of the Environment
NI Road Safety Strategy 2002-2012
<http://www.doeni.gov.uk/roadsafety>

Department of the Environment
Areas of Special Scientific Interest in NI - Proposals for their future management and protection
<http://www.ehsni.gov.uk/pubs/publications>

Department of the Environment
Built Heritage Conservation Programme 2001-2005
www.ehsni.gov.uk/pubs/publications

Department of the Environment, Food and Rural Affairs (January 2000)
Air Quality Strategy for England, Scotland, Wales and Northern Ireland
<http://www.defra.gov.uk/environment>

Department of the Environment, Food and Rural Affairs
Developments towards a Directive on Environmental Liability (scheduled for April 2007)
<http://www.defra.gov.uk/environment/liability/index.htm>

Department of Finance and Personnel, Building Regulations and Energy Branch:
Amendment to the Building Regulations (Northern Ireland) 2000
<http://www.dfpni.gov.uk>

Department of Finance and Personnel (May 2002):
Public Procurement Policy
<http://www.cpdni.gov.uk>

Department of Finance and Personnel
Northern Ireland Programme for Building Sustainable Prosperity
<http://www.dfpni.gov.uk>

Department of Finance and Personnel
NICS Strategic Human Resources Strategy
<http://www.dfpni.gov.uk>

Appendix 6 - Bibliography

Department of Health Estates and Facilities Management:
NEAT (NHS Environmental Assessment Tool)
<http://www.dh.gov.uk/PolicyAndGuidance>

Department of Health, Social Services and Public Safety (September 2000)
Strategy to reduce alcohol related harm <http://www.dhsspsni.gov.uk/publications>

Department of Health, Social Services and Public Safety (March 2002)
Investing for Health
<http://www.investingforhealthni.gov.uk>

Department of Health, Social Services and Public Safety (November 2002)
Teenage Pregnancy and Parenthood Strategy 2002-2007 <http://www.dhsspsni.gov.uk>

Department of Health, Social Services and Public Safety (January 2003)
Promoting Mental Health Strategy and Action Plan <http://www.dhsspsni.gov.uk/publications>

Department of Health, Social Services and Public Safety (November 2004)
Home Accident Prevention Strategy and Action Plan
<http://www.dhsspsni.gov.uk>

Department of Regional Development (July 2002)
Regional Transportation Strategy for Northern Ireland 2002 – 2012
<http://www.drdni.gov.uk>

Department of Regional Development (June 2004):
Planning Policy Statement (PPS) 14 on “Sustainable Development in the Countryside”
<http://www.drdni.gov.uk>

Department of Regional Development (November 2005)
Accessible Transport Strategy
Travel Safe – a guide about community safety for people with learning disabilities
<http://www.drdni.gov.uk/ats>

Department of Regional Development:
Regional Development Strategy (RDS) for Northern Ireland, ‘Shaping Our Future’
<http://www.drdni.gov.uk>

Department for Social Development (November 2004):
Ending Fuel Poverty: A Strategy for Northern Ireland
http://www.dsdni.gov.uk/fuel_poverty
Department for Social Development
Neighbourhood Renewal Strategy
<http://www.dsdni.gov.uk>

Appendix 6 - Bibliography

Department for Social Development
Partners for Change – Government’s strategy for support of the Voluntary & Community Sector
<http://www.dsdni.gov.uk/publications>

Department of Trade and Industry Energy Group (February 2003):
Our Energy Future – Creating a low carbon economy (government white paper)
<http://www.dti.gov.uk/energy>

Directive 2002/91/EC of the European Parliament and of the Council on the energy performance of buildings (December 2002):
<http://www.diag.org.uk/documents.jsp>

Economic Development Forum (June 2002):
Working Together for a Stronger Economy
<http://www.edfni.com>

Education & Library Boards’ Interboard ESD Group (December 2005):
Education for Sustainable Development (ESD) Good Practice Guide for Primary, Secondary and Special Schools 2005
This document is available for download at:
<http://www.welb-cass.org>
It can also be accessed directly at:
<http://www.welb-cass.org>

Environment and Heritage Service/Ulster Architectural Heritage Society (March 2005)
Buildings at Risk Northern Ireland Volume 7
<http://www.ehsni.gov.uk>

Environment and Heritage Service, Department of the Environment (October 2005):
Towards Resource Management – a consultation on proposals for a new Waste Management Strategy
<http://www.ehsni.gov.uk>

Environment and Heritage Service, Department of the Environment (December 2005):
Municipal Waste Management Northern Ireland 2004/2005 summary report
<http://www.ehsni.gov.uk>

Environment and Heritage Service, Department of the Environment (March 2006):
Towards Resource Management: The Northern Ireland Waste Management Strategy 2006 - 2020
<http://www.ehsni.gov.uk>
Environment and Heritage Service, Department of the Environment
Northern Ireland Biodiversity Strategy
<http://www.ehsni.gov.uk/natural>

Appendix 6 - Bibliography

Environmental Policy Group, Department of the Environment:
Integrated Coastal Zone Management
<http://www.doeni.gov.uk>

European Commission
COUNCIL DIRECTIVE of 8 December 1975 concerning the Quality of Bathing Water (76/160/EEC)
<http://europa.eu.int>

Evans, E., Ashley, R., Hall, J., Penning-Rowsell, E., Saul, A., Sayers, P., Thorne, C. and Watkinson, A. (2004)
Foresight. Future Flooding. Scientific Summary: Volume I Future risks and their drivers.
Office of Science and Technology, London. http://www.foresight.gov.uk/Previous_Projects

Forest Service for Northern Ireland (December 2004):
Options for Forestry
<http://www.forestserviceni.gov.uk/publications>

Forest Service for Northern Ireland:
Farm Woodland Premium Scheme
<http://www.forestserviceni.gov.uk/publications>

Her Majesty's Stationery Office
The Wildlife (Northern Ireland Order) 1985
<http://www.opsi.gov.uk>

Higher Education Funding Council for England (July 2005):
Sustainable Development in Higher Education
<http://www.hefce.ac.uk/pubs>

Hulme, M., Jenkins, G.J., Lu, X., Turnpenny, J.R., Mitchell, T.D., Jones, R.G., Lowe, J. Murphy, J.M., Hassel, D., Boorman, P., McDonald, R. and Hill, S. (2002)
Climate Change Scenarios for the United Kingdom: The UKCIP02 Scientific Report, Tyndall Centre for Climate Change Research, School of Environmental Sciences, University of East Anglia, Norwich, UK.
<http://data.ukcip.org.uk>

Invest N.I.
Business Start up Programmes
<http://www.investni.com>

<http://www.pfgbudgetni.gov.uk/>

Appendix 6 - Bibliography

Northern Ireland Housing Executive
Homelessness Strategy
www.nihe.gov.uk/publications/reports

Northern Ireland Housing Executive
Places for people – delivering rural commitments
<http://www.nihe.gov.uk/publications/reports>

Office of the First Minister and Deputy First Minister – Victims Unit (April 2002):
‘Reshape, Rebuild, Achieve’ a cross-departmental strategy to deliver practical help and services to victims of the Troubles
<http://www.victimsnri.gov.uk>

Office of the First Minister and Deputy First Minister (December 2003):
A Cross-departmental equality and social need research and information strategy
<http://www.research.ofmdfmi.gov.uk>

Office of the First Minister and Deputy First Minister (September 2004):
Gender Matters - Towards a cross-departmental strategic framework to promote gender equality for women and men 2005-2015
<http://www.genderequalityni.gov.uk>

Office of the First Minister and Deputy First Minister (March 2005):
A SHARED FUTURE - Policy and Strategic Framework for Good Relations in Northern Ireland
<http://www.asharedfutureni.gov.uk/>

Office of the First Minister and Deputy First Minister (July 2005):
The Racial Equality Strategy in Northern Ireland
<http://www.ofmdfmi.gov.uk>

Office of the First Minister and Deputy First Minister
Integrated Impact Assessment tool:
<http://www.ofmdfmi.gov.uk>

Office of the First Minister and Deputy First Minister:
New Targeting Social Need policy
<http://www.newtsnri.gov.uk/>

Office for Official Publications of the European Communities (April 1979):
Council Directive for the Conservation of Wild Birds
<http://europa.eu.int>

Office for Official Publications of the European Communities (May 1992):
Council Directive 92/43/EEC on the Conservation of Wild Habitats and of wild fauna and flora
<http://europa.eu.int>

Appendix 6 - Bibliography

Office of Public Sector Information
Countryside and Rights of Way Act 2000
<http://www.opsi.gov.uk>

Office of Public Sector Information
Nature Conservation (Scotland) Act 2004
<http://www.opsi.gov.uk/legislation/scotland>

Planning Service (March 1999)
Planning Policy Statement 6 Planning, Archaeology and the Built Heritage (DOE
March 1999)
<http://www.planningni.gov.uk/AreaPlans>

Planning Service (November 2004, updated February 2006)
Belfast Metropolitan Area Plan 2015 Draft Plan
<http://www.planningni.gov.uk/areaplans>

Planning Service (March 2006):
Planning Policy Statement 14 (Draft): Sustainable Development in the Countryside
<http://www.planningni.gov.uk/AreaPlans>

Roads Service/Department of Regional Development (June 2000)
Northern Ireland Cycling Strategy
<http://www.roadsni.gov.uk/cycling>

Rural Northern Ireland (Autumn 2004):
Organic Bulletin (section on Organic Farming Scheme in Northern Ireland)
<http://www.ruralni.gov.uk/pdfs/organic>

Scottish Executive Publications (December 2005):
Choosing Our Future: Scotland's Sustainable Development Strategy
<http://www.scotland.gov.uk/Publications>

"Sustainable Development - *The Government's approach - delivering UK sustainable development together*" web-site (March 2005):
Securing the Future - UK Government sustainable development strategy
<http://www.sustainable-development.gov.uk/publications>

UN Department of Economic and Social Affairs Division for Sustainable Development
Agenda 21
<http://www.un.org/esa/sustdev/documents>

Water Service/Department of Regional Development
Water Efficiency Plan 2004
<http://www.waterni.gov.uk>

Appendix 6 - Bibliography

WRAP (Waste & Resources Action Programme) business plan:
Creating Markets for Recycled Resources
<http://www.wrap.org.uk>

WRAP (Waste & Resources Action Programme):
Quality Protocol for the production of aggregates from inert waste in Northern Ireland
<http://www.wrap.org.uk>

