

Towards Resource Management

The Northern Ireland Waste Management Strategy 2006 - 2020



Department of the
Environment
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Foreword

In March 2000 my Department published the first Waste Management Strategy for Northern Ireland. The Strategy was firmly founded on the principles of the EU Waste Framework Directive, particularly the “waste hierarchy” which emphasised the need to move waste management away from landfill towards more sustainable and less environmentally harmful practices. Several independent reviews of the first Strategy, as well as responses to our recent consultation on this new Strategy, have all endorsed the continuing validity of those early principles.

However, waste management policy and technology have advanced considerably since the first Strategy. Successive EU Directives have increased the challenges and targets we must meet, while technological advances mean we need to reassess the waste management solutions at our disposal. At the same time, a growing awareness of the importance of sustainable development has moved our focus away from simply managing waste to preventing waste and managing resources – hence the title of this Strategy “Towards Resource Management”.

Northern Ireland has entered a period of enormous change in the way in it is governed as a consequence of the Review of Public Administration. The independent Review of environmental Governance may bring further change.

In the new Strategy, greater emphasis is placed on the importance of waste prevention and of breaking the link between waste production and economic growth. We reinforce the need to increase waste recycling and recovery through a mixture of approaches, including the renewal of recycling targets, focused awareness campaigns and the possible introduction of incentive schemes.

If we are to meet our EU targets for the diversion of waste from landfill, we will need a network of new waste disposal and treatment facilities. In the Strategy, we set out how we propose to identify and procure the right infrastructure. We also recognise that energy from waste will be a necessary component of the mix of technologies required, particularly in light of the urgent need to develop energy from renewable sources.

Finally, Government is committed to playing a lead role in driving forward the actions and monitoring the targets contained in this Strategy. As evidence of our commitment, I will chair a high level non-statutory advisory committee, the Strategic Waste Board, tasked with overseeing the Strategy delivery programme.



Lord Rooker, Minister of the Environment

Executive Summary

On 18th October 2005, the Department of Environment issued a consultation document on a new Waste Management Strategy for Northern Ireland. The document elicited 53 responses and, as far as possible, we have tried to reflect those responses in this Strategy.

The new Waste Management Strategy is set out in three parts. The key policies and actions are presented as six policy strands, which are represented in **Figure 1**. These are largely based on the policy measures identified in the first Waste Management Strategy, updated to address emerging legislation and key issues raised by stakeholders during the review and consultation process. Progress will depend on taking action in all six interdependent areas.

The Strategy is supported by an annex which lists sources of further information. It is accompanied by a supporting document providing summaries on how the new Strategy will impact on individual waste streams.

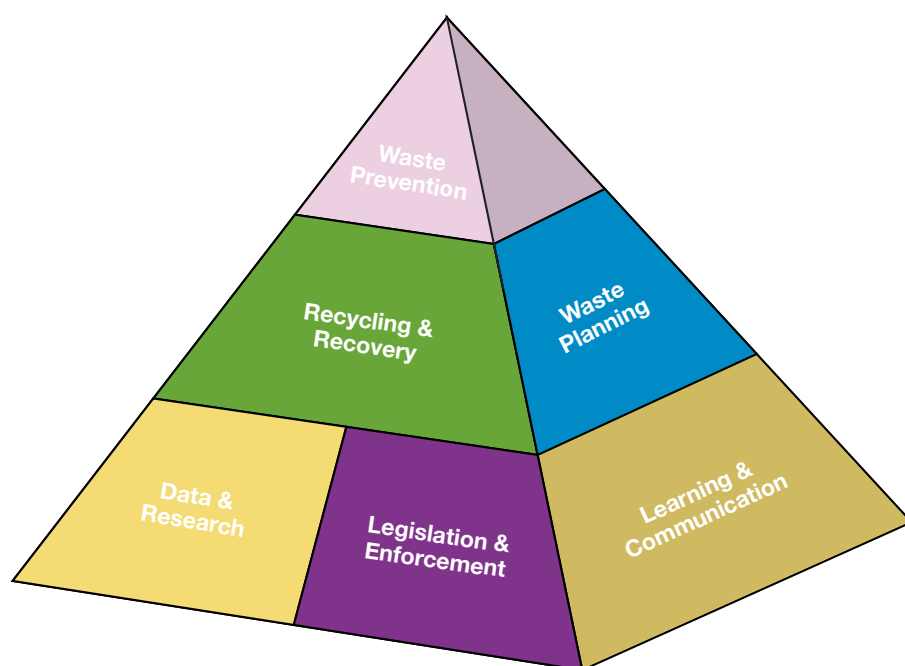


Figure 1: Policies and Action Pyramid

Part 1: Setting the Scene

This introductory section is a reminder that the measures encompass all wastes, not just municipal waste, and for everyone, not just government. It provides the background to and context of the new Waste Management Strategy. It briefly details the findings of a number of recent reviews of the first Strategy highlighting those areas which were identified as needing strengthening in order to improve implementation, for example more effective and visible government leadership, greater emphasis on resource management and waste prevention, improved data collection and a more co-ordinated approach to the development of an integrated network of waste management facilities.

This part also highlights areas where significant progress has been made in improving waste management since the publication of the first Strategy, particularly in clearing the backlog of waste legislation, the production of sub-regional Waste Management Plans and increased recycling of household waste.

The Strategy is set firmly in the context of sustainable development policy and other key government policy documents and initiatives, such as the Regional Development Strategy, the Investment Strategy for NI, the Energy Strategy and the Review of Public Administration, as well in the context of EU legislation, as a key driver of waste management policy and practice.

This part also sets out the aims, objectives and core principles of the new Strategy, of which the most important is the need for a shift of emphasis from waste management to resources management.

Part 2: Policies and Actions

Strand 1: Waste Prevention

Waste Prevention is at the top of the waste hierarchy and the number one priority for waste management. The pressure on global resources is a major challenge for us all.

This policy strand sets out a range of initiatives to be applied across all sectors. It focuses on extending existing initiatives and introduces specific new actions to motivate behaviour change and contribute to waste reduction including the introduction of Site Waste Management Plans and the provision of financial incentives.

This strand highlights how Government will demonstrate leadership in waste prevention through the adoption of green house keeping measures, the use of sustainable purchasing practices and the provision of guidance to assist stakeholders improve their resource management.

Strand 2: Recycling & Recovery

After waste prevention, the next priority is to separate waste materials for recycling and recovery. Recycling and recovery are an important part of the progressive transition towards better resource management.

Strand 2 introduces a number of policy measures which apply to all wastes and producers including public sector, businesses and householders. Placing a legal requirement on district councils to provide two separate material collections and the provision of powers to develop financial incentives have been designed to enable and encourage stakeholders to recycle and recover materials. The strategy has renewed targets to complement the NILAS targets to ensure that landfill diversion focuses (after prevention) on recycling and composting.

This strand also outlines the mechanisms designed to stimulate markets for recycled materials through the encouragement of sustainable construction and the support for the different programmes delivered by the Waste Resources Action Programme (WRAP).

Strand 3: Waste Planning

The diversion of waste from landfill to other treatment methods will require the development of significant new waste management infrastructure with considerable cost implications.

This policy strand sets out the important role of the various planning processes in contributing to the timely provision of an integrated network of waste facilities which is essential if EU targets are to be met. The Department's Planning Service and district council Waste Management Groups both have an important role to play.

The Department's programme for Modernising Planning Processes will reform and improve the development control process in fundamental ways. To meet EU Landfill Directive targets the mix of technologies likely to be needed for the management of waste has been identified through district council Waste Management Plans and the Department's guidance on the Best Practicable Environmental Option for Northern Ireland.

The Waste Infrastructure Task Force was established to facilitate the delivery of the required new waste management facilities. Its work addresses three key questions:

- who should procure the infrastructure?
- which facilities need to be procured? and
- how should they be procured and funded?

The Waste Infrastructure Task Force will report on its findings and recommendations in June 2006. Its report will form the basis of an Implementation Action Plan for waste infrastructure.

The consultation document proposed the setting up of a Programme Delivery Support Unit to provide expert advice to local authorities on all aspects of procurement, from planning to financing. In view of the favourable responses received, the Department will establish this unit as soon as possible in 2006.

Strand 4: Data and Research

Accurate and reliable information is essential for the proper management of resources. Data is vital to measure progress and to make investment decisions on the infrastructure for the safe management waste.

This policy strand sets out the measures which will be implemented to collect the data and knowledge required through new statutory reporting mechanisms, surveys, development of data recording tools and research programmes.

Strand 5: Legislation and Enforcement

The purpose of waste legislation is to control the management of waste and better management of resources. To this end, a steady stream of EU Directives has been issued with the aim of improving and harmonising waste management policies and practices throughout Europe.

This strand sets out actions and targets aimed at providing an effective regulatory framework for waste and resources management in Northern Ireland. It is based on the timely introduction of new legislation and the production of user-friendly advice and guidance. In particular, it details new activities and legislative powers aimed at combating illegal trafficking in and dumping of waste.

It also sets out the details of the Department's regulatory regime, for ensuring effective compliance with the law, and of its enforcement and prosecution policies, in order to raise industry standards and provide effective protection of the environment and human health.

Finally, this strand identifies a need for additional waste legislation to support the implementation of the new Strategy.

Strand 6: Learning and Communication

The public sector, businesses, communities and families all need to make more informed choices to become resource efficient. This strand identifies a mix of actions which will be delivered to encourage behaviour change in everyone whether at home or at work.

Working in partnership with all the key stakeholders the Department will develop a communication and education programme which will deliver various initiatives including the provision of accessible information, the advancement of the Wake up to Waste advertising campaign and supporting the delivery of waste education and training programmes.

Part 3: Delivering the Strategy

A constant refrain running through the various reviews of the first Waste Management Strategy is that strong government leadership and effective implementation are crucial to success.

This part of the Strategy focuses on delivery, particularly on the main actions that need to be taken and the key targets that need to be met in order to achieve our waste management objectives, engage partners, and measure and monitor performance. It sets out the roles and responsibilities of the key stakeholder groups and emphasises the particular role of government-led action in delivering the Strategy.

A new Ministerially-chaired advisory committee, the Strategic Waste Board, will be set up to oversee the Strategy delivery programme and to monitor and measure progress across all strands of the Strategy.

Finally, the work of the Waste Infrastructure Task Force, particularly in financial modelling and affordability analysis, will form the basis for the integration of waste management into the 2007 Comprehensive Spending Review for resource allocation.

PART 1: SETTING THE SCENE



Review of the Waste Management Strategy

The first Waste Management Strategy for Northern Ireland envisaged a process of continuous implementation and review. In March 2003, the Department initiated the first review, which included a comprehensive consultation process. All stakeholder groups were invited to comment on the strengths and weaknesses, as well as successes and failures, of the Strategy. Key areas for improvement were identified and these have provided the foundation for enhancing the Strategy.

Independent reviews of the first Strategy have been carried out by the Waste Management Advisory Board, the House of Commons Northern Ireland Affairs Committee and the Northern Ireland Audit Office (see **Annex 1** for references). These reviews all agreed that the fundamental principles of the 2000 Waste Management Strategy are still valid. However, they highlighted a number of areas which need to be strengthened by Government in order to drive implementation. These include:

- new focus on resource management and waste prevention;
- effective leadership by Government to set an example to all sectors;
- streamlining the process for determining planning applications for waste management facilities;
- clear recognition of the roles, responsibilities and actions for all stakeholders;
- provision and funding of an integrated network of waste management facilities;
- integration of the Strategy and Northern Ireland's three Waste Management Plans;
- consideration of all types of waste;
- improved data collection;
- new measures to combat illegal waste activities; and
- better mechanisms for monitoring and measurement.

Progress Since 2000

Since the publication of the first Waste Management Strategy, significant progress has been made in improving waste management in Northern Ireland:

- The backlog of waste management legislation needed to meet EU and national requirements has been cleared.
- Three sub-regional Waste Management Groups have been formed and Waste Management Plans have been adopted. These fulfil the requirement to produce waste management plans under the EU Waste Framework Directive and set out short term implementation.

- The number of materials recycling facilities for household and commercial and industrial waste has increased considerably. Northern Ireland's infrastructure capacity (over 600,000 tonnes) currently outstrips the amount of waste being collected.
- Household waste recycling has increased from 5% in 1999 to 19% in 2005.
- Planning permission has been granted for four major facilities since 2000.
- The enforcement of Producer Responsibility and waste management legislation has been enhanced and is more efficiently co-ordinated.
- Data collection and reporting for municipal waste has been improved, allowing progress to be measured more accurately.
- Public awareness of and involvement in waste management issues has increased, through the *Wake up to Waste* media campaign and through education programmes in schools.

Consultation Process

A consultation document on proposals for a new Waste Management Strategy was published on 18 October 2005 with a deadline of 20 January 2006 for response. A total of 53 responses were received.

The policies and proposals in the consultation document were generally favourably received. A number of additional comments and suggestions were made which the Department has tried, as far as possible, to include in this Strategy. A full analysis of consultee responses is available on; www.ehsni.gov.uk

Context of the New Strategy

The Waste Management Strategy is one of a number of key documents that make an important contribution to sustainable development in Northern Ireland (see **Figure 2**). The landfilling of biodegradable waste produces carbon dioxide and methane, both greenhouse gases which contribute to the threat of climate change.

Reuse and recycling of waste helps to reduce the rate of consumption of virgin materials as well as the energy used in their mining and manufacture. The policies and actions for better resource management set out in this Strategy aim to produce important environmental, health and economic benefits.

The new Strategy, together with the three sub-regional Waste Management Plans, provides the framework for establishing an integrated network of waste management facilities for Northern Ireland, as required by the EU Waste Framework Directive. It also incorporates Northern Ireland's measures for the management of biodegradable wastes in fulfilment of Article 5(1) of the EU Landfill Directive.

Waste is reflected in many areas of Government policy. These include the land-use planning policy, the Regional Development Strategy, the Investment Strategy for Northern Ireland, the Energy Strategy and Invest Northern Ireland's Strategy for the Environmental Sector.

In addition, the Review of Public Administration (RPA) will affect the way in which waste is managed in Northern Ireland. The RPA aims to strengthen the role of local government in delivering accessible public services. As district councils currently have responsibility for waste collection, disposal and waste management planning, the main impact of the RPA on waste management will be the proposed reduction in the number of district councils carrying out these functions. **Waste Planning**

Figure 2:
Sustainable Development in
Northern Ireland



Key Drivers

The Waste Management Strategy applies the principles of sustainable development to waste management in ways that protect and enhance the natural and physical environment and the use of resources and energy as efficiently as possible.

The EU has driven the improvement of waste and resources management across Europe. Waste and resource management has been one of the priorities of the EU's environmental action programmes since the 1970s. As a result, a series of Directives have been implemented setting out important waste management objectives and targets for Member States, including a requirement to produce national waste management plans.

A number of Thematic Strategies, some of which are currently under discussion, covering Waste Prevention and Recycling, Soil Protection and Sustainable Use of Resources, have been considered in developing this strategy and will inform future waste policy and legislation. Further information on existing EU Directives is provided in **Annex 1**.

Aim and Objectives

The aim of the Waste Management Strategy is to help us manage waste and resources effectively. This means using material resources in a way that reduces the quantities of waste produced and, where waste is generated, to manage it in a way that minimises its impact on the environment and public health and contributes positively to economic and social development.

In support of this aim, the key objectives of this Strategy are:

- to move from waste towards resources management;
- to demonstrate Government's commitment by setting an example to other sectors of good waste management practice and by using its purchasing power to drive change;
- to prevent waste, where possible;
- to use the necessary Government powers (legislative, regulatory and economic) to ensure improved waste management practices
- to maximise recycling and recovery of those materials which enter the waste stream;
- to develop an integrated network of regional waste management facilities that represent value for money for Northern Ireland;
- to attract investment, support economic development and create opportunities for increased employment and wealth creation
- to improve data to support investment and facilitate monitoring;
- to maintain a regulatory framework which supports those businesses that work towards more efficient and sustainable use of resources; and
- to promote, encourage and facilitate public action through providing the opportunity to contribute to environmental protection at individual and household levels.

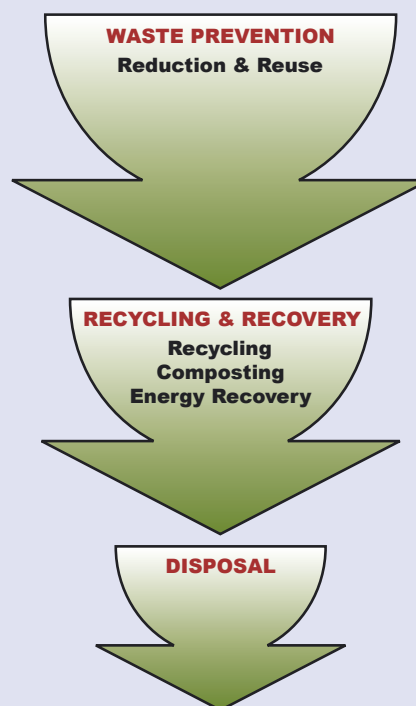
Core Principles

The Strategy is based on a life cycle approach that reflects current and emerging waste policy at European level. **Volume 2** provides further information and illustration of the life cycle principle.

Within this approach, six underlying core principles or concepts have been applied as shown in **Box 1**.

Box 1: Core Principles

- **The Waste Management Hierarchy** indicates the relative priority of the different methods of managing waste.
- **The Polluter Pays Principle** means that waste generators should pay the costs of providing services to manage their wastes.
- **The Proximity Principle** emphasises the need to treat or dispose of waste as close as practicable to the point of generation, to minimise the environmental impacts of waste transport.
- **Self Sufficiency** requires Member States, as far as possible, to manage their waste within their own borders, unless export offers significant environmental gains. The UK's commitment to self sufficiency is outlined in the UK Management Plan for Exports and Imports of Waste.
- **Best Available Techniques (BAT)**, are the most effective and advanced processes and technologies designed to prevent or reduce the impact of waste on the environment. BAT takes into account the balance between financial costs and environmental benefit.
- **The Best Practicable Environmental Option (BPEO)** is a systematic and balanced assessment of a range of waste treatment and management options in order to identify which option, or options, provides the maximum environmental, economic and social benefits.



A Strategy for Everyone

Waste management affects us all, at home, at school, at work and in our purchasing decisions. This Strategy is a strategy for everyone and everyone will have to play an active part if Northern Ireland is to achieve the necessary changes to comply with the high standards set across the EU.

Government recognises that it has a pivotal role to play in leading delivery of the Strategy and is changing its own waste and resource management practices. **Part 3: Delivering the Strategy** sets out how we will achieve this.

A Strategy for all Wastes

The main focus of the first Waste Management Strategy was on municipal waste. Whilst this remains an important waste stream and will continue to be covered in this Strategy, the new proposals are applicable to all controlled wastes. Many of these waste types, such as construction, demolition and excavation wastes, are produced in considerable quantities. This Strategy is, therefore, complemented by a comprehensive set of **Waste Stream**

Summaries (see **Volume 2**), which set out the implications for each major waste type and for key priority waste streams (see **Box 2**).

The **Waste Stream Summaries** provide brief outlines of key issues and actions, as well as signposting other sources of information. They are targeted at waste producers, so that each group of producers may know what is expected of them in relation to the wastes they generate. The **Waste Stream Summaries** are 'living' documents, available on the web and updated regularly as required.

Box 2 – Waste Streams Considered in the Strategy

Major waste types

- Municipal waste
- Commercial & industrial waste
- Construction, demolition & excavation wastes
- Hazardous waste
- Agricultural waste

Priority wastes under European legislation

- Packaging
- Waste Electrical & Electronic Equipment (WEEE)
- End of life vehicles
- Tyres
- Batteries

Impact Assessments

This Strategy document has been screened for Regulatory, Equality and Human Rights impacts. (See **Annex 2**)

"We have assessed the strategy taking account of equality, human rights and rural proofing and concluded that it will not have a different impact on any one group of people, or any area over another. We have decided that a Regulatory Impact Assessment is not necessary given the strategic level of the DOE website www.doeni.gov.uk."

PART 2: POLICIES AND ACTIONS



Strand 1: Waste Prevention

Why Prevent Waste?

Waste prevention is at the top of the waste hierarchy and our number one priority for waste management. It includes all activities that reduce the amount of waste entering the collected waste stream – for example:

- avoiding waste generation;
- reducing the quantity and hazardous nature of waste at source; and
- reusing products before they enter the waste stream.

The pressure on global resources is a major challenge for Governments throughout the developed world and a key topic in the European Commission's Sixth Environmental Action Programme. The Thematic Strategy on the Prevention and Recycling of Waste strongly emphasises the increasing importance of waste prevention measures within strategic waste planning.

The Landfill Directive places stringent targets on the diversion of biodegradable municipal waste from landfill. Northern Ireland produces some 1 million tonnes of municipal waste annually and this figure has grown by 2.5% between 2003 and 2004. If we continue with the current rate, municipal waste arisings will increase by almost 50% by 2020, producing a significant gap between arisings and the amount we are allowed to dispose of in landfill (Figure 4). Waste prevention will help us to meet our targets by reducing the amount of residual waste requiring recycling and recovery.

Projected Northern Ireland Municipal Waste

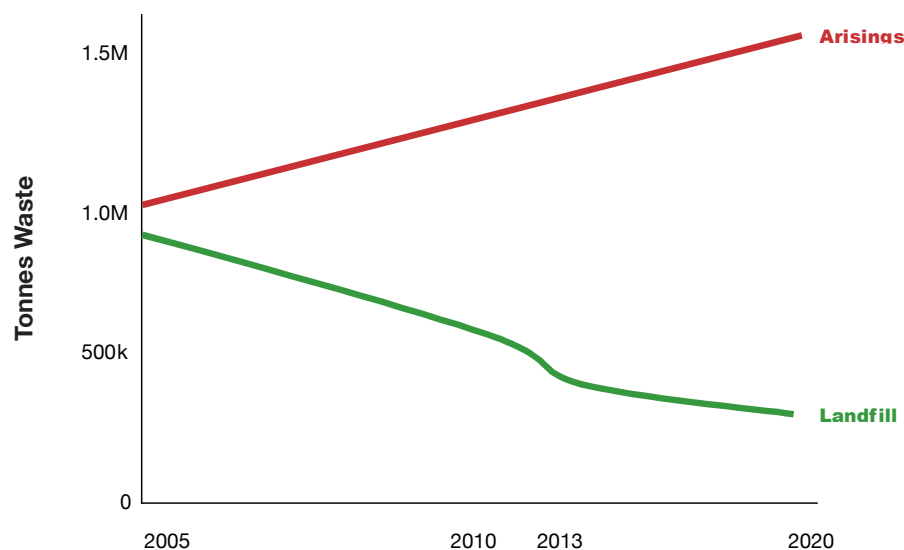


Figure 3: Gap between Waste Arisings and Disposal Allowances

The trend in waste arisings for commercial and industrial and construction, demolition and excavation wastes is more difficult to analyse due to the absence of robust data. However, with annual arisings of some 635,000 tonnes and 3.75 million tonnes respectively, they form substantial elements of our overall waste stream.

Aim

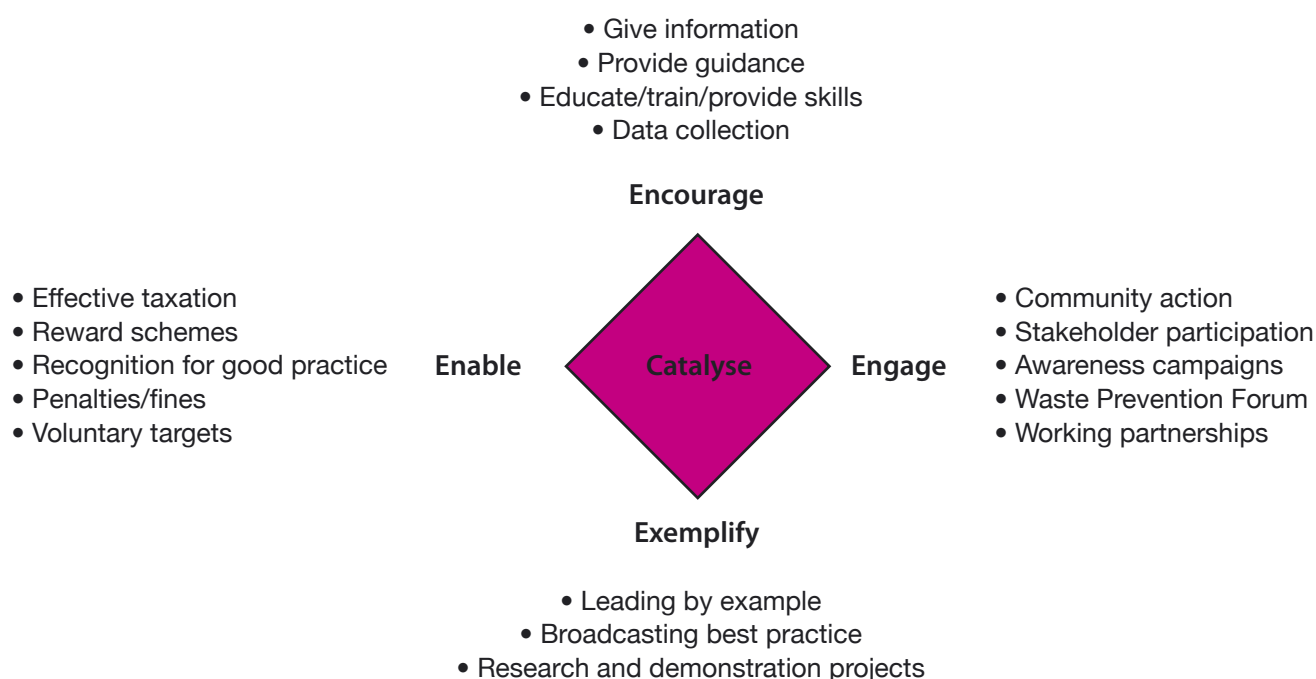
To stabilise waste generation in order to minimise impact on the environment, improve resource efficiency and reduce the cost of waste management in Northern Ireland.

Objectives

- To establish better resource management and waste prevention as an integral part of business management and project planning.
- To encourage people to use resources efficiently and generate less waste.
- To quantify and characterise the amount of waste generated, allowing action on waste prevention to be effectively targeted and progress monitored.

Policies and Actions

A Framework for Waste Prevention in Northern Ireland was published in September 2005. The Framework sets out an integrated approach to motivating all sectors through a mix of initiatives. It incorporates the behaviour change model designed for the UK Sustainable Development Strategy into waste management. **Figure 4** below shows how waste prevention initiatives are represented in the model.



These elements alone may not be sufficient to bring about the changes we require. Our actions should influence people to prevent waste so that over time, waste prevention activities become part of normal, everyday behaviour. Changing our behaviour is described further under **Learning and Communications**.

Figure 4: Waste Prevention Initiatives and the Behaviour Change Model

The Strategy applies the model in the Framework across all sectors. Policies and actions in this strand focus on six main headings:

- government leadership in waste prevention;
- new developments to include a Site Waste Management Plan;
- providing a financial incentive to reduce waste;
- preventing waste in the business sector;
- preventing waste in the home; and
- setting targets for waste prevention.

1.1 Government leadership in waste prevention

The public sector performs a broad range of functions including construction projects for roads and water services, as well as executive functions such as education and health. The annual purchasing budget for Government is approximately £1.8 billion, which represents a significant proportion of the Northern Ireland economy.

Government will demonstrate leadership in waste prevention through:

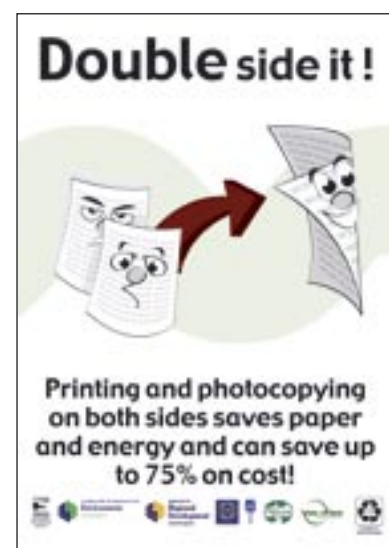
- implementing green housekeeping and environmental performance measures throughout Government;
- developing procurement policies and practices that encourage sustainable purchasing (see **Recycling & Recovery** for further details); and
- providing consistent information and guidance to assist all stakeholders to improve resource management.

Waste management is recognised by Government as a major lever for affecting change under Sustainable Development (SD) Policy commitments and is an integral part of the implementation programme for SD. The development of Departmental Waste Management Action Plans in March 2006 provides a consistent approach across Government to improve sustainability. These Action Plans will be published in April 2006.

The Department published its Waste Management Action Plan in November 2004, following a baseline audit of solid waste management. This plan identifies specific targets and initiatives for waste reduction, reuse and recycling, including a reduction in paper use by 50% over the next five years.

The Departmental Waste Management Action Plans are specific to each Department and will include initiatives for recycling and recovery (see section 2.8). In terms of waste prevention, the plans will include a minimum target for the reduction in paper use by 10% per annum, based on each Department's baseline.

The Departmental Waste Management Action Plans will be incorporated into the overarching delivery programme of Sustainable Development (SD) and a mechanism to monitor progress will be developed by 2007.



The Department regularly raises awareness of how to reduce paper through poster campaigns and training to reduce paper by 50% over the next five years

1.2 New developments to include a Site Waste Management Plan

The key to minimising waste on construction projects is to ensure that site engineers, surveyors, planning and procurement experts accurately assess the quantity of materials required and the potential for their re-use and recycling both on and off site. Site Waste Management Plans are an important tool for construction companies and all their clients to help prevent waste and reduce costs for developments of all sizes. Such plans quantify the waste to be produced and include measures for its reduction and proposals for its management, effective storage, treatment and recycling both during construction and once the development is operational.

Site Waste Management Plans also provide the opportunity to consider use of in-situ treatment technologies for the remediation of contaminated soils, which could potentially avoid more costly disposal routes.

In 2004, the Department of Trade and Industry issued a code of practice which proposed that Site Waste Management Plans should be introduced for projects of the value of £200,000 and above. This threshold has also been included in guidance notes for public sector contracts within Northern Ireland which were published in March 2006 (www.cdpni.gov.uk). However the guidance is equally applicable to private sector developments and the principles could be extended to all new construction projects.

The Strategy consultation paper generated widespread support for the principle of introducing Site Waste Management Plans, though there were varying opinions about what should be the threshold and who was best placed to administer the scheme.

As a first step towards implementing Site Waste Management Plans, the Department will promote the new guidance to developers and encourage uptake both to reduce contracting costs and the amount of waste potentially going to landfill. Following this, the Department will bring forward, for public consultation, detailed proposals for a statutory requirement to prepare Site Waste Management Plans.



Site waste management plans are a tool which improves environmental performance, meet regulatory controls and reduce rising costs

1.3 Providing a financial incentive to reduce waste

Municipal waste: At present, the cost for collection, recycling and disposal of waste is included in the general rate charge. Therefore, householders are unable to relate this cost to the amount of waste they generate. This means that there is no financial incentive for householders to reduce the volume of waste they produce.

Other European countries have introduced “pay as you throw” schemes for municipal waste. Although effort is needed to avoid an unacceptable increase in fly tipping, these schemes have been effective in decreasing the growth of waste and providing an incentive for participation in recycling schemes.

At present, other than in prescribed cases district councils do not have the legal powers to make a direct charge for collection of residual wastes from householders. However, such a provision could supply the necessary incentives for both waste prevention and recycling.

The consultation responses generally welcomed the principle of an incentive scheme, though concerns were expressed that sufficient infrastructure would be required before an incentive scheme could be introduced and that any proposed scheme would be pilot tested before wider application is considered. The Department will bring forward, for public consultation, detailed proposals to provide councils with the necessary powers to encourage householders to reduce the volume of waste they produce. However, the Department will work with district councils to develop and trial pilot schemes to test any such incentive schemes.

District councils are already obliged to collect waste from commercial premises and may charge for this service. Pricing mechanisms such as differential charging schemes could also be used to help foster a culture of waste minimisation, recycling and recovery for commercially collected wastes. The ability to charge for such collections gives district councils an economic lever, which would assist them in meeting landfill diversion targets under the Northern Ireland Landfill Allowances Scheme (see also **Recycling & Recovery**).

Non-municipal wastes: Landfill Tax is aimed at ensuring that more of the environmental cost of disposal is taken into account in landfill charges. The Landfill Tax is currently (2005/06) £18 per tonne for wastes classed as 'active' and £2 per tonne for 'inactive' wastes. The latter includes waste such as soils, concrete, ashes and slag, which typically arise from construction, demolition and excavation activities. The level for active wastes is set to rise progressively by at least £3 per year, to reach a rate of £35 per tonne by around 2012.

The Landfill Tax is an effective fiscal driver to reduce waste at source because, as the tax increases, alternative investment to reduce waste and therefore avoid landfill charges becomes attractive economically. However, the Department recognises that there are a number of factors that may make it difficult for businesses to invest in new options to manage their waste arisings. Issues may be particularly acute for Small and Medium Sized Enterprises (SMEs) who produce small amounts of mixed waste streams and do not have the capacity to store materials, develop new systems or control packaging received from suppliers.

Part of the Landfill Tax Escalator is being returned to assist businesses in England through a new Business Resource Efficiency and Waste Programme. A general point emerging from the consultation responses was strong support for the use of revenues from this tax to support improved waste management by businesses in Northern Ireland particularly SMEs. Although the revenue from Landfill Tax Escalator is not directly reinvested in the waste industry in Northern Ireland, it provides a potential source of funding to Northern Ireland through Government's allocation of the Northern Ireland block grant and, depending on Minister's spending priorities, may benefit waste management schemes.

Other problem wastes: People want to live in neighbourhoods that are clean and attractive and where they feel safe. Problems which blight the environmental quality of local neighbourhoods, such as litter (including plastic bags, cigarettes, chewing gum and dog waste), abandoned or nuisance vehicles, fly-posting and graffiti are major concerns for the general public. Initial proposals for improved measures to help tackle such local environmental problems are due to be published by the Department during 2006. The proposals form an important part of the developing cleaner, safer, greener neighbourhoods agenda and will help to raise awareness of the quality of life benefits of cleaner local neighbourhoods and contribute to general waste prevention.



People want to live in neighbourhoods that are clean and attractive

1.4 Preventing waste in the business sector

Reducing waste at source results in greater resource efficiency, less pollution and more profit. The Framework for Waste Prevention identifies a number of specific initiatives, supported by Government (see **Boxes 3, 4 and 5**), which promote the benefits of waste prevention within business sectors. The Waste Prevention Forum will develop a comprehensive action plan detailing the delivery of the initiatives identified in Boxes 8 and 9 in conjunction with other programmes identified in the Framework for Waste Prevention by July 2006. This action plan will be reviewed annually.

Box 3: Organisations and Agencies Promoting Waste Prevention

- **Invest NI** supports programmes such as the establishment of waste minimisation clubs (in conjunction with Arena Network), Invest NI Design Group, Envirowise and Biowise.
- **Envirowise**, funded by Invest NI, provides free, independent and practical advice to Northern Ireland businesses to help them reduce waste at source and increase profit.
- **WRAP**, sponsored by the UK Government and the Devolved Administrations, includes a range of initiatives to encourage investment, promote best practice, research new products and develop guidance and specifications.
- **NetRegs**, also funded by the UK Government and the Devolved Administrations, aims to help SMEs understand how environmental regulations affect them. The free website provides advice on good practice and guidance on legal compliance.

Box 4: Current Waste Prevention Initiatives

- **Encouraging eco-design practice within each manufacturing sector:** This is a process which minimises environmental impact across the product life cycle, whilst producing a high quality, cost-effective product.
- **Retail sector:** In conjunction with top retailers, WRAP has recently announced new targets through the "Courtauld Commitment". This aims to design out packaging waste growth by 2008, deliver absolute reductions in packaging waste by 2010 and identify ways to tackle issues relating to food waste.
- **Encouraging the use of Environmental Product Labelling:** Environmental labelling on products enables consumers to make informed choices about the products they buy.
- **Green Technology Initiative:** The Green Technology Initiative, sponsored by Invest NI, offers three years interest free loans of up to £50,000 towards the cost of capital equipment.
- The implementation of the Integrated Polluted Prevention and Control (IPPC) regime is a vehicle for promoting change in industry's performance in waste management, encouraging businesses to take action to prevent waste.

Box 5: New Initiatives to Encourage Businesses to Prevent Waste

- **Setting waste prevention targets through voluntary agreements:** The EU has made a very successful voluntary agreement with the motor manufacturing industry on the reduction of CO₂ pollution from vehicles. The principles of this agreement provide a model for extension to waste prevention in other sectors. Government will assist industry in the development of sector specific targets where this will contribute to waste prevention.
- **The Department to develop partnerships with the professional institutions and associations.** The Department, in conjunction with the organisations listed in Box 7 and others, will support the professional bodies in the encouragement of their members to prevent waste, implement supply chain management and practice green procurement through the provision of guidance and training.
- **Targeted awareness campaigns encouraging businesses to prevent waste.** In conjunction with the organisations outlined in Box 7, the Department will deliver awareness campaigns specifically targeted at businesses, encouraging action in waste prevention, resource efficiency and legal compliance.
- **Encourage the implementation of Environmental Management Systems (EMS):** EMS can result in better resource efficiency and increased awareness of waste prevention and recycling practices throughout staff, the Department, in conjunction with the organisations listed in box 7 will promote the implementation of EMS through the provision of guidance, advice and leading by example.

1.5 Preventing waste in the home

Encouraging individuals to prevent waste will require a significant change in the attitude and behaviour of the general public as consumers. Over the next 5 years, Government will focus on a number of initiatives to actively promote waste prevention in the home.

The consultation responses were very supportive of the proposals initially put forward and recommended additional initiatives to achieve waste prevention in the home. The Department has incorporated these recommendations in to the policies and actions below:

- **Raising awareness of how to prevent waste:** Government, district councils, the business sector and community groups will continue to work together to implement awareness campaigns and initiatives which educate the general public on the issue of waste prevention. The approach is described further under **Learning & Communication**.
- **Support for the community sector:** From 2005 until 2008, Government will provide £3 million funding for a Community Waste Innovation Fund to encourage the delivery of waste prevention and other initiatives within local communities.
- **Practical guidance and toolkits:** Projects developed by the National Resources and Waste Forum and by WRAP provide guidance and best practice examples to assist the householder and communities in the implementation of waste prevention practices. WRAP's ROTATE advisory service to District councils provides further support.



- **Establish recognition awards for waste prevention good practice:** Recognition for the efforts made to prevent waste is a key tool to empower and encourage everyone to get involved, motivating action at all levels.
- **District Councils to investigate the opportunities and develop incentive schemes:** Incentive schemes would reward sustainable behaviour, these will be closely related to the policy outlined in Section 1.3 Providing a financial incentive to reduce waste.

1.6 Setting Targets for Waste Prevention

The consultation document put forward proposals to introduce waste prevention targets. These proposals were supported by most respondents, but raised concerns about how the targets would be measured, due to the lack of robust data.

In response, the Waste Prevention Forum will set targets for waste prevention for all waste streams by 2010.

Improved data collection systems and the delivery of research and demonstration projects in waste prevention will assist in the development of SMART¹ targets. (see **Data and Research**).

Summary of Waste Prevention Actions and Targets

- Publish Departmental Waste Management Action Plans by April 2006.
- Public Sector to reduce paper use by 10% per annum based on the baseline established by each Departments own waste audit.
- Develop a mechanism to monitor the implementation of the Departmental Waste Management Action Plans by March 2007.
- The Department to bring forward, for public consultation, detailed proposals for a statutory requirement to prepare Site Waste Management Plans as a tool to help minimise waste on construction projects.
- The Department to bring forward, for public consultation, detailed proposals on the provision of legal powers to district councils to charge for collection of residual wastes from householders.
- Waste Prevention Forum to develop a comprehensive action plan for waste prevention, detailing the delivery of the initiatives listed in sections 1.4 and 1.5, by July 2006 and will be reviewed annually.
- Waste Prevention Forum to design SMART targets for the prevention of municipal, commercial and industrial waste and construction, demolition and excavation wastes by 2010.

SMART¹: Specific, Measurable, Achievable, Realistic, Timebound

Strand 2: Recycling and Recovery

Improving Recycling and Recovery

After waste prevention, the next priority is to separate waste materials for recycling and recovery. This not only reduces the environmental impact of waste, but also reduces demand on natural resources. Recycling and recovery are therefore an important part of the progressive transition towards better resource management.

The original Waste Management Strategy set out targets for the recycling and composting of household waste, and for reduction in the amounts of municipal, commercial & industrial, and construction, demolition & excavation wastes going to landfill. Progress to date has tended to focus on municipal waste, as the EU Landfill Directive sets statutory targets for reducing the quantities of landfilled biodegradable municipal waste to:

- 75% of 1995 levels by 2010;
- 50% of 1995 levels by 2013;
- 35% of 1995 levels by 2020.

The Northern Ireland Landfill Allowances Scheme, introduced in April 2005, sets the maximum amount of biodegradable municipal waste that can be disposed of by councils to landfill in each of the scheme years.

Improvements in the provision of municipal collection facilities and greater awareness of the environmental impact of waste has resulted in the rates of recycling and composting for household waste rising from 5% in 1999 to 19% in 2004/05.

Reducing dependence on landfill requires an integrated approach to recycling and recovery. The Department has published guidance on Best Practicable Environmental Option (BPEO) for Northern Ireland (June 2005), which provides a framework for identifying the optimum balance of recycling and recovery capacity to meet targets for municipal waste, commercial & industrial waste and construction, demolition & excavation wastes.

Particular waste streams, such as packaging waste, end of life vehicles and waste electrical and electronic equipment, are specifically covered by producer responsibility legislation which places financial obligations on producers to collect, sort, treat, recycle or recover these wastes.

In order to meet challenging targets for all waste streams, we will require a clearer and more sophisticated understanding of the markets for recycled materials. This means recognising the life cycle for different materials, and the key points in the cycle where our actions will make most impact on waste. Current arisings, management routes and life cycle assessment for different waste streams are illustrated in the **Waste Stream Summaries** which accompany this document. Cross reference should also be made to policies and actions described under **Waste Prevention**.

Aim

To increase resource efficiency through the promotion of recycling and recovery of waste, based on a life cycle approach which balances consumption and production.

Objectives

- To promote segregation of wastes at source and separate collection of recyclable and compostable materials.
- To increase recycling and composting rates and divert waste from landfill.
- To encourage the production of secondary materials and products, and to develop sustainable markets.
- To use the purchasing power of the public sector to develop and stabilise the market for recycled products through sustainable procurement.
- To maximise the application of producer responsibility, and ensure that the whole life cycle costs of a product are reflected both in its price and in the design process.



Policies and Actions

Waste prevention measures (see **Waste Prevention**) will contribute to closing the gap between municipal waste arisings and disposal allowances. The substantial quantity of waste generated must be recycled, composted or recovered by other methods, including energy recovery.

Planning and procurement of the necessary treatment infrastructure for the recycling and recovery of these wastes is described under **Waste Planning**. However, we also need to put in place measures to support recycling and composting. The policies and actions in this strand come under four main headings:

- Enabling and encouraging participation in recycling, composting and recovery;
- Stimulating markets through sustainable purchasing;
- Developing a recycling economy for all waste streams;
- Implementing producer responsibility policy; and
- Setting recycling and recovery targets

Enabling and Encouraging Participation in Recycling, Composting and Recovery

The Northern Ireland Landfill Allowances Scheme (NILAS) is focused on the biodegradable element of municipal waste. It is based on the collection of source segregated materials, whether by kerbside collection, at bring sites or at civic amenity sites. It is necessary to maximise recycling and composting practices to meet the requirements of NILAS. The following measures are aimed at encouraging and enabling separate collection of materials for recycling and composting, not only from municipal solid wastes (MSW) but also from commercial and industrial (C&I) and construction, demolition and excavation (C, D & E) waste streams.

2.1 Amending the building regulations

In Great Britain, the Sustainable and Secure Buildings Act widens the purpose of Building Regulations to include furthering the protection or enhancement of the environment and facilitating sustainable development. This enables Building Regulations to be introduced for new areas such as the provision for segregated waste collection, use of recycled materials, reuse of materials and the demolition of buildings.



In the consultation paper the Department signalled its intention to make similar provision in Northern Ireland legislation and the proposal was favourably received by those consultees who commented. Accordingly within three years of publication of the new Strategy, the Department of Finance and Personnel will amend the Building Regulations to require developers to provide for collection containers appropriate to the development, for the segregation of waste and to facilitate the recycling of waste materials. The proposed amendments will enable a progressive extension of appropriate facilities for segregated collection of waste, and will make it more convenient for the public to participate.

2.2 Introducing a legal requirement for separate collection of recyclable materials

Most district councils already provide for the separate collection of materials for recycling through kerbside schemes or, where this is not feasible, at civic amenity sites. Roll out of these facilities across Northern Ireland is expected to be complete by 2006.

The consultation document proposed that district councils be legally required to collect separately at least two materials for recycling or recovery, in addition to residual waste, by 2010. Responses were split. Members of the public, NGOs, business and a number of Government respondents were broadly in favour, as this would encourage recycling. District councils were firmly against, as they consider that existing practices are already effective without additional legislation.

This provision would be similar to the legislation which already exists in Great Britain so there would be no burden on councils greater than that elsewhere. Most, if not all, councils are already compliant so the cost burden would not be great. The legal requirement would cement the progress that has already been made to ensure that the recent improvement in recycling rates is indeed maintained in the long term. This would, in turn, provide greater certainty for industry bidding to provide the necessary recycling and treatment facilities.

The Department will bring forward for public consultation, detailed proposals for a statutory requirement for district councils to collect at least two materials for recycling or recovery at the next available legislative opportunity (see **Legislation and Enforcement**).

2.3 Assisting small businesses

Many businesses producing commercial waste wish to recycle, but the amount of waste they generate is too small to be of interest to commercial collectors. WRAP is currently funding a pilot for waste collection from Small

& Medium Sized Enterprises (SME), the results of which will inform the development of appropriate agreements to assist this objective.

The consultation document proposed that district councils should encourage small businesses to participate by accepting their commercial & industrial waste for recycling at a minimum of one civic amenity site per council area, and that a reasonable charge should be made in return for the use of such facilities.

There was broad support for this proposal from consultees. Therefore, the Department strongly encourages district councils to make such provision, so that on a regional basis SMEs can access a civic amenity site within a reasonable distance. Provision for this should be included in the development of future waste management plans.



2.4 Providing powers for district councils to introduce financial incentives

Improvements to waste collection infrastructure will provide a mechanism to enable greater participation in recycling. However, there is a need to go further to motivate businesses and the public to recycle. The Department proposes to give powers to District Councils which would assist the introduction of local financial incentives for the recycling of waste. Such powers may include fixed penalties on householders who fail to use recycling and disposal facilities correctly or fixed penalties for illegal behaviour such as fly tipping.

Increased powers to fine illegal behaviour could be balanced by the ability to provide financial incentives for householders to participate in the recycling of waste, through differential charging or fiscal rewards, such as weight based charging mechanisms for residual household waste. This would enable district councils to pass on the savings to those who recycle more.

These proposals received broad support from all sectors in the consultation. The Department intends bringing forward, for public consultation, detailed proposals for enabling District Councils to introduce local financial incentives for recycling waste and apply fixed penalties for illegal behaviour such as flytipping at the next available legislative opportunity (see **Legislation and Enforcement**).

2.5 Providing technical support and advice

District councils play a key role in encouraging local businesses and the public to recycle and compost their waste.

Through membership of WRAP, the Department will provide technical support and advice to assist district councils in the provision of improved services to householders and local businesses on kerbside collection, home composting, communication tools, training and procurement.

The Department is also reviewing the role of the voluntary sector to identify its capacity to support the delivery of Strategy objectives.

Stimulating Markets through Sustainable Procurement

Government's buying power means that procurement policies can be used to develop and stabilise the market for recycled products. There will also be a positive impact on the businesses and supply chains that provide goods and services to the public sector. The Government will develop specific procurement policies and practices that encourage sustainable purchasing. The following proposals are aimed at stimulating market development in both the public and private sectors. These proposals were broadly welcomed in the consultation by all sectors. It was agreed that Government needs to be seen to be taking the lead, but it was also stressed that other sectors need to follow that lead.

2.6 Integrating environmental considerations into public procurement

The Department of Finance and Personnel (DFP) has published guidance on "Integrating Environmental Considerations into Public Procurement" (September 2004). This provides all Government Departments with advice on the most effective ways of incorporating environmental issues into contracts, whilst ensuring compliance with EU procurement legislation and best value.

The Department for Regional Development's Roads Service has used this guidance to successfully incorporate recycled materials into its contracts. This policy now covers 50% of Roads Service depots.

DFP's Central Procurement Directorate has developed a database to record statistical information relating to procurement including the incorporation of environmental considerations when awarding contracts. A baseline of existing performance was established in April 2005 which is used in conjunction with surveys to evaluate progress.



The Roads Service awarded the plastic traffic cone, cylinder and barrier board contract to companies supplying items made from 100% recycled materials.

2.7 Adopting sustainable construction

Government has endorsed the introduction of a Construction Procurement Policy Framework. The Framework highlights key aspects of Northern Ireland Public Procurement Policy which are particular to construction. The Framework endorses the Sustainability Action Plan, prepared by the Northern Ireland Government Construction Clients Group to set standards on sustainability issues for all construction projects.

The Framework also requires the principles of the 'Achieving Excellence in Construction' initiative (developed by the office of Government Commerce) to be applied to Government construction projects. The initiative includes guidance on all aspects of sustainable construction, and includes a recommendation that a minimum of 10% of the materials value of appropriate projects should be derived from recycled or re-used content.

The Central Procurement Directorate chairs a Sustainable Construction Group, which has recently developed a series of guidance notes for Government construction clients to aid the implementation of sustainable construction objectives, including the adoption of the above 10% target across Government (www.cpdni.gov.uk). This guidance, which was published in March 2006, promotes sustainable construction and provides practical



Specifying 'recycling' in the procurement of products can increase a business's contribution to sustainability at no extra cost

assistance to project managers and project sponsors across the public sector. The guidance also includes the introduction of Site Waste Management Plans (see **Waste Prevention section 1.2**) and information on the use of recycled aggregates.

A Quality Protocol for the production of aggregates from inert waste in Northern Ireland, based on work led by WRAP, will further encourage the use of recycled materials. Revisions to the aggregates levy in Northern Ireland and the cost of waste disposal will create further incentives for recycling.

2.8 Adopting Waste Management Action Plans

Departmental Waste Management Action Plans to be published in April 2006 (see **Waste Prevention section 1.1**) include initiatives for recycling and recovery. The plans outline how each of the Departments will manage waste. As a minimum the plans include the following actions:

- progressive specification of the use of recycled paper;
- preparation of detailed recycling action plans;
- inclusion of specific targets for the proportion of reused and recycled materials in public sector construction contracts;

A mechanism will be developed to monitor implementation of the action plans by March 2007.

Developing a Recycling Economy for all Waste Streams

2.9 Stimulating markets for recycled material

Establishing a sustained demand for end products from recycled materials is the most effective means of stimulating markets. In the first phase of implementation of the Waste Management Strategy, the Department established a Market Development Programme which identified support measures and initiated projects based on membership of WRAP, establishment of a Waste Management Industry Fund with Invest NI, and liaison with the Republic of Ireland through a North South Market Development Steering Group.

WRAP is a UK-wide organisation, supported by the Department for Environment, Food and Rural Affairs and the devolved administrations, which provides a focus for recycling market development programmes across the UK. WRAP's market development work covers core business development, procurement, standards and specifications, together with regional programmes and materials sectors (see **Box 6**).

Box 6: Wrap Programmes In the Uk

Wrap's mission is to create stable and efficient markets for recycled materials and products in the UK. The programme includes

Construction sector -

driving forward materials resource efficiency in the construction process and on-site practices.

Retail sector -

waste reduction and recycled content in retail packaging.

Manufacturing sector -

developing large scale existing and new opportunities for virgin material substitution for example in glass, paper and plastics production

Organic waste -

developing markets for organics to include high volume and high value applications. To include a strong focus on reducing food waste and composting

Land remediation sector -

development of opportunities for the major uptake of compost and linked to a broader regeneration agenda

Behavioural change -

communication focused on delivering the change in attitudes and perceptions needed to deliver an increase in recycling

These programmes of work are underpinned by the Local Authority Support Programme ROTATE, which provides advice on collection schemes; and a business support programme helping recycling industry to grow and improves its profitability.

The scope of the programmes has steadily grown since WRAP's inception in 2001, as WRAP's budget has been increased to deliver new initiatives under Defra's Waste Implementation Programme. The areas of work are relevant to market development across the UK and provide a cost effective mechanism to support businesses and district councils in their participation in recycling and recovery programmes within Northern Ireland.

The Department is committed to continuing its support for WRAP and ensuring full participation in all programmes that will assist Northern Ireland in building processing capacity and developing viable end markets for recycled and recovered materials.

In conjunction with WRAP, the Department has established a Market Development Forum to provide a co-ordinated focus on the key issues influencing market development in Northern Ireland and to bring together the principal groups and organisations that have an involvement in market development. The Forum will support the progress of our Market Development Programme and provide for appropriate measures to implement the programme, such as a market development plan.

WRAP initiatives received strong support from all sectors in the consultation. Support was also expressed for all island initiatives and for other UK schemes such as Envirowise and the National Industrial Symbiosis Programme (NISP).

In addition to supporting the work of WRAP, the Department will also support other UK schemes such as Envirowise and NISP. All island initiatives include the establishment of a North South Waste Management Forum to act as a catalyst for joined up waste management policy development and implementation. The Forum will take a holistic view of waste, managed as a resource and will seek to remove barriers to all-island solutions and promote best practice.

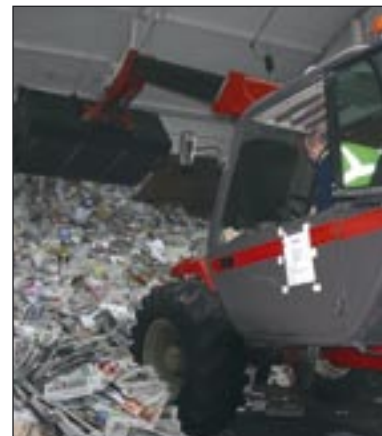
2.10 Engaging businesses in the environmental sector

Invest NI recognises that waste management accounts for a significant portion of business activity in the environmental sector, and acknowledges that there is a clear need for investment in this area. In its Strategy for the Environmental Sector, Invest NI focuses on business development and growth with particular emphasis on export. Strategic initiatives include:

- support for business expansion and start up in the environmental sector;
- support for trade development;
- innovations, research and development; and
- skills development.

Specifically for projects in the waste management sector, Invest NI will consider support for:

- companies that demonstrate development of sustainable markets for recyclable materials or equipment;
- companies that demonstrate a clear understanding of their customer base, and that they are not restricting local competition or causing displacement in the market place;
- companies that demonstrate that they are clearly adding value and introducing new or emerging technologies;
- projects that demonstrate how they contribute to the Northern Ireland Waste Management Strategy; and
- projects that demonstrate how they comply with emerging or current EU legislation.



Implementing Producer Responsibility

Producer responsibility is aimed at shifting the costs of recovering, recycling or disposing of a product from the end user to the retailers, wholesalers and manufacturers. Producer responsibility is intended to give producers an incentive to develop products that:

- use fewer resources;
- reduce or eliminate the use of hazardous substances in their manufacture;
- minimise waste from the product and reduce the amount of waste going to landfill;
- are able to be repaired or reused; and
- are more easily treated, dismantled and recycled.

Producer responsibility currently focuses on specific waste streams which have been identified as “priority waste streams” by the European Union, due to growing concerns about their impact on the environment. These include:

- packaging waste (steel, aluminium, cardboard/paper, glass, plastic and wood);
- waste Electrical & Electronic Equipment;
- end of Life Vehicles;
- batteries.

Consideration is also being given to the extension of producer responsibility to farm plastics and tyres.

The separate **Waste Stream Summaries** describe the current status of, and proposals for, each of the above wastes.

Setting Recycling and Recovery Targets

The Landfill Directive sets statutory targets for the diversion of biodegradable municipal waste from landfill. Producer responsibility legislation sets statutory targets for the recovery of materials from other specific waste streams.

The consultation document proposed a number of additional targets in support of these statutory targets, to ensure that a significant proportion of **all** waste streams is diverted from landfill, specifically through recycling and composting. The aim is to provide a focus for recycling efforts, and to assist the measurement and evaluation of progress. The proposed targets are based on the framework set out in the guidance document on the Northern Ireland BPEO.

Box 7 compares Northern Ireland targets for recycling and composting of municipal solid wastes with those in the strategies elsewhere in the UK. . The first Waste Management Strategy set 2005 targets for district councils, of recycling and composting 15% of household waste arisings and recovering



25%, with 2010 targets of 25% and 40% respectively. District councils strongly opposed the setting of additional targets for the public sector. The overall recovery target has effectively been replaced by the NILAS targets, but the Department believes that supplementary targets for recycling and composting remain necessary to complement the NILAS targets, to ensure that landfill diversion focuses (after prevention) on recycling and composting.

Therefore, targets for recycling and composting of household waste are set at 35% by 2010, 40% by 2015 and 45% by 2020. These targets are subservient to the NILAS targets, in that no additional penalties are envisaged. However, the analogous targets elsewhere in the UK do have a statutory basis, and the Department will consult within 3 years on proposals to take the powers to set such targets.

In terms of other waste streams, the original strategy, in common with those both in England and in Wales, set a target to reduce the amount of commercial and industrial waste sent to landfill to 85% of that landfilled in 1998. In the consultation, all sectors agreed that targets for both commercial & industrial and construction demolition & excavation waste are desirable, and the targets for commercial and industrial wastes, 60% recycling by 2020, and for construction demolition and excavation wastes, 75% recycling and reuse by 2020

Box 7: Targets for Recycling and Composting across the UK

| Region | Recycling and Composting target |
|------------------|-------------------------------------------|
| Northern Ireland | 35% by 2010 40% by 2015 45% by 2020 |
| England | 40% by 2010 45% by 2015 50% by 2020 |
| Wales | 15% by 2005 25% by 2007 40% by 2010 |
| Scotland | 25% by 2006 30% by 2008 55% by 2020 |

Summary of Recycling and Recovery Actions and Targets

- Waste Management Groups to review Waste Management Plans by June 2006.
- The Department of Finance and Personnel will amend the Building Regulations by 2009.
- The Department will bring forward, for public consultation, detailed proposals for a statutory requirement for district councils to collect at least two materials for recycling or recovery at the next available legislative opportunity.
- The Department will bring forward, for public consultation, detailed proposal to provide district councils with powers to provide financial incentives for recycling waste and fixed penalties for illegal behaviour such as flytipping at the next available legislative opportunity.
- Market Development Forum to develop a Market Development Action Plan by June 2006.

Targets

- 60% of Commercial and Industrial Waste to be recycled by 2020
- 75% of Construction, Demolition and Excavation Wastes to be recycled or reused by 2020
- Recycling and Composting of Household Wastes to be at:
 - 35% by 2010
 - 40% by 2015
 - 45% by 2020

Strand 3: Waste Planning

Providing Waste Infrastructure

The diversion of waste away from landfill to recycling and other treatment methods, such as composting and energy recovery, will require the development of significant new waste management infrastructure. Whilst landfill has traditionally been a passive, low-cost, low-tech approach to waste management, the alternatives tend to be more complex, more expensive and require more active participation, from the public segregating waste materials through to plant operators tightly controlling process conditions in high-tech plants. The provision of new infrastructure is a challenging and costly process, which takes considerable time to deliver.

This section considers the waste management planning and procurement arrangements to assist the delivery of an integrated network of waste management facilities that meets Northern Ireland's infrastructure requirements. It also addresses funding mechanisms to facilitate procurement of new facilities for municipal waste.

Aim

To support the development of an integrated network of facilities for the recycling, recovery and disposal of waste within Northern Ireland and to ensure that these facilities are planned, designed and operated to provide a high level of protection for the environment and for public health.

Objectives

- To identify waste infrastructure requirements to meet Northern Ireland's long term needs for all waste streams.
- To ensure that Waste Management Plans provide a detailed framework for identification of capacity and development of an integrated network of waste facilities.
- To ensure that waste management facilities are developed at a limited number of key sites, convenient to the major centres of waste production.
- To facilitate the timely processing of applications for the relevant permissions and licences necessary for the legal operation of waste facilities.
- To identify the best procurement route and mix of funding for the provision of the new facilities.
- To identify where, within Government, the responsibility for waste infrastructure procurement should lie and to make any legislative and administrative changes needed to ensure that delivery structures are fit for purpose.

Policies and Actions

Policies and actions to facilitate the planning and procurement of the necessary new facilities fall under two main headings:

- Planning for the Management of Waste in Northern Ireland
- Procuring the Infrastructure

Planning for the Management of Waste in Northern Ireland

3.1 Waste Management Planning

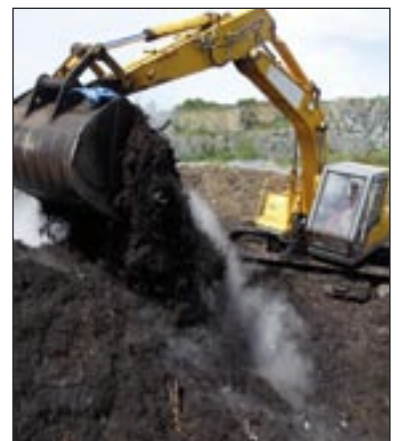
In response to a recommendation from the Northern Ireland Audit Office that the Department should provide a “generic Waste Management Plan” that the three Waste Management Groups could adapt in drawing up their individual Waste Management Plans, the Department prepared guidance on a Best Practical Environmental Option (BPEO) for Northern Ireland to provide a framework to guide district councils in the development of their Waste Management Plans and to assist with infrastructure procurement.

Relevant EU Directives, the Regional Development Strategy, the Waste Management Strategy and Planning Policy Statement 11 (PPS11), together with more recent initiatives such as the Department’s guidance on BPEO for Northern Ireland and the Statement of Facility Needs for Hazardous Waste in Northern Ireland, have combined to form a robust framework within which district councils can develop their Waste Management Plans.

On behalf of their constituent Councils, Northern Ireland’s three Waste Management Groups will review and update their Waste Management Plans by June 2006. Thereafter, formal reviews will take place at intervals of no more than five years. The reviews will address the detailed facilities and locations for the management of municipal waste and will include a specific provision for the management of all waste streams. This is to ensure that a network of appropriate facilities is established in Northern Ireland so that our statutory obligations are met.

A number of respondents to the consultation document expressed concern about the potential of the BPEO to constrain waste management solutions. Attention was also drawn to the fact that BPEO is gradually being replaced by Strategic Environmental Assessments elsewhere in the United Kingdom. The BPEO for Northern Ireland was intended to provide a reference point to guide the current revision of the Waste Management Plans by the three Waste Management Groups, to help ensure that the three plans mesh together to provide a sensible solution for Northern Ireland as a whole. That guidance has also informed the targets in Strand 2 for recycling and composting.

The current planning process requires that developers demonstrate that their proposed facility meets Need, as established in the Waste Management Plans, and that it is the BPEO, again as established in the Waste Management Plans. The Department is aware that the Department for the Environment, Food and Rural Affairs in England has taken the view that the new statutory Strategic Environmental Assessment process for plans effectively duplicates the BPEO process and has recently removed the link between BPEO and the planning process. The Department agrees with this view and will work towards revising Planning Policy Statement (PPS) 11: Planning and Waste Management, before the next review of Waste Management Plans.



3.2 Obtaining planning permission for waste infrastructure facilities

To date, one of the causes of delay in the development of new waste management facilities has been the complexity of the planning process. Following a comprehensive review, the Planning Service has been working through a major modernising programme aimed at improving accessibility, simplicity and speed. Of particular relevance in the development control process are progressive improvements in the consultation process and greater scope for recovering the cost of operating the system through fees and charges.

In the meantime, the planning Service has identified a number of areas in which the processing of planning applications for waste management facilities can be improved without compromising the integrity of the planning process. Applicants for planning permission for this type of facility will be required, as part of their application, to demonstrate that their proposals are consistent with this Strategy, the Regional Development Strategy, Planning Policy Statement 11 and other relevant planning policy.

The planning system is facing a period of fundamental change as a consequence of the implementation of the Review of Public Administration. This will entail the transfer of the development control and development plan functions from central to local government. However, some aspects of the development control function will remain with central government, in particular the handling of large applications which have a significance beyond the council where they are located. This may include significant waste infrastructure applications.

The Northern Ireland Waste Management Strategy is a material planning consideration and will be taken into account when assessing applications for waste management facilities. This Strategy will, therefore, replace the Waste Management Strategy published in 2000 as part of the decision framework for the assessment of planning applications (see **Box 8**).

Planning Service will undertake preliminary discussions with applicants or their agents to advise on policy and other planning matters, including, where appropriate, the scoping of an Environmental Statement. This will provide information on the details required to ensure that the application, when submitted, can be progressed as quickly as possible, including the identification of relevant consultees. Planning Service also recommends early discussion with all statutory consultees prior to the submission of planning applications for waste management facilities.

While there was broad support for these proposals from all sectors, some felt that additional measures were required, such as the introduction of a “plan led” system and strict time limits for planning decisions. Through its Modernising Planning Processes programme, the Planning Service will continue to address issues aimed at improving accessibility, simplicity and speed and reform its consultation, development control and development plan processes.

Box 8: Information which Constitutes the Planning Decision Framework for Waste Management Facilities

- Information submitted by the applicant, including forms, plans, drawings and any accompanying Environmental Statement which is required to address the likely significant effects of the development
- Planning policy and guidance:
 - Regional Development Strategy;
 - Planning Policy Statement 11: Planning and Waste Management, including policies on Best Practicable Environmental Option (BPEO) and on need, as identified in Waste Management Strategy and the three Waste Management Plans; and
 - Other relevant planning policies, including the Development Plan for the area, other Planning Policy Statements and supplementary guidance.
- Other material planning considerations:
 - Relevant information in the Waste Management Strategy for Northern Ireland;
 - The characteristics of the site and surrounding area;
 - The planning history and case law;
 - Advice from statutory consultees;
 - The opinion of the District Council;
 - Representations from third parties; and
 - Any other material planning consideration which may arise during the processing of the application.

Procuring the Infrastructure

3.3 Waste Infrastructure Task Force

Meeting the requirements of the EU Landfill Directive will require substantial investment in waste infrastructure. In April 2005, the Department established a Waste Infrastructure Task Force to examine the complex and interrelated issues surrounding the procurement of waste management facilities. The aim of the Task Force is to facilitate delivery of the waste infrastructure necessary to enable Northern Ireland to meet national and European waste management targets up to the year 2020. It draws its membership from key stakeholder organisations, including the Department of the Environment, the Strategic Investment Board, the Department of Finance and Personnel, the Department of Agriculture and Rural Development, the three Waste Management Groups, the Northern Ireland Local Government Association, and nominated elected representatives.

The work of the Task Force covers three broad areas:

- structural arrangements for the procurement of waste infrastructure;
- location, type and cost of infrastructure; and
- procurement and funding.

3.4 Structural arrangements

In its report on the first Strategy, the Waste Management Advisory Board highlighted the need to consider the establishment of a single waste management authority for the whole of Northern Ireland. Under current arrangements, the 26 District Councils have statutory responsibility for the collection and disposal of municipal waste. The three Waste Management Groups – arc21, the Southern Waste Management Partnership (SWaMP), and the North West Region Waste Management Group (NWRWMG) – are responsible for drawing up Waste Management Plans on behalf of their constituent District Councils and, to varying degrees, for procuring infrastructure on the Councils' behalf.

The consultation document proposed three potential structural options:

- **Option 1:** Enhancement of the current arrangements with district councils responsible for waste collection, disposal and planning functions.
- **Option 2:** Establishment of a single waste disposal authority for Northern Ireland with responsibility for waste planning and disposal.
- **Option 3:** Establishment of a single waste management authority with responsibility for waste collection, disposal and planning functions.

Responses were generally in favour of option 2, given the small geographic size of Northern Ireland and the need to enhance investor confidence in public/private partnerships for waste management. Most favoured the regionalisation of waste planning and waste disposal, with waste collection and recycling operations remaining at local level.

Keeping responsibility for collection and recycling at the local level allows councils to build on this link with their communities and for these communities to actively participate in recycling schemes. Establishing a single, regional waste disposal authority with responsibility for waste disposal and waste management planning would realise economies of scale in the procurement of major waste infrastructure, would assist the development of an integrated network of treatment and disposal facilities and would allow for waste management to be planned on a consistent and coherent regional basis. The Department will move to establish a single regional waste disposal authority, drawing on the work of the Waste Infrastructure Task Force, within the context of, and in parallel with, the implementation of the Review of Public Administration. The Department envisages that a new regional authority will be put in place at the same time as new arrangements for local government, i.e. 2009.

In the meantime, in order to address certain deficiencies in Northern Ireland's local government legislation, the Department will make a local Government Companies (Best Value) Order during 2006 to provide district councils with the power to establish or participate in companies to improve the exercise of their functions, including waste management.

3.5 Assessing the infrastructure requirements

A range of proven and new technologies is available to reduce the amount of waste sent to landfill, including anaerobic digestion, composting, mechanical biological treatment and thermal treatment. Thermal treatment in this

context includes incineration and advanced thermal technologies such as pyrolysis and gasification. Both anaerobic digestion and thermal treatment facilities provide energy from waste. Energy from waste can contribute to meeting Northern Ireland's non-fossil fuel obligations and Government's policies on renewable energy, as well as helping Northern Ireland to meet its landfill diversion targets. In addition, mechanical biological treatment can produce a fuel which may also provide energy from waste through subsequent thermal treatment, for example, in a cement kiln, power station.

The policies, actions and targets set out in this Strategy are based upon the hierarchy of waste management options, emphasising the importance of maximising waste prevention, recycling and recovery. However, Government continues in its firm belief that energy from waste will be a necessary component of the preferred infrastructure, both in terms of its policies on renewable energy and to ensure that Northern Ireland meets its landfill diversion targets. Energy from waste facilities will also provide diversity and security of supply.

Proposals for the development of energy from waste facilities in Northern Ireland must set out all reasonable measures to maximise energy recovery in the form of both heat and electricity. The scale of proposals must also ensure that the complementary targets for recycling and composting are met (see **Recycling and Recovery**).

Respondents to the consultation document were generally in favour of a mix of technological solutions to the waste management problems posed by the Landfill Directive. Most also agreed that the potential for a contribution from energy from waste solutions should be explored.

In preparing guidance on the BPEO for Northern Ireland, the Department conducted a high-level regional assessment to identify possible numbers, capacities and indicative locations for the required waste infrastructure. A more detailed assessment of these issues will form part of the current review of Waste Management Plans and will take local factors into account. In proposing indicative locations, the Waste Management Groups should carry out a technical assessment to translate the regional framework set out in the BPEO to the local level.

In conjunction with the three Waste Management Groups, District Councils should, where possible, apply for planning permission for waste management facilities on sites owned by the public sector. This will become a function of the single waste disposal authority for waste disposal infrastructure, when that body is established. Securing planning permission at the earliest possible stage would help to attract private sector investment in Northern Ireland's waste infrastructure and should also prevent costly delays in the construction of facilities.

3.6 Funding

Meeting Northern Ireland's waste infrastructure deficit will require a substantial programme of investment in new waste management facilities. The Strategic Investment Board has identified a capital investment requirement of up to £285 million. It will also mean a substantial increase in operating costs and will require the involvement of people with the appropriate range of skills to facilitate this type of complex procurement programme.

Securing funding is a major challenge. The capital and operational funding required to meet EU targets is of a scale new to the waste management sector in Northern Ireland and is dependent on many issues, including the level of waste prevention and recycling, and the degree to which infrastructure is either centralised or localised. How these issues are addressed will determine both the cost and size of individual facilities and the type of procurement entered into.

The Waste Infrastructure Task Force is carrying out a financial modelling exercise in order to determine the likely cost of providing the necessary infrastructure and the options for paying for it. This exercise will examine a number of key issues, including:

- an affordability analysis;
- cost sharing between district councils;
- assumptions about waste growth;
- contract duration;
- third party income;
- implications of the Northern Ireland Landfill Allowance Scheme;
- raising project finance and technology choices; and
- potential contract and funding options.

The Investment Strategy for Northern Ireland has recognised the scale of investment in waste infrastructure assets required for compliance with EU legislation, and the work of the Task Force reflects the high priority attached to this critical issue. Drawing on the work of the Task Force, the Department will consider funding options, including seeking parity with any arrangements in GB involving central government funding for waste disposal investment. This consideration can be carried out in the context of the 2007 Comprehensive Spending Review and future spending reviews.

3.7 Supporting the procurement of infrastructure

It is acknowledged that the skills level and capacity within NI Local Government are currently limited in relation to this type of complex procurement programme and that additional support would be highly beneficial for pre-procurement and procurement activities.

The Strategic Investment Board, which has played a key role in facilitating water infrastructure requirements on a similar scale, has identified a need for a Programme Delivery Support Unit to provide expertise in the following areas:

- Programme direction;
- Project co-ordination;
- Planning;

- Commercial and contract work; and
- Financial analysis.

The consultation document canvassed views on the establishment of a Programme Delivery Support Unit within the Department. Responses to the consultation were generally supportive and so the Department and the Strategic Investment Board will now move to establish this Unit as soon as possible. The detailed governance arrangements for the Unit and its terms of reference are being considered by the Waste Infrastructure Task Force.

The Unit's functions will be to:

- Facilitate the co-ordination of procurement activity among the three Waste Partnership Groups for the purpose of helping to secure an optimal solution for Northern Ireland in particular, facilitate the development and definition of the scope and boundary of each procurement activity.
- Assist with preparation of planning applications.
- Assist with securing appropriate sites.
- Assist with the preparation of business cases and in negotiating funding solutions.
- Disseminate best practice from GB and elsewhere. This would include evaluation of applicability of PPP procurement guidance such as the 4Ps procurement pack.
- Assist with detailed programme management, including oversight of schedules and progress with meeting targets, issuing regular progress reports and highlighting problems and issues that require resolution.
- Address issues related to transport of waste and recovered materials to and from Northern Ireland as may impact on the procurement and service specifications.

Northern Ireland's three Waste Management Plans (and, in due course, the single Northern Ireland Waste Management Plan prepared by the single regional waste disposal authority to be established in 2009) will provide the framework for developing a network of facilities to manage all waste streams. However, the funding and delivery of the necessary infrastructure for non-municipal wastes will, in line with the principle of producer responsibility, be undertaken by waste producers in conjunction with private sector waste management companies.

The Department will continue to maintain close liaison with the Department of Agriculture and Rural Development on issues relating to agricultural waste infrastructure and with DRD Water Service in relation to the disposal of sewage sludge, so that any opportunities for sharing facilities can be exploited.

Summary of Waste Planning Targets and Actions

- Make a Local Government Companies (Best Value) Order during 2006.
- Complete the work of the Waste Infrastructure Task Force by June 2006..
- Waste Management Groups to review Waste Management Plans by June 2006.
- Establish a single, regional waste disposal authority within the context of, and in parallel with, the implementation of the Review of Public Administration (by 2009).
- Establish a Programme Delivery Support Unit in 2006.

Strand 4: Data and Research

Improving our Understanding

Accurate and reliable information is essential for the proper management of our resources. We need data to measure our progress and to make investment decisions on the infrastructure we need for the safe management of waste and to promote a healthy economy.

In the past, accurate baseline data regarding waste management has been unavailable. Baseline data on municipal waste management has improved dramatically since the first Waste Management Strategy was published in 2000. District councils now make quarterly electronic returns to the Environment & Heritage Service.

Surveys have been carried out on commercial & industrial, construction, demolition & excavation wastes and other specific waste streams such as hazardous waste, tyres, WEEE and End of Life Vehicles.

Northern Ireland is required to formally report on progress towards EU Directive targets. The European Waste Statistics Regulations 2002 requires Member States to report waste arisings and management statistics on a wide range of waste streams every two years.

Encouraging the application of modern techniques to manufacturing and waste management is also essential if we are to develop more efficient use of resources and protect the environment. Sound research is vital for all planners, procurers and providers of the technologies that will meet our needs.

Aim

To provide appropriate and reliable data to inform the decision making process and facilitate progress towards strategic objectives.

Objectives

- To obtain accurate data on waste management activities in Northern Ireland.
- To provide a uniform and consistent basis for monitoring progress towards Strategy targets.
- To ensure that Northern Ireland has full access to the latest findings in waste research and development, and in the demonstration of new technologies.

Policies and Actions

Whilst businesses are required to comply with the Duty of Care transfer note system, they are not currently required to keep detailed records of the waste they produce. Failure to accurately capture this information weakens attempts to determine levels of waste generation and meet statutory obligations. The policies and actions will fall under two main headings:

- Improving our waste data systems; and
- Promoting research, development and demonstration projects.

4.1 Improving our waste data systems

The Department is committed to improving data on waste arisings, composition and management methods to improve decision making in waste and resource management.

Environment & Heritage Service sits on the UK Data Advisory Panel and will continue to influence the UK Waste Data Strategy which sets out how information on all wastes and waste management is collated. Policies for data collection for specific waste streams include:

Municipal waste: With co-operation from district councils, Environment & Heritage Service will continue to implement and develop the WasteDataFlow system. Data reports will be published annually, including information on performance indicators.

In partnership with district councils, Environment & Heritage Service has carried out a Northern Ireland waste compositional survey to determine the quantities and biodegradable content of municipal waste. District councils will develop a monitoring programme for biodegradable municipal waste as part of their reporting requirements to meet statutory obligations under the Northern Ireland Landfill Allowances Scheme.

Commercial & industrial and construction, demolition & excavation wastes: During 2005/2006, Environment & Heritage Service carried out surveys to update the overall baseline for these waste streams and to provide more comprehensive information on arisings and management methods. Environment & Heritage Service will undertake further waste surveys to improve baseline data for those priority waste streams, such as Waste Electrical & Electronic Equipment.

The Environment and Heritage Service will develop a waste information tool for recording information on waste arisings and management activities following consultation with business interest groups in 2006. The tool will help businesses provide more accurate data.

Hazardous waste: Data on waste arisings, treatment capacity and facility needs, as at 2005, is summarised in the technical report prepared on behalf of the Hazardous Waste Forum. The report aims to provide a framework to guide the three Waste Management Groups and business in the planning and procurement of new hazardous waste infrastructure, and it will be updated as required so that the information it contains remains current.

Agricultural waste: Agricultural waste will be included within the regulatory regime for controlled waste in 2006. In conjunction with the Department of Agriculture and Rural Development, Environment & Heritage Service will carry out a survey during 2006/07 to provide improved information on agricultural waste arisings and management.

Regulatory returns: Environment & Heritage Service will develop a waste management information database to integrate all statutory returns, surveys and applications from waste producers and carriers and, in particular, from licensed facilities. The Department will also request returns from activities which are exempt from waste management licensing.

Statutory reporting: Surveys carried out during 2005/06 have updated Northern Ireland's current baseline for the wastes listed above. However, without full participation from businesses, their value will be limited. Further measures are needed to meet statutory reporting obligations and enable data to be interpreted in a way which assists business planning and corporate decisions. The consultation paper put forward proposals to introduce statutory requirement to make annual returns on waste arisings and management. The business sector respondents favoured mandatory reporting, although there were concerns expressed that this may lead to excessive burdens being placed on business. In response to this, the Department will bring forward for public consultation detailed proposals requiring businesses to submit statutory returns on waste arisings and management at the next available legislative opportunity (**see Legislation and Enforcement**)

4.2 Promoting research, development and demonstration projects

Participation in UK-wide initiatives, or initiatives in partnership with Scotland or the Republic of Ireland, provides a co-ordinated and cost effective approach to delivering practical and innovative solutions to Northern Ireland's waste management issues.

Government, businesses, and the public in Northern Ireland have access to Defra's Waste Technology Data Programme. This includes the results from a series of projects which demonstrate innovative technologies for municipal solid waste treatment, funded under Defra's Waste Implementation Programme. Environment & Heritage Service sits on Defra's Waste and Resources Research Advisory Group, and will actively continue to influence research priorities for the benefit of all owned businesses in Northern Ireland.

At a local level, the Department will continue to support research and demonstration projects through established programmes with WRAP, the Community Waste Innovation Fund and the Scotland and Northern Ireland Forum for Environmental Research (SNIFFER) (see **Box 9**).

Box 9: Examples of Research and Development Projects which Support Waste Management Strategy Objectives

- The WasteDataFlow system, piloted in Northern Ireland, was initiated and funded through a UK-wide project under the Landfill Tax Credit Scheme.
- A clinical waste survey carried out through SNIFFER will provide information for businesses and district councils to assist in the management of clinical wastes in Northern Ireland.
- WRAP is undertaking work on home composting and organics to assist district councils to develop effective systems for composting and diversion of material from landfill.
- On behalf of the Department of the Environment and the Republic of Ireland's Department of the Environment, Heritage and Local Government, WRAP has carried out a paper mill feasibility study for Ireland to investigate the potential for new investment in paper reprocessing capacity.

- Under the EU INTERREG Programme, from 2004-2008 the Department is administering a £6 million budget to support a range of waste research and capital projects, including a cross-border waste awareness campaign and new organic treatment capacity.
- DEFRA's Waste and Resources Research Programme is funding a suite of projects on household waste prevention and behaviour change.

Summary Data and Research Targets and Actions

- Publish annual (December) data reports to include information on performance indicators.
- Carry out surveys on waste arisings, composition and management methods on various waste streams over the next three years. Particular surveys include:
 - Carry out an NI Waste Characterisation survey in partnership with district councils during 2005/06.
 - Co-operate with business interest groups to develop information recording tools on waste arisings and management activities during 2006.
 - Undertake new surveys to update baseline information on commercial and industrial, and construction, demolition and excavation wastes, using the findings of the 2005/06 surveys by September 2006.
 - Work in partnership with the Department of Agriculture and Rural Development to survey agricultural waste arisings and management during 2006/07.
- Within three years of the publication of the Strategy, the Department will bring forward detailed proposals for public consultation, to introduce a statutory requirement for businesses to submit returns on waste arisings and management.
- Develop a waste management information database to integrate all statutory returns, surveys and applications from waste producers and carriers and in particular from licensed facilities by 2008/2009.
- Continue to support research and demonstration projects through WRAP, the Community Waste Innovation Fund and the Scotland and Northern Ireland Forum for Environmental Research (SNIFFER) and the DEFRA Waste and Resources Research Programme.

Strand 5: Legislation and Enforcement

Effective Regulation

It is essential that the waste we produce has as little impact as possible on our local and global environment. The purpose of legislation is to ensure that waste is managed in a controlled manner and to encourage good practice in our use of resources.

Over the past 30 years, the EU has produced a steady stream of Directives intended to improve and harmonise waste management policies and practices across Member States. Giving effect to these Directives in Northern Ireland legislation was a key priority of the first Waste Management Strategy and has led to the making of much new waste management legislation in recent years. Significant changes include:

- The introduction of new waste management licensing and integrated pollution prevention and control regimes affecting all controlled waste.
- The implementation of new producer responsibility legislation identifying specific measures for the recovery of packaging waste and End of Life Vehicles.
- The introduction of Landfill Regulations and the Northern Ireland Landfill Allowances Scheme, which provide strict controls on the quantities and types of waste we can dispose of to landfill, and on how operations must be conducted.
- The extension of controls to a wider range of wastes, including the review of agricultural waste, as well as other wastes not previously covered by the licensing system.
- A review of hazardous waste, including the introduction of a new list of definitions which will increase the scope and quantity of these wastes.

In terms of agricultural waste, most organic farm waste is being addressed through other environmental controls. This applies both to more and less intensive types of farming. In particular, a Nitrates and Phosphate Action Programme, managed jointly by the Department of Agriculture and Rural Development and the Department of the Environment, will ensure that most manure and slurry is managed on farms to take full advantage of its nutrient value without polluting the environment. Further information is available in the Agricultural Waste Stream Summary (see **Annex 2**).

Aim

To provide an effective regulatory framework for waste and resources management in Northern Ireland, which ensures high standards, environmental protection and the prevention of waste crime.

Objectives

- To develop and implement new legislation on waste and resources management in a timely manner and in accordance with European, national and local requirements.
- To make producers of waste and waste management businesses aware of their legal responsibilities by providing them with timely, user friendly guidance and information to facilitate their compliance.

- To work with waste producers and the waste management industry to raise standards and ensure compliance.
- To protect legitimate operators by targeting the illegal transportation and disposal of waste.

Policies and Actions

If it is not managed in a controlled way, waste has the potential to cause considerable damage to the environment, the economy and human health. A wide range of international, national and local waste management policy and legislation has been implemented to protect the environment and drive behaviour change. However, the regulatory framework requires continual updating so that it remains current and reflects Northern Ireland's strategic priorities in regard to sustainable development and environmental protection. These include:

- Introducing new obligations in a timely manner.
- Educating all sectors on compliance issues, including the development of additional technical and user-friendly guidance where necessary.
- Regulating waste operators in a fair and consistent manner and taking enforcement action where businesses break the law.
- Strengthening our enforcement powers and actions to prevent illegal dumping.
- Introducing additional legislation to support the implementation of this strategy particularly to encourage participation in waste prevention, recycling and recovery initiatives.

5.1 Prompt introduction of new legislation

Effective development and implementation of new legislation is essential to ensure that, where necessary, advances in waste management policy are swiftly translated into legal obligations. It is particularly important that there is minimal delay between the introduction of European or national legislation and, where required, the development of comparable legislation in Northern Ireland. This is essential to enable those affected by new controls to plan ahead on a consistent basis.

Since 2004, the Department has provided significant additional resources for the development of its Environmental Policy Group with the result that the backlog of overdue European Legislation has now been cleared and the group can now focus on proactively engaging, on behalf of Northern Ireland, in the development of national and international policy.

The Department will develop new waste management legislation in accordance with the programme of work published in the Environmental Policy Group's annual Business Plan (www.doeni.gov.uk/epd). Where appropriate, legislation will be accompanied by interpretative guidance, in order to help those affected by new controls to identify what is required of them at the outset.

5.2 Advice and guidance

If legislation is to be effective, key players such as district councils, the waste management industry and the commercial sector need to understand their responsibilities. The Department will develop appropriate technical guidance to help stakeholders to identify what each piece of legislation means to them. Such guidance will be accompanied by accessible, user friendly advice and environmental information (see **Learning & Communication**).

To help businesses to understand their obligations, NetRegs (www.netregs.gov.uk) has been developed as a joint initiative between Environment & Heritage Service, the Environment Agency in England and Wales, and the Scottish Environment Protection Agency (see **Box10**). It is a unique internet resource, which provides free and anonymous advice to help small businesses identify the environmental legislation relevant to them and take steps to comply with it.

Box 10: NetRegs

Categorised by industry sector and structured for ease of navigation, it offers small businesses:

- Clear, authoritative guidance on the environmental legislation that governs a wide range of industry sectors.
- Information on current legislation and the likely impact of future legislation.
- Advice on good practice, designed both to aid compliance and save small businesses money.

The Department will promote awareness amongst owners of Small & Medium Sized Enterprises with regard to all environmental legislative requirements, including waste management and will keep the Northern Ireland sections of NetRegs up to date.

5.3 Regulatory activities

Good regulation is essential to ensure that environmental policy is understood and applied by all stakeholders. Environment & Heritage Service works closely with other Agencies, industry, district councils and the public to ensure compliance with waste management legislation. Its overall approach is to offer accessible information and advice to all those it regulates. The aim is to encourage individuals and businesses to put the environment first and to integrate good environmental practices into normal working methods.

Environment & Heritage Service's first level of engagement is to work with businesses and waste management operators to resolve problems with compliance.

However, if businesses break the law, Environment & Heritage Service will take enforcement action in accordance with its Enforcement and Prosecution Policy, consistent with the approach in the rest of the UK.



The Environment and Heritage Service in partnership with other government agencies, held free advice clinics in October 2005. The clinics gave advice to businesses on how to become compliant with End of Life Vehicles Regulations.

The policy is based on firm but fair regulation. Environment & Heritage Service will take the necessary steps to prevent damage to the environment or harm to human health and these will be proportionate to the risks posed and to the seriousness of any breach of the law. This approach applies to regulatory activities on all controlled waste and affects anyone who produces, transports or disposes of waste in accordance with obligations under Duty of Care legislation.

We will work with other regulatory Agencies in order to provide an effective response and consistent approach to protect the environment. Where we prosecute, cases that are judged to be of a serious nature may be heard in the Crown Court. This gives the possibility of unlimited fines and prison sentences upon conviction.

Regulatory activities are designed to protect the ability of legitimate businesses to compete in the market place. It is important that the introduction of new legislation is supported by the effective resourcing of regulatory activities. This is to ensure both protection of the environment and fairness for legitimate businesses.

Environment & Heritage Service will review its Enforcement and Prosecution Policy in 2006 to ensure that it continues to provide a comprehensive and robust framework for regulation that is appropriate to Northern Ireland and comprehensively addresses all regulatory responsibilities.



EHS, working with the UK environment agencies, are extending their incident reporting services to provide a new hotline which will cover all environmental incidents for example illegal dumping, breaches in waste management licences, water pollution, damage to designated conservation sites. The new hotline will be launched in 2006.

5.4 Prevention of illegal dumping

In recent years, the nature and scale of illegal waste disposal in Northern Ireland has developed the potential to inflict serious environmental and economic damage. Illegal disposal activity has had adverse effects on our environment, particularly through air, water and land pollution. It has also provided substantial revenue for illegal waste operators. This results in a negative impact on legitimate waste businesses.

Historically, in Northern Ireland, landfilling has been the main disposal route for construction, demolition & excavation wastes in particular, often under the guise of agricultural land improvement at authorised sites which are exempt from licensing. However, this approach is open to abuse as unscrupulous operators attempt to avoid costs and proper regulatory controls.

These practices have been driven by the desire to avoid payment of landfill charges, particularly in the Republic of Ireland, where disposal charges are higher, and by the perception that the likelihood of detection is low. The Department's legislative powers are not currently sufficient to deal with the problem of illegal dumping, in as effective a manner as we would wish. New legislation is required to provide additional investigation and enforcement powers.

To address one aspect of illegal dumping namely fly-tipping, the Department has joined (with the other UK agencies) a national database of fly-tipping incidents known as 'Flycapture'. This will improve intelligence on fly-tipping and focus resources on fly-tipping hot spots. The system brings together information on the scale and nature of the issue as well as the collective cost and effort authorities put into tackling the problem. The 'Flycapture' database and the municipal waste database 'waste data flow' are used to calculate

the baseline for the annual tonnage of illegal waste disposed of in Northern Ireland. By 2015, the Environment and Heritage Service aims to reduce the annual tonnage of illegal waste disposed in Northern Ireland to 1% of the 2004/2005 baseline.

New legislation: On 31 August 2005, we published a consultation paper on proposed amendments to the Waste and Contaminated Land (NI) Order 1997, including:

- Powers to stop, search, seize and dispose of vehicles suspected of involvement in the illegal disposal of waste.
- Additional powers to investigate incidents or offences relating to illegal waste disposal.
- Recovery of investigation, enforcement and clean-up costs from offenders.
- Increased penalties on conviction.
- Introduction of fixed penalty notices for breaches of Duty of Care and Registration of Carriers legislation in relation to the transportation of waste.

The consultation paper is available on the Environmental Policy section of the Department of the Environment website (www.doeni.gov.uk/epd). The consultation exercise closed on 14 November 2005 and generated 20 responses. The majority of these responses (13) were received from district councils or council representatives who have a particular interest in illegal waste disposal in terms of impact on amenity. While generally welcoming the proposals, their concerns were that the proposals were focused too narrowly on the powers of the Department in dealing with waste management/disposal activities and did not provide a greater role for district councils to become involved in this important area. Following consideration of the responses, the Department will publish a draft Order in Council setting out its detailed proposals to amend the Waste Management and Contaminated Land (NI) Order 1997 before the end of 2006.

Implementation: The effectiveness of the new powers will depend on how they are used. In parallel to the development of new legislation, we will address the issue of providing adequate resources to enforce the law and give confidence to legitimate operators.

Since a considerable proportion of illegally deposited waste originates from the Republic of Ireland, close liaison between the two jurisdictions is essential if the problem is to be resolved. A cross-border Unauthorised Waste Activity Working Group was formed to tackle the problems of illegal waste movement and unauthorised disposal of waste. A priority of the working group is to take the joint actions necessary to stop the movement of unauthorised waste across the border into Northern Ireland and to co-ordinate enforcement action against the companies and individuals involved. The Department will continue to work closely with the Irish Government to seek ways of reducing the quantities of waste being illegally transported across the border.

New guidance for contractors: In construction contracts, waste disposal is often delegated far down the supply chain. This increases the scope for waste to be dumped illegally, and therefore cheaply, by sub-contractors.



The Sustainable Construction Group, chaired by the Department of Finance and Personnel's Central Procurement Directorate has developed a series of guidance notes to assist Government construction clients. These promote good practice both in waste prevention and in application of the Duty of Care Regulations (see **Recycling & Recovery section 2.7**).

5.5 Additional legislation to support implementation of the Strategy

A number of the policies set out in this Strategy will require further changes to existing waste management legislation. We will develop detailed proposals for public consultation, with the intention of providing the legislation needed to implement the Strategy in a timely manner.

These will include measures:

- requiring developers to produce Site Waste Management Plans for developments over a certain threshold (see **Waste Prevention**);
- encouraging the reduction, reuse and recycling of waste, including requiring District Councils to collect separately at least two recyclable materials and making provision for incentive schemes to encourage separation of waste by householders (see **Recycling & Recovery**);
- introducing fixed penalties for those failing to place their waste in the appropriate receptacles (see **Recycling & Recovery**);
- facilitating the provision of the waste management infrastructure needed to meet European targets for the diversion of biodegradable municipal waste from landfill and the recycling of certain manufactured goods (see **Waste Planning**);
- improving waste data collection by requiring businesses to record and report data on waste arisings and management (see **Data & Research**); and
- introducing issues identified by District Councils and others, in responses to the consultation paper that issued on 31 August 2005, in respect of new investigation and enforcement powers.

Summary of Legislation and Enforcement Targets

The Department will continue to introduce and implement legislation to meet statutory obligations in accordance with published programmes and timetables. The review of the Strategy has highlighted a number of particular areas where new legislation is required and the Department is committed to bringing this forward in a timely manner as follows:

- To amend the Waste and Contaminated Land (Northern Ireland) Order 1997 by autumn 2006 to provide for new investigation and enforcement powers (see section 5.4);
- To bring forward, the additional measures outlined in section 5.5 within 3 years of publication of the strategy;

- Environment & Heritage Service will review its Enforcement and Prosecution Policy in 2006; and
- By 2015, Environment & Heritage Service aims to reduce the annual tonnage of illegal waste disposed of in Northern Ireland to 1% of the 2004/05 baseline.

Strand 6: Learning and Communication

Changing our Behaviour

The public sector, businesses, communities and families all need to make more informed choices about the waste they generate and how it is dealt with.

Meeting the challenging targets for diversion of waste from landfill, and producer responsibility for all waste streams, will require a dramatic change in waste management practices. The success of this Waste Management Strategy largely depends on changing the attitude and behaviour of everyone.

In implementing the first phase of the Waste Management Strategy, the Department engaged stakeholders through a new public information programme, *Wake up to Waste*, which successfully heightened awareness of municipal waste. This included a national advertising campaign with *Reduce, Reuse, Recycle* messages. Aimed principally at the householder, it included messages targeted at businesses and the delivery of a waste education programme. These campaign elements have been delivered through working partnerships with local Government, the business sector, education authorities and the voluntary sector.

The campaign must now evolve to transform this increased awareness into behaviour change across all sectors. The Framework for Waste Prevention identifies the model to achieve this behavioural change (see **Waste Prevention**).

The combination of all the activities in this strategy will achieve the behavioural change required to manage our resources more efficiently.

Aim

To raise awareness, encourage best practice and achieve behavioural change by all stakeholders, in order to effect a cultural shift towards better resource management and improved environmental quality.

Objectives

- To engage with Government Departments and Agencies, district councils, industry and businesses, in order to enhance participation by all stakeholders.
- To promote the Strategy to the public and other target audiences through access to dynamic, web-based information, best practice guidance and educational resources.
- To provide stakeholders with the skills required to deliver effective resource management and environmental performance.
- To educate future generations in the actions required to safeguard the environment.

Policies and Actions

The implementation of the behaviour change model (**Strand 1: Waste Prevention**) will guide the development of a learning and communications action plan. Several tools will be required to bring about the behaviour change needed to reduce the growth of waste and to drive efficient use of resources. The policies and actions for this strand fall under four main headings:

- Developing a new communications programme for all sectors;
- Providing accessible information for all waste streams;
- Using incentives to encourage all sectors in greater resource efficiency; and
- Supporting the delivery of waste education and training.

The consultation responses were very supportive of the proposals initially put forward and recommended several additional initiatives to achieve behavioural change. The Department has incorporated these recommendations in to the policies and actions below:

6.1 A new communications programme for all sectors

Engaging the public sector, business sector, community groups and the general public on the issue of resource efficiency and waste management will require action by all key stakeholders. The learning and communications forum will assist the delivery of consistent and appropriate messages to the different sectors.

The forum will harness the expertise and influence of each stakeholder to develop an all encompassing communications programme. The communications programme will draw on the experiences and successes of the *Wake up to Waste* Campaign and other national campaigns i.e. *Race Against Waste*, *Recycle Now* and *Waste Aware Scotland*.

Learning and Communication activity will be delivered through the following working partnerships, implementing key elements of the programme.

- Partnership between Government Departments and agencies through a Ministerial led Sustainable Development Group. The group will monitor the delivery of the Waste Management Action Plans ensuring experience and best practice is shared.
- The Department has established strong working partnership with waste management groups and their district council members. This partnership will develop the national advertising campaign (Wake up to Waste) to deliver messages at a local level through various media (Television, Press, Outdoor Advertising, Events, and Promotional Material). It will co-ordinate the development of the advertising campaigns with the development of infrastructure. The Waste Management Groups will develop Education and Awareness Implementation Action Plans in conjunction with the department and ROTATE (see **Box 11**). Enabling district councils will use the national campaign effectively to increase participation rates locally. The national campaign will be independently evaluated against behaviour change.

Box 11: ROTATE

ROTATE, is a programme for local authorities delivered through WRAP which was extended to Northern Ireland in 2005. It is a free advisory service to local authorities on their kerbside collection programmes and their local communication and awareness programmes.

- The Department will develop working partnerships with those organisations providing support to businesses, across all sectors, on resources and waste management. For example NetRegs, WRAP, Envirowise, InvestNI etc., ensuring a consistent message is communicated across all sectors.

The Department will assist businesses and trade associations in the development of sector specific guidelines and we will encourage these organisations to take the lead in developing the appropriate guidance.

- The Department will develop partnerships with the community group sector and NGOs to incorporate resource efficiency and correct waste management into community action; integrating resource efficiency and good waste management practices into the every day activity of community groups.

The effectiveness of the communications programme delivery will be evaluated independently to assess the effectiveness of the working partnerships detailed above.

6.2 Providing accessible information on all waste streams

The Department will continue to develop its web-based resources and links to other key information providers (see **Box 12**) to provide easily accessible information on all aspects of waste management practice. Waste management information will include:

- Duty of Care (Licensing, Registration of Carriers);
- Producer Responsibility (Packaging, WEEE, ELV);
- Hazardous Waste;
- Contaminated Land;
- Regulation and Enforcement;
- Progress on Departmental initiatives and Waste Management Action Plans; and
- Progress on delivery of measures in the new Waste Management Strategy.

This information will be provided primarily via downloadable guidance documents, case studies of best practice, fact sheets, educational resources and access to public registers (registered carriers, licensed waste management facilities, accredited reproprocessors, registered packaging waste producers).

Box 12: Key Sources of Web-based Information

Environment & Heritage Service:

Waste guidance and publications, advice, communications programme www.ehsni.gov.uk

Department of the Environment:

Corporate & Business Plan, consultation programmes, codes of practice & sustainable development guidance www.doeni.gov.uk

Wake up to Waste:

Public information & awareness campaigns, best practice examples, information for schools www.wakeuptowaste.org

Invest NI:

Comprehensive information for businesses, advisory services & business links www.investni.com
Related links include www.niwasteworks.com and www.envirowise.gov.uk

WRAP:

Market development, advice for businesses, standards & quality protocols www.wrap.org.uk

NetRegs:

Plain language guidance for businesses on environmental legislation and how to comply with it www.netregs.gov.uk

Central Procurement Directorate (DFP):

Information about public procurement and public procurement policy www.cpdni.gov.uk

6.3 Using incentives to encourage all sectors in greater resource efficiency

Incentives can take a number of forms, including subsidies, voluntary initiatives, trading schemes or taxes.

The waste prevention policies for financial incentives, set out in the Framework for Waste Prevention in Northern Ireland (see **Waste Prevention**), will impact upon all waste management practices.

The Department will:

- **Establish recognition awards for waste prevention good practice.** Recognition for the efforts made to prevent waste is a key tool to empower and encourage everyone to get involved, motivating action at all levels.
- **Encourage District Councils to investigate the opportunities and develop incentive schemes.** The incentive schemes would reward sustainable behaviour. These will be closely related to the policy outlined in Section 1.3 Providing a financial incentive to reduce waste.

The incentives identified above will contribute to changing stakeholder behaviour by encouraging participation.

6.4 Supporting the delivery of waste education and training

Education and training programmes will help the current and future workforce make informed decisions to manage resources efficiently and manage their waste correctly. The Department will support the delivery of both education and training programmes through working partnerships, provision of supporting information and resources.



Education Programmes

The Department of Education, the Council for Curriculum Examination and Assessment, and the Education and Library Boards have successfully integrated the teaching of Sustainable Development into the draft revised curriculum for all key stages in Northern Ireland. The Education and Library Boards published a guidance document to assist teachers on the integration of Sustainable Development into their every day teaching of the curriculum “Education for Sustainable Development – Good Practice Guide for Primary, Secondary and Special Schools” 2005. Waste is a key theme of Sustainable Development and will link waste to every day teaching.

The Department supports the work of the Environmental Education Forum which has the main aim of enhancing the profile of environmental education within the curriculum and in extra curricular activities. The Forum promotes a co-ordinated approach to the delivery of environmental education in Northern Ireland. The Forum gives environmental educators the opportunity to work with the statutory education bodies.

Through this forum and working partnerships with the education bodies and district councils the Department will develop an overarching framework for waste education. This framework will enable those delivering waste education to use consistent messages and integrate learning with the curriculum using effective tools. The Department will assist the implementation of this framework via the provision of resources and guidance on delivering activities which are curriculum related.

During 2002-2005 Environment & Heritage Service delivered a schools waste education programme which provided educational resources and equipment which allowed children of all ages to learn by doing. The availability of recycling facilities, competitions and awards has encouraged participation and behaviour change (see Box 13).

Training Programmes

In partnership with professional bodies, trade associations and organisations supporting business, the Department will promote best practice in waste management.

Along with other areas of Government, the Department will work with the Energy and Utility Skills Council (see Box 14), academic institutions and professional waste management bodies to support training initiatives, including vocational qualifications. In addition, guidance will be provided to students on the range of waste related qualifications that are available through Further Education highlighting the employment opportunities within the waste management sector.

Box 13: Case Study on Schools Engagement

The Environment and Heritage Service launched a Schools Recycling Grant Scheme in 2004. The scheme made £400,000 available to District Councils in Northern Ireland to provide recycling facilities and services to both primary and secondary level schools. Schools responded by integrating waste and resource management issues into their everyday teaching.

Over 1000 schools across Northern Ireland have benefited from this scheme with “waste” being integrated into Art and Craft, Technology, Religious Studies and Language and Literacy as well as into the more obvious areas of Science and the Environment.

Summary of Learning and Communication Targets and Actions

- The Learning and Communications Forum to develop an overarching learning and communications programme for waste management by summer 2006. The delivery of the programme will be evaluated annually.
- In partnership with key stakeholders, the Department will extend the Wake up to Waste campaign, and develop a long-term, national campaign delivered at local level by December 2006.
- The Learning and Communications Forum will develop an overarching education and training framework for waste management by December 2006.

Box 14: Energy Utility Skills Council

Energy Utility Skills Council is the UK wide sector skills council for the electricity, gas, waste management, and water industries. Its purpose is to enable the provision of an appropriately skilled workforce. Helping to deliver the new National Skills Strategy "21st Century Skills, realising our potential" 2003. The Council is consulting representatives of the waste sector on the applicability of a waste management Apprenticeship, tailored to the needs of each of the devolved administrations.

PART 3: DELIVERING THE STRATEGY



Achieving our Objectives

Effective implementation is crucial to the success of the Waste Management Strategy for Northern Ireland.

Delivering the actions and targets it contains will require the active involvement and commitment of a wide range of stakeholders. Government Departments, public bodies, district councils, businesses and the public must all help to improve waste management practices. More sustainable product design, the exercise of purchasing power to reduce waste generation, separating materials for recycling and developing sustainable markets for resource-efficient products are some of the ways that can contribute.

Every manufacturer, business and householder needs to act in order to meet statutory targets and achieve the challenging shift to sustainable management of resources. To ensure that this happens, we must address the following:

What targets must we meet? The policy strands in Part 2 identify a number of key targets that Northern Ireland must meet to fulfil both statutory obligations and our wider objectives.

Who is responsible? The Department will take the lead in driving implementation of the Strategy. However, every stakeholder will be expected to show leadership in their area of responsibility. This section summarises the roles and responsibilities of each stakeholder group, and outlines the initiatives that Government will take to demonstrate leadership.

How will the Strategy be implemented? Achieving the shift towards sustainable practices requires effective co-ordination. The Department proposes a new non-statutory advisory committee, the Strategic Waste Board, to oversee the strategy delivery programme and co-ordinate a series of detailed action plans that set out the specific actions that will be taken, when and by whom.

How do we monitor and measure progress? Monitoring Northern Ireland's progress is essential to the successful implementation of the Strategy, to ensure that we remain on track to meet our targets. As one of its key functions, the Strategic Waste Board will monitor performance across all strands of the Strategy delivery programme and publish annual reports.

Where will the money come from? There is a large funding requirement for the provision of major waste infrastructure to help us to meet targets for landfill diversion. Options for delivering this funding are being addressed through the work of the Waste Infrastructure Taskforce and will also be reflected in the overarching Investment Strategy for Northern Ireland. The Waste Strategy aims to minimise other costs required to meet targets by efficient use of existing programme resources

How does the Strategy relate to my waste? It is important that each group of waste producers knows what is expected of them in relation to the wastes they generate. This Strategy is accompanied by a set of **Waste Stream Summaries** (see **Volume 2**), which set out what the Strategy means for that particular waste stream.

What Targets Must We Meet?

This Strategy aims to ensure that our statutory targets can be met in a timely and cost-effective manner. Statutory targets are summarised in **Box 15**. For a comprehensive list of legislative targets for each waste stream, see the **Waste Stream Summaries at Volume 2**.

Box 15: Summary of Statutory Targets

Landfill Directive:

Reduce the quantity of biodegradable municipal waste being landfilled to:

- 75% of the 1995 level by 2010;
- 50% of the 1995 level by 2013; and
- 35% of the 1995 level by 2020.

The Northern Ireland Landfill Allowances Scheme has translated these into annual allowances for each district council.

Producer Responsibility Directives (See Annex 2)

Packaging Waste:

The UK national target for recovery of packaging waste is 65% for 2005. This gradually increases to 70% by 2008. 95% of the recovery figures for 2008 must be achieved by recycling. Under this overall 2008 target, there are material specific recycling targets as follows:

- Paper 70% Steel 61.5% Aluminium 35.5%
- Glass 71% Plastic 23.5% Wood 21%

Waste Electrical and Electronic Equipment (WEEE):

Producers are required to introduce separate collection systems for household WEEE to meet a minimum annual collection target of 4kg of WEEE per person by 31 December 2006. For 2006, recovery targets for separately collected WEEE are set between 50 and 80%, depending on the product category. New EU targets will be set for the recovery, reuse and recycling of WEEE by 31 December 2008.

End of Life Vehicles:

From 2006-2014, each vehicle producer must achieve 85% reuse and recovery of ELVs (80% of which must be achieved by reuse and recycling). For vehicles marketed before 1 January 1980, 75% reuse and recovery must be achieved (70% of which must be achieved by reuse and recycling).

Batteries:

The draft EU Batteries Directive proposes that collection targets for spent portable batteries will be 25% of average annual sales, increasing to 45% after 8 years. 50-75% of collected batteries will be recycled, depending on battery type. Landfilling or incineration of untreated automotive or industrial batteries will be banned.

Part 2 identifies a number of supporting targets, backed up by proposals, which will help Northern Ireland towards meeting these obligations. These form the basis of the Department's Strategy delivery programme.

Who is Responsible?

The development of a successful waste management system requires the support, commitment and engagement of all the people of Northern Ireland. Working together and developing effective partnerships with all key stakeholder organisations will be vital to the delivery of the policies and actions contained within this Strategy.

Lack of leadership by Government and the slow pace of change were key criticisms of implementation of the first Strategy. Over the last five years, Northern Ireland has made significant progress through delivery of new legislation, partnerships between District Councils and transformation of municipal waste recycling. What Government must now do is accelerate progress by what it does within Government, how it uses its tremendous purchasing power, and how it regulates others.

This commitment is set out in **Box 16**.

Box 16: Government Leadership: Putting Sustainability into Practice

All Government Departments recognise that they have a pivotal role to play in improving our own resource utilisation and waste management practices.

Government will show leadership by:

Leading by example: implementing green housekeeping and environmental performance measures throughout Government (see **Waste Prevention**).

Purchasing policy: developing procurement policies and practices that encourage sustainable purchasing and stimulate market development throughout the public and private sectors (see **Recycling & Recovery**).

Promoting good practice: providing consistent information and guidance to assist all stakeholders in better resource management.

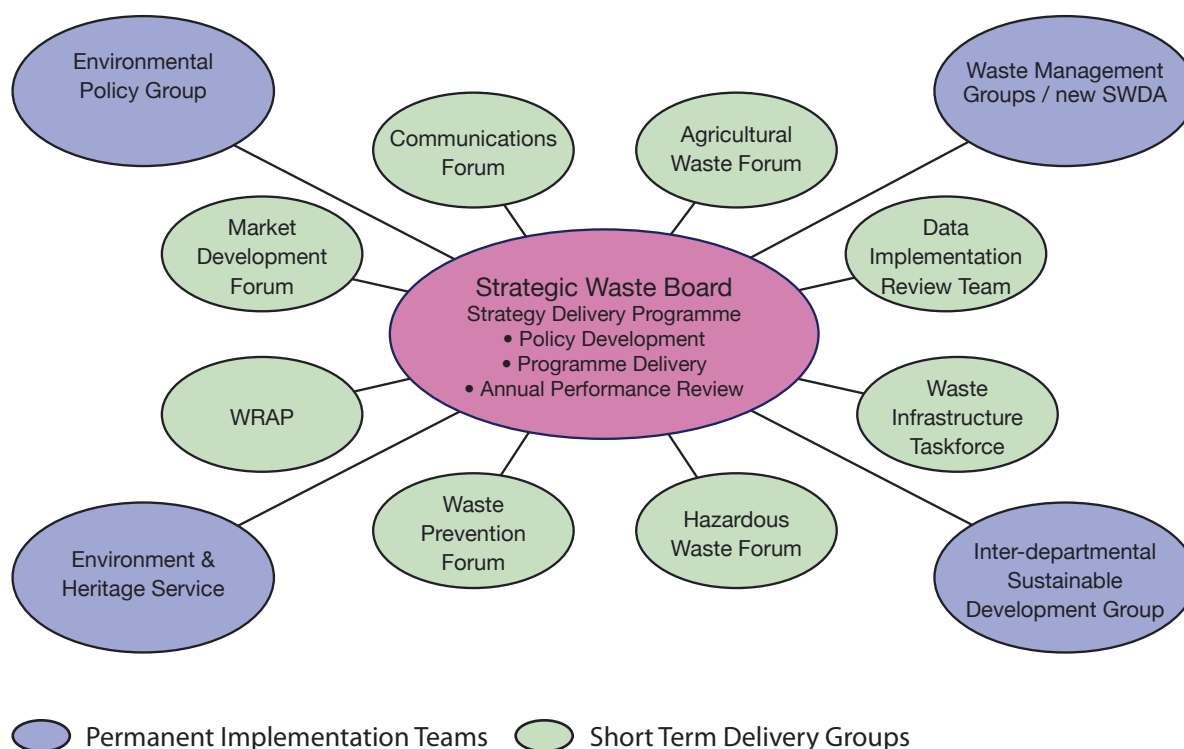
The key roles and responsibilities of various stakeholder groups are summarised in **Table 1** opposite.

Table 1: Roles and Responsibilities etc. of the Various Stakeholder Groups

| | |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Members of the Public | <ul style="list-style-type: none"> • Minimise household waste • Undertake home composting where possible • Exercise purchasing decisions by choosing most resource efficient products • Actively participate in reuse and recycling initiatives, both at community level and individually • Build awareness in the community |
| Business Sector | <ul style="list-style-type: none"> • Comply with legislation • Implement initiatives for waste prevention • Develop more resource efficient products • Exercise producer responsibility • Identify and participate in schemes for reduction and recovery • Provide accurate data on waste arisings and management |
| Waste Management Sector | <ul style="list-style-type: none"> • Develop and operate waste management facilities and services • Respond to recycling and recovery market opportunities • Develop new skills and achieve appropriate Certificates of Technical Competence (COTCs) • Improve data reporting on waste arisings and management • Provide consultancy, research and development services • Promote education and awareness among stakeholders |
| Non-Governmental Organisations | <ul style="list-style-type: none"> • Work alongside Government and district councils to develop and promote education and awareness • Deliver services (e.g. community/kerbside recycling) • Provide training • Promote participation from community groups |
| Department of the Environment | <ul style="list-style-type: none"> • Develop policies and legislation • Regulate and enforce to ensure a level playing field • Put in place programmes/plans to meet statutory targets • Communicate and promote the Strategy • Drive co-operation between Departments • Monitor implementation of Strategy |
| Other Government Departments | <ul style="list-style-type: none"> • Develop and implement waste management action plans to prevent, recycle and recover waste • Develop and implement green procurement policies • Implement Environmental Management Systems for greater resource and energy efficiency |
| District Councils | <ul style="list-style-type: none"> • Prepare Waste Management Plans • Develop infrastructure for the management of municipal waste in order to meet targets and public expectations • Implement Best Value • Implement green procurement policies • Actively promote waste prevention, re-use and recycling • Develop accurate waste data and reporting systems |

How will the Strategy be Implemented?

Achieving the shift towards sustainable resource management requires this Strategy to be turned into specific actions. This will be achieved using a variety of delivery mechanisms. Co-ordination and monitoring of the Strategy delivery programme will be undertaken by a new Ministerially-chaired advisory committee, the Strategic Waste Board, using proven programme management techniques and supported by the groups identified in Figure 5.



Some of the groups will be permanent, whilst others will develop to complete defined projects on a task and finish basis. For example, it is anticipated that the work of the Waste Infrastructure Task Force will be completed shortly after the publication of this Strategy.

Figure 5: Strategic Delivery Model

In some cases, delivery is the direct responsibility of a Government Department. In such situations, detailed actions and timings will be set out in the appropriate Departmental or Agency Business Plans. In other cases, a focused stakeholder group will be responsible for drawing up a detailed implementation plan setting out the specific actions that will be taken, when and by whom. This stakeholder group will also be responsible for monitoring implementation of any such plan. Some of these groups have already been established, and have published guidance and action plans. Table 2 sets out a schedule of the implementation action plans which will be developed during 2006 to deliver the various strands of the new Strategy.

This co-ordinated approach will ensure that cross-cutting delivery mechanisms are not duplicated, that the key stakeholders are engaged in the delivery of targets for each policy area, and that such groups will exist only long enough to complete the work with which they are tasked. The work of these stakeholder groups will directly contribute to the overarching Strategy delivery programme.

Table 2: Action Planning for Strategy Delivery

Smart actions and targets have been set out at the end of each policy strand, the table below identifies a number of high level implementation action plans to be developed in 2006.

| Implementation Action Plans | Led By |
|--------------------------------------------|-----------------------------------------------|
| Waste Prevention Action Plan | Waste Prevention Forum |
| Waste Management Plans | Waste Management Groups and District Councils |
| Departmental Waste Management Action Plans | All Government Departments |
| Market Development Action Plan | Market Development Forum |
| Hazardous Waste Action Plan | Hazardous Waste Forum |
| WRAP, Business Plan | WRAP |
| Infrastructure Implementation Action Plan | Waste Infrastructure Task Force |
| Learning and Communications Action Plan | Learning and Communications Forum |

How do we Monitor and Measure Progress?

The development of an effective Strategy is a continuous process that requires regular review and refinement to ensure that the implementation programme continues to be relevant, and that the initial objectives are still appropriate. Equally, clear mechanisms are required, across Government as a whole to ensure that the strategy is implemented fully and effectively.

The Waste Management Advisory Board was established to guide and monitor implementation of the first Waste Management Strategy. Its role came to an end in June 2005. The Board was made up of a number of independent waste experts and, whilst the Department acknowledges that it fulfilled its valuable role of reporting on performance against targets contained within the first Strategy, as an external body it did not have the authority to ensure that Government Departments and other public bodies delivered on their Strategy commitments. The Department is conscious that, in implementing this new strategy, robust arrangements will be required for delivering Strategy commitments and for monitoring and reporting on their delivery.

In the consultation document the Department proposed to establish a new body with responsibility for ensuring timely and effective implementation and for monitoring and reporting on the outcomes. Responses were generally in favour of the establishment of such a body provided that it does not consist solely of public sector members, that it has sufficient powers to ensure strategy implementation by all departments and sectors, that it is genuinely accountable and that it is supported by a full time secretariat. The Department has taken these comments into account by expanding on the role and membership of the Board in this Strategy.

Accordingly, the Department intends to establish a Ministerially-chaired advisory committee, the Strategic Waste Board, with the ability to deliver Government leadership and facilitate progress on all Strategy targets. The Board will be chaired by the Minister and will be made up of senior representatives of all the key statutory organisations, from both central and local Government with a role to play in delivering Strategy commitments, including representation from the Northern Ireland Local Government Association (NILGA), at both elected member and officer level. In addition the Board will be supplemented by a number of independent members to bring the views of external experts to bear on the delivery of the Strategy. The independent members of the Board will be appointed as individuals rather than representatives of stakeholder groups. As well as ensuring timely and effective implementation of the Strategy, the Board will also serve as the forum for consideration and discussion of strategic waste issues between central and local government. It is for consideration whether the Board might subsume the work of the joint DOE/NILGA Strategy Waste Partnership. The Department will discuss this with NILGA. The Board will also subsume the work of the Infrastructure Task Force, ensuring that the Task Force's Implementation Action Plan is delivered effectively.

The Strategic Waste Board will carry out the following functions:

- consider advice from stakeholder groups and oversee the strategic co-ordination of all work required by Government Departments, Agencies and local Government toward implementation of the targets within this Strategy;

- provide a forum for developing a strategic overview of the implementation of the Strategy as a whole, which will aid management decisions on resources and responsibilities;
- assist Government Departments and Agencies to ensure that all relevant policies and programmes are consistent with Strategy objectives;
- drive forward progress on Strategy targets and focus efforts on targets which experience delays in implementation. Where necessary key performance indicators will be developed to assist with this monitoring.
- engage with relevant industry and other stakeholder groups to focus on policies and actions relating to individual waste streams;
- consider the impact of waste – related policy initiatives, including EU-driven initiatives, on the Strategy delivery programme, and review the programme as appropriate.

The secretariat to the Strategic Waste Board will be provided by a dedicated Strategy programme management team within the Department of the Environment. In supporting the Board, the team will apply proven programme management techniques to the co-ordination of the implementation of the Strategy. The Department will publish annual progress reports against Strategy targets.

Key Performance Indicators

The Strategic Waste Board will address the issue of identifying appropriate key performance indicators, where required, as part of its early work programme.

Where will the Money come from?

Historically, the cost of waste management in Northern Ireland has been low, because we have been over reliant on landfill disposal methods, which are not sustainable. A move towards alternative waste disposal technologies is now essential to enable us to meet EU targets and avoid the heavy fines which will be incurred if we fail to comply.

At present, The Department provides significant funding for waste management in the form of staff costs, grant aid and direct expenditure. This Strategy aims to minimise the costs required to meet the statutory targets in a number of ways, for example, by increasing waste prevention and reducing the quantities that would otherwise require treatment. Implementing the Strategy will have cost implications, and these must be carefully thought out so that an affordable funding package can be developed.

The Waste Infrastructure Taskforce is carrying out a financial modelling exercise for the procurement of the major infrastructural elements of the Strategy to determine the likely cost of the facilities needed and the options for paying for it. This work will form the basis for integrating waste management into the 2007 Comprehensive Spending Review by considering funding options including seeking parity with any arrangements in Great Britain.

Summary List of Actions and Targets

Strand 1: Waste Prevention

- Publish Departmental Waste Management Action Plans by April 2006.
- Public Sector to reduce paper use by 10% per annum based on the baseline established by each Departments own waste audit.
- The Department to develop a mechanism to monitor the implementation of the Departmental Waste Management Action Plans by March 2007.
- The Department will bring forward for public consultation, detailed proposals for a statutory requirement to prepare Site Waste Management Plans as a tool to help minimize waste on construction projects within three years of the publication of this Strategy.
- The Department to bring forward, for public consultation, detailed proposals on the provision of legal powers to district councils to charge for collection of residual wastes from householders within three years of the publication of this Strategy.
- Waste Prevention Forum to develop a comprehensive action plan to deliver all the initiatives identified in sections 1.4 and 1.5 by July 2006
- Waste Prevention Forum to design SMART targets for the prevention of municipal, commercial and industrial waste and construction, demolition and excavation wastes by 2010.

Strand 2: Recycling and Recovery

- Waste Management Groups to review Waste Management Plans by June 2006.
- The Department of Finance and Personnel will amend the Building Regulations by 2009.
- The Department will bring forward, for public consultation, detailed proposals for a statutory requirement for district councils to collect at least two materials for recycling and recovery at the next available legislative opportunity.
- Market Development Forum to develop a Market Development Action Plan by June 2006.

Targets

- 60% of Commercial and Industrial Waste to be recycled by 2010.
- 75% of Construction, Demolition and Excavation Wastes to be recycled or reused by 2020.
- Recycling and Composting of Household Wastes to be at:
 - 35% by 2010
 - 40% by 2015
 - 45% by 2020

Strand 3: Waste Planning

- The Department to make a Local government Companies (Best Value) Order during 2006.
- Complete the work of the Waste Infrastructure Task Force by May 2006.
- Waste Management Groups to review Waste Management Plans by June 2006.
- Establish a single, regional waste disposal authority within the context of, and in parallel with, the implementation of the Review of Public Administration by 2009.
- Establish a Programme Delivery Support Unit in 2006.

Strand 4: Data and Research

- The Department will publish Annual (December) data reports to include information on performance indicators.
- The Department will carry out surveys on waste arisings, composition and management methods on various waste streams over the next three years. Particular surveys include:
 - Carry out an NI Waste Characterisation survey in partnership with district councils during 2005/06.
 - Co-operate with business interest groups to develop information recording tools on waste arisings and management activities during 2006.
 - Undertake new surveys to update baseline information on commercial and industrial, and construction, demolition and excavation wastes, using the findings of the 2005/06 surveys by September 2006.
 - Work in partnership with the Department of Agriculture and Rural Development to survey agricultural waste arisings and management during 2006/07.
- Within three years of the publication of the strategy, the Department will bring forward detailed proposals for public consultation, to introduce a statutory requirement for businesses to submit returns on waste arisings and management.
- The Department to develop a waste management information database to integrate all statutory returns, surveys and applications from waste producers and carriers and in particular from licensed facilities by 2008/09.
- The Department will continue to support research and demonstration projects through WRAP, the Community Waste Innovation Fund and the Scotland and Northern Ireland Forum for Environmental Research (SNIFFER) and the DEFRA Waste and Resources Research Programme.

Strand 5: Legislation and Enforcement

- The Department will amend the Waste and Contaminated Land (Northern Ireland) Order 1997 by Autumn 2006 to provide for new investigation and enforcement powers (see section 5.4);
- The Department will bring forward, the measures outlined in section 5.5 within 3 years of publication of the strategy;
- Environment & Heritage Service will review its Enforcement and Prosecution Policy in 2006; and
- By 2015, Environment & Heritage Service aims to reduce the annual tonnage of illegal waste disposed of in Northern Ireland to 1% of the 2004/05 baseline.

Strand 6: Learning and Communication

- The Learning Communications Forum to develop an overarching learning and communications programme for waste management by summer 2006. The delivery of the programme will be evaluated annually.
- In partnership with key stakeholders the Department will extend the Wake up to Waste campaign, and develop a long-term, national campaign delivered at local level by December 2006.
- The Learning and Communications Forum will develop a comprehensive education and training framework for waste management by December 2006.

Annex 1

References and Supporting Information

Annex 1: Reference and Supporting Information

This annex provides references and supporting information to the Northern Ireland Waste Management Strategy under the following headings:

- Waste Management Legislation;
- Strategy Review Reports;
- Key Technical References; and
- Website References.

1. Waste Management Legislation

European Union (EU) Policy provides the overarching framework for waste management practices in Northern Ireland.

There has been a raft of environmental and waste management policy and legislation emanating from the EU, with the aim of promoting more sustainable waste management practices. The two key Strategies that create the overarching policy framework for waste management are:

- **The EU Sustainable Development Strategy**, which requires sustainable development to be at the core of member state policies.
- **The EU Waste Management Strategy**, which enshrines key principles, including the waste hierarchy, the proximity principle and self sufficiency.

Measures to deliver the strategic policy objectives are primarily implemented in the form of EC Directives, which can be categorised as follows:

- Framework Directives;
- Waste Stream Specific Directives; and
- Technology Specific Directives.

Member states must ensure that the requirements of these Directives are implemented through national legislation in a timely manner to avoid infraction proceedings.

This section provides a summary of the key EU Directives. It is not intended to be a comprehensive list of EU legislation and stakeholders should refer to the EU website www.europa.eu.int/eur-lex for a full list of current EU documents.

EU Waste Directives and Communications

The following provides a summary of the key EU Waste Directives, Regulations and recent EU Communications in Northern Ireland.

75/442/EEC Waste Framework Directive on Waste (as amended in 91/156/EEC) requires Member States to appoint competent authorities to draw up Waste Management Plans which develop an integrated network of regional facilities. The Directive also establishes requirements for licences and registration of carriers and the polluter pays principle. The Amendment contains a number of significant modifications intended to maintain a high level of environmental protection.

1993/31/EC Directive on the Landfill of Waste aims to harmonise controls on the landfill of waste throughout the European Union. It also aims to reduce the amount of methane, a powerful greenhouse gas emitted from landfill sites, by setting three progressive targets for member states to reduce the amount of their Biodegradable Municipal Waste (NMW) sent to landfill. This reflects the UK's wider and legally binding target for reduction of greenhouse gases agreed at Kyoto in December 1997.

1996/61/EC The Integrated Pollution Prevention and Control (IPPC) Directive introduced a control system for major industries, covering emissions to air, water and land; noise; site restoration and accident prevention. The Directive specifies the activities which are subject to these controls, including certain waste management operations.

91/689/EEC Directive on Hazardous Waste aims to introduce greater harmonisation in the management of hazardous waste amongst member States. In order to formulate a common definition of hazardous waste, it lists waste that can be classified as hazardous, and includes their constituents and properties. It also requires that the national competent authorities publish a hazardous waste management plan.

94/62/EC Directive on Packaging and Packaging Waste places responsibility on those involved in the manufacture and sale of products to meet targets for recycling and recovery.

2000/76/EC Directive on the Incineration of Waste aims to prevent or to limit as far as practicable, negative effects on the environment, in particular pollution by emissions into air, soil, surface water and groundwater, and the resulting risks to human health, from the incineration and co-incineration of waste.

2000/53/EC Directive on the End-of-Life Vehicles (ELVs) introduces new requirements on treatment centres or scrapyards. All ELVs will need to be treated to new standards. Treatment/dismantling companies will need to be licensed according to new licensing requirements if they wish to accept waste vehicles.

2002/96/EC Directive on Waste Electrical and Electronic Equipment (WEEE) states that 'producers should be responsible for financing the management of waste from their own products'.

75/439/EEC Directive on Waste Oils. National governments are required to ensure the safe collection and disposal of waste oils, preventing escape to land or water. They are to ensure that as far as possible, the disposal of waste oil is carried out by recycling (regeneration and/or combustion other than for destruction). Waste oils are any mineral-based lubrication or industrial oils which have become unfit for the use for which they were originally intended. In particular this covers used combustion engine oils, gearbox oils, mineral lubricating oils, oils for turbines and hydraulic oils.

91/157/EEC Directive on Batteries and Accumulators. Existing EU Directives and NI Regulations are primarily aimed at reducing the hazardous nature of batteries by setting limits on the use of materials such as mercury, cadmium and lead. A new EU Batteries Directive is being developed which is intended to maximise the separate collection of all types of batteries and implement specific collection and recycling targets. The DTI will be the lead Government department for implementation of a new Batteries Directive in the UK. Implementation of the regulations in Northern Ireland will be consistent with the UK approach. The DTI anticipates that the new Batteries Directive will be adopted in mid-2006. Member States will have 2 years to implement the directive once it has been adopted.

86/278/EEC Directive on Sewage Sludge used in agriculture. This Directive regulates the use of sewage sludge in agriculture in such a way as to prevent the harmful effects on soil, vegetation, animals and man, thereby encouraging the correct use of such sludge. The Directive covers the use of sewage sludge from sewage plants, septic tanks and other treatment installations in any commercial crops including stock-rearing. Certain restrictions are put on the use of sewage sludge in agriculture and producers of such sewage sludge are to provide certain information to the users.

EU Waste Regulations:

2150/2002 Regulation on Waste Statistics provides a legal basis for complete statistical data collection on "generation" and "treatment" of waste from businesses and private households in the European Community. The data are to be collected on a regular basis and will provide comparable statistics on trends in waste generation and waste management, and enable monitoring of compliance with the European Community waste policies.

EU Communications

Towards a Thematic Strategy on the Prevention and Recycling of Waste, COM (2003) 301 – Official Journal C 76 of 25 March 2004. The communication proposes waste prevention and waste recycling targets and focuses on a mixture of voluntary, regulatory and economic instruments to drive the achievement of targets.

Integrated Product Policy. COM (2001) 68. The Communication outlines the Commission's strategy to stimulate greener products, i.e. products with a better environmental performance throughout their life-cycle.

Sixth Environmental Action Programme of the European Community. Environment 2010: Our Future, Our Choice. COM (2001) 31 final. The Communication defines the priorities and objectives of Community environmental policy up to 2010 and beyond, and describes the measures to be taken to help implement European Union's Sustainable Development Strategy.

National Legislation and Regulations

The following provides a list of the key primary and subordinate legislation for implementation of Directives in Northern Ireland. The list is not exhaustive, and readers should refer to the Department of the Environment website (www.doeni.gov.uk/epg) for current environment legislation and consultation documents.

Primary Legislation

The following provides a list of the key primary legislation in Northern Ireland.

- SI 1978/1049 Pollution Control and Local Government (Northern Ireland) Order;
- SI 1985/1208 Local Government (Miscellaneous Provisions) (Northern Ireland) Order;
- SI 1997/2778 Waste and Contaminated Land (Northern Ireland) Order 1997;
- SI 1998/1762 Producer Responsibility Obligations (Northern Ireland) Order;
- SI 2002/3153 Environment (Northern Ireland) Order;
- SI 1994/1896 Litter (Northern Ireland) Order; and
- Waste and Emissions Trading Act 2003.

Subordinate Legislation

The following provides a list of the key subordinate legislation in Northern Ireland.

- SI 1994/1137 Transfrontier Shipment of Waste Regulations;
- SI 1996/1527 Landfill Tax Regulations (and subsequent amendments);
- SR 1999/115 Producer Responsibility Obligations (Packaging Waste) Regulations (Northern Ireland);
- SR 1999/362 Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations (Northern Ireland);
- SR 2002/271 The Controlled Waste (Duty of Care) Regulations (Northern Ireland) 2002;
- SR 2003/46 Pollution Prevention and Control Regulations (Northern Ireland);

- SR 2003/404 Controlled Waste (Amendment) Regulations (Northern Ireland);
- SR 2003/493 Waste Management Licensing Regulations (Northern Ireland);
- SR 2003/495 Animal By-Products Regulations (Northern Ireland);
- SR 2003/496 Landfill Regulations (Northern Ireland);
- SI 2003/1941 Packaging (Essential Requirements) Regulations;
- SI 2003/2635 End-of-Life Vehicles Regulations;
- SR 2004/73 Litter (Fixed Penalty) Order (Northern Ireland);
- SR 2004/416 Landfill Allowances Scheme (Northern Ireland) Regulations;
- SI 2004/459 The Planning (General Development) (Northern Ireland) Order;
- SI 2004/1936 Landfill (Scheme Year and Maximum Landfill Amount) Regulations;
- SR 2005/90 Transfrontier Shipment of Waste (Fees) Regulations (Northern Ireland); and
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Annex 2

Impact Assessments

Impact Assessments

Regulatory Impact Assessment (RIA) Screening

The application of Regulatory Impact Assessment (RIA) has been considered in the review of the Northern Ireland Waste Management Strategy.

It is recognised that the implementation of the new Strategy may potentially impact on business, charities, social economy enterprises and voluntary bodies. However, the policies proposed within the developing Strategy document are defined at a high level and their combined impact would be very difficult to assess. Proposals would only be sufficiently defined at the implementation stage to assess potential impacts.

In addition, the review process to date has identified that the guiding principles and policies of the original Statement remain essentially sound and provide a stable foundation for the new document. The main emphasis in the new document is to provide enhanced clarity of purpose and a new dynamic to drive future action.

Therefore, application of RIA is not considered appropriate during the process of updating of the Northern Ireland Waste Management Strategy. However, the need for RIA will be reviewed as implementation progresses. In particular, it is anticipated that new detailed legislation or policy proposals will be subject to RIA as appropriate, and at this stage the options, costs, implications and impacts would be properly addressed during their detailed development.

Strategic Environmental Assessment (SEA)

Strategic Environmental Assessment (SEA) is not being applied to the Strategy as the review process commenced before the Regulations in 2004 and will be complete before July 2006. However, SEA principles are reflected in: The development of NI-wide BPEO guidance and the accompanying consultative process (the determination of BPEO at the strategic level has involved consultation and assessment of similar set of environmental parameters as for the SEA process); and

Consideration of SEA as appropriate in the review of the Waste Management Plans, which are the second part of Northern Ireland's binary approach to the meeting requirements of the Waste Framework Directive.

The consultation process will also fully reflect the requirements of the Public Participation Directive.

