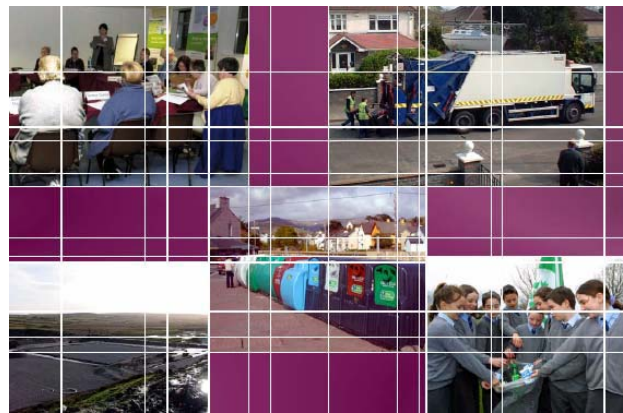




ANNUAL REPORT JUNE 2006 - JUNE 2007 REPLACEMENT WASTE MANAGEMENT PLAN LIMERICK/CLARE/KERRY 2006-2011



Limerick-Clare-Kerry

MANAGING
WASTE
BETTER

Brief	1
Executive Summary	2
Highlights Year 1	8
1. Introduction.....	9
2. Waste Generation and Waste Collection	10
2.1 Household Waste Arisings Per Person	11
2.2 Waste Collection Household Level	11
2.2.1 The Collection system.....	12
2.2.2 Households Availing of a Waste Collection Service.....	12
2.3 Uncollected Household Waste.....	14
2.4 Commercial and Industrial Waste Generation.....	15
2.5 Priority Waste Streams.	15
2.5.1 Construction and Demolition Waste (C&D Waste).....	15
2.5.2 Waste Electrical and Electronic Equipment(WEEE).....	16
2.5.3 End of Life Vehicles (ELVS).	17
3. Waste Recovery and Recycling	19
3.1 Introduction.....	19
3.2 Household Recycling Rate.....	19
3.3 Commercial & Industrial Recycling	21
3.4 Municipal Waste Recovery	21
3.5 Priority Wastes.....	22
3.5.1 Construction & Demolition Waste Recovery	22
3.5.2 Waste Electrical and Electronic Equipment (WEEE).....	22
3.5.3 End of Life Vehicles	22
3.6 Organic Waste.....	22
3.7 Energy Recovery.....	23
4 Infrastructural Development	24
4.1 Introduction.....	24
4.2 Bring banks	24
4.3 Recycling Centres	25
4.4 Landfill Development	26
5. Waste Prevention and Awareness.....	28
5.1 Introduction.....	28
5.2 Prevention Awareness.....	28
5.2.1 Limerick City Council	28
5.2.2 Limerick County Council	29
5.2.3 Kerry County Council.....	29
5.2.4 Clare County Council	30
5.2.5 Green Schools Campaign.....	30
5.2.6 Regional Awareness Intiatives.....	30
5.2.7 Waste Minimisation for Business & Industry.....	31
5.3 Prevention Projects	33
5.3.1 Local Authority Prevention Demonstration (LAPD).....	33
5.3.2 Green Fáilte Awards Scheme.....	35
6 Closed Landfills	36
6.1 Introduction.....	36
6.1.1 Register of Closed Landfill in the Limerick/Clare /Kerry Region	36
7. Enforcement.....	39
7.1 Introduction.....	39

7.2	Waste Permits	39
7.3	Waste Collection Permits.....	40
7.4	Enforcement Task Group.....	40
8.	Summary	43
9.	Conclusion	45

Brief

The Department of the Environment Heritage and Local Government published an up dated policy Document in 2004 namely *Waste Management Taking Stock and Moving Forward*. This combined with previously published documents aim 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 provide a solid basis for ensuring speedier and more effective realisation of the underlying policy objectives.

Key point 13 deals specifically with annual Environmental Reports for Waste Management Plans and states the following: -

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 key actions that are to be delivered in each of the plan's five years, and
- Prepare, within three months of the end of each year, an annual report on implementation.

The Annual Environmental Report will assess how well the Waste Management Plan is being implemented and it will follow a the performance based system for local government as required under the DEHLG Initiative "*Delivering Value for People-Service Indicators in Local Authorities*". A series of primary and secondary key performance indicators have been set out for the Limerick/Clare Kerry Region.

The report will also report on progress of projects introduced after the making of the replacement plan, which do not have specific indicators listed in the replacement plan but do contribute to reaching the overall targets of the Replacement Plan.



Signing of the Replacement Waste Management Plan June 2006

Executive Summary

Introduction

This is the first annual report for the Replacement Waste Management Plan 2006-2011 for the Limerick/Clare/Kerry Region. The Local Authorities of Limerick City, Limerick County, Clare and Kerry agreed in June 2004 to review the 2001 Plan and the Replacement Plan was published in June 2006. This report details the progress on targets for waste generation rates, recycling rates, prevention awareness and prevention initiatives, infrastructural developments, status of enforcement and including the areas where progress has been limited.

How Much waste is produced in the Region?

Since 2004 there has been an overall increase of almost 50% in waste generation but a decrease in household waste generation of 5%. The largest increase is attributed to the Construction and Demolition waste sector which increased by just over 80% since 2004 with Commercial and Industrial Sector having an increase of 5%. The following table indicates the trends: -

Waste Generation Per Sector 2004-2006.

Waste Type	2004 Tonnes	2005 Tonnes	2006 Tonnes
Total Household Waste	169,039	171,005	160,270
Total C&D Waste	580,960	961,362	1,049,772
Litter & Street cleaning	5358	3636	3450
Total Commercial /Industrial	196,694	198,244	209,702
Total Arisings	952,506	1,334,246	1,423,194

The massive increase in the Construction & Demolition Sector cannot be attributed solely to the increased number of developments but can also be attributed to the better recording systems now available for Construction and Demolition waste.

Household waste generation in the region when measured in kilogrammes per person has decreased since 2004, which is a very positive aspect of this report, and as prevention is a major strategic component of the plan, this would indicate that prevention awareness is beginning to take effect. The table below indicates the household waste generation rate per person in the region: -

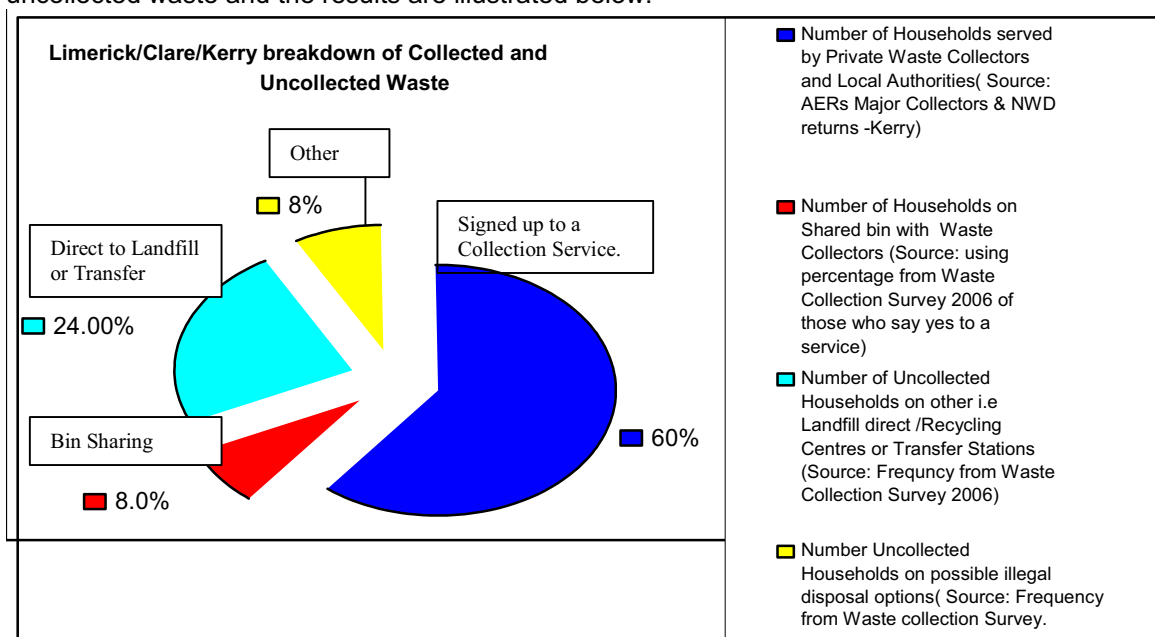
Household Waste Generation per person

Item	Limerick City	Limerick County	Kerry County	Clare County	Regional Figures
Kgs of Waste per person 2004	548	351	450	416	424
Kgs of Waste per person 2006	368	307	417	431	384
% increase decrease	-32.85%	-12.54%	-7.33%	3.61%	-9.43%

The regional average of 384kgs per person is less than the EPA 2005 indicator of 430kgs per person. Household and commercial waste collection in this region is predominantly collected by the private sector. Whilst we are satisfied with the overall regional figure, there may be some discrepancies in the individual Local Authority areas due to some confusion as to the precise boundaries.

Uncollected Household Waste

As only 60% of the households in the region are signed up to a waste collection service it was agreed that a household waste collection survey would take place and this was completed earlier this year. The frequencies from the survey were used to determine the destination of uncollected waste and the results are illustrated below: -



Recycling Rates

Recycling rates in the region have continued to grow since 2004 with regional household recycling rates having reached 23% and the municipal recycling rate running at 44%. There has been little progress in recycling Construction and Demolition waste. The following table summarises the household recycling trends since 2004.

Household Recycling Rates

Year	Limerick City	Limerick County	Kerry County	Clare County	Region
2004	15.2%	13%	8.4%	21%	13.9%
2005	23%	19%	16.3%	23.4%	20.1%
2006	25.5%	25.2%	21.3%	23.6%	23%

Waste collected from Bring Banks and Recycling Centres has had the greatest influence on the increased household recycling rate. The trend shown above is very encouraging and compares favourably to the national household recycling rate of 22%.

Priority Wastes

The European Union identified nine priority waste streams and these include streams such as Waste Electrical and Electronic Equipment (WEEE), End of Life Vehicles (ELVs), Construction and Demolition Waste and Tyres. The report focuses on areas where progress is on going.

- WEEE - Some major steps have been taken with the priority waste streams since 2004 and the region now exceeds the 2008 national target of 4kgs per head for collection of Waste Electrical and Electronic Waste (WEEE) as the current rate is 6.7kgs per head.
- ELV - Nine modified permits for Authorised Treatment Facilities have been issued in the region since January 2007 for End of Life Vehicles (ELVs) processing.
- C&D - There has been no progress in developing a regional recycling facility for Construction and Demolition Waste.

Infrastructural Developments

The Replacement Waste Management Plan made recommendations for the expansion of the existing waste infrastructure with continued emphasis on recycling facilities. The specific developments since 2006 are outlined below: -

- 11 additional bring banks
- 2 additional recycling centres
- 1.65million tonnes of additional landfill capacity
- No progress on thermal treatment
- No progress on biological treatment facilities.

Many of the infrastructural targets are on schedule but evidence indicates that there are going to be difficulties in finding suitable sites for bring banks going forward. Finding suitable sites will also be an issue for recycling centres. The lack of interest in developing thermal treatment facilities in the region is directly linked to the security of supply of waste to such a facility. The need for biological facilities to process organic waste will only be recognised as segregated collections for organic waste commence in 2008.

Prevention and Awareness

The Replacement Plan sets targets for continued waste prevention awareness and general waste awareness. The awareness officers in the region have been involved in many campaigns to achieve the regional targets for 2006 -2007 and the following are the main highlights: -

- 2 Waste Awareness Days
- 9 Schools Waste Prevention Events
- 3 Public lectures on Waste prevention
- Composting Workshops/Information Evenings
- Repaint Pilot Scheme
- Regional Recycling Leaflet-*Everything You Need to know about recycling but were afraid to ask.*
- Regional Hazardous Waste leaflet- *Household Hazardous Waste*
- 156 Schools have achieved Green Flag Status.

Commercial and Industrial Minimisation Projects

Many initiatives for waste minimisation in the workplace have taken place over the last year with the efforts of the waste minimisation officer being concentrated in the following areas: -

- Eco-Networking project
- Supply Network Shannon Pallet Exchange & Waste Reduction Scheme
- Waste Prevention Guide for Business & Industry
- Annual Forum
- Company site visits
- Biannual newsletters
- Hazardous Waste Leaflet for Business and Industry.

Major Prevention Projects

Local Authority Prevention Demonstration Project (LAPD)

This region was granted 75 % funding of over €440,000 in June 2006 for a 30-month project entitled New Integrated Prevention Project (NIPP) by the EPA in the first phase of the Local Authority Prevention Demonstration Project. The Limerick/Clare/Kerry region selected four different initiatives to demonstrate prevention in the region and they are summarised below. The region employed a full time co-ordinator to work on this project and the staff of the

Regional Waste Management Office and the Environmental Awareness Officers in each local authority assists this LAPD Co-ordinator.

- **Limerick County Council in partnership with the University of Limerick** has embarked on a paper reduction project.
- **Limerick City Council** has embarked on a very interesting initiative, which has two distinct phases to it. The first in conjunction with **Sisk Building Contractors** is monitoring the waste management practices of a large-scale construction project in the heart of Limerick City. The second phase of this project is to work with the newly opened Marriott Hotel, retailers and householders once in occupation to reduce waste and promote waste prevention.
- **Clare County Council in Conjunction with the Skycourt Shopping Centre** has embarked on an initiative aimed at “Wise Waste Management”.
- **Kerry County Council and Kerry Airport** is developing a waste action plan as part of LAPD. Kerry Airport is a small regional airport operating in a very competitive market and successfully growing its passenger numbers.

Green Fáilte Awards Scheme

This scheme encourages member companies in the hospitality sector to implement and develop environmental management systems, with a particular focus on waste, energy and water. Fourteen hotels have joined the scheme to date and it will run over a three year period. The Programme involves on-site environmental reviews and on-going workshops, as well as presentations of different categories of Green Fáilte Awards.

Enforcement

The enforcement efforts in the region have continued to increase since 2004 with more enforcement manpower in place and a higher level of expertise within the teams. Car dismantlers, small recycling companies and those wishing to deposit building waste on their land require waste Facility Permits. The number of Facility Permits has increased from 195 in 2004 to 249 in 2007. Waste Collection Permits are required by persons involved in the collection and movement of waste as described in the European Waste Catalogue and include such things as bulky waste, household waste, hazardous waste and construction and demolition waste. The Waste Collection Permits have increased from 305 in 2005 to 395 in 2007. There has continued to be an increase in the number of enforcement notices issued and also in cases pursued in the courts particularly in connection with illegal movement and disposal activities.

Closed Landfills

A draft inventory of closed landfills in operation or closed between 1977 and 1997 has been prepared and now includes 48 facilities which are being investigated in accordance with the EPA Code of Practice for Risk Assessment for Unregulated Waste Disposal Sites.

Next Steps

The regional steering group realises that progress must continue over the next year and efforts will be concentrated in the following areas: -

- Continued Infrastructural Development.
- Target Organic Waste & Biological Treatment
- Proceed with Reuse Schemes
- Further Prevention Awareness
- Target Uncollected Waste
- Engage with Private Sector regarding C& D Recycling and Thermal Treatment
- Verification Methods for Waste Data

Comments

Considerable progress has been made in meeting the targets of the Replacement Waste Management Plan 2006. Nevertheless, significant challenges remain particularly in siting new waste infrastructure. The recent statement by the newly appointed Minister for the Environment Heritage and Local Government, Mr. J. Gormley T.D., that he is minded to issue a Section 60 Policy which would change the direction of National Waste Policy would have considerable impact on the policies of the Replacement Waste Management Plan 2006-2011 for the Limerick/Clare/Kerry Region. The local authorities in the region are concerned that altering the policy now which in effect is a move towards endorsing Mechanical-Biological Treatment (MBT) would lead to regression in progress for recycling and waste prevention.

Highlights Year 1

The targets for the major treatment options in the plan are:

Recycling	45%
Energy Recovery	41%
Landfill Disposal	14%

After the first year of implementing the policies and objectives of the Replacement plan, considerable progress has been made.

The following are some of the main achievements: -

- **Increase in the household recycling rate**
- **Increase in the number of recycling centres**
- **Decrease in the waste arisings per person/employee**
- **WEEE recycling targets per person per annum have been reached**
- **Modified Permits for Authorised Treatment Facilities for end of life vehicles have been issued**
- **Increase in the municipal recycling rate**
- **Development of new landfills cells in all the licenced landfills.**
- **Commencement of Waste Prevention Projects**
- **Continued Education and Awareness Programmes**
- **Increased Enforcement.**

Unfortunately there are some areas where little or no progress has been made and the main obstacles are defined as: -

- **Lack of suitable sites for Bring Banks**
- **No security of supply for Thermal Treatment Facilities**
- **No major Construction and Demolition waste recycling Facilities (Also a national issue)**
- **Lack of Facilities for Treatment of Biological Waste**

1. Introduction

The Local Authorities of Limerick City Council, Limerick County Council, Clare County Council and Kerry County Council jointly agreed to prepare a Replacement Waste Management Plan. The process commenced in June 2004 and was completed and made on the 20th day of June 2006. This is the second waste management plan for the region and the study area for the plan consists of the four administrative areas of the above listed local authorities.

In the period of the first Waste Management Plan for this region significant progress had been made particularly in relation to recycling levels for householders and businesses. Nevertheless many elements of the first plan remain to be fully delivered and are now included in this Replacement Plan. The emphasis in the Replacement Waste Management Plan shifts the focus from recycling to moving further up the hierarchy and concentrates on prevention, minimisation and reduction of waste but does include more stringent recycling targets. Measurement of recycling targets is a readily quantifiable task as compared with measuring prevention that is not so easily measured as it is quantifying waste that potentially would have been produced.

Waste growth in this region increased over the five years of the previous plan with a growth rate of approximately 3% per annum and this can be linked to the economic growth and population growth. The table below indicates the population shifts from 2002 to 2006.

Table 1.1 Population changes Limerick/Clare/Kerry Region

Local Authority	2002 Population	2006 Population	Change in population
Limerick City Council	54,023	52,539	-2.7%
Limerick County Council	121,281	131,516	8.4%
Clare County Council	103,277	110,950	7.4%
Kerry County Council	132,527	139,835	5.5%
Total	411,108	434,840	4.7%

The challenge during the life span of the Replacement Waste Management Plan is to break the link between waste growth and economic growth and to concentrate on targeting minimisation at household and business levels so as to reduce the arisings per person/household and per employee.

The policies of the Replacement Waste Management Plan prioritise prevention as a key focus area and then have set targets for each of the major treatment options as follows: -

- Recycling 45%
- Thermal Treatment 41%
- Disposal 14%

The Replacement Waste Management Plan also sets out a number of secondary targets that will be key in achieving the overall targets and these have various target dates throughout the life span of the plan. These targets will be documented in this report as well as the success of the plan to date, which will be monitored using a series of primary and secondary indicators as set out in the Replacement Waste Management Plan. The biggest challenge for the region in the years ahead will be meeting the landfill diversion targets as set out the 1998 Policy Statement "*Waste Management Changing Our Ways*" as well as meeting the 2010 targets for

organic waste which are set out in “National Strategy on Biodegradable Waste” which was published in 2005. The targets set out in the strategy for organic waste are also included in the Replacement Waste Management Plan.

2.0 Waste Generation and Waste Collection

The Limerick Clare Kerry region has recognised that waste growth has continued in the region, which reflects the national trend and is similar to current UK trends also. The reporting of waste statistics has improved significantly over the years and the regional waste management office has put considerable efforts into verifying the results reported annually. However, achieving consistency of reporting still requires improvement over the coming years. The primary responsibility for the accuracy of information remains with major waste collectors. In reviewing the detail of this report it should be noted that all waste figures quoted are best estimates derived from the Annual Reports from the Major Waste Collectors and the EPA National Database.

Table 2.1 outlines the total waste generation for the region for 2004, 2005 and 2006 (Excluding Sludge Generation from Water/Sewage/Agricultural/Industry as no updated figures are available)

Waste Type	2004 Tonnes	2005 Tonnes	2006 Tonnes	Increase or decrease since 2004
Household Waste Collected by or on behalf of LA	116,561	114,231	102,533	-12.03%
Household Waste delivered to Civic Amenity sites/Recycling Centres	3978	5978	10,825	172.12%
Bring Bank Waste	5802	7030	7953	37.07%
Other Household Waste Home Composted	3080	2727	3726	20.97%
Estimate of uncollected Waste	39,618	41039	35,233	-11.07%
Total Household Waste	169,039	171,005	160,270	-5.19%
Litter & Street Cleansing	5,358	3636	3450	-35.61%
Commercial & Industrial Waste	196,694	198,244	209,702	6.61%
C& D Waste	*580,960	961,362	1,049,772	80.70%
Ash & Incinerator Residues	** (233,619)		-	
Mining And Quarry Waste	-		-	
Healthcare waste	455		-	
Total	952,506	1,334,246	1,423,194	49.42%

* This figure seems low, as it is possible that all Construction & Demolition Waste was not being recorded at this stage

**Not included for comparison purposes

The first waste plan predicted growth rates of 2-3% per annum in household waste and this was the case from 2001 to 2004. The household waste statistics indicate that for 2006 the total tonnages of household waste are considerably less than 2004, which are admirable, but may also be due to more accurate statistics being generated by the major waste collectors..

The key performance indicator for household waste is to examine the waste generation per person so this is calculated on Table 2.2 as follows. The major waste collector in the Limerick County/Clare area had difficulty in defining the border with Limerick City in terms of waste collection tonnages. As a consequence data relevant to Clare may include data from Limerick City and Limerick County. The regional figure for waste per person is the more meaningful indicator.

Table 2.2 Kilogrammes of waste generated per person-Primary Key Performance Indicator

	Limerick City	Limerick County	Kerry County	Clare County	Regional figures
No. of Households 2004(adjusted CSO 2002)	18,697	43,205	43,982	34,588	140,472
No. of persons/household CSO 2002	2.71	3.04	2.69	2.92	2.84
Total Household Waste arisings 2004	27,751	46,076	53,238	41,973	169,038
Kilogrammes of Waste Arising per household 2004	1484	1066	1210	1214	1203
Kilogrammes of Waste per person 2004	548	351	450	416	424
No. of Households 2006 CSO	19,550	44,675	48,110	38,210	150,545
No of persons/household CSO 2006	2.6	2.9	2.7	2.8	2.75
Total Household Waste Arisings 2006	18,690	41,271	54,168	46141	160,270
Kilogrammes of Waste Arising per household 2006	956	924	1,126	1,208	1,065
Kilogrammes of Waste per person 2006	368	307	417	431	384
% decrease/increase in waste arisings/person	-32.85%	-12.54%	-7.33%	3.61%	-9.43%

2.1 Household Waste Arisings Per Person

The EPA national indicator for waste arising in 2004 and 2005 was 430kgs per person per annum (as per National Waste Database Reports 2004 & 2005) and it is evident from the above results that this region is on average below this indicator.

It is estimated that the continuing waste prevention awareness programmes in the region will further impact on this figure and further decreases should then result.

2.2 Waste Collection Household Level

Household Waste in the Limerick/Clare/Kerry Region is collected, treated and disposed of through an integrated system and now all persons signed up to a system have access to a dry recyclable service. Some households do not have access to a collection system but results from our recent Household Waste Collection Survey indicate 90% of people in the region have access to a service but not all households are using the service even when they have access.

2.2.1 The Collection system

85% of those persons signed up to a service in the Limerick/Clare/Kerry Region are serviced by the private waste sector and the remaining 15% are serviced by the Kerry Local Authorities, which is a drop of 14% from the 2004 estimate. The household waste that is generated is segregated at source by the householder into bins and or bags so as two separate streams are produced; one for recycling and one for disposal. These wastes are collected either on alternate weeks or in dual compartment trucks. The residual waste is either brought directly to landfill or is processed through a mechanical treatment system and the resultant waste is either Refused Derived Fuel (RDF), which is exported to Sweden or residual waste destined for landfill. The segregated dry recyclables are further sorted and shipped as single stream green wastes to destinations throughout Europe and Asia for recovery, details of which are noted on the annual returns from the major waste collectors.

2.2.2 Households Availing of a Waste Collection Service.

The Limerick/Clare/Kerry Region commenced a household waste collection survey during 2006 that was completed in 2007. This survey was one of the 2006 targets of the Replacement Waste Management Plan 2006-2011 for the Limerick/ Clare/Kerry region. The survey was carried out with the assistance of Marketing Centre for small business in the University of Limerick. The survey was to examine the following: -

- Access to the Waste Collection Service
- Use of Waste Collection Service
- No of persons sharing bins
- Disposal options for those not signed up to a waste collection service
- Frequency of use of bring banks and Civic amenity sites.

The survey was designed to give an indication of the destination of uncollected waste and for first time the significance of bin sharing was to be established. The survey also reviews trends in use of Bring Banks, Recycling Facilities, Landfills and Illegal activities. It also examined the differences in urban versus rural household waste management practices.

In Table 2.3 that follows we have used the results from the survey combined with information supplied by the major waste collectors in their annual returns (particularly number of households signed to the collection service) to provide an overview of current household waste practices.

It should be noted that the Kerry rural Survey was carried out twice as the first survey was only carried out on rural collection routes and this would skew the overall results. The second rural survey indicates an unusually high bin sharing figure was recorded which is not in line with regional trends.

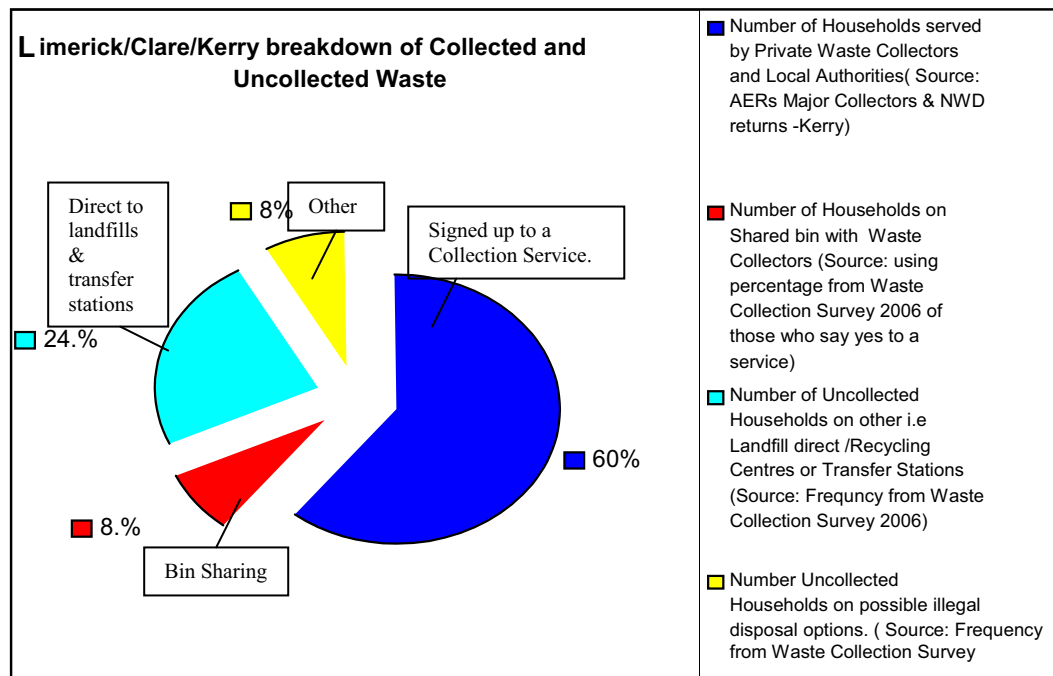
Chart 2.1 graphically represents the estimated breakdown in terms of the following: -

- Signed up to a collection service
- Bin Sharing
- Waste direct to landfill or Recycling Centres
- Other options – mainly backyard burning/ burying/fly tipping.

Table 2.3 Waste Practices of Households Not Signed Up To A Waste Collection Service 2006.

Description of Households	Limerick City Council	Limerick County Council	Clare County Council	Kerry County Council	Regional Figures
Number of Households in the County (Source CSO 2006 Figures)	19,550	44,675	38,210	48,110	150,545
	100%	100%	100%	100%	100%
Number of Households served by Private Waste Collectors and Local Authorities(Source AERs Major Collectors & NWD returns -Kerry)	16,991	25,300	22,285	25,683	90,259
Number of households served by Private Waste Collectors and Local Authorities expressed as a percentage	87%	57%	58%	53%	60%
Number of Households not signed up to a service	2,559	19,375	15,925	22,427	60,286
Above Expressed as a percentage of Total Households	13%	43%	42%	47%	40%
Breakdown of Households not signed up to a service.					
Number of Households on Shared bin with Waste Collectors (Source using percentage from Waste Collection Survey 2006 of those who say yes to a service)	276	2,015	2,166	8,971	13,428
Frequency from survey	10.80%	10.40%	13.60%	40%	18.70%
Shared bin numbers based as a percent of total households	1%	5%	6%	19%	7.56%
Number of Uncollected Households on other i.e Landfill direct /Recycling Centres or Transfer Stations (Source Frequency from Waste Collection Survey 2006)	0	13,957	11,062	10,819	35,839
Frequency of above from survey	0%	80%	78%	75.40%	58.45%
Expressed as a percentage of Total Households	0%	31%	29%	22%	24%
Number Uncollected Households on possible illegal disposal options	2,283	3,403	2,697	2,637	11,019
Above Expressed as a percentage of Total Households	12%	8%	7%	5%	8%
Total uncollected	13%	43%	42%	47%	40%

Chart 2.1 Breakdown of households using and not using the service in the Limerick/Clare/Kerry Region



The number of households signed up to a service remains at 60% and has even dropped slightly from our reported 2004 figure of 62%. The breakdown reveals that there is a significant number of households i.e. 1 in every 12 are sharing a bin as one household is signed up to the service and the other is using their wheeled bins. There is 24% of households choosing to organize their own waste disposal at landfills and transfer stations

2.3 Uncollected Household Waste.

Uncollected Household waste represents 35,233 tonnes of the total waste generated in 2006 and is a key performance indicator for the Replacement Waste Management Plan with 2004 baseline rate set at 39,618 tonnes. The 2006 figure indicates an 11.2 % decrease in uncollected waste even with increased waste arisings but this may be due to a better estimate of the shared bin collection rate.

In 2004 it was estimated that 17.4% of uncollected waste is brought directly to landfills, recycling centres (Civic Amenity Sites) and transfer stations. This has risen to 24% in 2006 based on survey results and this would indicate that higher bin charges are pushing some people towards organizing their own waste collection arrangements. The bin charges were estimated in the 2001 plan to range from €89-€124 per annum for household waste. In 2005 the range is €320 to €450 per annum. Finally the 2006 costs range from €338 to €490 but with the average bill being approximately €390.00 per annum. Taking the mid point of the 2001 range and the 2006 range that would indicate that bin charges have increased 290% since 2001.

In 2004 it was estimated that the level of households using illegal options was in the range of 5-15% and now in 2006, based on the survey results, it is estimated that the level is 8%. So going forward more awareness programmes need to be targeted at these focus groups to encourage them to use more environmentally friendly options in the future.

It may also be desirable to do a follow on survey in 2008/2009 and this would measure the effect of programmes pursued.

2.4 Commercial and Industrial Waste Generation.

The quantity of commercial and industrial waste generated in the Limerick/Clare/Kerry Region has increased by 6.6% since 2004 to 209,702 Tonnes. This waste consists mainly of mixed commercial and industrial waste and separately collected fractions. There is a difficulty in generating the exact figure for commercial and industrial waste as there is a need to ensure that double counting of waste being removed from waste facilities does not occur as much of the waste brought back to waste facilities by major collectors is counted by them and then transported by hauliers to its final destination and recounted by the hauliers. We have tried to ensure this figure has taken account of this situation. The waste growth is in line with our economic growth, which in terms of GNP and GDP is approximately 5% per annum.

The key performance indicator for Commercial & Industrial waste for the Replacement Waste Management Plan is the quantity of Commercial and Industrial Waste generated per employee, the 2004 figure was 1290kgs/employee based on the 2002 figure of 168289 people employed in the region. The 2006 figure is 1093kgs/employee and so that indicates an overall decrease of 6.5% per employee based on an employment rate of 191942 people for the region.

This is an area that requires further concentration from our waste minimization programme so as we ensure economic growth does not always represent waste growth. In this vein the Limerick/Clare /Kerry Region has taken on major projects in the area of waste prevention and minimization and the up to date results will be discussed in Section 5 of this report.

2.5 Priority Waste Streams.

The European Union has identified the following as priority waste streams:

- Construction & Demolition Waste
- End of Life Vehicles
- Waste Electrical and Electronic Equipment
- Batteries
- Healthcare Waste
- Packaging Waste
- Polychlorinated Biphenyls (Transformers/Capacitors)
- Tyres
- Waste oils

In what follows only the streams which have had undergone significant changes since the plan was published will be discussed.

2.5.1 Construction and Demolition Waste (C&D Waste).

Construction and Demolition waste arisings in the region have increased by further 80% since 2004 to just over 1million tonnes in 2006. This far exceeds the growth in volume output in the construction sector that was 10.8% in 2004, 12.6% in 2005 and 1.1% in 2006(CSO 2006 Quarterly Reports). This demonstrates that waste growth in the Construction sector is greater than economic growth and may in part be due to the major increase in permitting of carriers of

C&D waste and hence better recording of volumes of C&D Waste. The EPA is proposing to introduce Guidelines on C&D waste with view to excluding waste used in certain beneficial reuse projects from the C&D waste stream definitions.

The Department of Environment, Heritage and Local Government published “ *Best Practice Guidelines on the preparation of Waste Management Plans for Construction and Demolition Projects*” in July 2006 and the Regional Waste Management Office talked to each of the planning offices in the region to look at how to ensure the developments of a size greater than the threshold listed in the guidelines would produce waste management plans. However, as this was a voluntary initiative it was not possible for the planning departments to take action on same as adequate resources are scarcely available to meet their statutory requirements.

2.5.2 Waste Electrical and Electronic Equipment(WEEE)

All major recycling centres (CAs) now accept WEEE and this is one of the targets of the Replacement Waste Management Plan.

The government introduced regulations in August 2005 to ensure handling of WEEE waste in an environmentally sound manner. These regulations Waste Management (Waste Electronic and Electrical Equipment) Regulations, 2005 introduced a one to one take back system when purchasing electrical items.

A levy was also introduced on all electrical and electronic equipment known as European Recycling Fund (ERF) and this is charged when purchasing these items. The levy is designed to pay for the collection and recovery of take back items. The regulations introduced a registration system for retailers and a compliance scheme for producers and importers. Hence when importing or producing electrical and electronic for the Irish market these groups must join one of the two compliance schemes WEEE Ireland or the European Recycling Platform. The legislation allows the public as well as using the take back scheme to bring WEEE to the recycling centres free of charge and also allows retailers to use the recycling centres as drop off point when they are not a certified collection point. The Minister also introduced targets at that time. This target was to recycle 4kgs per head of WEEE waste by 2008. In the table that follows it is evident that all the local authorities in the Limerick/Clare/Region have now exceeded this target.

Table 2.4 WEEE Collection August 2005-August 2006

LIMERICK CITY/LIMERICK COUNTY						
SITES	CRT	IT	LDA	LDA COLD	OTHER	Total
GORTADROMA LANDFILL	11.441	1.209	8.12	20.12	6.984	47.874
HEGARTY	6.893	3.159	8.1	31.8	11.0	60.9
KILMALLOCK	32.918	3.373	80.7	41.1	29.9	188.0
NEWCASTLE WEST	28.8	7.55	73.6	24.0	25.5	159.4
PARK ROAD DEPOT	24.191	8.784	4.5	5.9	13.9	57.3
Total Civic amenities	104.243	24.075	175.0	122.9	87.2	513.5
4 HOME DAIRYGOLD	0.456	0	4.2	2.1	1.1	7.8
ARGOS CRESCENT	1.238	0	0.0	0.0	6.4	7.7
ARGOS CRUISES	0.74	0	0.0	0.0	1.7	2.5
CURRYS LIMERICK	8.646	0.806	15.8	4.4	4.4	34.1
FREIGHTSHIFT NATIONWIDE	0	0	6.5	1.4	0.0	7.9
SEAMUS KIELY LTD	5.575	0	21.6	5.6	3.3	36.1
SEAMUS KIELY LTD NEWCASTLEWEST	0.705	0.489	0.0	2.5	1.7	5.4
SEAN HENNESSY ELECTRICAL SUPERSTORE LIMERICK	5.379	0	37.7	15.4	4.9	63.3
Total Retailers	22.739	1.295	85.7	31.4	23.5	164.7
Total LIMERICK	126.982	25.37	260.8	154.3	110.7	678.2

Limerick City & County

Average weight per collection 5.5Tonnes
Average weight per inhabitant per year 3.7kgs 2006 6.0kgs 2007 to date

CLARE SITES	CRT	IT	LDA	LDA COLD	OTHER	Total
ENNIS RECYCLING CENTRE	52.789	18.239	66.605	26.433	56.509	220.575
INAGH LANDFILL	48.988	5.747	82.921	29.829	20.809	188.294
LISDEEN CIVIC AMENITY SITE	6.994	2.579	22.33	6.365	10.606	48.874
SCARIFF CIVIC AMENITY SITE	15.166	3.961	34.1	14.57	16.894	84.691
Total Civic amenities	123.937	30.526	205.956	77.197	104.818	542.434
ENNIS ELECTRICAL	5.359	3.555	77.256	23.07	10.035	119.275
SEAN HENNESSY ELECTRICAL SUPERSTORE CLARE	4.309	1.021	47.299	16.306	9.682	78.617
Total Retailers	9.668	4.576	124.555	39.376	19.717	197.892
Total CLARE	133.605	35.102	330.511	116.573	124.535	740.326

Clare County

Average weight per collection 7.1Tonnes
Average weight per inhabitant per year 6.9kgs 2006 7.3kgs 2007 to date

KERRY SITES	CRT	IT	LDA	LDA COLD	OTHER	Total
CAHERCIVEEN	12.75	0.10	38.80	11.33	6.18	69.16
KENMARE	7.42	1.50	33.17	10.39	10.42	62.89
KILLARNEY (COOLCASLASH)	4.97	1.32	55.71	9.97	6.00	77.97
MILLTOWN	27.32	3.60	135.70	34.98	19.33	220.93
NORTH KERRY LANDFILL	43.26	4.30	111.03	39.61	33.03	231.23
Total Civic amenities	95.72	10.82	374.40	106.29	74.95	662.18
J. MCKENNA LTD	0.56	0.00	8.22	2.72	0.68	12.18
TOMO BURKE ELECTRICAL LTD	2.66	0.00	61.52	13.09	2.40	79.67
WALSH BROS ELECTRICAL	2.90	0.00	69.52	21.02	3.43	96.86
Total Retailers	6.12	0.00	139.26	36.83	6.51	188.71
Total KERRY	101.84	10.82	513.66	143.11	81.46	850.89

Kerry County

Average weight per collection 6.5 Tonnes
Average weight per inhabitant per year 6.2kgs 2006 6.8kgs 2007 to date

The kilogrammes of WEEE waste collected per inhabitant now exceeds the national and EU target for 2008 with the regional average for 2005/2006 being 5.5kgs/head and having increased to 6.7kgs per head for the first six months of 2007. Clare County has consistently exceeded the collection rates of the other local authorities. It is also worth noting that the European studies have indicated that the average generation rate of WEEE per person is 12-20kgs per annum.

2.5.3 End of Life Vehicles (ELVS).

The end of life vehicle regulations were introduced in June 2006 and these imposed substantial obligations on local authorities in terms of registration /administration, modification of permits, inspection and enforcement. These areas have implications for resources of which some was offset by the registration fee paid by the brand names. The Waste Management (End of Life Vehicle) Regulations 2006 are designed to allow individuals to bring their end of life vehicles to an Authorized Treatment Facility (ATF) for recycling free of charge. The ATF should be contracted by the brand names but there are some teething difficulties in agreeing these contracts. There are no figures arising as of yet due to the fact that most of brand

names have not satisfactorily completed the registration process. Many Authorized Treatment Facilities (ATFs) are now permitted in the region and Table 2.5 below indicates the availability of ATFs in this region. ATFS issue Certificates on Destruction when the vehicle has been treated/recovered appropriately.

Table 2.5 Authorized Treatment Facilities in the Limerick/Clare/Kerry Region

Local Authority Area	Number of ATFS	Number of Applications awaiting a decision
Limerick City Council	1	0
Limerick County Council	2	1
Kerry County Council	7	5
Clare County Council	0	0

There has been no significant applications for permits from any operators in Clare to date but Clare County Council are liaising with local operators to see if any interest can be generated.

3.0 Waste Recovery and Recycling

3.1 Introduction

The overall recycling target for the Limerick/Clare/Kerry region in the Replacement Waste Management Plan is 45% by 2013. The region is progressing steadily towards this target with the greatest impact on the household recycling rate being the introduction of recycling centres. Commercial and Industrial Waste recycling has continued to improve and the latest review of Waste Collection Permits ensures that segregated collection of dry recyclables and individual streams is always provided by major waste collectors.

3.2 Household Recycling Rate

In the following tables the recycling rates for 2004, 2005 and 2006 are shown. In the household recycling rate is a key performance indicator for the Replacement Waste Management Plan.

Table 3.1 Recycling rate for households in 2004

Waste Source	Limerick City	Limerick County	Kerry	Clare	Region
Bring Banks	1052	2090	1641	1019	5802
Recycling Centre	434	1096	1040	1407	3978
Kerbside	2735	2807	1811	6576	13729
Total Recycled (Tonnes)	4221	5994	4492	8802	23,509
Contaminated mixed Collected Waste	285	312	138	708	1443
Collected waste	22,265	26,874	28,557	23,662	101,358
Home Composting	80	1200	1600	200	3080
Uncollected Waste	899	11699	18451	8599	39618
Chemcar Collection	0.5	27.8	0.6	2.0	30.9
Total Arisings (Tonnes)	27,751	46,076	53,238	41,973	169,039
Recycling Rate (%)	15.2%	13.0%	8.4%	21.0%	13.9%

Table 3.2 Recycling rate for households in 2005

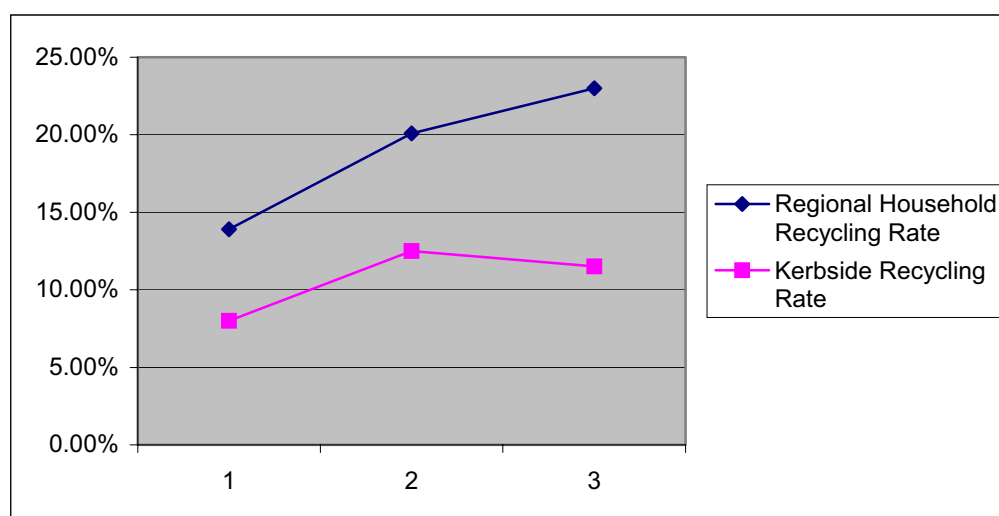
Waste Source	Limerick City	Limerick County	Kerry	Clare	Region
Bring Banks	1,055	2,111	2,445	1,420	7,031
Recycling Centre	497	1,640	1,696	2,145	5,978
Kerbside	4,618	4,790	4,266	7,811	21,485
Total Recycled (Tonnes)	6,170	8,541	8,407	11,376	34,494
Collected waste	17,578	22,215	22,133	21,769	83,695
Home Composting	127	600	1,800	200	2,727
Uncollected Waste	2,510	11,829	14,127	12,572	41,038
Landfill direct	0	1,486	4,962	2,603	9,051
Total Arisings (Tonnes)	26,385	44,671	51,429	48,520	171,005
Recycling Rate (%)	23.0%	19%	16.3%	23.4%	20.1%

Table 3.3 Recycling rate for households in 2006

Waste Source	Limerick City	Limerick County	Kerry	Clare	Region
Bring Banks	1,229	2,213	2,869	1,642	7,953
Recycling Centre	530	3,627	2,162	4,506	10,825
Kerbside	3,007	4,588	6,418	4,757	18,770
Total Recycled (Tonnes)	4,766	10,428	11,449	10,905	37,548
Collected waste	12,635	19,800	21,332	21,433	75,200
Home Composting	360	600	1,800	966	3,726
Uncollected Waste	929	8,934	15,826	9,544	35,233
Landfill direct	0	1,509	3,761	3,293	8,563
Total Arisings (Tonnes)	18,690	41,271	54,168	46,141	160,270
Recycling Rate (%)	25.5%	25.2%	21.3%	23.6%	23%

The above figures should be reviewed in the context of earlier statements regarding boundaries. The tables indicate that the recycling targets for household waste are increasing steadily and that the introduction of the recycling centres (CAs) has had the greatest influence on increasing the recycling rates. The regional household recycling rate has reached 23% in 2006 and is just above the EPA's 2005 indicator of 22.7%. The kerbside recycling rate has remained unchanged for 2005 and 2006 with even a slight decrease in 2006. The local authorities are encouraging the private waste contractors in particular to include recycling awareness in their future information campaigns and it now a condition of the reviewed waste collection permits. The chart below indicates the kerbside recycling trend versus the total household recycling trend demonstrating the almost static trend of kerbside recycling compared with total recycling rate. It should be noted that one of the major waste collectors in the region introduced additional capacity for dry recyclables in the first quarter of 2007 that may have impact on 2007 kerbside recycling rates

Chart 3.1 Household Total Recycling Rate Versus Kerbside Recycling Rate.





New Bring Bank Facility at Inch Beach in Kerry.

3.3 Commercial & Industrial Recycling

The implementation of the packaging directives has impacted on the increased recycling rate for commercial and industrial waste over the last few years. The commercial recycling rate in 2004 was 61% and this is a key performance indicator for the Replacement Waste Management Plan. The recycling rate has continued to rise and in 2006 has reached 64%.

In the review of the Waste Collection Permits for the major waste collectors, the local authorities have ensured that all major waste collectors offer a segregated collection to all their commercial and industrial clients and this will be enforced over the latter months of 2007 and during 2008.

3.4 Municipal Waste Recovery

Municipal Waste is defined in the National Strategy for Biodegradable Waste as follows:-

“Waste from households, as well as commercial and other waste, which because of its composition, is similar to waste from households.”

In 2004 it was estimated that the municipal recycling rate was 39% and using the same method as indicated below the 2006 Municipal recycling rate has risen to 44%

Table 3.4 Municipal Waste Recovery Rate

Waste Source	Regional Total 2004(Tonnes)	Regional Total 2006(Tonnes)
Total Household Waste Recovered	23,509	37,548
Total Commercial/industrial Waste Recovered	119,491	135,322
Total Quantity Recycled	143,000	172,870
Total Quantity of Household, Street Sweepings and Commercial/industrial Waste generated	371,090	390,706
Recycling Rate	39%	44%

This figure indicates that Limerick/Clare/Kerry Region is moving close to the 2013 target for Municipal Waste but all waste arisings must be included. The Construction & Demolition Waste arisings and recovery rate would also have to be accounted for and currently there is little or no recycling of C&D Waste in this region and hence this would have a significant effect on the overall recycling rate.

3.5 Priority Wastes

3.5.1 Construction & Demolition Waste Recovery

There has been very little progress in the investment in infrastructure for C& D Waste Recycling/Recovery in the Limerick/Clare/Kerry Region over the last few years despite the increased developments in the region. So as to meet the overall targets of the plan the local authorities will have to further engage with the C& D sector and encourage it to invest in recycling facilities. The Local Authorities in the region will also be looking at implementing the guidelines for submission of recycling plans under Section 34(4) of Planning and Development Act 2000 as means of going forward following the unsuccessful application of the *“Best Practice Guidelines on the preparation of Waste Management Plans for Construction and Demolition Projects”*

3.5.2 Waste Electrical and Electronic Equipment (WEEE)

It is assumed that all the WEEE waste collected in this region is sent to a dismantling site that then allows for the recovery of most of the components. These dismantling sites are in Ireland and Europe but most of the recovery sites are in Europe.

As discussed earlier the national target for WEEE is 4kgs per head and as we have now reached a regional average of 6.7kgs per head we have now exceeded this target. The collections system for WEEE is organized by European Recycling Platform through their logistics arm Geodis.

3.5.3 End of Life Vehicles

The new regulations also introduce new environmental standards so that when a car is scrapped, as much material as possible is recovered and recycled and it takes place in a way that does not harm the environment. The new recovery and recycling targets that ATFS will be required to meet are

- 85% reuse/recovery by average weight per vehicle deposited for appropriate treatment by 1 January 2006 (to include 80% materials recycling); and
- 95% reuse/recovery by 1 January 2015 (to include 85% materials recycling)

There is no data available to date but trials will commence in Autumn 2007.

3.6 Organic Waste.

The Limerick/Clare/Kerry Region has set the 2010 targets for diversion of organic waste from landfill as stated in the *“National Strategy on Biodegradable Waste”* published by the Department of Environment, Heritage and Local Government in April 2006. This sets a target to divert 35% of Organic Waste from landfill by 2010. There has been little progress on meeting this target in 2006 but during the review of the waste collection permits new

schedules relating to collection of segregated organic waste for households and commercial waste producers were included and these are outlined below.

TABLE 3.5 Schedule for Segregated Organic Waste Collection for Households

Date	Target
31 st Dec 2007	10% of Households must have segregated organic collection
31 st Dec 2008	25% of Households must have segregated organic collection
31 st Dec 2010	40% of Households must have a segregated organic collection

TABLE 3.6 Schedule for Segregated Organic Waste Collection for Commercial Collections.

Date	Target
31 st Dec 2007	50% Diversion of Commercial Organic Waste from Landfill
31 st Dec 2008	80% Diversion of Commercial Organic Waste from Landfill
31 st Dec 2009	100% Diversion of Commercial Organic Waste from Landfill

3.7 Energy Recovery

The Replacement Waste Management Plan has set a target of 41% for energy recovery for 2013 that was to focus on the provision of thermal treatment to recover energy from the residual waste body remaining after preferred options. There has been some progress in recovering energy from landfill gas but no progress on the provision of thermal treatment facilities. In discussions with the private sector the lack of a consistent supply of waste for thermal treatment is one of the greatest obstacles to the development of thermal treatment for this region. The private sector are not comforted by the waste direction policy included in the Replacement Waste Management Plan and have indicated that this would require a national policy direction.

4 Infrastructural Development

4.1 Introduction

The Replacement Waste Management Plan policies continue to implement an integrated approach to waste infrastructural development in the region with the eventual aim of reaching the 2013 plan targets.

4.2 Bring banks

The Replacement Waste Management Plan has Secondary Key Performance Indicator of the total Number of Bring Banks distributed throughout the region. The 2005 baseline figure was 215 and the 2007 figure to date is 226. Therefore progress has been made in the region on the additional bring banks numbers required to meet the target in Replacement Waste Management Plan. The Replacement Plan has set a target of 32 additional bring banks by 2010 with following distribution:-

- Limerick City 5
- Limerick County 8
- Kerry County 9
- Clare County 10

Table 4.1 indicates the progress in each local authority since June 2006

Table 4.1 Bring Bank Numbers

Local Authority	No. of Bring Banks June 2006	New Bring Banks installed	Bring Banks removed	No. of Bring Banks June 2007	No. of Bring Banks to meet target
Limerick City Council	19	1	2	18	6
Limerick County Council	50	1	0	51	7
Kerry County Council	93	10	0	103	0
Clare County Council	53	1	0	54	9
Total	215	+13	-2	226	247

There has been an increase of 11 bring banks in the region since June 2006 but this mainly due to the efforts in Kerry which involved siting permanent banks at their blue flag beaches. There are issues regarding siting of new bring banks particularly in residential areas and the following problems have been raised:-

- Lack of suitable sites
- Associated with illegal dumping
- Not serviced often enough
- Noise particularly banging of glass
- Take up car-parking space particularly at shopping centres/garage forecourts
- Vandalism.

Reaching the targets set in the Replacement Waste Management Plan is going to require an enormous effort to convince the public of the benefits of Bring Banks. The Local Authorities will also have to ensure that the existing banks are well maintained and serviced regularly so as not to add the public dislike of Bring Banks. The costs of maintaining Bring Banks is very expensive for Local Authorities. Recycling remains one of the most visible and tangible waste management practices engaged in by the public. The impact of Bring Banks on the recycling rate for the region is quite substantial with a 37% increase in waste collected from Bring Banks since 2004 and we need to convey this message to the public in a positive fashion.

4.3 Recycling Centres

The installation of further recycling centres in the region has had the greatest impact in driving up the household recycling rate in the region and hence has hopefully lessened the reliance on landfill. The Replacement Waste Management Plans set targets to continue to increase the number of recycling centres a further 8 are to be developed by 2010.

Table 4.2 below shows that the recycling centre in Mungret, County Limerick was completed in 2006 followed by the Recycling Centre in Shannon, which was completed in July 2007, the table also identifies other targets to be reached.

Table 4.2 Recycling Centre Targets

Local Authority	No of Recycling Centres July 2006	Recycling Centres in place July 2007	PlanTarget for 2010	No required to meet 2010 target
Limerick City Council	1 mini recycling centre –Park road	1 Mini-Recycling centre (Site location for new centre underway)	1 additional	1
Limerick County Council	3 Recycling Centres Kilmallock RC Newcastlewest RC Gortadroma	4 Recycling Centres 1 Additional Centre in Mungret completed October 2007	1 additional	0
Kerry County Council	5 Recycling Centres North Kerry Landfill Coolcaslagh WTS Milltown WTS Kenmare WTS Caherciveen WTS	5 Recycling Centres Dingle centre will commence in Autumn 2007	4 additional	4
Clare County Council	4 Recycling Centres Ennis RC Lisdeen RC Scariff RC Central Waste Management Facility	5 Recycling centres 1 additional centre in Shannon completed July 2007	2 additional	1

The additional recycling centres are on target apart from the centres in Kerry for which development has been delayed. The delays are mainly due to site location, as like the Bring Banks the public does not like siting these facilities near residential areas despite the convenience factor.

4.4 Landfill Development

There are three landfills currently in operation in the region and the EPA regulates them. Each of these landfills has undergone cell development and has the potential to develop even further. Table 4.3 below shows the remaining landfill capacity in the region.

Table 4.3 Remaining Landfill capacity Limerick/Clare/Kerry Region

Landfill Capacity	Limerick County Council-Gortadroma Landfill Tonnes	Kerry County Council-North Kerry Landfill Tonnes	Clare County Council-Ballyduff-Beg Landfill Tonnes	Regional total Tonnes
Remaining Capacity in Tonnes with current old cells	10,000	0	5,500	15,500
Capacity in cells developed in 2006/2007	500,000	120,000	140,000	760,000
Potential Capacity if remaining cells are developed	480,000	880,000	325,000	1,685,000
Total remaining capacity if all developments happen	990,000	1000000	470,500	2,460,500

The remaining landfill capacity in the region appears to be more than adequate but will be affected by the speed of introduction of thermal treatment. The trends in landfill disposal in the region have increased since 2004 but have decreased overall since 1998 and this mainly due the fact that some of the waste suitable for landfill is being exported outside the region. From our calculations to date there should be 217,836 tonnes of waste available for landfill and this would indicate that 20% of all waste available for landfill is landfilled outside the region. The total quantity of household waste disposed of to landfill is estimated to be 69% which is below the EPA National indicator of 77% published in 2005. The table below shows landfill trends in 1998, 2004 and 2006.

Table 4.4 Waste Landfilled in the region

Total Waste Landfilled 1998 Tonnes	Total Waste Landfilled 2004 Tonnes	Total Waste Landfilled 2006 Tonnes	% Increase since 2004 Tonnes
223,000	135,181	175,585	30%

Even though the total waste landfilled in 2006 has increased since 2004 there is an overall decrease of 20% since 1998. More waste will have to be diverted from landfill over the coming years to meet landfill diversion targets and the regional waste office has commissioned RPS to investigate landfill trends and landfill incomes with waste diversion in line with the Replacement Waste Management Plan 2006-2011.



Landfill Development at Gortadroma Landfill Co. Limerick.

5. Waste Prevention and Awareness

5.1 Introduction

Prevention is at the top of the Waste Hierarchy and is the core of all recent EU and Irish legislation and key strategy component of the Replacement Waste Management Plan. As a region the Environmental Awareness officers have continued to promote waste prevention and minimisation at household level and the Waste Minimisation officer has continued to work with industry and business supporting them in their prevention and minimisation efforts.

The region has also taken on two major projects since the establishment of the Replacement Plan. The first of these is the Local Authority Prevention Demonstration which is a programme established by the EPA and Limerick /Clare/Kerry Region received funding from the EPA under phase 1 of this project.

The region has funded the Green Fáilte Hotel programme, which not only looks at Waste Management Practices in the Hotel and Hospitality Sector but also includes water and energy management. The overall concept is to prevent waste generation and to decrease consumption of energy and water.

These projects will be discussed in detail later.

5.2 Prevention Awareness

The Replacement Waste Management Plan sets a target of a minimum of two awareness initiatives per annum per local authority focussing on ways in which householders can prevent waste. A summary of events organised in each local authority is outlined below.

5.2.1 Limerick City Council

Waste Awareness Days

Two waste awareness days (in conjunction with Limerick Estate Network) and a home compost workshop were run in Limerick City.

The aim of the waste awareness days was to encourage people to reduce, reuse, recycle and manage their waste better.

At the Waste Awareness Days:

- 250 visitors took part.
 - 425 reusable bags and 250 mugs made from recycled plastic, with the message Reduce, Reuse, Recycle, were distributed.
 - 60 home composters were sold.
 - 10 stands were on display including: Environment Dept. (Reduce, Reuse, Recycle & Litter Prevention), 6 Estate Management Groups and two Waste Operators (Mr. Binman & Clean Ireland).
 - Eight local school groups visited
-

- Nine schools provided Art Work for the events including "Tayto", the Recyclable Horse, made by the Youth Group in St. Mary's Park and "Charlie", the Recycling Man, made by Galvone National School.
- A Raffle was held at both events, the total prizes won were 4 skips provided by Clean Ireland and Mr Binman (promoting correct disposal of waste), 10 hampers of Fairtrade products, 8 packs of low energy light-bulbs and 6 litter pickers.

These events were an excellent example of how Limerick City Council can work with communities to build awareness and understanding of waste issues.

Home Compost Workshop

49 people attended the home compost workshop, organised by the Environment Department. The workshop illustrated how composting is a simple and cheap way to manage waste, and how, through composting, we can help preserve bogs in Ireland.

5.2.2 Limerick County Council

Householders Composting and Waste Prevention Event

Limerick County Council recognizes that the single most effective method for householders to prevent waste is of course not to create it in the first place. Significant effort over the past number of years has been put into encouraging householders across the county to take up home composting, this practice not only diverts waste from landfill but can also save householders money through less waste going to landfill and less need to purchase compost from garden centers. To explain how easy it is to compost and to encourage householders to take up the challenge Limerick County Council commissioned the Irish Peat Conservation Council to run a series of workshops for householders. 3 Composting Workshops were held in May, 2007 - 2 on the 23rd May, 2007 and 1 Composting Workshop on the 24th May, 2007. Participants learnt new skills on how easy it is to home compost as well as improving on knowledge and skills on how to deal with potential composting problems.

At these events Householders were also given further information on how to prevent waste through consumer choices they make, particularly in the area of packaging and food related waste. Information on where to purchase cost price composters from the council as well as information on recycling and careful disposal of waste was also distributed.

5.2.3 Kerry County Council

February 23rd 2007

Sustainable Living Conference, O'Connell Centre, Cahersiveen.

This conference was organised by South West Kerry Partnership (LEADER Group) A number of speakers were invited and the Kerry Environmental Awareness Officer spoke on 'Waste Prevention in Kerry', outlining what householders could do to minimise waste produced in the home. Approximately 50 people attended the event. Other speakers at the conference included a spokesperson from SEI and Fáilte Ireland.

March 21st 2007.

Probus Annual General Meeting, Tralee.

The Kerry Environmental Awareness Officer was invited as guest speaker, to address over 250 retired citizens from Kerry on the 'Importance of Reducing Waste.' All those present are members of Probus, Active Retirement Group. Probus is an organisation with branches in

practically all parts of Kerry, and since the presentation at their AGM, the awareness officer has spoken to many of the groups individually.

16th June 2007

Féile na mBláth, Tralee

Composting Workshop in association with Irish Peatland Conservation Council.

This event was one of the workshops set up in the Town Park Tralee as part of the Annual Garden Festival – Féile na mBláth. Over a three hour period, up to 100 people would have come to the composting workshop stand where demonstrations were held and information distributed on all aspects of home composting and waste reduction.

5.2.4 Clare County Council

Waste Prevention Events

Clare County Council ran 9 waste prevention events across the county in May and June 2007 to give practical advice to householders on ways to reduce waste. The events featured composting workshops, slide shows, practical demonstrations and lots of practical information and tips on preventing waste. Events were held in various venues including GAA halls, Schools and Council Area offices. A total of 750 students and 91 adults attended the waste prevention events.

5.2.5 Green Schools Campaign

The aim of Green-Schools is to increase students' and participant awareness of environmental issues through classroom studies and to transfer this knowledge into positive environmental action in the school and also in the wider community. Schools that have successfully completed all the elements of the programme are awarded the 'Green-Flag'. The Environmental Awareness Officers in the region have continued to promote the scheme and there are now 366 schools registered with the An Taisce Green Schools compared with 323 in 2005 and 156 schools have achieved Green Flag Status compared with 117 in 2005.

5.2.6 Regional Awareness Initiatives

Hazardous Waste.

One of the targets of the Replacement Waste Management Plans was to run one local authority campaign per year around management of hazardous waste. So as to meet this target the local authorities in the region produced a Household Hazardous Waste Information leaflet,

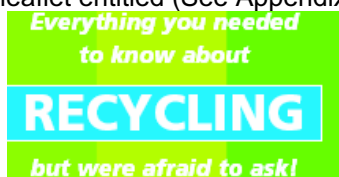


Household Hazardous Waste

which was funded by the Regional Waste Management Office, and 7000 copies were published (See Appendix A). This has been widely distributed in conjunction with a series of radio and newspaper advertisements in June 2007.

Recyclable Waste

The recycling policy in the Replacement Waste Management Plan is continuing to promote recycling and reuse. The local authorities in the region combined their efforts and produced a leaflet entitled (See Appendix B):-



2000 copies were printed and distributed to the Local Authorities in the Region.

5.2.7 Waste Minimisation for Business & Industry

Supply Network Shannon.

Regional Forum was held on 22nd May 2007.

SNS Environmental Committee / Eco-Industrial Network Steering Group

The Waste Minimisation Officer is a member of Supply Network Shannon Environmental Committee. Part of the work involved being a member of the project Steering Group for the EPA funded project 'Eco-industrial Networking for Businesses in the Mid West Region'. This project has been run by a partnership of SNS, University of Limerick and the Regional Waste Management Office.

The project's final report was published in 2006. Environmental committee meetings took place approximately once every two months. The Eco-Network Project organised special Family Open Day at UL on 17 June 2006. RWMO had display stand at the event. SNS also had a networking social event on 23 June 2006.

SNS Steering Committee

The Waste Minimisation Officer was invited in early 2007 to become a member of the Steering Committee for the SNS organisation. Meetings generally take place every second Tuesday of each month.

Supply Network Pallet Exchange Project

The RWMO has given visible support to SNS Pallet Exchange which receives funding from EPA under its Cleaner Greener Production Programme. The project promotes reuse in all transport packaging, not just in pallets.

The Waste Minimisation Officer spoke at the Programme launch on 17 October 06. Other speakers included a representative from Repak. Supporting the Pallet Exchange is a very positive move in encouraging re-use in the region and fits in with the objectives of the Regional Waste Management Plan. A workshop was held at Sercom Solutions, Raheen on 19 June 2007 – RIWMO talk focused on reuse.

Membership of UL-led SME Expert Panel

This was an initiative co-ordinated by UL under the Programme for University and Industry Interface (PUII). PUII is funded by the Higher Education Authority and the Department of Enterprise, Trade and Employment.

A Report 'SME Growth Through People: The role of education and training' was published in February 2007.

Chambers of Commerce/ Other Business Organisations

The Waste Minimisation officer communicates with these organisations on a regular basis – newsletters etc are circulated to them, their representatives are invited to attend RWMO events and RWMO staff participate in events organised by the different organisations.

Contact With Individual Companies

Since the establishment of the RWMO, a total of 171 site visits have been conducted. Of these, there were 17 visits between June 2006 and May 2007.

There is also contact through email and telephone for distributing information and dealing with particular queries.

CONTINUATION OF B2B GREEN MENTOR PROGRAMME

The Business to Business Green Mentor Programme was set up by this region and received funding from EPA under the Cleaner Greener Production Programme (CGPP). The final one of the initial Green Mentor Events was held on 13 June 2006 at Fitzgeralds Woodlands House Hotel, Adare. Follow-up company visits took place to those who attended Green Mentor Events. Following from this pilot phase, it is planned to roll out the programme throughout the region.

The Technical Report for the Green Mentor Programme was prepared and submitted and received final approval. A summary leaflet on the project is currently being prepared by EPA/Clean Technology Centre.

INVOLVEMENT IN THE DEVELOPMENT OF A WASTE AUDIT TOOL

RIWMO took part in workshops contributing to the national development of a Waste Audit Tool (WAT) – as a follow-on from the Race Against Waste Campaign. The WAT will form part of EPA's Green Business Initiative which is currently being developed.

STUDENT CONTACT

Participation in Student Enrolment Week

RIWMO set up display stand at Institute of Technology, Tralee on 11, 18, 20 September 2006. Focus was on promoting waste awareness, i.e. reduce reuse recycle.

RIWMO was invited to participate following participating in ITT's environmental committee, Campas Glas.

RIWMO talked to Production Technology Students in UL – on 24th and 26th October 06.

ANNUAL REGIONAL FORUM

The fifth annual regional forum was held on 22 May 2007. The forum was held in association with Enterprise Ireland and the theme was 'Environmental Sustainability for Industry & Business'. A range of speakers covered topics on waste minimisation and energy efficiency. A case study was presented by Organic Lens Manufacturing, Ennis. Approximately 40 people attended.

PUBLICATIONS

Distribution of the Region's new Waste Prevention Guide for Industry & Business. The Guide contains many good practice case studies from within the Limerick Clare Kerry Region. The Guide was launched at the Region's annual Waste Prevention Forum on 22 May 2006 and copies were subsequently distributed through events as well as a mailshot to approximately 500 companies, including local business organisations.

The Guide received funding from DEHLG as part of a special waste awareness campaign. Newsletter 'Managing Waste in Business'

Autumn 06 and Winter 06/Spring 07 issues were distributed – by email or mailshot and at seminars. Each Newsletter contains one or more best practice case study from within the region, as well as an update on new regulations and other developments.

Preparation of Hazardous Waste Leaflet for businesses

Work commenced on producing a Hazardous Waste Leaflet for businesses, currently being prepared for printing.

5.3 Prevention Projects

5.3.1 Local Authority Prevention Demonstration (LAPD)

In February 2006 the Limerick/Clare/Kerry region submitted an expression of interest to the EPA to apply for Grant aid for involvement in the Local Authority Prevention Demonstration Project (LAPD). This region was granted 75 % funding of over €440,000 in June 2006 for a 30-month project entitled New Integrated Prevention Project (NIPP). The Minister for Environment, Heritage and Local Government launched the project in July 2006 in Dublin. The project aims to build capacity in Local Authorities to demonstrate prevention and is one of the objectives of the National Waste Prevention Plan. **Ultimately it is hoped that the NIPP objectives will bring about a lasting change for all the organisations involved and will focus attention on waste prevention across the region.**

The Limerick/Clare/Kerry region chose four different initiatives to demonstrate prevention in the region and they are summarised below. Each of the initiatives involves an external partner to the local authority – Kerry Airport, UL, Sisk Building Contractors and the SkyCourt Shopping Centre and it is hoped that the experience of each of these diverse partners in the area of waste prevention can be shared regionally as well as nationally. The region employed a full time co-ordinator in February 2007 to work on this project and she is assisted by the staff of the Regional Waste Management Office and the environmental awareness officers in each local authority.

Limerick County Council in partnership with the University of Limerick have embarked on a paper reduction project, which commenced by calculating the ecological footprint of paper consumed. The next phase of the project is to raise awareness of the impact of unnecessary paper usage and to bring about a reduction in usage, which will ultimately shrink the ecological footprint for each organization. The project is placing emphasis on more efficient working practices which benefit the environment. Already there is great information sharing between the two organisations and similarities in approach to reducing paper consumption are being trialled in both organisations.

Limerick City Council has embarked on a very interesting initiative which has two distinct phases to it. The first in conjunction with **Sisk Building Contractors** is monitoring the waste management practices of a large scale construction project in the heart of Limerick City. The construction phase consists of a hotel, apartments and retail units at the site of the old Savoy Cinema, Bedford Row, Limerick.

The second phase of this project is to work with the newly opened Marriott Hotel, retailers and householders once in occupation to reduce waste and promote waste prevention. It is anticipated that this second phase will commence as soon as possible after the opening of these facilities so that waste prevention can become the norm.

Clare County Council in conjunction with the SkyCourt Shopping Centre has embarked on an initiative aimed at "Wise Waste Management". The SkyCourt Shopping Centre is unique in that it has three large supermarkets – as well as over 50 other tenants. A waste audit found that 21% of all the waste generated over a five day period was organic waste. Improved segregation of dry recyclables is a primary aim of this project as is a separate collection for organic waste for all SkyCourt Tenants but particularly the larger organic waste producers. An additional objective of the initiative is to investigate the supply chain for product distribution and to encourage if at all possible the introduction of at least one form of reusable packaging for a retailer in the SkyCourt Shopping Centre.

Kerry County Council and Kerry Airport are developing a waste action plan as part of LAPD. Kerry Airport is a small regional airport operating in a very competitive market and successfully growing its passenger numbers. However an increase in passenger numbers has led to waste growth and growth in the consumption of water and energy. This initiative aims to decouple this trend. A significant starting point has been extensive monitoring of water and energy and looking at patterns of usage throughout the day as well as conducting a waste audit. The project will include all operators on-site including recommendations for catering, car hire and other transport operators as well as encouraging passengers to think waste prevention.

Project Progress

As the projects have developed it has become increasingly evident that all of our partners are in need of advice and assistance in relation to overall waste management and recycling. Despite the roll out of segregated collection for dry recyclables across the region since 2003, many commercial premises are not segregating all dry recyclables only a fraction of them. In addition our partners have requested assistance and advice on general waste management practices or in dealing with waste contractors. Obviously we are happy to provide such information and assistance as well as encouraging a change in attitude and awareness of waste prevention, however this has significantly slowed down progress on prevention initiatives while our partners get their house in order.

There is a growing interest in and awareness of prevention in our region which can to some degree be attributed to the progression of NIPP. Promotional material on waste prevention is currently being prepared by the EPA and we intend using these materials to further increase awareness within our partner organisations and of course regionally.

We are particularly impressed with the willingness and effort our partner organisations are putting into the delivery of the NIPP initiatives.

For example for Initiative 1, the agreement of the Deans Council in UL to encourage all coursework and thesis submission double sided and to change all printing equipment to facilitate this is a fantastic step forward. With 17 million sheets of paper used in the library alone, we could see this drop to 8 million or less in the next academic year.

For initiative 2, an initial encouraging meeting has been held with a representative of the Fordmount Property Development Company during which the objectives of NIPP were outlined. Although further contact needs to be made we are encouraged that the developer showed an interest in NIPP and is not adverse to promoting waste prevention practices with future tenants. In addition the operations manager of the Savoy Marriott has a keen interest in environmental issues and we hope to see the hotel shortly sign up to participate in the "Green Fáilte" programme.

For initiative 3 we are extremely impressed with the level of interest shown in the project by a significant number of retailers in the SkyCourt Shopping Centre. The facilities management staff is well engaged and driving many of the NIPP objectives, with the rollout of a separate organic waste collection just underway at the centre and the establishment of a green team, significant progress is being made.

For Initiative 4 at Kerry Airport extensive monitoring of water, waste and energy has been undertaken and the expertise of a number of KCC staff has been utilised in the collection and collation of data and recommendations on these findings are now being prepared for consideration by the board of management. Clearly the staff at the airport are beginning to realise that there is significant cost savings to be made through waste prevention initiatives.

Individual progress can be viewed in six monthly reports in Appendix C (Should this be here?)

5.3.2 Green Fáilte Awards Scheme

Green Fáilte was launched for this region on 20th February 2007 in Adare, with Duncan Stewart as guest speaker. The scheme encourages member companies in the hospitality sector to implement and develop environmental management systems, with a particular focus on waste, energy and water. Following its success in Cork, the RWMO decided to support the Green Fáilte scheme for this region – through financial support as well as direct staff involvement. The scheme is managed by Hospitality Solutions Consulting and Clean Technology Centre.

To-date, 14 companies are signed up to Green Fáilte. The objective is to achieve a membership of 60 over the initial three-year period. Green Fáilte involves an initial on-site review of each member, as well as a series of workshops to provide guidance to the members who in turn will chart their progress through a set of workbooks. Initial marketing workshops took place in March 2007, and the first series of the member workshops was held in April 2007

In addition to savings, in both resources and costs, there will also be recognition provided through the Annual Awards presentation – bronze, silver, gold and platinum categories.

6 Closed Landfills

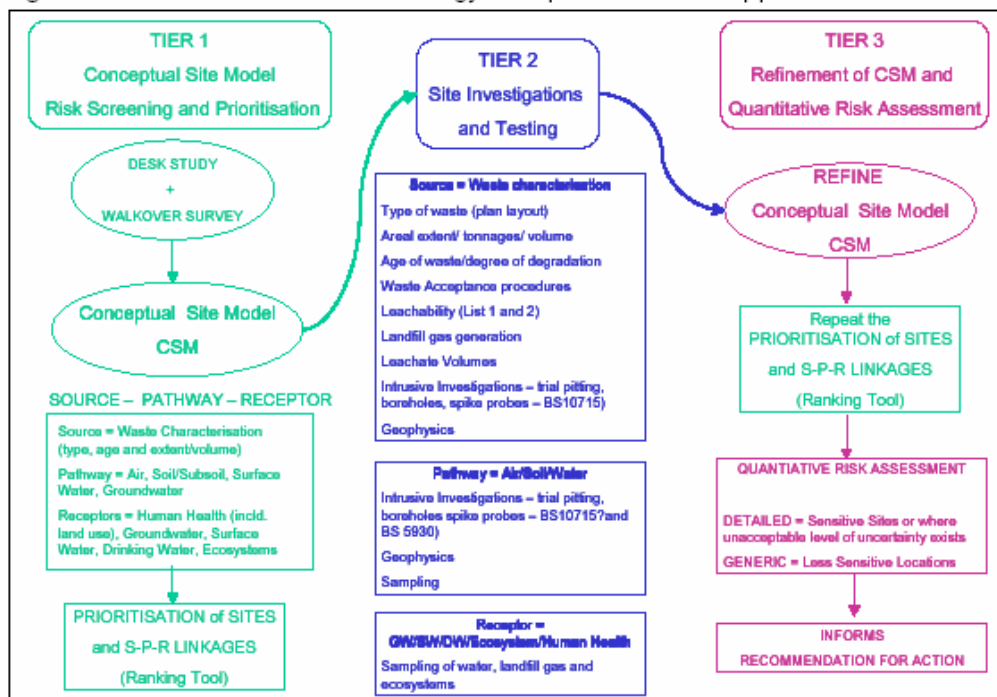
6.1 Introduction

A Ministerial Direction (WIR04/05) was issued on the 3rd May 2007 under Section 60 of the Waste Management Acts 1996 to 2005. This policy direction reminds local authorities of their obligations under Section 22 of the Waste Management Acts 1996 to 2005. The region produced a draft inventory of closed landfills in the Replacement Waste Management for the Limerick/Clare/Kerry Region. Since that publication the EPA has developed a Code of Practice to assist local authorities with the requirements of Section 22 of the Waste Management Acts 1996 to 2005.

6.1.1 Register of Closed Landfill in the Limerick/Clare /Kerry Region

The Local Authorities of the Limerick/Clare/Kerry region will concentrate on the landfills, which were in operation between 1977-1997 as these are landfills that were considered by the European Court Judgement. The EPA Code of Practice ensures a consistent approach to environmental risk by local authorities, with a Phased Risk Assessment Methodology as follows: -

Figure 4: Risk Assessment Methodology - Proposed Phased Approach



The Local Authorities in the region have commenced work on the closed landfill sites and investigations have been carried out in accordance with the EPA Code of Practice and work is continuing on the closed sites to ensure each site is scored in terms of source pathway and receptors. The position to date has been detailed on the table below. Further work will be required to prioritise sites in accordance with the risk level and each site will be classified as High Risk, Moderate Risk or Low Risk, with high risk taking priority in terms of action. High Risk and Moderate Risk sites will have to apply for a waste regularisation licence/permit through new regulations yet to be published by the Department of Environment, Heritage and Local Government.

Table 6.1 Section 22 Draft Register Limerick/Clare/Kerry Region

<i>Reference</i>	<i>Authorisation</i>	<i>Site Name</i>	<i>Address of townland</i>	<i>Address 2</i>	<i>Status</i>	<i>Year Closed</i>
Limerick County Council						
22-1	None	Morenane Landfill	Morenane	Croom	Closed Capped with gas Mangement Desk Study Completed	1999
22-2	None	Adare	Adare	0	Closed Desk Study Completed	1992
22-3	None	Askeaton	Askeaton	0	Closed Desk Study Completed	1979
22-4	None	Ballingrane Landfill	Ballingrane	Rathkeale	Closed Desk Study Completed	1991
22-5	None	Ballinvoher Landfill	Ballysteen	0	Closed Desk Study Completed	1987
22-6	None	Ballycusowen Landfill	Ballycusowen	Cappamore	Closed Desk Study Completed	1987
22-7	None	Ballyroe Lower Landfill	Ballyroe Lower	Kilfinnane	Closed Desk Study Completed	1970
22-8	None	Knocklong	Knocklong	0	Closed Desk Study Completed	0
22-9	None	Carroward West Landfill	Carroward West	Dromcollogher	Closed Desk Study Completed	1992
22-10	None	Churchtown Landfill	Churchtown Landfill	Newcastle West	Closed Desk Study Completed	1986
22-11	None	Coolroe Landfill	Coolroe	Kilmallock	Closed Desk Study Completed	mid 1980's
22-12	None	Glin Demesne Landfill	Glin	0	Closed Desk Study Completed	1980
22-13	None	Gotoon Landfill	Gotoon	Hospital	Closed Desk Study Completed	1982
22-14	None	Griston Bog Landfill	Griston	Ballylanders	Closed Desk Study Completed	1971
22-15	None	Kilmacat Landfill	Pallaskenry		Closed Desk Study Completed	1980
22-16	None	Kilmoylan Lower Landfill	Kilmoylan Lower	Doon	Closed Desk Study Completed	1964
22-17	None	Knockacarriga Landfill	Knockacarriga	Doon	Closed Desk Study Completed	c 1987
22-18	None	Lackanagoneeny Landfill	Lackanagoneeny	Doon	Closed Desk Study Completed	1982
22-19	None	Knockbrack	Knockbrack	Abbeyleale	Closed capped with Gas Management Desk Study Completed	1996
22-20	None	Moohane Landfill	Moohane	Herbertstown	Closed Desk Study Completed	1973
22-21	None	Newpark House	Athea	0	Closed Desk Study Completed	1984
22-22	None	Newtown Landfill	Newtown	Bruff	Closed Desk Study Completed	0
22-23	None	Tankardstown Landfill (South)	Tankardstown	Kilmallock	Closed Desk Study Completed	1981
22-24	None	Tooreen Landfill	Tooreen	Croom	Closed Desk Study Completed	1984
22-25	None	Southhill	Rathbane North	Southhill	Closed Partial Containment	1987

<i>Reference</i>	<i>Authorisation</i>	<i>Risk</i>	<i>Site Name</i>	<i>Address of townland</i>	<i>Address 2</i>	<i>Status</i>	<i>Year Closed</i>
Limerick City Council							
22-25	None		Longpavement	Ballynanty		Closed with remediation work progressing	1998
22-26	None		Concanree	Dock Road	Limerick		-
Kerry County Council							
22-27	None		Ardfert			Closed –Desk Study & Walk over survey	1980
22-28	None		Rockfield			Closed –Desk Study & Walk over survey	1988
22-29	None		Listowel			Closed –Desk Study & Walk over survey	1989
22-30	None		Sneem			Closed –Desk Study & Walk over survey	1990
22-31	None		Tralee			Closed –Desk Study & Walk over survey	1994
22-32	None		Dingle			Closed and capped not to EPA Standard. Walk over survey	1996
22-33	None		Leanmore			Closed and capped not to EPA Standard Walk over survey	1996
22-34	None		Ahascra			Closed –Desk Study & Walk over survey	1997
22-35	None		Coolcaslagh			Closed due for capping Sept 07 Desk Study & Walk over survey	1999
22-36	None		Milltown			Closed due for capping Sept 07 Desk Study & Walk over survey	1999
22-37	None		Kenmare			Closed Capped to EPA requirements Desk Study & Walk over survey	1999
22-38	None		Caherciveen			Closed Capped to EPA requirements Desk Study & Walk over survey	1999
Clare County Council							
22-39	None		Lisdoonvarna			Closed	1980
22-40	None		Milltown Malbay			Closed	1980
22-41	None		Kilmihil			Closed	1980s
22-42	None		Corofin			Closed	1980s
22-43	None		Kilrush			Closed	1992
22-44	None		Ennistymon			Closed	1997
22-45	None		Whtiegate			Closed	1998
22-46	None		Shannon Airport			Closed – Airport Authority ownership	1998
22-47	None		Lisdeen			Remediation Plan developed & approved	1999
22-48	None		Doora			Remediation Plan developed & approved	2001

7.0 Enforcement

7.1 Introduction

The role of Local Authorities in regulation and enforcement has increased considerably over the last number of years, as the number of regulations issued in the last number of years has been quite considerable and with Local Authorities being the main enforcement body for most of the regulations. Enforcement units have been established in all the local authorities in the region but staffing levels and tasks vary considerably. Continuous government funding is going to be essential to ensure the effectiveness of enforcement staff in the future. The enforcement teams in each individual local authority issue facility permits and waste collection permits are issued by the Regional Waste Management Office representing the lead authority, Limerick County Council

7.2 Waste Permits

Waste Management (Permit) Regulations were introduced in 1998 and these regulations require all smaller facilities with an annual intake of less than 5000 tonnes to apply to the local authority for a permit. There are an increasing number of facilities applying to the local authority for authorisation. The biggest increase in applications has been in the land fill permits for the Construction and Demolition Waste Sector. Table 7.1 below shows the trends in permitted facilities in the region: -

Table 7.1 Number of Waste Permitted Facilities in the Limerick/Clare/Kerry Region

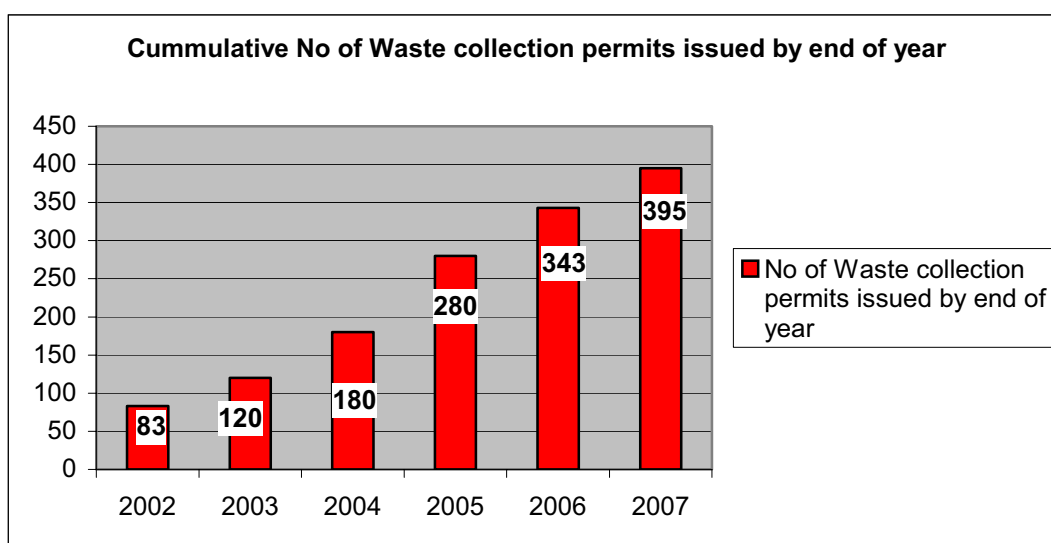
Local Authority	Land Deposition	Authorised Treatment Facilities	Green Waste Facilities/composting facilities	Other	Total
Limerick City Council	1	1	0	9	11
Limerick County Council	26	2	1	8	37
Kerry County Council	138	8	2	9	157
Clare County Council	5	0	0	39	44
Limerick/Clare /Kerry Region Total	170	11	3	65	249

There now is a total of 249 facility permits issued in the region compared with 195 in 2005. Land deposition has by far the greatest number of authorisations and this reflects the trends in developments over the last number of years and the lack of recycling facilities for construction and demolition wastes. Since 2007 will see the introduction of organic waste collection, the Limerick/Clare/Kerry region are hopeful that this will stimulate growth in this sector. The local authority is responsible for ensuring that each permit holder submits annual returns. New waste permit regulations are due to be issued before the end of 2007 by the government.

7.3 Waste Collection Permits

The Waste Management (Collection Permit) Regulations issued in 2001 and this requires waste collectors to hold a Waste Collection Permit. The number of applications to the regional waste Management office has continued to increase with construction & Demolition waste sector having the greatest number of applications. Chart 7.1 indicates the trends in waste collection permits issued since 2002 for this region. The Replacement Waste Management Plan reported that there was 305 permitted collectors in 2005 with a rise to almost 400 permits issued to date in 2007. The applications have continued to grow and we have received 510 applications since 2002. New waste collection permit regulations are due to be issued before the end of 2007.

Chart 7.1 New Waste Collection Permits:



The Regional Waste Management Office also monitors the Annual Environmental Reports from the permit holders and there was a 94% return on annual reports for 2006.

7.4 Enforcement Task Group

A regional enforcement task group was set up in 2005 which meets bi-monthly to discuss planned and concerted action in the region. Regional action plans were drawn up in 2006 and 2007 and progress on these plans is brought to the Enforcement Network's unauthorised waste grouping at national level. The regional waste co-ordinator represents the region at these meetings. The enforcement task group ensures an effective and consistent approach across the region.

Waste enforcement activities are now reported to the EPA through Local Authority Management System(LAMS). Table 7.2 indicates the level of activity in the region for 2006.

Table 7.2 Enforcement Activity in the Limerick/Clare/Kerry Region (Source EPA LAMS 2006 data Management System)

Question	Clare	Kerry	Limerick City	Limerick County	Total
W1(b) Q2 How many inspections of waste facility permit holders were carried out by the Authority during the reporting period?	19	99	14	27	159
W1(b) Q7 How many inspections under the packaging regulations were carried out during the reporting period?	1	3	2	47	53
W1(b) Q9 How many inspections of permitted waste collectors sites were carried out during the reporting period?	3	7	18	25	53
W1(b) Q15 How many and what other waste related inspections were carried out during the reporting period?	776	0	500	787	2063
Litter	86	0	5000	1177	6263
Unauthorised C&D sites	26	0	5	0	31
W9(a) Q2. How many vehicle roadblocks for unauthorised waste activities were conducted up by the Authority during the reporting period?	1	6	2	1	10
W9(b) Q3. During the reporting period, how many notices were issued under Section 18 of the Waste Management Act, 1996 (as amended) requiring the submission of information regarding waste?	16	10	0	29	55
W9(c) Q1. During the reporting period, how many notices were served under Section 55 of the Waste Management Act, 1996	38	25	0	46	109
how many have resulted in a prosecution being initiated (summons issued)?	3	0	0	4	7
W9(c) Q8. During the reporting period, how many notices ("on-the-spot" fines) were served under Section 28 of the Litter Pollution Act, 1997?	401	181	788	363	1733
How many are pending,	0	0	0	0	0
how many were resolved and	0	144	338	358	840
how many have resulted in a prosecution being initiated (summons issued)?	0	37	358	5	400
W9(d) Q3 During the reporting period, how many notices were issued under Section 34 of the Waste Management (End-of-Life Vehicles) Regulations, 2006 requesting further information?	0	0	25	0	25
W9(b) Q8. How many prosecutions under Section 32 of the Waste Management Act, 1996 were initiated (summons issued),	5	2	5	16	28
W9(b) Q9. How many prosecutions under Section 34 of the Waste Management Act, 1996 were initiated (summons issued),	0	0	3	0	3
W9(b) Q10. How many prosecutions under Section 39 of the Waste Management Act, 1996 were initiated (summons issued),	1	0	0	4	5
W9(h) Q1. How many warning letters have been issued by the Authority during the reporting period for the purposes of enforcing environmental legislation pertaining to waste?	10	33	38	325	406
W9(i) Q2. How many litter complaints did the Authority receive during the reporting period?	1271	531	0	1188	2990
How many have been resolved?	0	524	0	1044	1568
W9(i) Q4. How many non-litter waste complaints did the Authority receive during the reporting period?	279	0	0	878	1157

The level of activity has increased in areas since 2004 with increased manpower in the enforcement team and with the increased level of expertise within the team. Inspection levels, warning letters, enforcement notices and cases pursued have all increased since 2004 . A number of checkpoints have been mounted throughout the region during the reporting period and this has been a useful exercise in terms of awareness raising of enforcement activity in the region.



8.0 Summary

The Local Authorities are encouraged by the progress to date on the plan targets but are aware that there will be some difficulties in meeting targets for the year ahead. The Local authorities are delighted to see the commencement on the waste prevention projects and the targets that are being met for awareness campaigns on prevention, hazardous waste and recycling. The following tables monitor implementation to-date in line with Implementation Tables of the Replacement Waste Management Plan.

Table 8.1 Infrastructure Timetable for the Plan Period

Infrastructure	Public	Private	PPP	Timetable for Procurement	Progress End of June 2007
Bring Banks	Yes	-	-	32 additional bring banks provided throughout the Region by 2009	11 additional bring banks
Recycling Centres	Yes	Possible	Possible	8 additional sites by 2010 (must accept Household Hazardous waste, WEEE and Green	2 Additional sites
Green Waste Collection	Yes	Yes	Possible	All major Recycling Centres to accept green waste by 2010	Completed
Biological Treatment	Yes	Yes	Yes	2 Additional facilities for the Region by 2007	No progress
Thermal Treatment Facility	No	Possible	Possible	Commence procurement within Plan period	No Progress
Municipal Landfill	Yes	Possible	-	Additional phases as required	3 new phases completed
Construction/Demolition Recycling	Yes	Yes	Possible	Recycling facilities provided for the Region by 2007	No Progress
WEEE	Yes	Yes	-	All major Recycling Centres to accept WEEE by 2006	Completed
Trial Reuse/Repair	Yes	Possible	Possible	One centre for the Region by 2007	1 in situ

Table 8.2 Implementation Timetable(Minimum Targets)

Waste	2006	2007	2008	2009	2010
Prevention & Awareness	Awareness Initiatives on prevention and minimising household waste at least 2 per annum per local authority-Completed for Year 1				
Uncollected Waste Survey	1 in 2006-2007 Completed				
Collected Waste	Roll out Organic Waste Collection-Schedules set				
Materials Recovery	Monitor and report annually on performance MRFs/Transfer Stations- no progress				
Hazardous Waste	One Education Campaign for household per year –completed One Education Campaign for SMEs per year- currently being prepared				
Waste Statistics	To develop an audit programme to verify data and conduct audits-Preliminary verifications completed.				

Table 8.4 Annual Reporting Key Performance Indicators

Area	Primary Indicator	2004	2007	Secondary Indicator	2004	2007
Household Prevention	Household waste generated per capita	424kg	384	No. of compost bins/workshops	16,000	Data not available
				No. of green flags	72	117
				Composition surveys	NA	None
Commercial & Industrial Prevention	C&I Waste generated per employee	1246kg	1092kgs	No. of site visits	120	175
Household Reuse	No of reuse/repair centres	NA	1	Inventory of items reused	NA	-
Household Recycling	Household recycling rate	12%	31%	No. of bring banks	215	226
				No. of Recycling Centres	13	15
				No. of households with source separated collections	2 bin data not available	90,259
C&I Waste	C&I Recycling Rate	56.9%	64%	No. of recycling parks	-	-
				% of waste collected in source separated collections	-	Data not available
Uncollected Waste	Quantity of uncollected household/business waste	39618	35233			
Biological Treatment	% Biowaste Recovered from the mixed municipal waste stream	NA	No progress	No. of biological treatment facilities	-	1
				Tonnes of organic waste (brown bin) collected	-	0
				Tonnes of green waste collected	-	Data not available
				Tonnes of compost generated	-	Data not available
C/D Waste	% C/D waste recycled	Data not available	No Progress	No. of C/D processing facilities	Data not available	0
				Tonnes of crushed aggregate reused		
WEEE	National Target	4.0kgs/head	6.7kgs/head	Kg of non-white goods collected	-	1517
				No. of collection events	-	
Hazardous Waste	Tonnes household hazardous waste collected			No. of delivery points	4	27
				No. of collection events/mobile collections		0
Packaging Waste	% of packaging waste recycled	48%	Data not available	No. of Repak members	134	-
				Composition survey - Dry Recyclables	-	-
Energy Recovery	Megawatts of electricity generated	-	No progress		-	
Landfill Disposal	% of municipal waste landfilled	37%	44%	% of BMW landfilled	65%	-
				Composition survey	-	-

9.0 Conclusion

From the above it can be seen that there has been significant progress in the year since the making of the Regional Waste Management Plan 2006 - 2011 for Limerick/Clare/Kerry.

Among the positives are

- Increased recycling rates**
- Decrease in the amount of waste arising per person**
- An increase in the number of bring banks and particularly in the number of recycling centres.**
- Meeting (even exceeding) the WEEE targets.**
- Completion of cell developments at 3 landfills sites.**
- Commencement of waste prevention projects.**
- Further development of education and awareness programmes.**

Among the challenges still facing the Region are: -

- We are finding it increasingly difficult to locate suitable sites for bring banks.**
- There needs to be a national resolution on the issue of thermal treatment. Waste needs to be directed in accordance with the waste hierarchy away from disposal options.**
- A Construction & Demolition site needs to be developed in the Region.**
- Centres for the treatment of biological waste need to be established.**
- There needs to be a greater realisation of the high cost of presentation, recycling and disposal of waste. While everybody is in favour of these very laudable actions, the reality is that they constitute a significant burden on national and local finances and resources.**



**Regional Waste Management Plan
Limerick/Clare/Kerry Region
2006-2011
Annual Report**

Green Schools Awards 2006-2007



Limerick City Council
Green Schools



Limerick County Council
Green Schools



Limerick City Council
Green Schools

Waste Prevention Events



Limerick City Council
Event with *Tayto the
recyclable horse*



Kerry County Council
Composting Event



Limerick County Council
Information Evening with
Benny the Bee

September 2007
Philippa King,
Regional Waste Co-ordinator,
Limerick/Clare/Kerry Region

Sept 200
