Waste Management

Taking Stock and Moving Forward

April 2004

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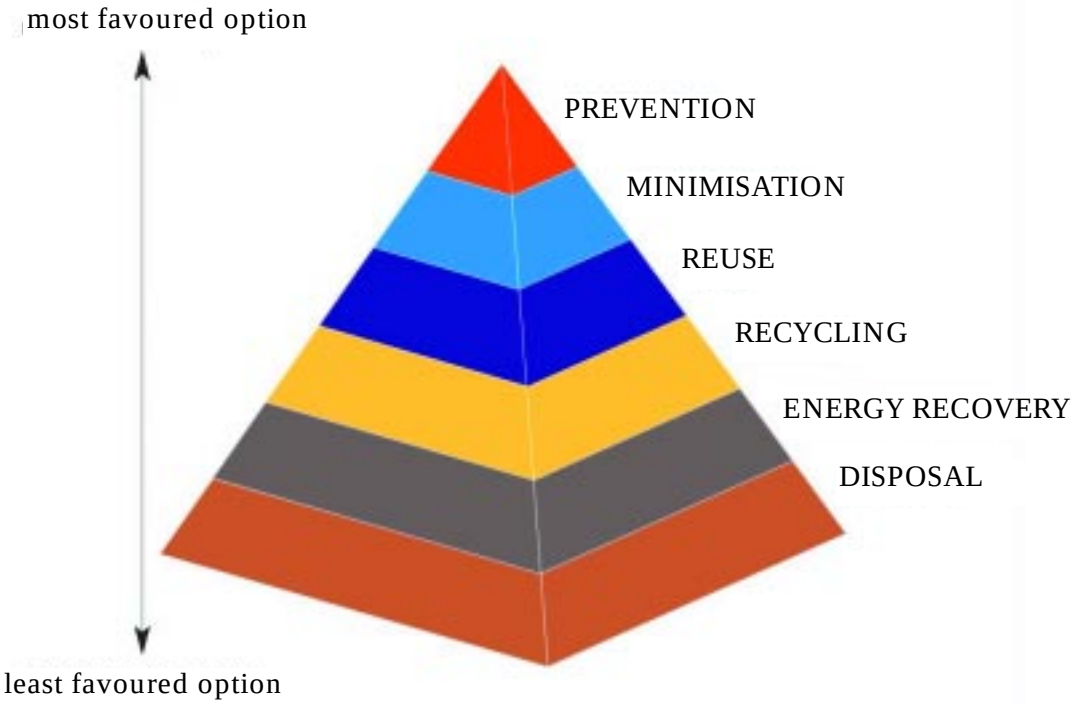
1. The Waste Management Framework

1.1 Introduction

Waste management is widely recognised as one of the most problematical areas of Irish environmental management. Waste generation is directly linked to trends in consumption and output, reflecting population growth and household formation, the level of manufacturing, industrial and agricultural activity, and overall economic performance. Waste streams are very diverse, and their management requires consideration of a wide range of environmental, technical, economic and market-related issues. Waste treatment options are often controversial and proposals for significant-scale waste infrastructure have generated strong opposition. Overall, the delivery of waste services and infrastructure is inherently more complex than the provision of other environmental services, such as water and wastewater management.

1.2 Waste Management Policy

A comprehensive policy framework for modernising our approach to waste management was put in place in 1998 in the form of the Policy Statement "*Waste Management: Changing our Ways*". In summary, the policy approach was based on the "integrated waste management" approach, based on the internationally adopted hierarchy of options which places greatest emphasis on waste prevention, followed by minimisation, re-use, recycling, energy recovery and, finally, the environmentally sustainable disposal of residual waste.



The policy context was strengthened in 2002 with the publication of "*Preventing and Recycling Waste: Delivering Change*".

1.3 Waste Legislation

In parallel with the modernisation of our waste management policies, a comprehensive body of legislation has been put in place to provide a sound legal basis for waste management planning and to comprehensively regulate activities in the waste sector. The Waste Management Act 1996 and amendments made to it through the Waste Management (Amendment) Act 2001 and the Protection of the Environment Act 2003, along with a wide range of supporting regulations, have brought the law in relation to waste in Ireland into line with best European practice.

1.4 Waste Management Planning

"*Changing our Ways*" highlighted the need for a new approach to the delivery of waste infrastructure and services. This challenged the older model of stand-alone provision of waste services by individual local authorities. It emphasised instead the need for co-operation with neighbouring local authorities and the utilisation of the potential of the private sector to contribute to the delivery of services. Local authorities were therefore encouraged to adopt a regional approach to waste management planning in order to secure a level of scale and activity which would provide a sound basis for the development of integrated and innovative waste management solutions.

Since 2001, full national coverage in terms of waste management plans has been achieved. There are, in effect, 7 regions (involving 31 local authorities) while the 3 remaining authorities have prepared individual plans.

1.5 Review of Progress and Issues Arising

The combination of clear policies, a comprehensive legislative framework and the completion of waste management plans nationwide in 2001, has provided the basis for a radical modernisation of our waste infrastructure and services. Over the past 5 years, the licensing/permitting regime in relation to waste facilities has been fully rolled out, as has the collection permit system for those involved in waste collection activities. In addition, much valuable work has been done in rolling out the infrastructure which the local authority waste management plans provide for. This has been particularly evident in the recycling area with significant increases in the numbers of bring banks, civic amenity sites, materials recovery facilities/transfer stations and services for the segregated collection of recyclables from households. As noted by the EPA at the time of publishing the National Waste Database Report for 2001 in July 2003, "*recycling rates have increased, the waste industry is more comprehensively regulated, waste statistics are more reliable and a more balanced waste management infrastructure is beginning to take shape*". Section 3 of this document outlines the state of progress in more detail.

While acknowledging the considerable progress made, it is clear that further work remains to be done to put the full range and scale of waste infrastructure in place. In order to ensure that Ireland is best placed to make the further progress that is necessary, it is important that the policy framework takes account of significant developments in the waste sector over the last 5 years. It is necessary to consider –

- the implications of the more up to date waste data now available,
- structural changes which have taken place within the waste sector, taking particular account of the growth and consolidation of the private sector's role in waste activities and the appropriate roles for the public and private sectors, and
- how to ensure we achieve more intensified and consistent enforcement of the law in relation to waste.

Section 4 of this document looks at these issues in more detail and sets out a responding programme of actions.

2. Waste Management - the Path to Modernisation

2.1 Historical Perspective

Until relatively recent times, waste management was the least developed of our environmental services. Traditionally, it was a local authority function, with no "hands-on" involvement from central government and no Exchequer funding of any significance being provided. The regulatory framework was underdeveloped, with no external regulation of local authority waste activities. Consequently, low-technology solutions were applied by local authorities, at their own discretion – essentially, they provided collection services and landfill facilities for municipal and some commercial / industrial wastes, while problematical industrial wastes were dealt with by the industry sectors concerned.

By the mid-1990's, it was evident that there were major shortfalls in infrastructure and waste management practice. There was limited recycling activity; in fact, Ireland's recycling rate was among the lowest in the EU. There was no biological treatment capability, and no means of recovering energy from waste. Ireland was heavily reliant on a landfill network that did not reflect modern environmental standards.

2.2 The Modernisation Process

The process towards securing the radical transformation of waste management practices in Ireland can be summarised by reference to a number of major milestones.

1996; The first step came with the introduction of a modern legislative framework to underpin future progress. The Waste Management Act 1996 introduced a new regulatory regime to apply to waste management activities and assigned new powers and functions to public authorities. While recognising the scope for private sector involvement in waste management, it introduced a broad regulatory role for local authorities and the Environmental Protection Agency and maintained a central (though qualified) role for local authorities in the provision of waste services.

In particular, the 1996 Act imposed an obligation upon the 34 major local authorities to make and implement detailed waste management plans, designed to lay the foundation for a comprehensive overhaul of waste management practices. The Act also placed a qualified obligation on local authorities to collect and provide recovery / disposal facilities for household waste.

1998; The legislative framework was built upon in 1998 with the publication of the first comprehensive Government policy statement on waste. Entitled "*Waste Management: Changing our Ways*", the policy statement was primarily concerned with the management of municipal wastes, and was intended to influence the orientation

of local authority waste management plans. It strongly endorsed a regional approach to waste management planning that would allow for greater efficiencies and economies of scale in the provision of services and infrastructure.

It identified as a key objective the dramatic reduction of our reliance on landfill, in favour of a range of waste treatment options that better reflected the waste hierarchy and the need for environmental sustainability. Ambitious recycling and recovery targets were set out, to be achieved over a 15-year timeframe.

Targets to be Achieved by 2013

- Diversion of 50% of household waste from landfill
- Minimum 65% reduction in biodegradable wastes consigned to landfill
- Recycling of 35% of municipal waste
- Recycling of 85% of C & D waste (50% rate to be achieved by 2003)

Though primarily directed at local authorities, *Changing our Ways* envisaged greater participation by the private sector in the provision of waste management services and infrastructure.

1998-2001; The coming together of most local authorities into regional groupings marked the next significant milestone along the road towards soundly-based integrated waste management planning. Seven regions evolved, reflecting geographical, demographic and other relevant considerations. Twenty-nine local authorities were involved in six regional waste management plans for the Dublin, North-East, Connaught, Midlands, Clare/Kerry/Limerick and South-East regions. Cork City and County Councils developed individual plans, but pursuant to a common waste strategy and objectives, and are effectively regarded as a seventh region. Three authorities - Donegal, Kildare and Wicklow - decided on individual county plans, but with provision for possible future interaction with neighbouring regions. The resulting regional waste management planning map of Ireland is shown at Appendix 1.

The process of putting waste management plans in place was lengthy and problematical, mainly because of public and political opposition to proposals in the Plans for the development of thermal treatment and, to a lesser extent, landfill facilities. However, utilising the powers provided under the Waste Management (Amendment) Act 2001, all local authorities concluded the waste management planning process by September 2001. Since then, the focus has been on plan implementation.

The waste management planning framework was strengthened further with the completion in 2001 of a National Hazardous Waste Management Plan (NHWMP) by the EPA. Local authority waste management plans are required to address the implementation of relevant measures consequent on the provisions of the NHWMP or related EPA recommendations.

2002; The policy agenda in relation to waste took another major step forward in March 2002 with the publication of a comprehensive policy statement specifically focused on waste prevention and recycling. "*Preventing and Recycling Waste: Delivering Change*" sets out an ambitious agenda of initiatives designed to achieve progress at the top of the waste hierarchy, in terms of preventing waste arising in the first place and achieving improved levels of recycling of waste that does arise. Funding to modernise our recycling infrastructure and other initiatives such as the introduction of a landfill levy (subsequently introduced in mid-2002) and new Producer Responsibility Initiatives were among the instruments envisaged.

2003; Most recently, the regulatory regime in relation to waste management planning and waste licensing/permitting was updated again through provisions of the Protection of the Environment Act 2003. This Act also introduced a number of important strengthenings of the enforcement provisions of the waste code.

2.3 Taking Stock and Moving Forward

It is timely, for a number of reasons, to carry out a "stock-taking" exercise in terms of where we now stand in relation to waste management. It is necessary to –

- assess progress to date with the implementation of plans,
- consider developments since the policy framework and the local authority waste management plans were put in place, and
- looking forward on the basis of current information, identify measures that can be undertaken to further support progress towards our stated objectives.

Sections 3 and 4 of this document examine the relevant issues in more detail.

3. Progress on Implementing Local Authority Waste Management Plans

3.1 Introduction

Before examining the progress which has been achieved in terms of delivering the main waste-related infrastructure provided for in local authority waste management plans, it may be useful to first -

- consider the background against which the Plans were prepared, and
- set out at a general level, details of the infrastructure objectives which the Plans sought to achieve.

3.2 Context for Waste Management Plans

Waste infrastructure in Ireland at the time of the preparation of waste management plans was both unsophisticated and significantly underdeveloped. The following is a summary of the situation which obtained at that time, from which the infrastructure deficits are obvious;

- The extent of ***source segregation and kerbside recycling*** was very limited. Such services were available in respect of domestic waste in only a few towns, plus about 50,000 households in the Dublin region (source segregation was more common in respect of commercial waste). There was only one pilot scheme for kerbside collection of organic wastes.
- There were less than 850 "***bring" sites***, with an uneven geographic distribution, which meant that some areas (rural communities in particular) were not serviced by these facilities.
- There were some 30 operational ***Civic Amenity Sites***, many of which were located at existing landfill facilities and were operating on a limited basis, i.e. accepting little more than the materials typically collected at bring banks.
- In terms of ***Materials Recovery Facilities and Transfer Stations,*** there were six local authority transfer stations in the Clare / Kerry / Limerick Region, primarily supporting the operation of landfills, as opposed to sorting of waste for recovery / recycling purposes. Several private transfer stations were also in operation.
- Despite the fact that ***biodegradable wastes*** account for some 65% of the total municipal waste stream (over half of this is paper and card which can be

recycled, while organic waste (i.e. food and garden waste) accounts for close on a further 40%), less than 6% of collected biodegradable wastes were recovered and this was heavily focused on paper (in respect of which a 15% recovery rate was recorded in 1998). Many local authorities were promoting home composting schemes, under which householders were offered composting units at a subsidised rate.

- While there were a number of in-house hazardous waste incineration facilities associated with pharmaceutical and chemical plants, there were no ***waste-to-energy/thermal treatment*** facilities for municipal waste, and no specific plans for the provision of such capacity.

- With limited recycling facilities in place and no thermal treatment, ***landfill*** was the main outlet for waste arisings. According to the EPA National Waste Database Report for 1998, there were 76 local authority operated landfills in the country. It was generally accepted that their operation did not reflect modern environmental standards and the process of licensing such facilities by the Environmental Protection Agency had barely begun.

3.3 Waste Management Plan Objectives

The *National Overview of Waste Management Plans* published in association with this document sets out in detail the objectives of each of the waste management plans in terms of the waste volumes expected to arise, the manner in which such wastes were to be managed and the infrastructure to be provided. The following is a general overview of the range of infrastructures which the plans envisaged;

- Most Plans contain specific proposals for **kerbside collection of recyclable materials** in urban areas, to be introduced on a phased basis, and with an ultimate objective of providing such services in all towns above an appropriate threshold (generally about 500 households or 1,500 population). Initially, dry recyclables would be collected, with separate collection of the organic fraction of waste to follow.

- Typically, Plans aim to achieve a density of the order of 1 "**bring**" **bank** for every 500 to 1,000 population (particularly in non-segregated collection areas), with a more even and widespread distribution. The focus was to be on collection of glass and aluminium, which are more easily recycled, with less attention to facilities for collection of paper and plastics, which would more readily be collected and dealt with via kerbside schemes.

- A network of **Civic Amenity Sites** was proposed, mainly for the collection of bulky recyclables and household hazardous wastes.

- A network of **Materials Recovery Facilities and Transfer Stations** was envisaged, designed to support other recovery facilities (such as composting or thermal treatment plants). Several Plans also proposed to establish reuse / repair centres for household wastes.

- Generally, each Plan envisaged the provision of a central **biological treatment facility** for biowastes (catering and / or agricultural waste); central green (garden) waste composting plants were also envisaged with some Plans envisaging additional reception facilities for such waste at civic amenity sites. Home composting was also to be promoted.

- Generally, Plans identified a need for regional **thermal treatment facilities** in the medium to long-term. Some Plans, while not providing for the provision of thermal treatment themselves, envisaged co-operation with neighbouring local authorities in meeting their thermal treatment requirements.

- In terms of **landfill**, waste management plan objectives were set against the background of the *Changing Our Ways* Policy Statement which sought to secure a progressive rationalisation of the municipal landfill network, the ultimate target being an integrated network of perhaps 20 state-of-the-art facilities incorporating energy recovery and high standards of environmental protection. However, it recognised that there were situations where local authorities faced an imminent shortage of disposal capacity and that interim solutions would be required. Therefore, generally, in addressing landfill requirements, waste management plans adopted a two strand approach whereby additional capacity would be provided in the short term, while medium to long term measures were implemented to secure diversion of waste away from landfill.

3.4 Government Support for Waste Recovery Infrastructure

Given the underdeveloped state of waste infrastructure in Ireland, it was recognised that significant investment in new facilities would be required in order to turn the objectives of the local authority waste management plans into reality. Recognising this, the Government is playing an important part in the investment process through the allocation of significant resources from the Environment Fund towards improved recycling infrastructure. The Fund was established in 2002 to receive the proceeds of the Plastic Bags Levy, introduced in March 2002, and the Landfill Levy, introduced in July 2002.

The 55 million environmental expenditure programme from the Fund announced in 2003 was heavily weighted in favour of activities in the waste area.

- A significant proportion of the funding - about 26 million – was assigned to a capital grants scheme which is targeted at recycling infrastructure that reflects the waste hierarchy. Under the scheme, grant assistance is available towards the capital cost of a range of recovery facilities, in particular "bring banks" and civic amenity sites, transfer stations facilitating recovery activities, and materials recovery and biological treatment facilities.

  22m of this has already been allocated in capital grants towards 71 local authority recycling projects, involving the provision of about 580 new "bring bank" sites (and upgrades of others), 25 new and 5 expanded civic amenity sites, 9 composting facilities, and 1 new and 1 expanded Materials Recovery Facility.

- A further 5 million has been provided to local authorities to offset the rising operational costs of existing recycling facilities.

- In addition, over 20 million has been earmarked for a range of other waste and environmental measures, including a programme of significantly improved enforcement of the law in relation to waste, and a national waste awareness/communications campaign.

Capital assistance is generally not being provided in respect of thermal treatment or landfill projects. However, funding is being made available to meet local authority planning and procurement costs arising from the provision of regional waste infrastructure by way of Public Private Partnerships (PPP's). In addition, funding may be provided towards the provision of a hazardous waste landfill, the need for which was specifically identified in the National Hazardous Waste Management Plan prepared by the EPA.

3.5 Waste Management Plans - Progress on Implementation

The *National Overview of Waste Management Plans* published in association with this document sets out, on a region by region basis, the progress made, generally up to end-2003, in providing the principal pieces of waste infrastructure envisaged in local authority waste management plans. It is important to note that -

- further progress continues to be made on an ongoing basis; and

- the progress reported does not reflect the full impact of the investment programme outlined earlier; the construction of many projects to which funding has been allocated has yet to be completed.

It is useful to look at the national implementation situation which emerges when reports of progress in each of the individual regions are drawn together. The following tables provide a snapshot summary of the position under each of the three headings – recycling, waste-to-energy / thermal treatment and landfill.

3.5.1 Recycling

The Table which follows sets out the position in relation to the delivery of the main waste infrastructure proposals required to meet the municipal recycling objectives of the plans. Overall, significant progress has been achieved on the roll-out of the service for the segregated collection of dry recyclables. At end-2003, this service was available to almost 564,000 households, the equivalent of some 42% of the estimated 1.34 million households in the State in 2003; the comparable figure in 1998 (when the process of preparing waste management plans was beginning) was estimated to be of the order of about 70,000 households. In addition, over 52,000 of the 564,000 households with a service for the segregated collection of dry recyclables also have segregated collection of organic waste.

Segregated collection of dry recyclables, organics and residual waste.

Recycling Infrastructure - Summary of Progress at end - 2003												
Region	Segregated Collection of Dry Recyclables (Number of Households)			Bring Banks			Civic Amenity Sites (Recycling Centres)			Materials Recovery Facilities, Biological Treatment / Composting Facilities & Transfer Stations		
	Prop	IP**	%	Prop	IP	%	Prop	IP	%	Prop	IP*	%
Dublin	270,000	294,400	109%	-	281	-	10	7^	70%	-	10	-
Cork	-	0	-	160	155	97%	5	5	100%	1	5	500%
Connaught	60,000	51,097	85%	509	279	55%	21	6	29%	13	8	62%
S East	140,000	63,038	45%	423	375	89%	22	11	50%	10	5	50%
Clare / Kerry / Limerick	43,000	43,550	101%	260	181	70%	12	10	83%	4	8	200%
N East	43,600	51,000	117%	192	79	41%	10	5	50%	3	4	133%
Midlands	30,000	28,975	97%	174	187	107%	12	6	50%	4	3	75%
Donegal	40,000	1,400	4%	-	52	-	-	1	-	-	0	-
Kildare	22,500	29,421	131%	67	40	60%	3	1	33%	2	2	100%
Wicklow	19,000	800	4%	102	55	54%	4	3	75%	2	1	50%
Total	**668,100+**	**563,681**	**84%**	**1,887+**	**1,684**	**89%**	**99+**	**55**	**50%**	**41+**	**46**	**112%**

Prop = Proposed; IP = In Place

- \- Indicates that a target was not specified in, or cannot be derived from, the Waste Management Plan
- * Includes 28 private sector waste facilities licensed by the EPA
- ** Over 52,000 of these households also have access to service for segregated collection of organics
- ^ Includes 1 Civic Amenity Site opened in early 2004

Similarly, good progress is being made in the roll-out of bring banks. The number now reported is more than double the 1998 level and represents a much-improved overall national density of approximately 1 bank per 2,300 persons. Increasing attention is also being paid to the upgrading of existing bring banks and to their maintenance / servicing to a higher standard.

The network of Civic Amenity Sites (Recycling Centres) has also expanded quite significantly, up from some 30 facilities (many accepting a quite limited range of waste materials) in 1998 to 55, many of which accept a much wider range of waste materials. A further 6 sites under construction are at an advanced stage and will therefore be in a position to become operational in the short term.

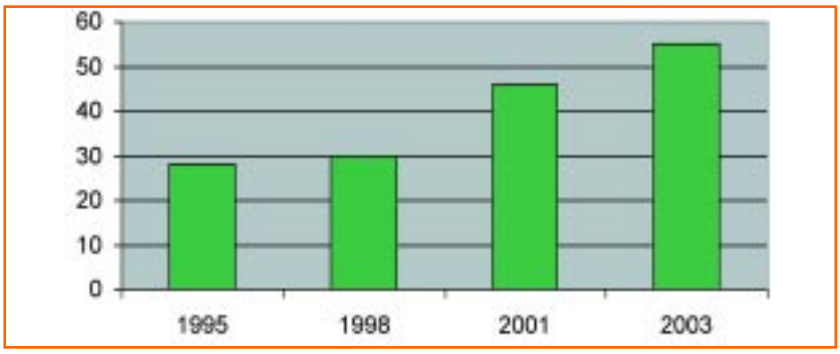
The progression over time in providing the key recycling infrastructure and services can be seen from the following table;

Recycling Facilities and Services 1995-2003				
	1995	1998	2001	2003
Bring Banks	426	837	1,436	1,684
Civic Amenity Sites (Recycling Centres)	28	30	46*	55 (+6 close to competion)
Households with segregated collection of dry recyclables	< 50,000	c. 70,000	c. 200,000	563,681^

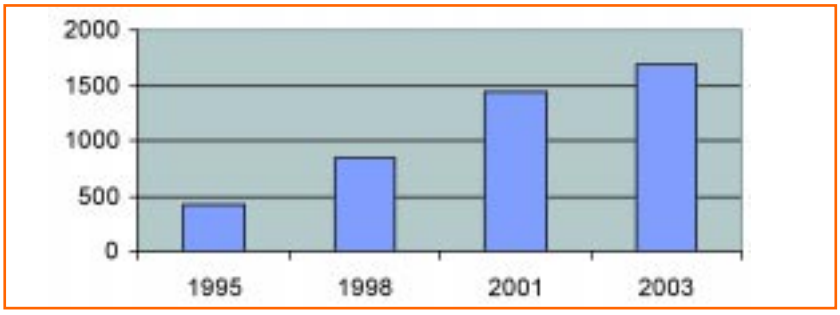
* Although figure quoted in 2001 National Waste Database was 53, it appears that there had been a number of misclassifications under this heading

^ Over 52,000 of these households also have segregated collection of organic waste

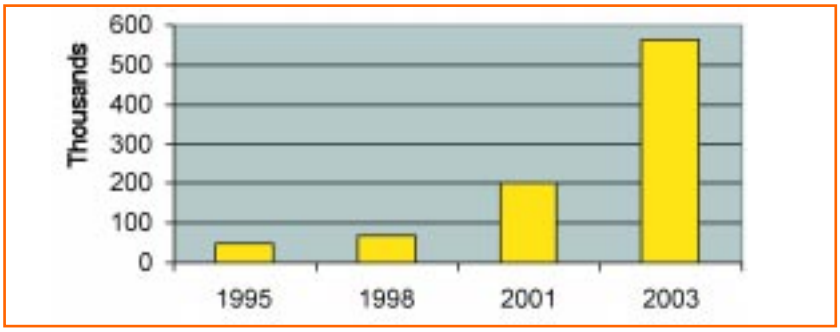
Civic Amenity Sites



Bring Banks



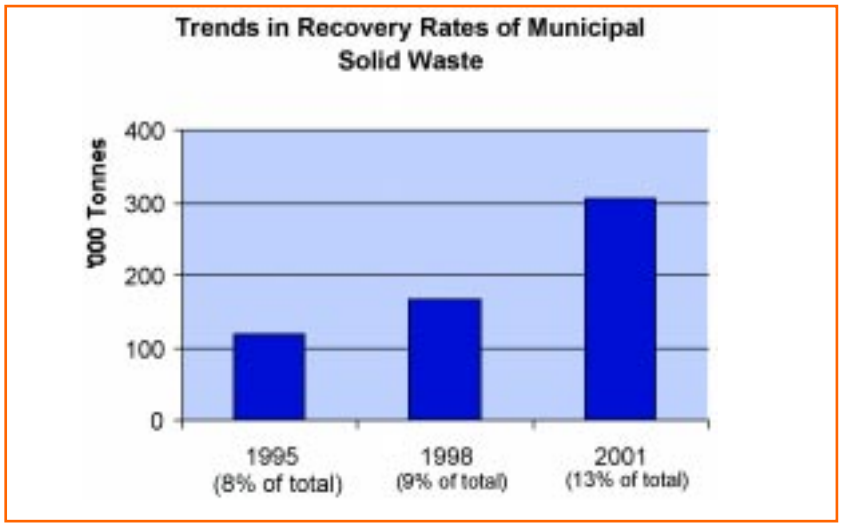
Households with segregated collection



The impact of the expanded and modernised waste infrastructure and services on the levels of recycling can only be accurately gauged through the comprehensive National Waste Database Reports compiled by the EPA. The early impacts of the modernisation of our waste infrastructure and services were visible from the 2001 National Waste Database Report which showed a significant pick-up in the pace of increase in recycling, as shown in the table below.

Landfill and Recovery of Municipal Solid Waste

	1995	1998	2001
MSW Landfilled (tonnes)	1,385,439 (92%)	1,685,766 (91%)	2,061,140 (87%)
% increase on previous report		22%	22%
MSW Recovered (tonnes)	117,732 (8%)	166,684 (9%)	305,554 (13%)
% increase on previous report		42%	83%



The next Database Report to be prepared will cover the year 2004 and should be available in late 2005 / early 2006. That Report should see substantial impacts arising from the expansions of facilities and services in the 2002 – 2004 period. In advance of the 2004 Database Report coming available, there are clear signs that the new infrastructure is translating into increased levels of recycling. For example, data from local authorities indicates that the volumes of waste accepted at their bring banks and Civic Amenity Sites in 2003 were up 25% on the levels just one year earlier.

As indicated previously, the situation represented by the foregoing 2003 data on recycling facilities and recycling should be seen as an interim rather than a final report of progress under the present suite of waste management plans. Even in those areas showing the least progress under individual headings, preparatory work to underpin

future progress is generally underway. Indeed, the full impact of already announced Government investment in recycling and recovery infrastructure has yet to be felt – the first allocations of grant assistance were only made in late 2002 and were followed by further allocations in April 2003. There can therefore be reasonable confidence that further significant progress will materialise in the short term under many of the recycling infrastructure headings.

In terms of future progress, the significant challenges which arise relate to –

- The further extension of segregated collections of dry recyclables and the considerable work that remains to be done on the introduction of segregated collection of organic waste;

- The need to make early and substantial progress on the provision of biological treatment facilities; and

- Generally ensuring that the provision of segregated collection, bring banks and civic amenity sites takes account of the increases in waste volumes now in evidence and higher population / household numbers (the potential implications of which are outlined in the region-by-region commentaries in the *National Overview of Waste Management Plans* being published in association with this document).

3.5.2 Waste-to-Energy/Thermal Treatment

Most of the waste management plans envisaged a role for some form of waste-to-energy or thermal treatment technology in the overall package of waste management

Thermal Treatment facility at Alkmaar, the Netherlands

measures to be put in place. The table below summarises the extent of progress which has so far been achieved.

Thermal Treatment – Summary of Progress at end-2003/early 2004		
Region	Thermal Treatment Provided for in Waste Management Plan	Progress
Dublin	Yes	PPP procurement process well underway. 4 bidders shortlisted. "Invitation to Negotiate" Documents issued to shortlisted bidders.
Cork	Feasibility studies to be carried out	Possible capacity for commercial and household waste in a second phase of privately promoted hazardous/industrial waste facility in Ringaskiddy for which planning permission has been granted. Decision on waste licence awaited.
Connaught	Yes	No significant progress to report
South East	Yes	Outline Business Plan for procurement of infrastructure completed. Procurement of services of Client's Representative for advancement of PPP process underway.
Clare/Kerry/ Limerick	Yes	No significant progress to report
North East	Yes	Planning Permission granted for private sector project. Decision on waste licence awaited.
Midlands	Yes	Preliminary work on site selection and procurement aspects of PPP project underway.
Donegal	Not in current plan	To be revisited at next review of Plan in 2005
Kildare	Yes, "Alternative" arrangements to be considered in co-operation with neighbouring local authorities	Dependent on progress in other regions
Wicklow	Yes, but not in County Wicklow	Dependent on progress in other regions

While most Plans envisaged the provision of thermal treatment as a long-term objective, the time that can be required in order to procure such projects (they are envisaged for delivery through PPP's) and to complete the necessary planning and environmental licensing processes means that those regions which have yet to show progress in this regard need to initiate action in the shorter-term.

As can be seen from the table above, progress can be reported in the North East, Dublin, Cork, the South East and (albeit in a preliminary way) in the Midlands.

However, in the other areas which identified a need for thermal treatment – Connaught and the Clare/Kerry/Limerick region - there has been little in the sense of substantive progress. The local authorities concerned will need to give early consideration to how they envisage accelerating progress towards meeting the objectives of their waste management plans in relation to thermal treatment.

3.5.3 Landfill

In line with national policy, the move from a high number of poorly managed landfill facilities to a much smaller number operated to the highest of environmental standards has continued in recent times. While there were 87 local authority landfills in 1995, this reduced to 76 in 1998 and to 50 by end-2001. This downward trend has continued since then, with the number of municipal landfills now of the order of 35.

While the Plans have set targets designed to achieve the national policy objective of maximum diversion of waste away from landfill, this can only be achieved if the other aspects of the Plans (i.e. recycling and thermal treatment) are fully implemented. In that regard, as noted earlier, good progress is being made in relation to the delivery of the recycling infrastucture required under the waste management plans and, while further challenges remain in relation to the full achievement of recycling objectives, work underway and initiatives in planning provide a good basis for confidence in relation to future progress. Because of the limited number of thermal treatment facilities envisaged, progress is not measurable in the sense of a progressive roll-out of facilities, as in the case of recycling. Instead, progress materialises in the form of a small number of significant advances, such as the granting of planning permission for two facilities to date and the advancement of the Dublin facility into the substantive phase of the PPP procurement process.

The importance of full and timely delivery on the recycling and thermal treatment objectives of the Waste Management Plans cannot be overstated. The alternative scenario would see greater pressure than expected on landfill capacity for longer periods of time, requiring the adoption by local authorities of responses which provide further short-term solutions, without prejudicing the achievement of the longer-term goal of achieving maximum diversion from landfill.

Insofar as landfill capacity is concerned, the most recent EPA National Waste Database Report for 2001 provided an estimate of remaining capacity in each of the 10 waste management planning regions in 2001. This is set out in the following table, along with more recent comparable data which has since been compiled by the Agency.

Region	Estimated landfill capacity remaining in 2001	*Estimated landfill capacity remaining in 2004 ^	Comment on 2004 position and details of steps being taken to provide further capacity
Dublin	3 years	7 years	7 year capacity estimate takes account of Baleally extension (5 cells completed; first of these about to become operational) and grant of permission for extension of Arthurstown (Kill) facility until 2007. In terms of further capacity, site selection process is underway for 2 new landfills for the region.
Cork	2 years	20 years	20 year capacity estimate includes proposed Bottlehill facility for which planning approval has been granted. "Proposed Decision" to grant waste licence issued by EPA. If licence issued, first cell expected to be operational by mid-2005. Kinsale Road facility to close by end 2004.
Connaught	6 years	7 years	7 year capacity estimate includes proposed private landfill facility in East Galway in respect of which a "Proposed Decision" to grant a waste licence has issued. Local authority decision to grant planning permission for this facility is under appeal to An Bord Pleanala. In terms of future capacity, local authority site selection process for South Connaught landfill concluded. Work on site selection for North Connaught landfill is at preliminary stage.
South East	2 years	4 years	4 year capacity estimate reflects additional capacities licensed including 5-year extension of Dunmore (Kilkenny) landfill and extension of life of Killurin (Wexford) facility to 2005. Also reflects proposed landfill at Hardbog (South Tipperary) for which a "Proposed Decision" to grant a waste licence has issued. Further capacity planned through 7-year extension of Carlow landfill (planning approval granted; awaiting determination of waste licence). In addition, a waste licence application has been submitted for new landfill in Wexford. Legal proceedings have delayed the advancement of proposals for a new facility in Waterford.
Clare / Kerry / Limerick	8 years	7 years	Approvals to be sought later in 2004 for expansions of the Limerick and North Kerry landfills.
North East	37 years	19 years	Adequate landfill capacity available.
Midlands	8 years	7 years	In terms of additional capacity, application submitted to the EPA for a waste licence to extend the Ballydonagh (Westmeath) landfill to 2011.
Donegal	2 years	2 years	In terms of additional capacity, planning & waste licence applications have been lodged for 8 / 10-year extension to Ballintra facility. Approvals for new facility (20-year life) to be sought later in 2004.
Kildare	2 years	6 years	While capacity position has improved, this is on basis of EPA issuing "Proposed Decision" to grant a waste licence for a private municipal landfill at Usk. However, a decision has not yet been made on the related application for planning permission. In terms of additional capacity, a commercial concern is in the process of seeking planning permission for a landfill in the north west of the county.
Wicklow	3 years	13 years	Improved situation reflects EPA "Proposed Decision" to grant waste licence for extension of existing facility at Rampere up to 2010 and issuing of planning and waste licensing approvals for new private sector landfill at Ballynagran.
Total	6 years	10 years	

* EPA National Waste Database Report 2001
^ Current EPA estimate

The capacity situation has improved substantially since 2001, with the volume of landfill space available having virtually doubled from some 12m tonnes to close to 24m tonnes, equivalent to 10 years capacity (as opposed to 6 years in 2001). This is largely attributable to the progress made on the licensing of additional/extended landfill facilities (with the impact of the increasing diversion of recyclable wastes from landfill also beginning to be seen).

Notwithstanding this overall improved picture, a number of regions continue to have very limited landfill capacity remaining. Delays have arisen in the construction of new facilities due to planning and licensing issues and legal proceedings, and these have also impacted on certain proposals to expand existing facilities. In the interim, some authorities have taken measures such as placing restrictions or bans on landfilling certain types of materials and making arrangements for waste to be disposed of at other local authority landfills. The local authorities concerned will need to continue to give urgent consideration to ensuring that adequate short-term contingency plans are in place to address these difficulties.

4. Policy Issues Arising and Key Points for Future Progress

4.1 The Fundamental Policy Framework

Since the publication of *Changing our Ways* in 1998, the policy framework has been firmly rooted in the "integrated waste management" approach, based on the internationally adopted hierarchy of options which places greatest emphasis on waste prevention, followed by minimisation, re-use, recycling, energy recovery and, finally, the environmentally sustainable disposal of residual waste.

In giving effect to this policy approach in developing waste management plans, local authorities -

- identified and provided for maximum achievable levels of recycling and biological treatment,

- then determined the need for thermal treatment in order to achieve national and EU landfill diversion targets, and

- finally, provided for environmentally sound landfill of residual wastes which cannot be recovered.

The approach to waste management has traditionally been, and continues to be, the subject of review internationally. In that context, there have been calls for the integrated policy approach based on the waste hierarchy to be set aside in favour of an approach based on a "Zero Waste" objective. Insofar as "Zero Waste" is promoted as a goal which would see a more concerted focus on prevention, minimisation, re-use and recycling, it is consistent with the fundamental principles underlying the waste hierarchy. However, no country has shown the "Zero Waste" aspiration in its purest sense to be an achievable objective. Indeed, even in the limited number of localised situations where "Zero Waste" has been pursued, it has still not been proven as an effective approach to waste management.

From a national policy perspective, Government must strike the appropriate balance between ambition and realism. In that context, it has to recognise the reality that even with a more concerted focus on waste prevention and the achievement of ambitious re-use and recycling objectives, there will still be waste remaining which must be managed in the most environmentally appropriate way. European waste management policy recognises that waste-to-energy is an environmentally preferable waste management option to landfill. Hence its inclusion as one element in the integrated approach towards ensuring that the amount of waste which ultimately remains to be consigned to landfill is kept to a minimum.

The integrated waste management approach, based on the waste hierarchy, remains established waste management policy at European Union level and it is the basis on which the successes of the best waste performers in Europe have been built. It has also provided the framework for the progress which has been made in kick-starting the modernisation of Irish waste management practices in recent years and remains the appropriate policy focus for the future.

While the issue was referred to in section 3, it is important to re-iterate that the concept of integrated waste management cannot reach its full potential unless all of the elements in the integrated mix are put in place. Therefore, with the details of the precise mix set out in the relevant waste management plan, simultaneous parallel progress should be made on all elements of the mix, in accordance with the plan's provisions.

In terms of the overall national targets set in *Changing Our Ways* for achievement by 2013 (see section 2.2), these clearly become more challenging in light of apparent trends in waste generation. The materials recycling target of 35% for municipal waste will be particularly challenging. Nevertheless, although ambitious, it is considered that the targets are achievable, particularly taking account of the fact that the most recent National Waste Database Report (for the year 2001), although showing progress on many fronts (including an increase from 9% to 13% in the recovery rate for municipal waste), does not reflect the impact of the implementation of local authority waste management plans which only began in a substantive way in late 2001.

Key Point 1

The policy approach will remain grounded in the concept of integrated waste management, based on the internationally recognised waste hierarchy, designed to achieve, by 2013, the ambitious targets set out in *Changing Our Ways*.

4.2 Waste Management Planning

When *Changing our Ways* was published in 1998, it encouraged local authorities to form regional groupings in order to secure more efficient provision of infrastructure and services. One of the main benefits arising is the resultant significant economy of scale, providing a viable framework in planning and volume terms for the development of integrated and innovative solutions and a favourable climate for the creation of beneficial partnership arrangements between local authorities and the private sector.

While the actual regions were developed pragmatically, and different permutations could have been envisaged, they have nonetheless provided a viable framework for

the development of integrated waste management solutions. This is borne out by the progress which has been made, particularly in the areas of segregated collection of recyclables and the development of additional recycling facilities (bring banks and civic amenity sites), and the work which is underway to ensure further progress in these areas. In addition, there are already a number of examples of the private waste industry showing its willingness to come forward with landfill and thermal treatment proposals within the regional waste planning framework.

There have been calls to consider replacing the regional approach to waste management planning with a single national waste management plan. The reality is that a very clear national **policy** framework, setting ambitious targets for radical change in our approach to waste management to be achieved over the period to 2013, has been in place since 1998; this was re-affirmed in the current Government programme and is now re-inforced further by this document.

The replacement of regional waste management planning by a single national plan has also been advocated in terms of potential cost efficiencies and the opportunities for the provision of a smaller number of larger facilities for managing our wastes. However, such considerations have to be balanced against environmental factors, particularly the need to respect the "proximity principle" which encourages the management of waste in close proximity to the location of its production. Essentially, what must be achieved is a balance between optimising the costs and efficiencies of waste management facilities and the energy and air pollution costs of transportation, and the impacts of large-scale developments on a local area.

It is not evident that a national plan would bring any marked improvement in terms of the delivery of services and infrastructure, or that it would offer greater refinement or flexibility in addressing local and regional requirements. Against this background, it is considered that the focus should continue to be on ***implementation*** of regional waste plans, rather than effectively suspending current progress on implementation pending the completion of a national plan.

The regional approach to waste management strikes the most appropriate balance – providing the scale to make waste services economically viable while at the same time ensuring that responsibility for dealing with waste is kept sufficiently close to the areas in which waste is generated.

Key Point 2

Waste management planning will continue to be delivered through local authorities in their (largely) regional groupings.

4.3 Waste Infrastructure and the Planning Process

The planning process as it applies to waste management facilities has come under scrutiny in recent times because of the terms of decisions on certain applications for planning permission. The issue which has emerged is the trend towards a practice under which planning permissions for some (though not all) pieces of waste infrastructure restrict the facilities concerned to dealing only with waste arising within the area to which the waste management plan applies. While recognising the well-intentioned support for the regional approach to waste management underlying this practice, the case has been made that a planning condition of this kind is too blunt an instrument for this purpose.

In considering this issue, it should be noted that it is not an automatic implication of waste management plans that waste facilities provided in the region have to be used exclusively for the region/county concerned; indeed some plans clearly envisaged movements of certain wastes in and out of regions. It is in the context of planning decisions for such facilities that the issue has arisen, although the same approach has not been taken in all recent decisions.

Clearly, facilities provided in a region must serve primarily the waste management needs of that region. That is entirely consistent with the concept of regional waste management planning where each region has to take lead responsibility for its own waste, thereby playing its part in reaching an overall national solution.

However, careful consideration needs to be given to whether the imposition of blanket prohibitions on all cross-regional movements of waste is an appropriate and measured interpretation of the philosophy underlying regional waste management planning. In particular, it must be borne in mind that such conditions are not required in order to limit the capacity of facilities as this issue is generally the subject of a separate condition capping the annual volume of waste which facilities can accept.

It is noteworthy that the EPA in its most recent National Waste Database Report for 2001 has recommended that -

"the inter-regional movement and treatment of waste should be provided for ….. in appropriate circumstances".

The careful manner in which this recommendation has been framed reflects the fine balance to be drawn between ensuring that each region cannot shirk its responsibility to plays its part in the development of waste facilities, while at the same time building in a limited measure of flexibility in terms of the use of facilities.

Key Point 3

An examination of the issues arising in terms of the interrelationship between regional boundaries and waste facilities will be completed with a view to providing guidance to the relevant authorities by end-Summer 2004.

4.4 Waste Management Plans – Baseline Data

National and international experience confirms that the collection of accurate and consistent statistical data on waste generation and management is highly problematical. This is recognised within the EU, which has adopted a Regulation on Waste Statistics in order to harmonise the frequency and quality of data collected within Member States.

Commonly, local authority waste management plans highlight, either directly or indirectly, the lack of consistent, reliable information on waste generation within the regions. Different approaches to data / statistics have been taken in the plans, with a variety of data estimation and presentation practices. Despite these differences, and the use of different base years, it is possible, for a notional base year in the late 1990's, to compile the following overall national picture of the waste arisings on which waste management plans were based.

Waste Management Plans Estimated Annual Arisings (tonnes)	
Household	1,291,644
Commercial	724,635
Total	2,016,279
Industrial	1,095,198
C&D	2,434,084

As with the baseline data in plans, the data in relation to projected waste arisings was also characterised by a variety of approaches. Projections were presented in some plans in absolute terms while, in others, the future scenario was expressed in terms of percentage rates of increase over a particular base year. The extent of the future horizon of plans is also quite varied, ranging from 2004 up to 2013.

Similarly, recycling / recovery targets to be achieved were expressed in a variety of ways – some plans use target rates or quantities, others express targets in terms of increases in the rates / quantities recovered / recycled, while targets were expressed in other plans in terms of decreases in the rates / amounts of waste to be managed in other ways (e.g. landfill). Target dates were again highly variable.

As might be expected, plans that based forecasts solely on anticipated economic growth or population increase predicted continued steady growth in the quantities of waste generated each year. Where other factors were taken into account – such as socio-economics indicators, trends in waste management and international experience - somewhat different conclusions were drawn. In overall summary terms, the future orientation of the waste management plans was based on –

- increases of between 1 and 3 percent per annum in per-capita household waste generation in the short-term, with slower increases or a levelling off in the longer term;

- continued, but slowing growth in commercial waste generation over the projection period; and

- a levelling off, or potential decline, in industrial waste generation.

As already outlined, due to the different ways in which waste management plans addressed anticipated future waste arisings, it is difficult to compile an overall national picture. However, focusing in on municipal waste, it is estimated that all of the waste management plans, when taken together, projected average national annual arisings in the medium term of the order of ***2.6 million tonnes***.

Since the plans were prepared, the EPA has published two further National Waste Database Reports for 1998 and 2001. It is useful to compare the data in these and the earlier 1995 Database Report with the base year data in local authority waste management plans and the plans' projections for waste arisings in the medium term.

	1995	Waste Management Plans Base Year	1998	2001	Waste Management Plans Medium Term ojections
Household	1,324,521	1,291,644	1,220,856	1,468,834	
Commercial	476,920	724,635	754,797	1,156,732	
Street Cleansing	46,791	50,000 (est)	80,999	78,469	
Total	*1,848,232*	*2,066,279*	*2,056,652*	*2,704,035*	*2,600,000*

It is apparent that there has been a progressive and significant increase in municipal waste arisings over the period concerned, reflecting the impacts of economic growth experienced during the height of the "Celtic Tiger" phenomenon and the very significant 8% increase in population recorded between 1996 and 2002 (compounded further, from a waste generation point of view, by the continuing decline in household size). Improved data on waste management is also likely to have made an impact.

From a waste management planning perspective, the significance of the data centres on the fact that municipal waste arisings in 2001, at about 2.7 million tonnes, had already exceeded the medium term projections in waste management plans. As the central vehicle for setting out the scale of the waste challenge and the infrastructure required, it is important that waste management plans are as up to date as possible and that their projections for future waste arisings are framed on the basis of an appropriate combination of ambition and realism. The Plans must therefore be updated in order to reflect the more up to date data in the National Waste Database Report for 2001 (and any other statistical information available to local authorities in relation to waste management in their regions) and to make appropriate revisions to their projections of future waste arisings for the next 10/15 years.

In the context of projections of possible future waste arisings, local authorities should have regard to the possible scenarios identified by the EPA in the National Waste Database Report 2001. In addition, the *National Overview of Waste Management Plans* being published in association with this document sets out details of a hypothetical scenario for waste arisings in 2010, taking account of projected economic growth, increases in population, reductions in average household size and the possible impacts of the National Waste Prevention Programme (see section 4.5.1). This is provided as a contribution to the consideration by local authorities of the likely scale of future waste arisings; it will be a matter for local authorities themselves to finalise these projections in their plans, taking account of the full range of information available to them.

Key Point 4

Local authority waste management plans are to be updated to take account of more recent data on current and likely future waste arisings – this will commence once guidance on this and other waste management planning issues is provided to local authorities.

4.5 Activities Within the Waste Hierarchy

As outlined above, a fundamental requirement of the integrated approach to waste management is the need to make parallel progress, in accordance with national policy and regional waste management plans, on all the elements of the waste hierarchy. Therefore, it is necessary to look at the different levels within the hierarchy in order to ensure that a solid basis for progress exists in each. In particular, while good progress has been made in relation to recycling, there is a need to secure greater advances on activities ***higher*** in the hierarchy - in relation to ***waste prevention and minimisation*** - as well as those at the ***lower*** levels - in terms of ***thermal treatment and residual landfill.***

4.5.1 Waste Prevention/Minimisation

Taking waste prevention and minimisation first, a very clear upward trend in waste generation has been demonstrated from the series of National Waste Database Reports prepared by the EPA. In line with experience elsewhere, the data shows a clear correlation between indicators of economic growth and waste generation. Progress needs to be made in countering this trend, effectively decoupling waste generation from economic growth.

Waste prevention initiatives are crucial to the achievement of this objective. However, the difficulties associated with making progress on waste prevention should not be underestimated. The limited progress achieved at a European level was highlighted by the EU Commission in its recent *Communication Towards a Thematic Strategy on Preventing and Recycling Waste (COM (2003)* 301 final);

"*It therefore remains true that, although waste prevention has been the paramount objective of both national and Community waste management policies for many years, limited progress has been made so far to turn the objective of waste prevention into practice.*"

However, the Communication also recognises that the lack of progress can be partly explained by the absence of a sufficiently well developed strategy to underpin the process. Accordingly, the advancement of the Commission's Communication on Preventing and Recycling Waste has been identified as a priority area for progress during the Jan / June 2004 Irish Presidency of the European Union.

In Ireland, considerable work has been going on in relation to the development of a National Waste Prevention Programme and this has been brought to the point that the programme is now being launched with immediate effect. The Programme will be led by a Core Prevention Team within the Environmental Protection Agency whose work will be supported with 2m in start-up funding from the Environment Fund. A key aim initially will be to improve data on waste arisings so that a sound basis for the measurement and monitoring of the Programme's impact can be established. Priority will also be accorded to carrying out baseline research and analysis of targeted sectors and specific waste streams with a view to identifying factors contributing to waste generation.

Key Point 4

A National Waste Prevention Programme is being launched with immediate effect. Start-up funding of 2m is being provided for the establishment of the Programme which will be led by a Core Prevention Team within the EPA. Key initial areas of focus will be improved data collection and an examination of the factors contributing to waste generation in targeted sectors and specific waste streams.

4.5.2 Recycling

As demonstrated in Section 3, the progress made in modernising our approach to waste management has been most evident in the area of recycling. However, in order to underpin the progress already made and to provide a basis for making further progress on the scale required, close attention must be paid to the development of markets for recyclable materials. Given the investment required in terms of segregation, collection and sorting of recyclables, it is essential that every effort is made to identify new opportunities for recyclable materials to be incorporated into new products.

Since *Preventing and Recycling Waste: Delivering Change* was published, work has been advancing on the development of a Market Development Programme for recyclables. This has now been finalised and a Market Development Group to oversee the Programme is being established with immediate effect. Enterprise Ireland, in addition to its role as a member of the Group, will provide Secretariat / administrative support functions, and some 1m is being provided from the Environment Fund to support the Group's initial activities. The recycling sector will be strengthened further by the establishment, by end-2004, of a broadly-based Recycling Consultative Forum which will play a key role in identifying and prioritising additional actions that could support further progress on recycling.

Key Point 6

A Market Development Group, supported by 1m in start-up funding, is being established with immediate effect to drive a Market Development Programme for recyclable materials. In addition, a broadly-based Recycling Consultative Forum will be established by end-2004.

4.5.3 Biodegradable Waste

Recovery of biodegradable waste is a key element of the waste recovery dimension to national waste management policy. Given that it accounts for some 65% of the municipal waste stream and can be readily recovered, it is an area for priority attention. The diversion of this waste stream from landfill is the subject of ambitious EU and national targets and will also reduce methane emissions from landfill facilities, with consequential benefits from a climate change perspective.

Landfill Directive Targets	
Year	Target
2006	Landfill no more than **75%** of biodegradable municipal waste generated in 1995
2009	**50%**
2016	**35%**

A draft National Biodegradable Waste Strategy, which provides a robust framework for meeting the ambitious landfill diversion targets, has been prepared and is now being published for consultation in advance of its early finalisation. Local authorities will need to take account of the implications of the Strategy in the context of updating their waste management plans, particularly in terms of the further roll-out of segregated collection of household dry recyclables and organic wastes, together with the provision of associated materials recovery/biological treatment infrastructure. The development of Producer Responsibility Initiatives in relation to newsprint/magazines and telephone directories (see section 4.5.5 below) also have the potential to contribute significantly.

Key Point 7

The draft National Biodegradable Waste Strategy now being published for consultation will be finalised by end-June 2004. Implementation of the Strategy (aspects of which are already in progress) will move ahead in accordance with the timetable set out in the Strategy itself.

4.5.4 Funding to Support Waste Recovery Infrastructure

As mentioned earlier, some 22m in grant assistance has been provided since November 2002 to support the provision of over 70 recycling projects by local authorities. The impact of the delivery of these projects is now beginning to be felt and their full delivery at the earliest possible date will remain a key priority.

Modern Civic Amenity Site at North Strand, Dublin 1

Examination of a range of additional local authority projects has now been finalised and a further 25m is being provided from the Environment Fund to support their early delivery.

Limited funding had also been earmarked within the Environment Fund for the provision of grant assistance to certain recycling projects to be undertaken by private waste management companies. This was based on the then understanding of the scale and structure of the waste industry which, historically, has been quite fragmented in nature, involving many small scale players operating within specific geographic areas and to single dimensional standards (landfill). The scheme was also conditional on gaining the necessary State aid approval from the European Commission.

Since this decision was taken, there have been a number of developments. Firstly, while State aid approval was obtained, it was of a somewhat limited nature, being limited to between 17.5% and 40% depending on the region involved (with the possibility of an additional 10-15% bonus for SME's). Secondly, the private waste industry has changed very dramatically;

- the industry's scale has increased very significantly in a short period of time, with some of the projects for which grant applications were submitted proceeding with no indication of the outcome of the applications;

- there has been a very marked process of consolidation within the industry with a small number of significant players involved in acquiring many of the smaller operators.

A report by Davy Stockbrokers in 2003 highlighted the major scale of the waste industry, suggesting, as a preliminary estimate, that it generates annual revenues of around 1 billion. The report also indicated that the process of industry consolidation underway was likely to continue.

Against this background, there is a very real danger of even a limited grant scheme for private waste companies impacting more on enhancing acquisition values (in the ongoing process of industry consolidation), than on infrastructure delivery. Taking account of all these factors and having regard to the competing demands for the resources available in the Environment Fund, the scheme of grants for private waste companies is not to proceed.

Instead, the resources that would have been devoted to this scheme will be earmarked for further enforcement initiatives (see section 4.9); such initiatives will be of considerable benefit to the private waste industry in terms of boosting confidence

and, hence, investment in the legitimate waste sector, and has been advocated quite strongly by the industry itself. Other areas to benefit from the re-allocation of resources will be a programme of support for small-scale innovative recycling partnerships between local authorities and local communities, as well as further initiatives in relation to awareness and education on issues relating to waste.

Key Point 8

€25m is being allocated in further grant-aid for a range of additional local authority recycling projects; additional funding will be provided according as projects are developed.

Given the growth and consolidation of the private waste industry, the scheme of capital grants for private waste companies is not to proceed – instead, support for the development of a more professionalised private waste industry is to be re-directed into further initiatives in the enforcement area. Small-scale local authority/local community-based recycling projects and initiatives in relation to education and awareness are also to benefit from further support.

4.5.5 Producer Responsibility Initiatives

Established policy envisages a significant role for Producer Responsibility Initiatives (PRI's) in meeting ambitious waste recycling and recovery targets for certain waste streams. To date, very significant progress has been made in implementing PRI's in relation to farm plastics, construction and demolition waste and packaging waste.

In the case of farm plastics, the Irish Farm Film Producers Group self-compliance scheme, operated through REPAK, provides a plastic collection service to farmers, funded through a levy on the sale price which is remitted to IFFPG. Initiated in 1997, this scheme has now achieved a recovery rate of 45% but is aiming to increase this to 60%.

Construction and Demolition Waste is an area which has also seen considerable progress. The EPA's National Waste Database Report for 2001 indicated a 65% recovery rate for C&D waste, representing substantial progress towards the 85% recovery objective set for 2013. Following the report of a Task Force established by the Forum for the Construction Industry, a National Construction and Demolition Waste Council, representative of all the key sectors involved, was established in June 2002 to drive the implementation of the Task Force's report. In its first annual report published in October 2003, the NCDWC outlined details of a voluntary industry initiative aimed at achieving further progress in the recovery of C&D waste.

In relation to packaging waste, the voluntary industry initiative being operated under the aegis of Repak has ensured that Ireland met its EU target of securing 25% recovery in 2001. While a much more ambitious 50% recovery target must be achieved in 2005 (with a 60% target having been recently agreed for 2011), Repak reports that significant progress continues to be made towards the achievement of the 50% target by the end of next year.

This positive experience of PRI's reinforces the appropriateness of their inclusion as a key tool in overall waste management policy. The priority now is to extend this concept to additional waste streams including end-of-life vehicles (ELV's), waste electronic and electrical equipment (WEEE), newsprint, tyres and batteries. Already, legislation to underpin a PRI in relation to ELV's has been provided for in the Protection of the Environment Act 2003 and an agreement has been reached with the Society of the Irish Motor Industry on the implementation arrangements. Legislation in relation to the WEEE PRI is being developed and the report of the WEEE Task Force, which charts the course towards implementing the PRI, has been completed and is now being published for consultation. The implications of this report, particularly in terms of capacity at Civic Amenity Sites, will need to be considered by local authorities in the context of updating their waste management plans. Discussions are underway with the newspaper and tyre sectors in relation to PRI's in those areas.

Key Point 9

In relation to Producer Responsibility Initiatives (PRI's),

- Detailed arrangements are being put in place for the implementation of the PRI for ELV's and the system will be introduced in 2005 (ahead of the January 2007 EU target date).
- Framework legislation to underpin the WEEE PRI will be introduced in 2004 and the initiative, guided by the WEEE Task Force Report now being published for consultation in advance of finalisation by June 2004, will be introduced by the EU target date of August 2005.
- Arrangements for a PRI for the newsprint sector will be finalised shortly with a view to its introduction (with supporting regulations) in 2004.
- Arrangements for a PRI for the tyre sector will be concluded with a view to its introduction by end 2004.
- In accordance with the National Biodegradable Waste Strategy (see section 4.5.3 above), a PRI will be developed in relation to telephone directories. As progress generally allows, consideration will be given to developing PRI's in certain additional areas.

4.5.6 Waste-to-Energy/Thermal Treatment

While no large-scale thermal treatment facilities, with energy recovery, have yet come on stream in Ireland, the EPA's National Waste Database Report for 2001 indicates that 11 small-scale plants are in operation in conjunction with 7 industrial installations licensed under the Integrated Pollution Control (IPC) licensing system.

Proposals for larger scale projects have advanced in a number of areas, most notably in Meath and in Cork where facilities have been granted planning permission. PPP procurement of projects by local authorities are at various stages of advancement in other regions, with the furthest advances being made in the Dublin region where the proposed project has advanced to the substantive stage of procurement with the shortlisted bidders.

Invariably, projects of this kind attract considerable opposition, most often because of health concerns and fears that such facilities will prejudice the achievement of recycling objectives. In relation to health matters, it must be borne in mind that comparisons between thermal treatment facilities being put in place now and facilities which may have operated historically in other countries without stringent controls are not soundly based. The most stringent international controls on facilities of this kind have been laid down in the EU Directive on Incineration (2000) and these have now been transposed into Irish law. The requirements are given effect through the rigorous IPC and waste licensing systems operated by the EPA.

While the suggestion is often made that the closure of thermal treatment facilities in Europe and elsewhere represents a move away from such technologies internationally, the reality is that such closures reflect the inability of certain facilities (largely of an older vintage) to meet the stringent controls now in place. New facilities complying with the rigorous requirements of modern licensing regimes continue to be put in place, most recently, and in closest proximity to Ireland, in the Isle of Man where construction of the island's first thermal treatment facility is close to completion.

A study by the Health Research Board – *Health and Environmental Effects of the Landfilling and Incineration of Waste: A Literature Review* – commissioned at the request of the Department of the Environment, Heritage and Local Government was published in February 2003. The study report recognised that the achievement of effective waste management at both local and national levels requires an integrated systems approach, reflecting the waste management hierarchy. The research considered in completing the study was principally related to facilities involving older technologies and no conclusive evidence could be found of a link between specific health outcomes and proximity to thermal treatment or landfill facilities. In addition, the Food Safety Authority of Ireland has considered the possible

implications of incineration on the food chain and concluded, in 2003, that properly managed incineration facilities will not contribute to dioxin levels in the food supply to any significant extent and will not affect food quality or safety.

A second significant concern expressed is that the adoption of thermal treatment will prejudice the achievement of ambitious recycling targets. While this would be a danger were thermal treatment to be employed in a waste management policy and planning vacuum, the reality is that thermal treatment is included in Irish waste management policy on the basis that it is *one* element in an *integrated* approach. Ambitious targets are set in relation to recycling at national level; these are carried through into local authority waste management plans and are now being realised progressively with the roll out of recycling infrastructure. The experience of certain other EU Member States is also instructive in this regard, as they have shown how significant levels of recycling and the use of thermal treatment can comfortably coalesce.

It is accepted that there is a need for better information in relation to the facts surrounding thermal treatment. The need in this regard is being addressed as part of the *Race Against Waste* campaign and factsheets in relation to thermal treatment and other aspects of waste management will be published in May 2004.

Key Point 10

Thermal treatment, with energy recovery, has a role to play *as one element* in the integrated approach to waste management; facilities will be subject to stringent controls through licenses issued by the EPA and through subsequent licence enforcement and facility monitoring. In order to provide better information in relation to thermal treatment (and other aspects of waste management), factsheets will be published in May 2004 as part of a more comprehensive information package under the *Race Against Waste* campaign.

4.5.7 Landfill

Traditionally, waste management in Ireland has been almost exclusively reliant on landfill, with a network of facilities which did not meet modern environmental standards. In more recent times, the landscape has changed significantly with the completion of the process of licensing landfills to very high standards and a progressive reduction in the numbers of operational facilities.

While landfill is the least preferred waste management option – and a reduced reliance on landfill will have important beneficial impacts from a climate change point of view - it nevertheless has a role, and will continue to have a role (albeit of a progressively reducing scale) to play in providing an outlet for residual waste which cannot be prevented, re-used, recycled or otherwise recovered. It is therefore imperative that sufficient landfill capacity for this purpose is made available, particularly in the short to medium term until the roll out of alternative facilities for the recycling, composting and thermal treatment of waste can be more significantly advanced.

In that regard, local authorities, when updating their waste management plans, will need to ensure that a timetable for the provision of the range of integrated waste infrastructure is provided so that an appropriate balance can be struck between -

- having sufficient landfill capacity available in the short to medium term, pending the delivery of alternative "higher-in-hierarchy" infrastructure, and

- guarding against the over provision of landfill which would be incompatible with its "residual" role in the integrated waste management mix.

In terms of concerns about the possible health impacts associated with landfill facilities, the HRB Study referred to in section 4.5.6 (which found no conclusive evidence of a link between specific health outcomes and proximity to thermal treatment or landfill facilities) is equally applicable here. In addition, it is noteworthy that a study completed in early 2004 by the Eastern Regional Health Authority and Trinity College Dublin concluded that congenital anomalies were not found to occur more commonly in proximity to municipal landfills.

However, as in the case of thermal treatment, there is a need for better information in relation to landfill and its role within a modern integrated waste management system. Accordingly, the factsheets to be prepared as part of the *Race Against Waste* communications campaign in May 2004 will include a factsheet devoted to landfill.

Key Point 11

Landfill, subject to rigorous licensing, will have a continued role as a waste management tool but it will progressively change to a residual role, in accordance with its place at the bottom of the waste hierarchy. Local authorities, when updating their waste management plans, will need to ensure that a timetable for the provision of the range of integrated waste infrastructure is provided so that an appropriate balance can be struck between –

- having sufficient landfill capacity available in the short to medium term, pending the delivery of alternative "higher-in-hierarchy" infrastructure, and
- guarding against the over provision of landfill which would be incompatible with its "residual" role in the integrated waste management mix.

In order to provide better information, one of the factsheets to be produced as part of the *Race Against Waste* communications campaign in May 2004 will be devoted to landfill-related issues.

4.6 Roles of the Public and Private Sectors

Until relatively recently, private sector involvement in waste management consisted largely of small-scale localised waste collectors, mainly serving the commercial and industrial sectors, and a small number of waste brokers, handling hazardous and industrial wastes. Accordingly, while waste management plans took account of the private sector, they were, by and large, predicated very heavily on local authorities either directly delivering or leading the process of infrastructure delivery.

Changing Our Ways highlighted the scope for increased participation by the private sector in all areas of waste management in Ireland, in terms of capital investment in infrastructure, specialist expertise in relation to new technologies and a better understanding of the dynamics of the marketplace, particularly in relation to recyclables. The past 2-3 years, in particular, have seen a very significant response on the part of the private waste industry, as rising landfill prices and limited disposal capacity have opened up significant commercial opportunities in both waste recovery and disposal. Reflecting a significant process of consolidation within the waste industry, several large, well-resourced, private waste concerns have emerged. It is estimated that about 60% of municipal waste is now collected by private waste management companies, there are many partnerships arrangements in place between local authorities and the private sector for the delivery of certain waste services, and there is an increasing trend of recycling, thermal treatment and landfill projects being advanced independently by the private sector.

While the extent of direct local authority involvement in the waste sector varies between regions (it is, and will continue to be, a matter for local authorities to decide

the nature and extent of this involvement, taking account of their qualified statutory obligations and local factors), in those regions where there is a mix of local authority and private waste industry operations, there is a measure of uncertainty in terms of the roles of the respective public and private players in delivering on the requirements of waste management plans. Greater clarity in this regard must be provided urgently, so as not to inhibit the pace of progress.

Given that the waste management plan is the central vehicle for determining the waste infrastructure and service requirements of each region, it is crucial that the mechanisms for the delivery of these requirements – either by the local authority, by the private sector or by PPP arrangements – must be set out clearly in the plans themselves. The current suite of waste management plans, now a number of years old, do not reflect the scale and pace of change within the waste sector and therefore do not address plan implementation/infrastructure delivery mechanisms in a sufficiently comprehensive way.

The issues involved are of particular significance in terms of dealing with commercial and industrial waste. Local authorities do not have a statutory responsibility to collect such wastes or to provide facilities for their disposal or recovery. While some local authority facilities do accept wastes from these sectors, capacity limitations in many areas have resulted in some local authorities excluding such wastes from their landfills, or placing strict quotas on the amounts that will be accepted. Given that the scope for the development of alternative facilities in the short term is obviously limited by the need to find suitable sites, secure planning consents and obtain the necessary waste licences, this can present very real difficulties. These must be fully addressed in waste management plans so that clarity can be brought to bear on the intentions of the respective public and private players.

Given the very different circumstances which exist in the different regions, there can be no standard prescription for the outcome of this engagement between the local authorities in a region and the private waste industry interests operating there. What is important is that the respective strategic intentions are surfaced and that they are reconciled to the greatest extent possible in the waste management plan.

Key Point 12

In updating waste management plans -

- the local authorities concerned will pay particular attention to ensuring effective engagement with the private waste industry; and
- the outcome of this engagement, together with other relevant factors, will be reflected in the final updated waste management plans adopted.

4.7 Reporting on Waste Management Plan Implementation

Waste Management Plans, by their nature, are comprehensive road maps for the process of modernising our approach to waste management. They must look at the situation as it currently exists, endeavour to predict future developments and trends in relation to waste, identify the issues that need to be addressed and set out a basis for doing so. Plans must therefore set out a short term course of action to be taken over their 5 year duration, set in the context of an understanding of the more medium/long term directions to be taken.

It is important that the necessary medium/long term context does not obscure the need for a clear focus on the challenging implementation issues to be addressed during the short-term 5 year life of the Plan. Rather than waiting until the end of year 5 when the formal process of reviewing or replacing the Plan falls due, there should be a mechanism for assessing progress on implementation over the course of the life of the Plan.

Accordingly, in updating their waste management plans, local authorities will be required to set out the key actions that are to be delivered in each of the five years of the plan, and to prepare, within 3 months of the end of each year, an annual report on implementation. This report should outline the state of progress on the delivery of the key objectives of the plan and should address the waste-related performance indicators which local authorities are required to report on under the requirements of "*Delivering Value for People – Service Indicators in Local Authorities*" published in January 2004.

The annual reports should be prepared under the auspices of the structures in place for co-ordinating plan implementation in each of the waste management planning regions. In order to be able to compile an overall national picture from the 10 regional reports, it will be important that they be prepared to a reasonably consistent format. Accordingly, guidelines on the form and content of the annual reports will be provided in due course.

Key Point 13

In order to ensure a sharper focus on the implementation of waste management plans, local authorities will be required to -

- set out in their plans the key actions that are to be delivered in each of the plan's five years, and
- prepare, within 3 months of the end of each year, an annual report on implementation.

4.8 Competition/Operation of the Market

Apart from the issue of ***environmental*** regulation, the changing structure of the waste sector now in evidence more sharply brings into focus issues in relation to the waste market and the need to ensure a competitive environment. Unlike other sectors, such as energy and telecommunications, where regulators have been put in place in order to oversee liberalisation, often against a background of EU legislative requirements and involving processes of bidding by those interested in entering the markets concerned, the framework underpinning increasing involvement of the private sector in providing waste services and infrastructure is quite different.

While PPP processes for the delivery of waste infrastructure – of which there are a number at various stages of development – involve, by their nature, a process of securing the best market price available, other pieces of the infrastructure mix are being developed independently by the private sector. In addition, in most cases where private operators have replaced local authorities in the provision of waste collection services, this has not involved any form of tendering. Instead, the setting of waste collection costs has been left to the market.

There is nothing wrong in principle with this approach. While the growth in involvement of the private sector in providing waste infrastructure and services over the last number of years has coincided with significant increases in the costs of waste services, much of the increased costs can be attributed to the implementation of very significantly higher environmental standards in the waste area and the need to move from a historical situation of low levels of cost recoupment to the scenario of full cost recovery, as encouraged in *Changing Our Ways*.

However, it must equally be borne in mind that the approach which has characterised increased private sector activity in the waste sector (apart from the competitive process inherent in PPP initiatives) is premised on a well functioning market, while respecting the requirements of the regional waste management planning framework. This requires that developments in the waste sector be monitored in order to guard against the emergence of anti-competitive practices. The situation in this regard, and particularly the need for an overall structural analysis of the waste sector and regulatory actions that may be required, taking account of the range of powers already available to the Competition Authority and the requirements of "Regulating Better", the Government's White Paper on Regulation published in January 2004, will be the subject of a detailed review to be initiated in Autumn 2004.

Key Point 14

The structure and operation of the waste market will be kept under close scrutiny in order to guard against anti-competitive practices. In that context, an analysis of the structures and trends in the waste sector and an examination of the adequacy of existing market regulatory tools will be initiated in Autumn 2004.

4.9 Enforcement of the Waste Code

The environmental regulation of the waste sector has been transformed over the past 5 years. All operating landfills and certain other major waste facilities are now licensed by the Environmental Protection Agency. A multitude of smaller facilities are regulated by the local authorities through a system of waste permitting and, in addition, all those involved in the movement of waste on a commercial basis are now required to hold a waste collection permit.

As in the case of any system of regulation, the issue of enforcement is of paramount importance. Those who flout the law and cause environmental pollution must be held to account. The growth and development of a well organised and efficiently operating sector providing waste services and infrastructure is crucially dependent on the existence of a "level playing field" where legitimate service providers do not find themselves being undermined by unscrupulous waste operators operating outside the law.

A number of major investigations of illegal activity in the waste sector have been initiated in recent times and successful outcomes already achieved have delivered a very clear message that the full force of the law will be brought to bear in countering such activities. The scale of investigations being undertaken in a number of other ongoing cases, including cases being led by the Garda Siochána's National Bureau of Criminal Investigation, provides further evidence of the commitment to combating alleged illegal waste activities.

A number of specific initiatives launched within the past year provide a firm basis for achieving further major progress in enforcement of the waste code;

- A new Office of Environmental Enforcement (OEE) has been established within the EPA. The mobilisation of the new Office, which is focusing particularly on the waste sector in its early stages of operation, is bringing greater professionalism to environmental enforcement by having a dedicated and fully resourced team with extensive powers.

- At local authority level, a major 5-year programme of more concerted enforcement of the waste code has been launched. €7m is being provided from the Environment Fund to support the first year of operation of this programme and further funding will follow in future years. The aim of this programme is to provide a stronger and more visible local authority enforcement presence on the ground and to ensure more frequent inspecting of permitted waste facilities, enforcement of the packaging waste regulations, speedier responses to reports of illegal dumping and more widespread co-

operation with the Gardai in conducting checks on vehicles involved in the movement of waste.

- The enforcement provisions of the waste code have been strengthened in a number of ways through the Protection of the Environment Act 2003. The maximum fines for offences have been increased to 15m, strengthened powers have been given to those involved in enforcing the legislation (including provision for more effective involvement of the Gardai) and the burden of proof in prosecutions has been reversed in certain cases. In addition, a new provision has been introduced under which the owners of land on which illegal dumping is found to have taken place can be presumed, unless it can be proved otherwise, to have been complicit in allowing their property to be used for illegal dumping.

The combination of all of these measures will undoubtedly lead to a more vigorous enforcement regime in relation to waste matters, serving a dual deterrent and detection purpose. However, the establishment of the OEE provides a timely opportunity to undertake a more comprehensive examination of regulatory and enforcement activities in the waste sector. Accordingly, the OEE is undertaking, as a priority, studies which will -

- Endeavour to better quantify the extent of unauthorised waste activities, including movements of waste outside the State (including to Northern Ireland), examine the existing powers and practices in use to deal with illegal activities, look at international best practice, develop guidance and train local authority personnel; and

- Review the implementation of the waste permitting and waste collection permitting systems and identify ways in which the regime might be strengthened and its implementation rendered more consistent across local authorities.

The effectiveness of the regulatory and enforcement regime will be examined in light of the operation of the initiatives already underway and will take account of the outcome of the systematic studies now being initiated by the Office of Environmental Enforcement. Priority will be assigned to the provision of additional resources from the Environment Fund in order to fully and effectively deal with illegal waste practices.

Key Point 15

The implementation of new initiatives in relation to enforcement of the waste code, and the completion of major investigations underway will be pursued vigorously. Each local authority will be required to report annually on the waste enforcement activities they have undertaken in their areas – the first such reports will be prepared for 2004.

Priority will be accorded to the provision of additional funding for any further enforcement initiatives that may be required in light of the outcome of the comprehensive studies in relation to unauthorised waste activities and the operation of the waste permitting / waste collection permitting systems now being initiated by the new Office of Environmental Enforcement and due for substantial completion by late 2004 / early 2005.

4.10 Waste Collection Permits

The introduction of the waste collection permitting regime in 2001 represented the completion of the process of bringing all elements within the waste management regime under regulatory control. The system operates on a waste management planning region basis, with one local authority in each region being the nominated authority for the purposes of issuing waste collection permits which are valid for the specified waste collection purposes within the region of issue.

The issuing of some 600 waste collection permits had been notified by the relevant local authorities to the EPA by end 2002. The first of the 2 yearly reviews of collection permits are now getting underway. The enforcement by local authorities of the waste collection permit regime is one of the main areas to be targeted under the major programme of local authority waste enforcement referred to in section 4.9.

The issuing of waste collection permits on a regional basis reflected an acknowledgement of the impracticality of requiring collectors operating in a number of counties to obtain a separate permit from each individual local authority. The growth and consolidation of the private waste sector referred to earlier in this document whereby the operations of some collectors stretch not just across counties within a region but across two or more regions, has led to calls for provision to be made now for collectors to obtain a single national collection permit. Suggested inconsistencies of approach between nominated authorities in the operation of the collection permit regime have also been cited in support of the calls for a move to a national approach.

The importance of consistency in the operation of a regulatory regime such as the waste collection permit system is not contested. In addition, the merits of introducing a national collection permit regime should be considered. However, from an enforcement point of view, it is important that local authorities are not distanced from

the granting of waste collection permits which they will ultimately be required to enforce. Final consideration of this matter in advance of the completion of the OEE study of the operation of the waste collection permit system referred to in section 4.9 would be premature and potentially ill-informed. Accordingly, the study will encompass consideration of all of the relevant factors arising in relation to the option of introducing some form of collection permit with national scope and the matter will be considered further in light of the study report.

Key Point 16

The structure of the waste collection permit system, including the possible introduction of a single collection permit with national scope, will be reviewed in light of the completion by the OEE of the study of the operation of the waste permitting and collection permitting systems now being initiated.

4.11 Economic Instruments

The role of economic instruments in influencing public attitudes and actions has long been recognised in policy-making. In the area of waste, a prime example of the impact of economic instruments is the introduction of the levy on plastic bags in 2002. In the intervening 2-year period, the number of plastic bags put into circulation has reduced by 90%. Taking re-usable bags on shopping trips is now the norm. Although set at only 15c, the levy has nonetheless resulted in a very significant cultural change and the levy proceeds have been assigned to a special fund which is being used to support a wide range of environmental initiatives, many of them waste-related.

Building on the success of the plastic bags levy, an analysis has been undertaken of the implementation of economic instruments (including environmental levies) in relation to chewing gum, fast food packaging and ATM receipts; to address the design issues associated with the implementation of recommended economic instruments; and to examine the efficient administrative collection mechanisms to be applied. A decision on this matter will be announced by mid-2004, at the latest, following a focused period of public consultation on the consultancy report.

The 15 per tonne landfill levy introduced in 2002 has a key role to play in incentivising moves away from landfill in favour of environmentally preferable options higher up in the waste management hierarchy. The environmental purpose of the levy is underscored by the fact that the proceeds arising, like those accruing from the levy on plastic bags, are paid into a separate Environment Fund and are recycled in support of a wide range of environmental initiatives.

While the legislation governing the landfill levy permits increases of up to 5 to be introduced in any given year, it is proposed not to increase the current levy rate of 15 per tonne at this stage. However, the position will be subject to regular review, taking

particular account of the extent to which the pace and scale of implementation of waste management plans is providing further alternatives to landfill, in the form of "higher in hierarchy" waste management infrastructure.

Key Point 17

Following on from the success of the plastic bags levy, a decision on the possible application of economic instruments (including environmental levies) to chewing gum, fast food packaging and ATM receipts will be announced by mid-2004, at the latest, following a focused period of public consultation on the related consultancy report.

The level of the landfill levy, currently at €15 per tonne, will be kept under regular review, taking particular account of the progress in providing "higher in hierarchy" alternatives, particularly in terms of recycling.

4.12 Use-Based Waste Charges

Direct user charges for household waste collection services are widely applied internationally, particularly in the context of increasing awareness of the financial and environmental cost of waste generation and of encouraging waste reduction and recycling. Established waste management policy recognises the need to develop further the structure of waste charges. Both from the point of view of equity, and in order to provide the public with a very direct incentive towards waste prevention, minimisation and recycling (and a consequential capacity to exert some influence on their waste collection and disposal costs), Preventing and Recycling Waste: Delivering Change published in 2002 recognised that waste charges should be based on usage, and set a three-year timeframe for moving as fully as possible to either weight or volume-related charging.

Over the past two years, very significant progress has been made in this area with a variety of systems ranging from tag-a-bag/bin through to on-board weighing of bins utilising microchip technology. Having consulted with local authorities (in their capacity as waste collectors and/or waste collection permitting authorities), the indications are that all waste collectors – both public and private – have either already moved to a system of weight/volume charging or have plans in place to do so in order to meet the 2005 objective.

Accordingly, 1 January 2005 has been set as the date for the completion, nationally, of the switch to weight/volume based charging. Responsibility for doing so will rest with individual collectors, with local authorities including appropriate conditions in waste collection permits, the first two-yearly reviews of which are now starting to fall due. Collectors will have discretion to decide the precise form of system they use, provided that it respects the principle of use-based charging.

Weight-based waste collection service.

Experience, both in Ireland and internationally, highlights the importance of coupling the introduction of use-based weight charging with effective monitoring and enforcement, in order to avoid undesirable side-effects such as fly-tipping. Local authorities should pay particular attention to this issue in the context of the general scaling-up of their enforcement activities referred to earlier in section 4.9.

Key Point 18

1 January 2005 is being set as the date for the completion, nationally, of the switch to weight/volume based charging for waste. There will be discretion as to the types of systems to be used, provided that the key principle of use-based charging is respected.

4.13 Awareness of Waste Issues

There is wide acceptance of the importance of securing better awareness of the scale of the challenge to be faced in modernising our approach to waste management and better understanding of the new approaches and technologies which that involves. The *Race Against Waste* campaign was launched in October 2003 as a first step towards meeting the need for better awareness, and turning that awareness into action.

The campaign has been developed in an inclusive way, with a National Advisory Group and Regional Networks being established in order to gain input from all the key sectors. The local authority Environmental Awareness Officers are also actively involved, playing a key role in the roll-out of the *Race Against Waste* at local level.

Impactful advertising as part of the *Race Against Waste* campaign.

The campaign has been very well received by the general public and it has proved successful in securing improved collective action to meet the collective responsibility which a modern approach to waste management involves. As well as television, radio and print advertising, the campaign has also involved a communications programme - a "Small Change" guide has been prepared, providing practical advice for businesses on how they can improve their waste management practices and save money; an initiative is being advanced within the Tidy Towns Competition; and a range of information materials on key waste management issues are being prepared.

There remains, nonetheless, significant further awareness and education work to be done in relation to many other aspects of waste management. Further funding will therefore be committed to a multi-annual awareness and education programme once the current phase of the *Race Against Waste* concludes in the Summer of 2004.

On a separate, but related issue, there would appear to be insufficient public awareness of the work being done in terms of implementing waste management plans. Given that waste management plans are the central vehicle for securing the modernisation of our waste infrastructure, there needs to be a greater awareness of the pivotal role which their implementation is playing in the overall *Race Against Waste*. Therefore, a special allocation of 1m will be made available from the Environment Fund in order to support a programme in each waste management planning region aimed at communicating more effectively details of both the plan for the region and the progress on its implementation.

Key Point 19

Building on the success of the *Race Against Waste* campaign launched in October 2003, further funding will be committed to a multi-annual awareness and communication programme to follow the current phase of the campaign which concludes in the Summer of 2004.

In addition, a special allocation of 1m will be made available from the Environment Fund in order to support a programme in each waste management planning region aimed at communicating more effectively -

- the pivotal role which their waste management plan plays in the overall *Race Against Waste,*
- details of the plan's objectives, and
- an update on the progress with its implementation.

4.14 Community Gain

The *Agreed Programme for Government* includes a commitment in relation to developing further the concept of community gain in association with the delivery of major infrastructure projects under local authority waste management plans. In the period since the Programme was published, it has become standard practice for a condition to be attached to the grant of planning permission for major pieces of waste infrastructure requiring the operators to contribute (generally on the basis of the volume of waste accepted at the facility) to a special fund which is used to support certain initiatives in the local area.

The community gain concept is sometimes criticised on the basis that it is an instrument designed to "buy-off" objecting communities in the vicinity of proposed significant waste facilities. However, this is neither the basis on which community gain was conceived nor the reason it is being applied.

The concept of community gain recognises the reality that if Ireland is to deal with its waste in a modern, environmentally progressive way, new facilities have to be provided. It operates on the basis that the facilities will have to be located somewhere and that there should be a mechanism by which some benefit can accrue to the communities in the locations ultimately chosen.

Key Point 20

As a valid instrument in terms of the delivery of major waste facilities, Government policy in relation to the concept of community gain will be applied by the relevant authorities in their decisions on applications for planning consent for such facilities.

4.15 Waste Management in the Public Sector

It is important, in the context of promoting the key messages in relation to more sustainable waste management practices, that the public sector be seen to be leading the process by example. In addition, the scale of the public sector is such that the wider adoption of such practices throughout Government Departments, semi-state bodies, local authorities, health boards and the education sector has the potential to reap significant environmental gains. The wider adoption of "green procurement" policies across the public sector can also play a very important part in supporting markets for recycled materials. The Government Contracts Committee, in early 2004, published guidance for public bodies on how environmental considerations can be taken into account and promoted in the public procurement process under current rules.

Best environmental practice would suggest that ambitions in relation to improved waste management practices across the public sector should be advanced as part of a push towards the adoption of more broadly-based environmental management systems by public bodies. That was the approach taken in the Green Government Guide which was issued in 1996 and is also reflected in the approach of the Department of the Environment, Heritage and Local Government which, in November 2003, received certification for the ISO 14001: 1996 International Standard for Environmental Management Systems for its headquarters in the Custom House.

While a framework for the extension of this approach will be developed, there are more immediate waste-related benefits that can be reaped from the formulation and implementation of a focused public sector waste management programme. The need for a central best-practice resource to support the programme will be crucial, as has been demonstrated by experience with the Race Against Waste "Small Change" programme for businesses.

Key Point 21

A public sector waste management programme will be developed as a priority in the next phase of waste awareness and communication activities which will be initiated after the current phase of the *Race Against Waste* campaign concludes in the Summer of 2004.

5. *"Key Points" Summary*

Changing Our Ways (1998), Preventing and Recycling Waste: Delivering Change (2002) and Waste Management – Taking Stock and Moving Forward (2004) combine to provide a comprehensive, up to date policy framework for the modernisation of Irish waste management infrastructure and services. The "Key Points" identified in this document, and summarised below, provide a solid basis for ensuring speedier and more effective realisation of the underlying policy objectives.

Key Point 1

The policy approach will remain grounded in the concept of ***integrated waste management,*** based on the internationally recognised waste hierarchy, designed to achieve, by 2013, the ambitious targets set out in *Changing Our Ways.*

Key Point 2

Waste management planning will continue to be delivered through local authorities in their (largely) regional groupings.

Key Point 3

An examination of the issues arising in terms of the interrelationship between ***regional boundaries*** and waste facilities will be completed with a view to providing guidance to the relevant authorities by end-Summer 2004.

Key Point 4

Local authority ***waste management plans are to be updated*** to take account of more recent data on current and likely future waste arisings – this will commence once guidance on this and other waste management planning issues is provided to local authorities.

Key Point 5

A ***National Waste Prevention Programme*** is being launched with immediate effect. Start-up funding of 2m is being provided for the establishment of the Programme which will be led by a Core Prevention Team within the EPA. Key initial areas of focus will be improved data collection and an examination of the factors contributing to waste generation in targeted sectors and specific waste streams.

Key Point 6

A ***Market Development Group,*** supported by 1m in start-up funding, is being established with immediate effect to drive a Market Development Programme for recyclable materials. In addition, a broadly-based Recycling Consultative Forum will be established by end-2004.

Key Point 7

The draft ***National Biodegradable Waste Strategy*** now being published for consultation will be finalised by end-June 2004. Implementation of the Strategy (aspects of which are already in progress) will move ahead in accordance with the timetable set out in the Strategy itself.

Key Point 8

€25m is being allocated in further ***grant-aid for a range of additional local authority recycling projects***; additional funding will be provided according as projects are developed.

Given the growth and consolidation of the private waste industry, the scheme of capital grants for private waste companies is not to proceed – instead, support for the development of a more professionalised private waste industry is to be re-directed into further initiatives in the enforcement area. Small-scale local authority/local community based recycling projects and initiatives in relation to education and awareness are also to beneift from further support.

Key Point 9

In relation to ***Producer Responsibility Initiatives,***

- Detailed arrangements are being put in place for the implementation of the PRI for ELV's and the system will be introduced in 2005 (ahead of the January 2007 EU target date).

- Framework legislation to underpin the WEEE PRI will be introduced in 2004 and the initiative, guided by the WEEE Task Force Report now being published for consultation in advance of finalisation by June 2004, will be introduced by the EU target date of August 2005.

- Arrangements for a PRI for the newsprint sector will be finalised shortly with a view to its introduction (with supporting regulations) in 2004.

- Arrangements for a PRI for the tyre sector will be concluded with a view to its introduction by end 2004.

- In accordance with the National Biodegradable Waste Strategy (see section 4.5.3 above), a PRI will be developed in relation to telephone directories. As progress generally allows, consideration will be given to developing PRI's in certain additional areas.

Key Point 10

Thermal treatment, with energy recovery, has a role to play as one element in the integrated approach to waste management; facilities will be subject to stringent controls through licenses issued by the EPA and through subsequent licence enforcement and facility monitoring. In order to provide better information in relation to thermal treatment (and other aspects of waste management), factsheets will be published in May 2004 as part of a more comprehensive information package under the *Race Against Waste* campaign.

Key Point 11

Landfill, subject to rigorous licensing, will have a continued role as a waste management tool but it will progressively change to a residual role, in accordance with its place at the bottom of the waste hierarchy. Local authorities, when updating their waste management plans, will need to ensure that a timetable for the provision of the range of integrated waste infrastructure is provided so that an appropriate balance can be struck between –

- having sufficient landfill capacity available in the short to medium term, pending the delivery of alternative "higher-in-hierarchy" infrastructure, and

- guarding against the over provision of landfill which would be incompatible with its "residual" role in the integrated waste management mix.

In order to provide better information, one of the factsheets to be produced as part of the *Race Against Waste* communications campaign in May 2004 will be devoted to landfill-related issues.

Key Point 12

In updating waste management plans,

- the local authorities concerned will pay particular attention to ensuring effective engagement with the private waste industry; and

- the outcome of this engagement, together with other relevant factors, will be reflected in the final updated waste management plans adopted.

Key Point 13

In order to ensure a sharper focus on the implementation of waste management plans, local authorities will be required to -

- set out in their plans the key actions that are to be delivered in each of the plan's five years, and

- prepare, within 3 months of the end of each year, an annual report on implementation.

Key Point 14

The structure and operation of the waste market will be kept under close scrutiny in order to guard against anti-competitive practices. In that context, an analysis of the structures and trends in the waste sector and an examination of the adequacy of existing regulatory tools will be initiated in Autumn 2004.

Key Point 15

The implementation of new initiatives in relation to enforcement of the waste code, and the completion of major investigations underway will be pursued vigorously. Each local authority will be required to report annually on the waste enforcement activities they have undertaken in their areas – the first such reports will be prepared for 2004.

Priority will be accorded to the provision of additional funding for any further enforcement initiatives that may be required in light of the outcome of the comprehensive studies in relation to unauthorised waste activities and the operation of the waste permitting / waste collection permitting systems now being initiated by the Office of Environmental Enforcement and due for substantial completion by late 2004 / early 2005.

Key Point 16

The structure of the waste collection permit system, including the possibility of introducing a single collection permit with national scope, will be reviewed in light of the completion by the OEE of the study of the operation of the waste permitting and collection permitting systems now being initiated.

Key Point 17

Following on from the success of the plastic bags levy, a decision on the possible application of economic instruments (including environmental levies) to chewing gum, fast food packaging and ATM receipts will be announced by mid-2004, at the latest, following a focused period of public consultation on the related consultancy report.

The level of the landfill levy, currently at 15 per tonne, will be kept under regular review, taking particular account of the progress in providing "higher in hierarchy" alternatives, particularly in terms of recycling.

Key Point 18

1 January 2005 is being set as the date for the completion, nationally, of the switch to weight/volume based charging for waste. There will be discretion as to the types of systems to be used, provided that the key principle of use-based charging is respected.

Key Point 19

Building on the success of the *Race Against Waste* campaign launched in October 2003, further funding will be committed to a multi-annual awareness and communication programme to follow the current phase of the campaign which concludes in the Summer of 2004.

In addition, a special allocation of 1m will be made available from the Environment Fund in order to support a programme in each waste management planning region aimed at communicating more effectively -

- the pivotal role which their waste management plays in the overall *Race Against Waste*,
- details of the plan itself, and
- an update on the progress with its implementation.

Key Point 20

As a valid instrument in terms of the delivery of major waste facilities, Government policy in relation to the concept of community gain will be applied by the relevant authorities in their decisions on applications for planning consent for such facilities.

Key Point 21

A public sector waste management programme will be developed as a priority in the next phase of waste awareness and communication activities which will be initiated after the current phase of the *Race Against Waste* campaign concludes in the Summer of 2004.

Appendix 1 - Waste Management Planning Regions