

20 FINANCIAL REVIEW OF WASTE MANAGEMENT IN THE REGION

20.1 DATA AND METHODOLOGY

The financial data on waste management activities in the Region are taken from the various Local Authority financial statements from Programme Group 5 - Environmental Protection, and the relevant subgroups for the financial year 2004.

To present the financial implications in a consistent manner, the data for each Local Authority was re-grouped, based on standard waste management activities as follows:

Landfill Operation – The Local Authorities in the Region operate a number of landfill facilities which receive both commercial and domestic waste. In this chapter, the Landfill Operation heading includes the expenditures and revenues relating to the full range of landfill operations, including monitoring, management and other relevant activities.

Waste Collection – This activity relates to the expenditure undertaken in providing a waste collection service to some domestic and commercial customers, typically small traders in the region. For the most part these services in the region are provided by private sector operators. The income shown are from charges levied by the Local Authorities for this service.

Recycling – This includes expenditure related to the day-to-day maintenance, operation and management of all Local Authority operated recycling facilities such as recycling centres, composting centres, green waste facilities, bring banks, and certain promotional expenditure such as recycling initiatives.

Litter – Expenditure on litter control, street cleaning, litter removal, anti-litter measures, related overheads, as well as income from litter fines and such like is included in this activity.

Enforcement – This is the income and expenditure relating to waste enforcement

measures, staff costs and other activities such as issuing waste permits.

Prevention and Minimisation – This activity includes the expenditure related to environmental awareness activities, green campaigning, environmental awareness staff and related promotion and education initiatives.

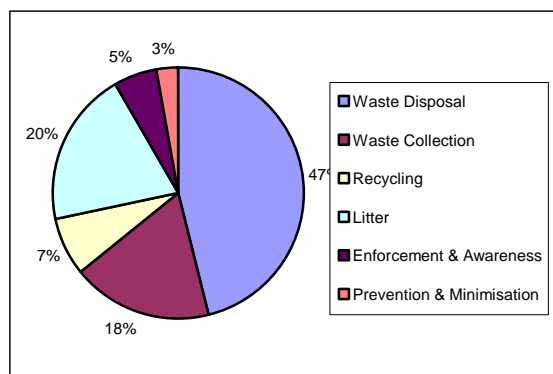
20.2 CURRENT LOCAL AUTHORITY EXPENDITURE REGIONAL SUMMARY

Expenditure in 2004 on waste management operations in the Limerick/Clare/Kerry Region is as shown in Table 20.1. The table shows only the current operating expenditure on waste management for 2004. No capital expenditure on landfill has been incurred in 2004. Capital expenditure on landfill has been included in Table 20.1

Table 20.1 Waste Management Expenditure 2004

Description	2004 €	%
Landfill Operation	12,173,476	46.2%
Waste Collection	4,751,917	18.0%
Recycling	1,943,566	7.4%
Litter	5,319,102	20.2%
Enforcement & Awareness	1,435,820	5.4%
Prevention & Minimisation	744,088	2.8%
Total	26,367,969	100.0%

Figure 20.1: Breakdown of Waste Management Expenditure, 2004 Figures



The operation of landfills was the largest single item of expenditure during 2004, accounting for 46.2% of waste management expenditure. However, overall expenditure on waste collection, landfill operations and litter control account for 84% of total waste expenditure in the region. It is a key objective of the proposed Plan to focus expenditure towards other activities such as recycling and waste minimisation.

Expenditure by the Local Authorities on recycling activities, promotional activities, waste minimisation and enforcement accounted for close to 16% of total expenditure in 2004. However, it should be noted that there is substantial private sector involvement in recovery and recycling activities in the Region.

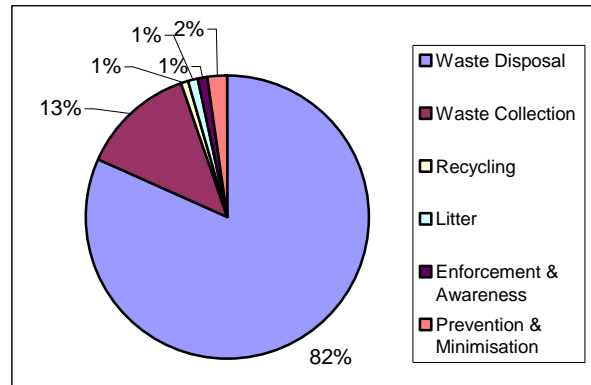
20.3 CURRENT LOCAL AUTHORITY INCOME – REGIONAL OVERVIEW

Income in 2004 for waste management services in the Limerick/Clare/Kerry Region were as shown in Table 20.2:

Table 20.2 Waste Management Income 2004

Description	2004 €	%
Waste Disposal	20,933,383	81.7%
Waste Collection	3,355,274	13.1%
Recycling	159,210	0.6%
Litter	302,625	1.2%
Enforcement & Awareness	291,741	1.1%
Prevention & Minimisation	575,279	2.2%
Total	25,617,512	100.0%

Figure 20.2: Breakdown of Waste Management Income, 2004 Figures



In 2004 income arising from landfill operations represented 81.7% of total waste inflows. This is a trend which is consistent year on year and highlights a high level of dependency on this source of income for the Local Authorities in the Limerick/Clare/Kerry Region.

The volume of waste landfilled in 2003 was 188,215 tonnes. Data shown previously (Table 10.2) indicates that circa 88,000 tonnes of household/ municipal waste left the Region in 2003 – to be disposed of elsewhere, while approximately 71,000 tonnes is estimated to have entered the Region for disposal/ treatment.

It is difficult to predict comparable future waste inflows/ outflows arising from private sector involvement in waste management, but it can be assumed for the purposes of making financial projections that current levels of landfill intake will continue until the provision of the Biowaste facilities.

Waste collection income (collected by the Local Authorities) is generated by household and commercial customer charges. These fall short of the collection costs shown previously by €1.39 million; these charges are intended to recover all the related costs of the service which include relevant waste disposal costs.

The income from enforcement and awareness activities provides a marginal portion of the income stream. Some of this income is provided by way of grants from the Department of the Environment, Heritage and Local Government.

20.4 COST RECOVERY

Total revenue expenditure (not including capital expenditure) in 2004 exceeds the income by an amount of €750,457, which indicates that full cost recovery has almost been achieved. In respect of landfill operations, it may be implied that the income from landfill charges of €20.9 million exceeds total landfill expenditure of €12.2 million by €8.7m. However, this income is being used to provide funding for a range of waste management activities.

Future National Initiatives

- The Local Authorities in the Region are supportive of the introduction of a national Waste Regulator.
- The Local Authorities in this region are supportive of the introduction of a National Waiver Scheme to be administered by the Department of Social & Family Affairs. It is hoped to maintain consistency with the concept of use related charging with any scheme

20.5 PROJECTED EXPENDITURE FOR PLAN PERIOD

20.5.1 Approach and Methodology

The projections of future expenditures have been estimated by:

- Establishing the 2004 baseline of the waste management activities for use as the starting point,
- Extrapolating the variable element of those expenditures that are dependant on factors such as increased activity, growth in waste arisings, diversion from landfill as well as providing for capital expenditure over the Plan period;
- Estimating monetary values of the proposed actions in the Implementation Action Plan Timetable, and
- Adding these into the projected expenditure stream.

Future expenditures are presented and summarised at 2005 price levels; inflation has not been provided for.

20.5.2 Financial Modelling and Definition of Future Scenario

The projected implications for expenditure by the Local Authorities in the Region arising from the proposed Waste Management Plan have been analysed based on a central scenario that future infrastructure, and by implication, the relevant operating costs and incomes, will be provided as shown in the Table below:

Table 20.3 Infrastructure Provision – Central Scenario

Infrastructure	Provided by
Bring Banks	Local Authorities
Recycling Centres	Local Authorities
Biological Treatment	Local Authorities / Private Sector
Thermal Treatment Facility	Private Sector
Municipal Landfill	Local Authorities
Construction/Demolition Recycling	Private Sector
Trial Reuse/Repair Centre	Local Authorities

20.5.3 Future Capital Investment

The projected capital expenditure in the Region during the life of the proposed Plan is as follows:

Table 20.4 Future Infrastructure and Estimated Capital Costs

Infrastructure	Provider	Est. Cost €	Timetable for Procurement
Bring Banks	Local Authorities	300,000	32 additional bring banks to be provided in the Region by 2009.
Recycling Centres	Local Authorities	700,000	8 additional sites by 2010 (must accept Household Hazardous waste, WEEE and Green Waste)
Green Waste Collection	Local Authorities	TBD	All Recycling Centres to accept household green waste where possible by 2010.
Biological Treatment	Local Authorities (1) Private Sector (1)	8,000,000 (x 2)	Capacity in the Region for biological treatment of 30,000 tpa Region by 2007. A private sector facility of similar size may also be developed.
Municipal Landfill	Local Authorities	18,500,000	Provision for new landfill cells within Region, plus remediation works on existing landfill sites
Construction/Demolition Recycling	Private Sector	5,000,000	New Facilities provided for the Region by 2009

The total capital expenditure for the Local Authorities over the Plan period is €27.5 million, subject to availability of resources.

Private Sector investment is estimated to be of the order of €13 million.

20.5.4 Projected Future Expenditures

Table 20.5 Operational Cost Projection per Activity Group – 2005 - 2010

Description	2004 €	2005 €	2006 €	2007 €	2008 €	2009 €	2010 €
Waste Disposal Cost	12,173,476	12,782,150	14,814,257	18,162,320	18,866,936	19,606,783	20,383,622
Landfill Operations	12,173,476	12,782,150	13,421,257	14,092,320	14,796,936	15,536,783	16,313,622
Landfill Remediation	*0	*0	643,000	1,713,000	1,713,000	1,713,000	1,713,000
Landfill Extension	*0	*0	750,000	2,357,000	2,357,000	2,357,000	2,357,000
Waste Collection	4,751,917	5,037,032	5,339,254	5,659,609	5,999,186	6,359,137	6,740,685
Recycling	1,943,566	2,461,958	2,681,958	4,530,958	5,475,958	5,745,958	5,765,958
Litter	5,319,102	5,478,675	5,643,035	5,812,326	5,986,696	6,166,297	6,351,286
Enforcement	1,435,820	1,543,506	1,659,269	1,783,715	1,917,493	2,061,305	2,215,903
Prevention and Minimisation	744,088	799,895	859,887	924,378	993,707	1,068,235	1,148,352
Total Expenditure	26,367,969	28,103,216	30,997,660	36,873,306	39,239,975	41,007,714	42,605,806

* Figures for landfill operation costs not available independently.

Comments and Assumptions

An overall annual increase in expenditure of €16.2 million in 2010 over 2004 is projected; this arises mainly from:

- An increase in expenditure of some €4.1 million in 2010 over 2004 costs for landfill extension and remediation.
- An increase of some €4.1 million in 2010 over 2004 also for landfill operating costs.
- Increase of €3.8 million over the period of the Plan on recycling, including the capital and operating costs of a Biowaste facility.
- All expenditures are at 2005 prices – no allowance has been made for inflation.
- Two landfill extensions are anticipated between 2006–2010, namely on the Gortadroma (Limerick) and North Kerry landfills. Combined capital expenditure of €11m has been estimated for expenditure on such extensions. The provision for landfill remediation has been made for €8 million.
- Recycling includes the installation and operation of one Biowaste plant; 8 recycling centres, 32 bring banks and one re-use centre over the period of the Plan. In the financial model, the Biowaste plant is funded through loans over a five year period. It is assumed the re-use centre will be leased over the period of the Plan; therefore no capital investment has been accounted for.
- It is assumed that 75% grant aid will be provided towards all recycling and recovery related capital expenditure, including the Biowaste facility.
- It is assumed that existing local authority waste collection service, which is provided in part of the Region, will continue to be provided.
- Provision is made for relatively substantial increases in enforcement and waste minimisation expenditure.

20.5.5 Future Income

The key driver of future income is projected to continue to be the landfill gate fees, as shown in Table 20.6, in which the estimated financial implications of the proposed Plan are shown.

Table 20.6 Income per Activity Group – 2005 – 2010

Description	2004 €	2005 €	2006 €	2007 €	2008 €	2009 €	2010 €
Landfill Waste Disposal - Gate Fees	20,933,383	21,871,069	22,855,639	22,245,417	21,537,482	20,723,214	21,672,892
Waste Collection	3,355,274	3,556,590	3,769,986	3,996,185	4,235,956	4,490,113	4,759,520
Recycling & Recovery	159,210	171,151	179,708	1,038,694	2,429,378	3,019,410	3,170,380
Litter	302,625	311,704	321,055	330,687	340,607	350,825	361,350
Enforcement & Awareness	291,741	306,328	321,644	337,727	354,613	372,344	390,961
Prevention and Minimisation	575,279	604,043	634,245	665,957	699,255	734,218	770,929
Total Waste Management Income	25,617,512	26,820,885	28,082,278	28,614,666	29,597,291	29,690,124	31,126,032
Waste Management Expenditure	26,367,969	28,103,216	30,997,660	36,873,306	39,239,975	41,007,714	42,605,806
Surplus / Deficit	-750,457	-1,282,331	-2,915,383	-8,258,641	-9,642,684	-11,317,590	-11,479,774

Assumptions

- 135,181 tonnes of waste was landfilled in the Region in 2004; this volume indicates a gross gate fee of €144 per tonne landfilled, including the Landfill Levy, or a net gate fee of €129 per tonne, after the levy is accounted for.
- It was assumed that landfill gate fees will increase in line with landfill operating cost increases over the period of the Plan. Any variation on this assumption is likely to increase the funding requirements of the Local Authorities.
- It was assumed that existing landfill volumes will remain as they are until 2006. In the period from 2007 – 2010 inclusive, it was assumed that 30,000 tonnes will be diverted progressively from Local Authority landfill to the Biowaste facility.
- It was assumed that the gate fee at the Biowaste facility will be €85 per tonne, this income is included as recycling income.
- It was assumed that grant assistance towards the operating costs of bring banks and similar facilities will pertain at current levels.

The effect of these assumptions is that projected landfill incomes increase marginally in the period to 2006 but generally fall back until 2010 as waste is diverted to the Biowaste facility. Provision is made for a substantial increase in recycling and recovery income, arising from this diversion to the Biowaste plant. However, we assume a Biowaste gate fee of €85 per tonne initially, which is substantially lower than the landfill gate fee.

We anticipate that there will be pressures on landfill gate fees and that there will be limited opportunities to recover costs by increasing the level of gate fees. We therefore see limited opportunity to recover the costs of remediation works through increased gate fees.

In overall terms, there was a deficit of €750,000 in the Region in 2004, with a shift to a €1.28 million deficit in 2005. This trend continues with substantial increases in the deficit in 2006/2007, mainly due to the capital costs of new infrastructure, including recycling/recovery works combined with landfill extension and remediation work. The funding gap will then stabilise in the Region of €11.5 million per annum until 2010.