

## EXECUTIVE SUMMARY

### Plan Context

This is the second Waste Management Plan for the Limerick/Clare/Kerry Region and deals with the five-year period from 2006 to 2011. This Plan details the amount of waste being generated in the Region, the progress made since the 2001 Plan was introduced and how it is proposed to minimise and treat the waste that is produced in the Region going forward.

### Background

By the mid 1990s it was clear that there was a lack of planning for waste management infrastructure in Ireland. The implementation of the Waste Management Act in 1996 allowed for the preparation of Regional Waste Management Plans which provided for an integrated approach to waste management with targets for implementation. The first Waste Management Plan for the Region was adopted in 2001 and since then significant progress has been made in terms of waste infrastructure, prevention and recycling. Whilst good progress has been made, more work needs to be done if the Region is to meet the challenge of National and EU targets.



### Regional Profile

The Local Authorities Limerick City Council, Limerick County Council, Clare County Council and Kerry County Council agreed to jointly prepare the Regional Waste Management Plan in 1998/99 which was adopted in 2001. The Local Authorities agreed in June 2004 to review the 2001 plan and to prepare this Plan for 2006-2011.

The study area for the Regional Waste Management Plan consists of the administrative areas of Limerick City, Limerick County, County Clare and County Kerry. The Region is bounded by counties Cork, Tipperary and Galway.

Regional Statistics (2004)	
Population	418,427
Area	1.07 million hectares
No. of Households	140,472
Ave. Occupancy	3 people per household
Tourism	2 million visitors annually
Labour Force	181,843

The National Spatial Strategy 2002-2020, has designated Limerick/Shannon as the Gateway for the Mid West Region with the towns of Ennis, Tralee and Killarney designated as a hubs. Balanced development within the Region and with the rest of the country is a major objective. Tourism is a major enterprise in the Region. The Region is served by eight national primary roads traversing the Region. The national secondary roads network follows a denser regional pattern, linking the main towns and providing localised tourism routes in the Region.

Limerick/Clare/Kerry is served by rail-lines with the major centres being connected to Dublin or Cork. Air transportation infrastructure is also well developed in the Region with airports at Shannon and Farranfore. There are also shipping ports in the Region.

### How Much Waste is Produced in the Region?

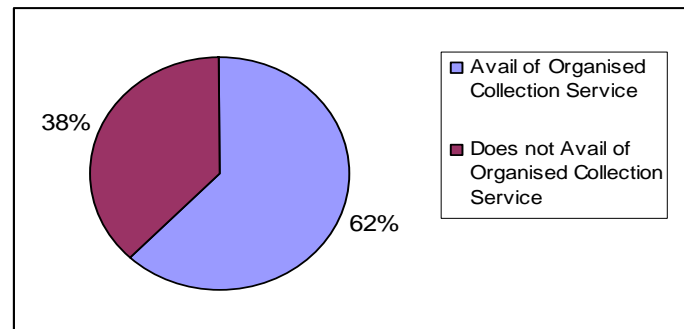
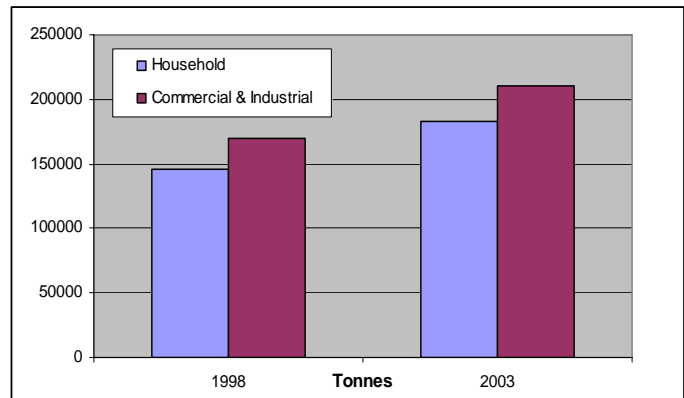
With increased economic growth in the Region, and the associated growth in consumer spending power, the amount of waste being produced in the Region is on the increase. During 1998 to 2004 household waste increased by over 15% from 146,000 tonnes to 169,039 tonnes. Likewise, Commercial and Industrial waste increased by 16%. However, the largest increase is attributed to Construction & Demolition (C&D) Waste, which increased by 384% to over 580,960 tonnes, over the period of 1998 to 2004 due to new and improved recording systems. Overall, waste generation for the above waste streams increased from 436,000 tonnes in 1998 to 952,051 tonnes in 2004.

Household waste collection in the Region is predominantly operated by the private sector, (except in the majority of Co. Kerry) which collected 71% of household waste produced in 2004. Of the total 140,472 houses in the Region, approximately 62% availed of a waste collection service in 2004, while

approximately 38% of households did not. It should be noted that not all households in the Region have access to a collection service, particularly in the more peripheral areas.

The Local Authorities recognise that whilst a high proportion of households in the Region do not avail of a collection service, it should be recognised that many of these households dispose of/recycle their waste at local transfer stations/Recycling Centres or directly to landfills in the Region.

There is also sharing of waste collection services by neighbours to reduce their waste charges. It is likely therefore that the true percentage of households that are disposing of their waste incorrectly, i.e. by illegal dumping or 'backyard' burning is probably in the region of 10% to 15%. Further studies/surveys are required to determine the actual situation.



### **PROGRESS SINCE THE 2001 WASTE MANAGEMENT PLAN**

While waste quantities are on the increase in the Region, significant progress has been made over the lifetime of the 2001 Waste Management Plan. The Limerick/Clare/Kerry Region is one of the most proactive and innovative regions in terms of waste management. This is indicated by the following developments:

- **Recycling** has increased significantly in the Region when compared with the 1998 recycling rates which started at a very low base and now have reached **14% for household waste in 2004 and 61% for Commercial and Industrial Waste in 2004**. This can be attributed to the segregated collection of dry recyclables, the provision of additional bring banks and the increased network of recycling centres.
- The degree of segregated collection has increased significantly since the 2001 Plan was published. In 2003, 43,500 households were provided with a segregated collection service which allowed 15,172 tonnes of recyclable materials to be diverted from landfill. Significant improvements have taken place since 2004 with the roll-out of segregated household collection to all areas in the Region.
- A **Regional Waste Management Office**, situated in Limerick, was set up by the four Local Authorities in the Region. This office will play a crucial role in implementing all aspects of this Plan.
- The level of awareness amongst the public of waste management issues is very high as a result of the regular campaigns, initiatives and projects run by the Environmental Awareness Officers in each Local Authority. The EcoSense ANSWER Project, organised by Kerry County Council, is an example of an innovative project in the Region where the Council works in cooperation with individuals, local communities, commercial sector and non-government organisations to achieve a number of aims central to waste management in their area.
- Enforcement and Regulation has been stepped-up and will have an increasingly important role to play over the next five years. The introduction of dedicated Enforcement and Regulation Teams, which have been expanded in 2004, by each Local Authority in the Region is essential to ensure



that the policies in the Plan are being adhered to. 195 Waste Facility Permits and 305 Waste Collection Permits have been issued in the Region.

- One of the major changes that occurred since the preparation of the 2001 Plan was the increased level of involvement by the **private waste sector** in the Region. The private sector is now almost totally responsible for the collection and subsequent recovery and recycling of household, commercial and industrial waste. Significant investment has been made by the private sector in the upgrading of existing waste infrastructure and in the development of new infrastructure.



**Other achievements since 2001 include:**

- 16,000 subsidised home compost bins sold
- Local Agenda 21 funding awarded to 60 waste related projects
- 323 schools in An Taisce Green Schools Programme
- Green Flag Status awarded to 117 schools
- 18 Environmental Awareness Weeks held
- Numerous presentations, seminars, radio interviews, workshops, media campaigns
- Promotion of best waste management practice within Local Authorities.



**Appointment of Regional Industrial Waste Minimisation Officer (RIWMO) who has:**

- Visited over 150 companies to date
- Held seminars on Waste management
- Involved in the initiation of Waste Clubs
- Initiated Waste Prevention Mentoring System
- Disseminated information on Cleaner Production
- Active involvement in Business Networks

Throughout the life of this Waste Management Plan (2006-2011) many more positive changes as a result of EU and National policy and legislation will assist in achieving the Region's targets.

**WASTE INFRASTRUCTURE**

The 2001 Regional Waste Management Plan made recommendations for the expansion of the existing waste infrastructure in the Region, particularly targeting provision of recycling facilities.

Specifically, the 2001 Plan recommended the provision of:

2001 Recommendations	Progress
260 Bring Banks	215 by end 2004
12 Recycling Centres	13 Recycling Centres in operation
Thermal Treatment 255,000 tpa	Little progress to date
1 Biological Treatment Facility	One facility provided to date. Private sector interested in developing a facility.
1 Central Materials Recovery Facility	Currently, there are 3 privately operated MRFs;
2 Transfer Stations	6 Local Authority Waste Transfer Stations and 4 large privately operated Waste Transfer Stations servicing the Limerick/Clare/ Kerry Region.

**Landfill**

While landfill still remains the primary disposal route for municipal and industrial waste in the Region, progress has been made since the publication of the 2001 Plan in that the amount of waste landfilled in the Region has decreased by 31%. Materials such as C&D (except topsoil), tyres, sludges and segregated packaging are no longer accepted at landfill facilities. Since 1994, a total of 21 landfills have been closed leaving 3 EPA-licensed landfills in the Region at Ballyduff Beg, Co. Clare; Gortadroma, Co. Limerick and North Kerry Landfill with an overall capacity of 2.5 million tonnes. Landfill charges have stabilised and now range from €115/tonne to €150/tonne in the Region.

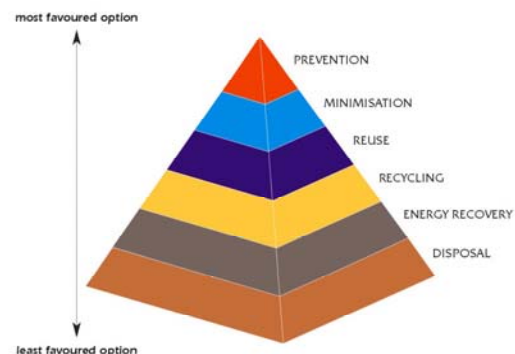
**WASTE POLICY**

The Limerick/Clare/Kerry Waste Management Plan sets out the proposed policy for integrated waste management in the Region including the planning, regulation, collection, recycling, recovery and disposal of wastes in accordance with current National and EU waste legislation and policies. The policy is summarised by the EU waste hierarchy below, which places the emphasis on prevention, minimisation, reuse, recycling and recovery of energy in order to end the current over-reliance on landfill.

Government Policy on waste management is set out in a Policy Statement on Waste Management “*Changing our Ways*” published on 1<sup>st</sup> October 1998, covering a 15 year period up to 2013. The main thrust of the policy is to reduce national dependence on landfill and to aid Local Authorities in a transition to a modernised waste system. The importance of the regional approach to waste management is underlined and support is expressed for increased private sector involvement. The policy sets out the national targets which can be summarised as follows:

**National Targets to 2013**

- Divert 50% of household waste from landfill
- 65% reduction of biodegradable waste to landfill
- Recycling 35% of municipal waste
- Recycle 85% of Construction & Demolition waste
- Rationalisation of landfills to 20 state of art facilities



This Limerick/Clare/Kerry Waste Management Plan has its fundamental strategy grounded in the concept of an integrated waste management policy, operated on a regional basis, with priority assigned in accordance with the EU Waste Management Hierarchy and National policy. The strategy takes account of all relevant and pending regulations, recognises priority waste streams, and promotes sustainable waste management practices at local, business and industrial level. In particular the policy set out in this Plan will have the following specific objectives:

- To implement EU policy on waste including the waste management hierarchy
- To implement National Policy on Waste Management

- To achieve targets set out in the EU Landfill Directive
- To implement targets set out in National Biodegradable Waste Strategy.

In order to meet these ambitious National targets the Limerick/Clare/Kerry Region proposes waste prevention as the key focus area. The revised targets\* for the treatment of total waste arisings by 2013 are:

**Recycling 45%**

**Energy Recovery 41%**

**Landfill Disposal 14%**

\*Due to progress in recycling in the Region the recycling target has been revised upwards. See Section 14.5 of this Plan.

## **SUMMARY OF WASTE MANAGEMENT PLAN POLICY**

### **Waste prevention**

Waste prevention and minimisation at household, commercial and industrial levels will be a priority. This will be achieved through: continuing to promote waste prevention and education at household and community level and targeting prevention at Small and Medium Enterprise (SME) level. Workshops and seminars will be held and progress will be measured by the production of an annual report by the Regional Waste Co-ordinator.

### **Reuse and Recycling**

Reuse and recycling will continue to be promoted at all levels and Local Authorities will adopt greener in-house policies in relation to purchasing and waste management. Additional Bring Banks will be established and Recycling Centres will accept a wider variety of material. The need for small scale Recycling Centres will be assessed. Local Authorities will work with the private sector and other bodies to facilitate markets for dry recyclables. Reuse workshops will be set up.



### **Organic Waste**

The objective of this Plan is to achieve the 2010 target as set out in the National Biowaste Strategy through a combination of source separated collection and appropriate treatment, combined with collections with other waste streams, with appropriate Mechanical Biological Treatment, home composting and green waste recycling centres

### **Biological Treatment**

The Plan will focus on the diversion of biodegradable waste from landfill through the development of Biological Treatment in the Region. Local Authorities will investigate the use of compost for horticultural and other uses. The role of Mechanical pre-treatment and/or Mechanical Biological Treatment (MBT) and other treatment technologies is recognised in order to meet the interim landfill diversion targets.

### **Thermal Treatment**

Thermal Treatment is acknowledged in environmental terms as being preferable to landfill for dealing with residual waste which has been identified as being unsuitable for recovery, reuse or recycling. The targets set out in national policy for diversion of waste from landfill will not be achieved without an integrated approach including thermal treatment. The Local Authorities recognise the need for the provision of Thermal Treatment by the private sector for the Region.

### **Materials Recovery Facilities (MRF):**

The Local Authorities will support the development of additional Materials Recovery and Waste Transfer capacity where it can be shown to be consistent with the overall objectives of the Plan.

### **Landfill**

In line with the targets set out in the Plan, landfill will have a decreasing role in the Region as recycling rates increase and, in particular, as biological and thermal treatment facilities are introduced.



However in the short to medium term, until such systems are developed, there will be a need for significant landfill capacity in the Region. The Local Authorities will update the inventory of former waste disposal sites and hazardous waste disposal sites in the Region and implement remediation measures based on risk assessments in accordance with the EPA Code of Practice and the Section 60 Policy Guidance issued by the Minister for the Environment in May 2005.

### **Inter-regional Movement of Waste**

While the proximity principle should be taken into account, it is recognised that there should be flexibility with respect to the movement of waste across regional boundaries. The capacity of waste facilities in the Region should, where practicable, satisfy the needs of the Region whilst allowing some element of flexibility of movement of waste into and out of the Region.

### **Directing Waste**

The Local Authorities for environmental or other reasons will if necessary and/or appropriate direct that certain waste streams must be delivered to a certain tier in the waste hierarchy (e.g. reuse, recycling, biological treatment, energy recovery facility). This will be achieved by means of the waste collection permit system or other appropriate regulatory or enforcement measures.

### **Priority Waste Streams**

The Plan promotes the prevention, where possible, of priority waste streams, and aims to achieve the targets set out in National and EU policy. Some specific objectives and targets include:

### **Construction & Demolition (C&D) Waste**



- To ensure that a C&D Waste Plan is prepared for specified new developments and that waste material generated is re-used and recycled
- To implement the Action Plan for Managing C&D Waste as adopted by the Region
- To encourage the re-use of C&D material in private sector and Local Authority construction projects
- To actively enforce Waste Permits and Collection Permits with respect to C&D waste
- Local Authorities will encourage the development of centralised C&D recycling facilities

### **Hazardous Waste**

- To improve awareness on prevention and segregation of hazardous waste at household and business levels
- To provide adequate facilities for household hazardous waste at the Recycling Centres.

### **Waste Electrical and Electronic Equipment (WEEE)**

- To ensure major Recycling Centres accept Waste Electrical and Electronic Equipment (WEEE)
- To explore alternative WEEE collection methods with industry to ensure maximum coverage is provided for householders in the Region.



### **End of Life Vehicles (ELVs)**

- To ensure the public are aware that all scrap vehicles must be disposed of in an environmentally sound manner at permitted facilities or suitably approved collection points
- To increase recovery rates for End of Life Vehicles (ELVs) and to encourage that the motor industry establishes a collection system at no cost to the final owner.

**In summary, implementation of the Waste Management Plan from 2005 to 2010 includes:**

- Education programmes on prevention of household waste will at least be held biannually.
- Seminars/workshops on waste prevention will be held at least twice a year for SMEs.
- Provision of additional 32 Bring Banks in the Region by 2009 giving in total 257 bring banks.
- Provision of 8 additional Recycling Centres by 2010 giving in total 21 Recycling centres.
- All major Recycling Centres will accept green waste by 2010.
- A collection system for organic waste will be implemented in 2006 for the commercial/industrial sectors.
- Additional biological treatment facilities in the Region by 2007.
- The process for the provision of thermal treatment capacity will be commenced.
- Provision of adequate landfill capacity.
- C&D recycling facilities to be provided in the Region by 2007.
- All major Recycling Centres will accept WEEE by 2006.
- A trial re-use/repair centre to be set up by 2007.
- A re-use website is to be established in 2006

### **FINANCIAL REVIEW**

The financial review, undertaken as part of the Plan review process, aimed to identify the relevant waste management costs in the Region, operational costs associated with different waste streams for the Local Authorities and to consider such costs for future waste management scenarios.

Consideration was given to changes in volumes of specific waste streams and how these may impact upon income and expenditure in the Region. Using 2004 financial data obtained from the Local Authorities, the aim of the financial review was to project future incomes and expenditures with regard to future waste flows, and potential new waste infrastructure.

Total expenditure costs for the Region, for 2004, amounted to €12 million for waste management; €4.7 million for waste collection; €1.9 million for recycling (Bring Banks, Dry Recyclables and Recycling Initiatives). €5.3 million for street cleaning; €1.4 million for enforcement and regulation;

Total income for 2004 amounted to €20,933,383 landfill income; €3,355,274 waste collection charges; €302,625 street cleaning; €291,741 commercial income (licences/permits); €291,741 enforcement and regulation; €159,210 recycling income.

Collection and landfill disposal expenditure for the year 2004 amounted to 64% of total expenditure on waste management for that year and is primarily due to landfill operating costs. Income generated from landfill operations totalled €20.9m providing adequate resources to finance this expenditure. The results highlight the high level of activity in relation to the domestic waste and landfill operations in the Region and illustrate the scope for developing expenditure in other areas.

### **IMPLEMENTING THE PLAN**

This Plan states the policies, objectives and targets for the period 2006-2011. In order to measure and assess the performance of the Plan, an Annual report will be produced, which will be measured against a set of 'Key Performance Indicators'. The annual reports will provide for increased transparency and will indicate the degree of real progress that is being made in the Region while allowing the Region to be compared with other waste management regions in Ireland.

#### **Roles and Responsibilities**

All sectors of society in the Region have responsibility for the implementation of the Plan to ensure that the targets are achieved. Government Departments, the EPA and Local Authorities are responsible for developing, implementing and enforcing strategies and policies in relation to waste management. In addition, all sections of the community, as waste producers, have a vital role to play:

The **private waste sector** has become increasingly involved in waste management since the adoption of the 2001 Plan and will continue to expand collection and recycling services, provide innovative technologies and assist in the promotion of education and awareness on waste management.

The **business and industrial sectors** will take responsibility for implementing best practice in relation to waste prevention, minimisation, recycling and waste disposal and will implement greener policies in-house. They will ensure that all waste leaving their premises has appropriate documentation and is handled by legal operators.

**Repak**, as a representative of the Packaging Producers, is responsible for improving packaging waste reduction, reusability & recyclability, as well as funding recycling and recovery of packaging.

**Educational Institutions** will participate in waste awareness, prevention and recycling programmes and third level institutions will conduct research and development work, in conjunction with industry, into innovative waste technologies.

**Voluntary & Community Groups** will co-operate with social economy measures and seek funding for waste projects at local level. Increased responsibility will be taken for waste management through schemes such as the 'Adopt a Bank' Scheme.

**The General Public** will aim to reduce the amount of waste generated at community and household level and segregate waste for collection or take to bring banks. Where organic collection is not available, householders will strive to undertake home composting. Householders will cease to engage in the burning and burying of waste and only use permitted waste collectors.

## **PUBLIC CONSULTATION AND INVOLVEMENT**

Consultation played a major role in the formulation of this Plan. Comment was invited from the general public and other interested parties and consultation took place and included:

### **Pre Draft Consultation**

- Newspaper advertisement calling for written public submissions in June 2004
- 4 Local consultation forums held throughout the Region
- 4000 'Layman's Guide' leaflets distributed to the public & specific stakeholders with feedback form
- Consultation days for the private sector waste industry in the Region were held in Limerick (covering Limerick City and County, and County Clare and Kerry).

A total of 26 written submissions were received from the public including 14 from organisations; 7 from individuals and 5 from the private waste management sector.

### **Post Draft Consultation**

- Newspaper advertisement calling for written public submissions in October and November 2005 and February 2006
- Radio Advertisements on local radio stations
- 22 Information Days held throughout the Region

A total of 216 written submissions were received from the public and 34 from other organisations and the private waste management sector.

The feedback from which led to a series of revisions and amendments to the Draft before it was finally adopted.

## **USEFUL WEBSITES**

<b>Limerick/Clare/Kerry Regional Waste Website</b>	<b><a href="http://www.managewaste.ie">www.managewaste.ie</a></b>
<b>Limerick City Council</b>	<b><a href="http://www.limerickcity.ie">www.limerickcity.ie</a></b>
<b>Limerick County Council</b>	<b><a href="http://www.limerickcoco.ie">www.limerickcoco.ie</a></b>
<b>Clare County Council</b>	<b><a href="http://www.clare.ie">www.clare.ie</a></b>
<b>Kerry County Council</b>	<b><a href="http://www.kerrycoco.ie">www.kerrycoco.ie</a></b>
<b>Race Against Waste</b>	<b><a href="http://www.raceagainstwaste.ie">www.raceagainstwaste.ie</a></b>
<b>Environmental Protection Authority</b>	<b><a href="http://www.epa.ie">www.epa.ie</a></b>
<b>Department of Environment Heritage and Local Government</b>	<b><a href="http://www.environ.ie">www.environ.ie</a></b>
<b>Information on the Environment</b>	<b><a href="http://www.enfo.ie">www.enfo.ie</a></b>