

PART 5



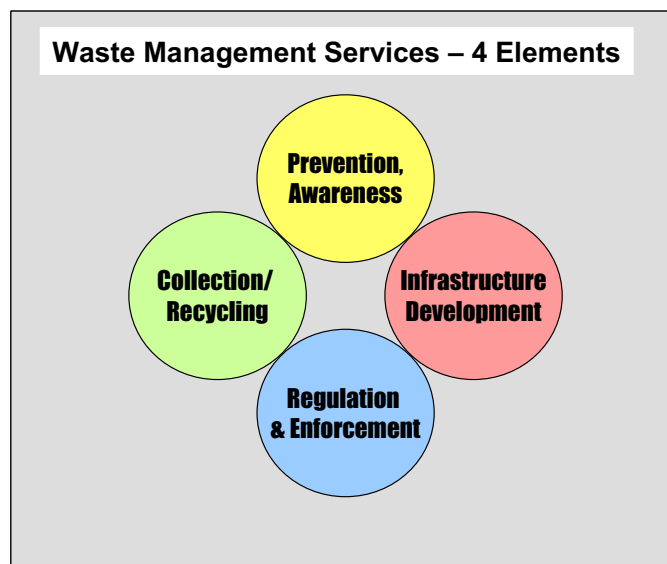
20 IMPLEMENTATION PLAN FOR THE DUBLIN LOCAL AUTHORITIES

20.1 INTRODUCTION

The Local Authorities face a significant challenge in implementing the Plan objectives. Not only must they expand their own waste management service delivery in terms of integrated waste management, but they must also regulate the activities of other waste producers and collectors. The Local Authorities must also provide leadership and drive forward change in sectors right across society from households to business and industry.

The role of the Dublin Local Authorities can be divided into four main activities as summarised in the following Figure 20.1.

Figure 20.1 Overview of Local Authority Services



Priorities in Implementation are:

- Applying adequate personnel resources to each of the main tasks: prevention/minimisation, collection & recycling, infrastructure development, and regulation & enforcement.
- Ensuring Regional co-ordination of activities through effective communication and management
- Setting annual objectives in delivering improvements to service, and securing adequate funding
- Monitoring Plan performance on a regular basis and responding to changing circumstances and input from stakeholders

20.2 PREVENTION/MINIMISATION AND WASTE AWARENESS PRIORITIES

The Plan defines the roles for three officers within each Local Authority with a focus on waste prevention and minimisation in households, schools, and business.

A second function is the delivery of information to the public on recycling facilities available in the Region, to motivate maximum participation in recycling and other schemes. This includes supporting new collection schemes and also ensuring ongoing support for existing schemes.

These staff will not be required to implement or administer the physical delivery of new services such as bring banks or recycling centres, nor will they be engaged in regulation/ enforcement measures, although they will need to work in close co-operation with colleagues dealing with these matters.

Finally a need for greater co-ordination of activities of these officers on a Regional level will be beneficial. This role will be managed by the Waste Steering Group.

20.3 COLLECTION AND RECYCLING PRIORITIES

Substantial additional resources – both personnel and financial – will be required to deliver the household recycling measures in this Plan. This includes planning, design and construction, staff training and administration of several contracts with private companies. Table 20.1 below summarises the improvements in recycling that will need to be delivered by the Local Authorities directly over the coming 5 years. The Local Authorities will establish dedicated teams to the developing and running of these services. Regional co-ordination of these activities will be critical to successful implementation.

Table 20.1 Priority Action Areas for Local Authority Recycling Collections

<p>Recycling Centres</p> <p>Develop a standard Regional template for the service offered, including branding and signage</p> <p>Physical Improvements for storage of WEEE and household hazardous waste</p> <p>Staff training – handling of HHW, WEE</p> <p>Improved data collection and reporting</p> <p>Extend open hours and accessibility</p> <p>Widen range of recyclables collected to include green waste and other recyclables</p> <p>Identify and develop additional facilities</p>	<p>Bring Banks</p> <p>Review of sites and develop a standard template for appearance and signage</p> <p>Develop a common protocol for servicing, contract conditions to support all contracts</p> <p>Identify and develop additional sites</p> <p>Innovative siting and use of underground banks in high-density locations</p> <p>Physical Improvement of existing sites</p>
<p>Green Bin (Dry Recyclables) Collection</p> <p>Expand system capacity to cater for high demand</p> <p>Increase the range of materials that can be collected</p>	<p>Brown Bin (Organics) Collection</p> <p>Roll-out of brown bin service with sufficient support and information systems to households</p>
<p>Other Actions</p> <p>Carry out 'Collection events' for materials such as WEEE and household hazardous waste</p>	<p>Other Actions</p> <p>Investigate feasibility of recycling of packaging waste from street litter collections</p>

20.3.1 Waste Bye Laws for Commercial & Industrial Waste

In order to support the improvements to recycling services and infrastructure, Figure 20.2 outlines the suggested approach to phasing in collection bye-laws for Dry Recyclables and Organic Waste.

Consultation will need to be carried out with waste collectors and representatives of commerce & industry (e.g. Chambers of Commerce).

Implementation in relation to Organic waste may be phased in, either on a geographical basis (gradually applying the bye law in more areas of the region, with accompanying enforcement inspections), or by turning attention to the larger businesses and waste producers first.

Figure 20.2 Collection Bye-Laws Implementation

	2006				2007				2008				2009			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Draw Up Draft Bye-Law	■															
Consultation Phase		■	■													
Implementation: Dry Recyclables				■	■	■	■	■	■	■	■	■	■	■	■	■
Organic Waste (may be phased)						■	■		■	■			■	■	■	■

20.4 INFRASTRUCTURE DEVELOPMENT PRIORITIES

A substantial number of facilities need to be delivered to ensure the overall waste strategy for the Region can be implemented. Table 20.2 lists of the facilities that must be developed by the Local Authorities during the plan period. All of these have a Regional dimension, and typically each facility will require siting, planning, environmental licensing, securing funding, negotiating contracts, managing construction and commissioning, all requiring varying levels of public consultation and involvement.

The Dublin Waste Steering Group will co-ordinate the development of this infrastructure and assist infrastructure development staff within individual Local Authorities undertaking the development.

Table 20.2 Priority Action Areas for Infrastructure Development

Facility	Responsible (on behalf of the Region)	To be completed by
Reuse/ Repair Centre	Regional Level	2007
New Recycling Centres	Each Local Authority individually, applying template	2005 onwards
WEEE delivery points & Hazardous Waste delivery points for Business	Each Local Authority (upgrade Recycling Centres) or at WEEE depot	2005 (WEEE) 2007 (HHW)
Green Waste Reception Capacity	FCC, SDCC DCC, DLRCC	2005 2006 2007
2 Biowaste Treatment facilities	DLRCC and FCC	2007/2009
Waste to Energy Plant	DCC	2010
Municipal Landfill (Fingal)	FCC	2008

The Section 60 Policy Guidance issued by the Minister of Environment Heritage and Local Government on May 3, 2005 requires that an inventory of former waste disposal sites and a register of former hazardous waste disposal sites be compiled as a matter of priority. Table 20.3 below provides a timeline of implementation for the Dublin Local Authorities to comply with this guidance.

Regarding the implementation of policies on former waste disposal sites and on potential hazardous waste disposal sites, the following sequence of implementation is set out.

Table 20.3 Implementation of Former Waste Disposal and Section 26 Policies

	Action	Target
1	Local Authorities develop GIS based <i>Waste Disposal Site Database</i> using current available records. Any gaps in information should be filled from in-house records or knowledge without recourse to site investigations. A protocol for maintaining and updating the database is agreed for the four Local Authorities. Co-operation with Planning Section is recommended.	End 2005
2	Local Authorities commence the process of preparing Section 26 Register. This should address Stages 1 – Stage 5 of the EPA methodology and will not involve physical site investigation, but will set out a priority order for further risk assessment of sites. All potential hazardous waste generation activities to be included. Completed Report will establish Section 26 Register .	End 2006
3	Stage 6 and Stage 7– Site Specific Risk Assessment to be carried out on priority sites with a view to determining environmental impacts and the requirement for remediation if any.	End 2008
4	Once the Waste Disposal Site Database and the Section 26 Register are created, they need to be updated on an ongoing basis. This should be done in conjunction with Annual Report on waste management plan.	2006 onwards

20.5 REGULATION AND ENFORCEMENT

Regulation and Enforcement on a local level serves a number of critical functions:

- Ensuring systems set up at national level to regulate the waste industry are fully adhered to – these laws are in place with the ultimate aim of ensuring waste is handled properly and does not cause pollution
- Ensuring that waste is managed in the manner set out in the Waste Management Plan using local Bye-laws and Permits

This function is relatively new for the Local Authorities, who previously focussed on collection and operation of landfills. Over the past 3-4 years however dedicated teams have been set up within the Local Authorities to address the new role in regulation and enforcement. Funding of these units has come from the DEHLG using the Environment Fund. The following figure demonstrates the ideal model of the individual regulation/ enforcement units in each Local Authority.

A 'Regional Enforcement Unit' has been set up by Dublin City Council and Fingal County Council. The unit employs a Head of Enforcement Unit, 10 field staff, an Environmental Manager and 2 administrative staff. The field staff are employed on a 3 year contract basis. The unit is fully staffed since September 2004. Its duties include enforcement of almost all waste regulations within the DCC area (bar Packaging and Plastic Bag levy) and enforcement of the Waste Collection Permits. They also serve an over-arching enforcement role across DCC and FCC where night time and weekend work is required.

In certain areas – e.g. Packaging Waste enforcement, Regional Enforcement Unit – the Dublin Local Authorities are the leading performers on a national level. However there is a lack of consistency in implementation across the Region and there is room for improvement in a number of areas. A review

has been carried out of the current ability of the Local Authorities to provide this service effectively. The following areas for action have been identified:

Management Recognition – the Local Authorities will recognise regulation/ enforcement as an essential function and will provide clear management direction on the objectives of the unit, staff roles and responsibilities and communication with other units.

Staff Resources – resources have improved in the past 2-3 years, but staffing of regulation/ enforcement units in South Dublin (who have a high number of relevant permitted facilities, and packaging producers) and Dublin City Council (who operate the Collection Permit system and significant Transfrontier Shipment regulation) will be improved.

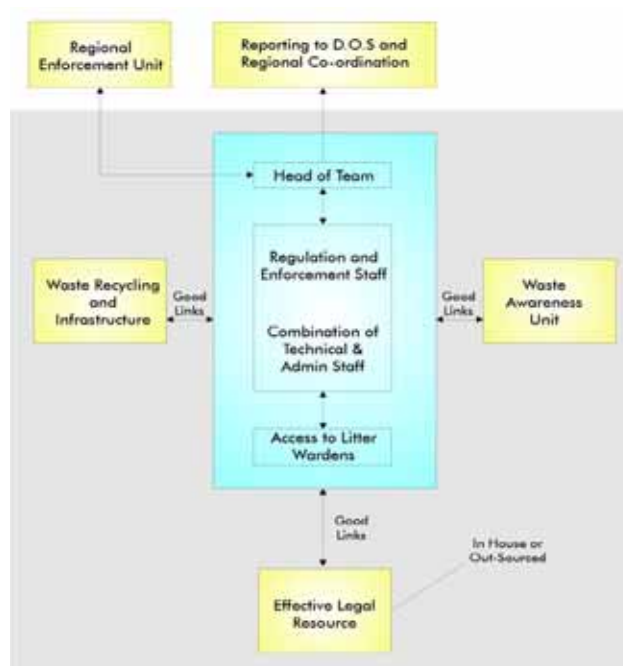


Figure 20.3 Model for Regulation/ Enforcement Units

Staff Training - the most common theme emerging is the need for training of staff with the necessary knowledge skills to perform their duties effectively. A comprehensive training programme for staff in regulation/ enforcement units will be put in place, drawing on expertise and experience already held in the Region, and making use of the forthcoming EPA training initiatives on regulation/ enforcement.

Regulation to Support Plan Objectives - there is a need to develop understanding of the potential for the Waste Presentation Bye-Laws and Waste Collection Permit to be used as tools in supporting Plan objectives (such as the separation of dry recyclables and organic waste for recycling). Bye-Laws will be implemented in a co-ordinated manner with respect to the waste collection schemes, the bins provided

and the awareness campaigns. Implementing Bye-Laws will require significant resources for inspection and enforcement on the ground.

Regional co-ordination of Regulation and Enforcement will be implemented. The main focus is to ensure an effective and consistent approach across the Region, to monitor performance, and to exchange information and experience. By sharing expertise and experience the Region can become better equipped in a shorter period of time. Co-ordination mechanisms will be established by the Waste Steering Group, in conjunction with the 'Head of Unit' in each of the Local Authorities.

Each Local Authority will perform its own day to day regulation and enforcement tasks. This will keep an important link between issuing Permits / Bye-Laws and their effective implementation.

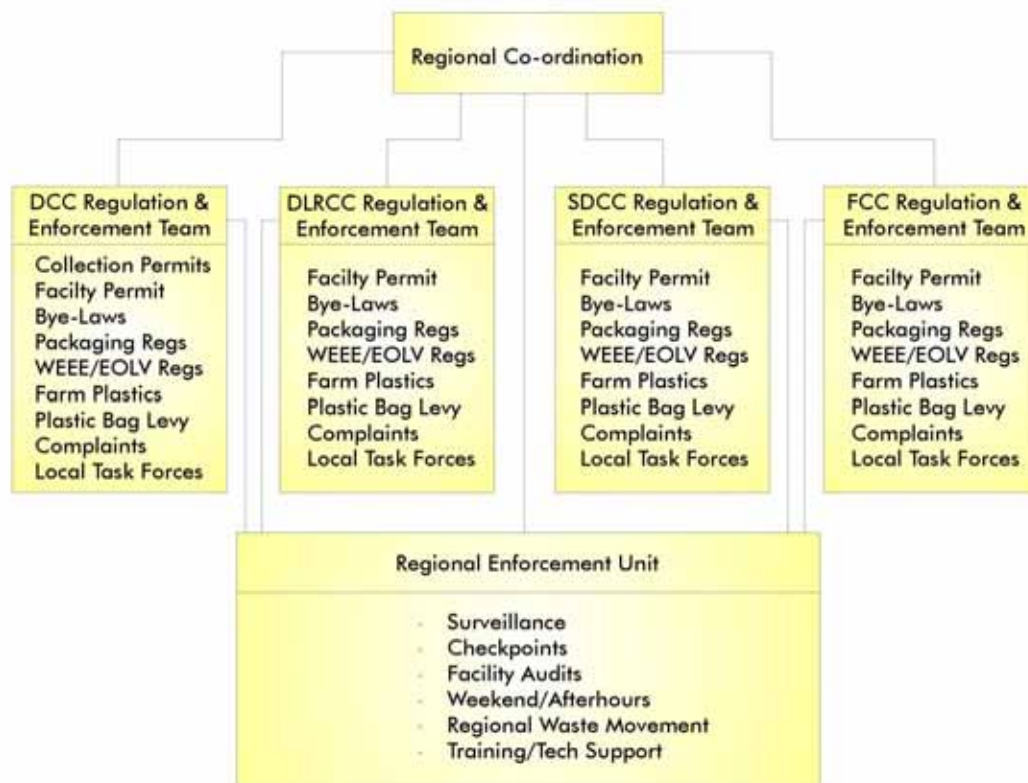
The Regional Enforcement Unit may operate on a full Regional basis, and the role they currently fulfil for FCC and DCC (as back-up and specialist expertise) will be extended by agreement with SDCC and DLRC.

Data Collection and Auditing – currently the completion by waste collectors and contractors of their 'Annual Environmental Reports' is very variable. This has negative consequences for waste planning, reporting and regulation/enforcement in general. More resources will be applied to ensuring that the data is supplied promptly, accurately and in sufficient detail. The Local Authorities will increase the number of audits and spot checks carried out on collection companies and permitted facilities.

- Regulation systems will be improved by the Local Authority (waste collection permit AERs) to determine the number of individual household (including apartment) units served by any private collector and the quantity of household waste collected.

Figure 20.4 below outlines the model for Regional co-ordination of each regulation/enforcement unit and the division of functions. The list of regulatory tasks for the units will expand further as more legislation (e.g. WEEE Regulations, EOLV Regulations) are enacted.

Figure 20.4 Regional Co-ordination of Regulation and Enforcement



National Enforcement Network Established by the EPA

Enforcement of waste legislation is now being coordinated at national level by the EPA, through the National Enforcement Network. The Network is being coordinated by the Office of Environmental Enforcement, an office within the EPA dedicated to enforcement of environmental legislation in Ireland. The EPA established the Network in June 2004 and its work is mainly being conducted through a number of inter Agency working groups and networks on topics such as unauthorised waste activities, TFS and packaging. Waste enforcement needs to happen at different levels - local authority, regional and national - for it to be successful.

The overall objective of the enforcement network is to foster co-operation between the various agencies involved in enforcement of environmental legislation so that effective enforcement is achieved throughout the country. The role, therefore, is to focus the collective resources, expertise and investigative capacity of all the players engaged in environmental enforcement activity in Ireland to bring about changes of behaviour in areas such as unauthorised waste activities, trans frontier shipment of waste and compliance with waste legislation in general.

The Dublin Local Authorities recognise the need for a coordinated and concerted approach to enforcement of waste legislation.

The Dublin Local Authorities will participate in the National Enforcement Network and its working groups and work with other public authorities to achieve an effective and more consistent standard of enforcement of environmental protection legislation. In relation to enforcing waste management legislation, this will include cooperation at regional and national level with other local authorities, the EPA and An Garda Síochána.

The EPA in its role as co-ordinator of the National Enforcement Network is assisting the Local Authorities in developing capacity in terms of regulation and enforcement services of local authorities. All local authorities are in the process of developing a Complaints Handling & Resolution procedure, and a separate 'Environmental Inspection Plan' which will set out the number and frequency of inspections and audits required, as well as procedures for recording and reporting findings of these inspections. These Inspection Plans will be required on an annual basis.

20.6 ROLE OF THE STEERING GROUP

Initially established during the preparation of the Dublin Waste Management Strategy in 1997, the Steering Group is drawn from management, technical and administrative staff from the four Local Authorities. The group will play a pivotal role in leading and co-ordinating the Plan implementation over the coming years. The following are the main functions of the Steering Group.

- Leadership Role – advancing the Plan implementation and driving change across the Region, and responding to change in legislation, policy and the Region.
- Monitoring and Reporting – by means of annual reporting and involving stakeholders in ongoing review
- Infrastructure Development – planning the realisation of facilities serving the Region
- Co-ordinating Role – ensuring that the benefits of Regional co-operation are fully realised by each of the individual Local Authorities as they deliver waste management services.
- Consultation will be needed with neighbouring local authorities with regard to agreeing a common policy with regard to C&DW from the Dublin Region deposited in the functional areas of these neighbouring Local Authorities, and other inter-regional issues.

20.7 ROLE OF THE PLANNING DEPARTMENT OF LOCAL AUTHORITIES

The Planning Section of each of the Local Authorities also has an important role in improving waste management in the Region. This includes responsibility in the following areas:

- **Physical development of buildings** – ensuring homes and workplaces are adapted to meeting the waste collection and recycling needs of the future. Appendix C
- **C&D waste management** – identifying developments that must prepare C&D waste management plans and ensuring these plans are adequate and are implemented
- **Forward Planning** – including the need for integrated waste facilities in the forward planning of communities. For example, including bring banks in housing development plans, and considering waste recycling in Area Plans.
- **Infrastructure development** – private sector development of facilities is part of the Plan, therefore planners will need to liaise with colleagues in the Environment/Waste Management Section to ensure informed decisions are made and that the Waste Plan objectives are met.
- **Development Plans** – ensuring that waste management requirements in Development Plans are implemented and enforced.

21 ROLES AND RESPONSIBILITIES

While the Local Authorities are responsible for leading implementation, the success of the Plan will depend on the actions of the entire society. This section of the Plan highlights the main roles and responsibilities of the other sectors that will contribute to making the objectives of the Plan a reality.

21.1 GENERAL PUBLIC

Each member of the public, as a holder and producer of waste, has a duty to handle waste responsibly and to ensure that any waste produced does not cause environmental damage. Additional responsibilities include:

- To reduce the amount of waste being generated in the home by buying products with less packaging and buying in bulk
- To participate in waste collection schemes where they are available
- To segregate recyclable waste for collection or take to recycling centres or bring banks
- To segregate organic waste for composting
- To avoid burying or burning of waste
- To ensure that waste is presented for collection in the manner required by the Local Authority or waste operator
- To ensure that all waste collectors have a valid waste collection permit

21.2 VOLUNTARY AND COMMUNITY SECTOR

Local Authorities wish to engage with local communities regarding the provision of waste management infrastructure and education on waste prevention, minimisation, recovery and recycling. This is a two-way process in which voluntary and community groups and Non Government Organisations have the following opportunities:

- To co-operate with social economy measures
- To seek Local Authority, EU and National funding for waste minimisation and recycling projects, which will in turn create employment in the local area
- To participate in Tidy Towns competitions
- To discourage littering and undertake 'clean-up' days
- To liaise and co-operate with the Environmental Awareness Officers in the Region
- To take responsibility for the upkeep of bring banks in local communities

21.3 BUSINESS AND INDUSTRY

The business and industrial sectors contribute significantly to the overall amount of waste produced in Ireland. As waste producers, these sectors must take responsibility for the production, handling and ultimate treatment of waste produced on their premises and for waste generated as a result of products they place on the market. Roles and responsibilities include:

- To implement best waste management practice in the workplace with the emphasis on waste prevention
- To segregate waste that is produced into appropriate streams
- To adhere to the Producer Responsibility initiatives, for example for Packaging Waste
- To promote awareness and best practice amongst employees
- To implement green purchasing policies
- To implement, where appropriate, Environmental Management Systems
- To ensure that all waste collectors have the appropriate waste permits/licences
- To explore ways of reducing waste, in the form of packaging, that is passed on to the consumer
- To liaise with Local Authorities and private waste sector in relation to provision of recycling parks for SMEs
- To ensure that all movements of waste, within Ireland and abroad, have the appropriate authorisations and documentation
- To encourage and support initiatives and research into waste management by third level institutions



Unused telephone directories

21.4 PRIVATE WASTE SECTOR

The private sector plays a significant role in waste management in the Region, particularly for Commercial/ Industrial and Construction /Demolition waste. In line with this increased participation, the private sector must also acknowledge its roles and responsibilities in relation to waste management, which include:

- To promote education and awareness regarding waste management
- To implement the requirements of the Waste Plan in line with the principles of the Waste Hierarchy
- To ensure that waste does not cause environmental pollution
- To ensure that all waste activities are adequately licensed or permitted, including the destination of all waste
- To comply with the requirements of all waste permits/licences – including accurate and punctual reporting of waste flows
- To use Best Available Techniques
- To explore and introduce innovative waste management technologies

21.5 ENVIRONMENTAL PROTECTION AGENCY

The EPA has a wide range of statutory duties and powers under the Environmental Protection Act. In addition, the capacity of the EPA in relation to enforcement has been enhanced in the Protection of the Environment Act 2003.

The responsibilities of the EPA in relation to waste management include:

- Leading National Waste Prevention Programme on behalf of Government
- Regulation of major waste facilities through Waste Licences
- Reporting national waste performance through the *National Waste Database*
- Regulating major industries through the Integrated Pollution Prevention and Control Licence
- Preparation and Review of National Hazardous Waste Management Plan, and monitoring implementation
- Co-ordinating and improving Local Authority performance in relation to permitting, regulation, packaging, TFS etc.
- Promotion of environmental best practice through Cleaner Greener Production Programme
- Assisting Local Authorities to improve their environmental protection performance through the establishment of an enforcement network to promote information exchange and best practice, and by the provision of appropriate guidance.

21.6 DEPARTMENT OF ENVIRONMENT HERITAGE & LOCAL GOVERNMENT

In its 'Statement of Strategy 2003 – 2005' the Department of Environment and Local Government (now Department of Environment, Heritage and Local Government) states its Mission Statement is:

"To promote sustainable development and improve the quality of life through protection of the environment and heritage, infrastructure provision, balanced regional development and good local government".

In line with this overall mission, the DOEHLG includes a number of objectives and strategies which include:

- To provide and maintain policies, programmes and a legislative framework for the satisfactory management and reduction of waste.
- Pursuing complementary policy initiatives, including **producer responsibility initiatives** and application of the **polluter pays principle**, to meet environmental and development needs.
- Promoting a partnership approach among the economic sectors, social partners, and non-governmental organisations to key environmental policy and sustainability issues through *Comhar* and other inclusive initiatives such as Local Agenda 21.
- Developing and overseeing implementation of initiatives to prevent or minimise waste in the context of *Preventing and Recycling Waste: Delivering Change*, including a new grant scheme to support greater reuse and recycling, further producer responsibility initiatives (building on the success of REPAK) and additional environmental levies following those implemented successfully in respect of plastic bags and landfilling operations.
- To encourage and support the use of Public Private Partnerships within the local government sector as a way of delivering infrastructure and quality public services in a timely and cost effective manner.

The DOEHLG is also leading the development of markets for secondary materials through its Market Development Group, and exploring the feasibility of an all-Ireland paper recycling facility with its counterparts in Northern Ireland.

22 MONITORING IMPLEMENTATION, & ONGOING STAKEHOLDER INVOLVEMENT

22.1 ANNUAL REPORT

An Annual Report will be prepared by the Local Authorities to update on progress in plan implementation. This will be prepared by the end of June (commencing in 2007) every year based on data for the previous calendar year with a summary of key waste statistics provided each year. The annual report will synthesise information from each of the four Local Authorities and is expected to include details of performance in relation to:

- Key Performance Indicators specified below
- Prevention/Minimisation and associated waste awareness activities
- The delivery of the main collection systems, facilities and infrastructure required by the plan
- Regulation and Enforcement activities
- Reporting any difficulties or challenges emerging in Plan implementation
- Review financial performance and implementation of Polluter Pays Principle, including for example a review of the charging mechanisms for waste services

22.2 CONSULTATION FORUM AS PART OF ANNUAL REPORT

The Dublin Local Authorities recognise the need for input of the various stakeholders in waste management in plan implementation. It is proposed to invite the various stakeholders in the Region to comment on the Draft Annual Report. This is an opportunity to provide feedback on the implementation of the Plan, and to bring forward new proposals or innovations as they arise.

Preparation of an Annual Report gives an opportunity for two-way communication with relevant sectors including the waste management industry, community and voluntary sectors, etc. The private waste sector has significant responsibility in the Plan for collecting waste, developing facilities, all of which requires significant investment.

Proposed participants in the forum include:

- Waste holders/producers – households, business, institutions, and industry
- Organisations handling or managing waste – private waste companies and charity sector
- Voluntary and Non Government Organisations
- Representative groups such as the company REPAK representing the packaging industry, and the CIF/ NCDWC
- Regulators, policy makers, public sector – such as the EPA, DoEHLG
- Local Authorities of the GDA - Kildare, Meath and Wicklow County Councils.

The consultation will be developed through a 'Regional Waste Forum' – which will enable better partnership to be developed with the sector in the coming years. This annual stocktaking exercise will also provide an opportunity to consult with and coordinate activities with other Local Authorities regarding prevention, recovery, collection and disposal.

22.3 TARGETS AND INDICATORS

22.3.1 Need for Targets and Indicators

A recommendation of the Government policy statement 'Taking Stock and Moving Forward' was for Local Authorities to adopt a more systematic and regular assessment of how well the waste management plan is being implemented. This follows the performance-based system for local government as required under the 'Delivering Value for People – Service Indicator in Local Authorities'. This document outlined 42 performance indicators for Local Authorities, a number of which relate to waste management as follows:

Service Indicators of the 'Delivering Value for People' Policy

E6 - % of households provided with segregated waste collection

E7 - % of household waste recycled

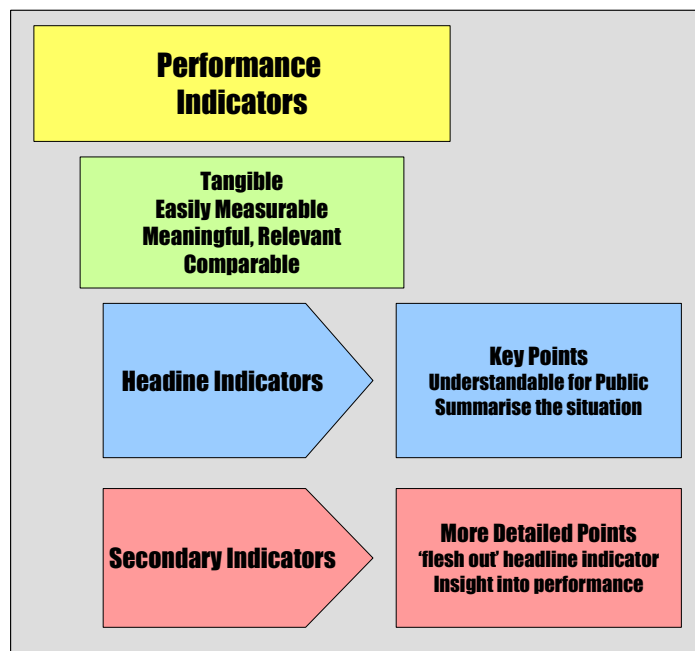
E8 - % of household waste landfilled

E9 - Recycling facilities: No. Bring Banks and Recycling Centres / 5000 population, and tonnage collected/ 5000 population

E10 – Litter enforcement (several indicators)

E11 – Environmental complaints and enforcement (including waste, noise, air and water pollution)

E12 – % of primary and secondary schools participating in environmental education



Using 'key performance indicators' will prove a useful tool for benchmarking the waste management performance and comparing Dublin's progress with other Regions nationally and internationally. They will also demonstrate to the public the real progress being made.

22.3.2 Existing Indicators and Targets

The following targets have already been set out:

- Targets of the original Dublin Waste Strategy and Plan (as outlined in Section 16)
- National targets set by the Government Waste Policy 'Changing Our Ways'. These were set in 1998 with a 15-year horizon (2013).
- Targets and monitoring indicators already employed by the EPA National Waste Database Reports, and also those recommended in the Draft Biodegradable Waste Management Strategy (April 2004)
- Local Authority performance indicators set out in 'Delivering Value for People' (see above)

Bearing in mind the above, and the availability of actual waste management data in the Dublin Region, a series of headline and secondary performance indicators have been set out for the Dublin Region.

22.3.3 Headline Indicators

The following headline indicators are recommended for monitoring the overall success of Plan implementation. These are chosen for consistency with the existing Waste Strategy targets and objectives, and to reflect the main categories of waste addressed in the Plan.

Table 22.1 Headline Indicators

Area	Headline Indicator
Prevention & Minimisation of Waste	Household Waste Generated per capita
Recycling of Municipal Waste	Municipal Waste Recycling Rate
Construction & Demolition Waste	% C&D Waste Recycled
Waste Electrical and Electronic Equipment	Kg WEEE collected for Recycling per capita
Household Hazardous Waste	% Household hazardous waste in residual waste bin
Packaging Waste Recovery	% Recycling of Packaging Waste
Recovery of Energy from Waste	Energy Recovery Rate
Landfill Disposal	Tonnage Biodegradable Waste Landfilled

Each of the Local Authorities will prepare its own EPA national waste database annual return, which will include details on some of the above. The Regional Waste Steering Group should then combine these when preparing the overall Annual Report where a Regional perspective can be achieved.

22.3.4 Ability to Measure Performance

In order to apply the above indicators, the level of waste management planning expertise within the Local Authorities should be gradually improved. Current data collection and management will need to improve in the following areas:

- Efficient data collection and management by Local Authorities – fulfilling the requirements of the EPA *National Waste Database* annual electronic reporting system in a consistent and punctual way
- Ensuring full compliance by private waste management companies with reporting requirements under *waste collection permits* and *facility waste permits*. This will require

vigorous enforcement where reports are not returned, or not accurately completed, including spot checks and audits on facilities and collectors.

- Improved recording at Recycling Centres – detailing the types and quantities of each waste stream collected
- Regular assessment of the waste stream for recycling and disposal by means of waste composition studies

22.4 TARGETS AND SECONDARY INDICATORS

Building on the overall Plan targets set out in Section 17, these are the targets set out relating to each of the headline indicators. Some secondary Indicators within each of these Headline Indicators have also been suggested for use in the Annual Report.

The Annual Report, monitoring progress made towards achieving the targets set out in the Waste Management Plan will also include a Regulation and Enforcement Section with the following headings, to be reported on a Regional basis: No. of Staff, No. of Facility Audits, No. of Facility Inspections, No. of Checkpoints and Collector Inspections, and No. of Fines issued.

Table 22.2 Headline Indicator Targets

Headline Indicator	2003 Performance	Target
Household Waste Generated per household	1.21 tonnes/annum	1.25 tonnes/annum 2006 onwards
Municipal Waste Recycling Rate	27%	45% by 2010
Proportion of Household and C/I waste sent for Energy Recovery	0 %	38% by 2013
Tonnage Biodegradable Waste Landfilled	431,340	175,030 by 2009 (requires WTE)
% C&D Waste Recycled	17.8% (excl soil)	85% by 2013
Kg (household) WEEE collected for Recycling per capita	2.5 Kg	4 Kg by 2006
% Household Hazardous Waste in residual waste stream	1.1%	0.75% by 2008
% Recycling of Packaging Waste	39.7%	55% by 2011

The following graphs illustrate some of the above targets and demonstrate how monitoring will be carried out for all Indicators in the Annual Report.

Figure 22.1 Monitoring Recycling and Recovery Targets

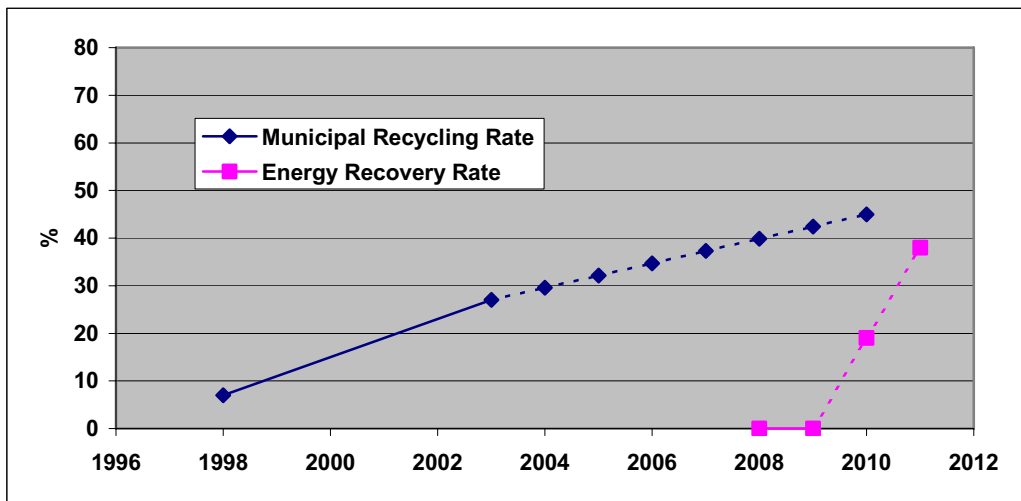


Figure 22.2 Biodegradable Waste Landfilled – Targets for Reduction

