

## EXECUTIVE SUMMARY

### Introduction

This Connacht Region Waste Management Replacement Plan has been developed by the local authorities of Galway City and County, Leitrim, Mayo, Roscommon and Sligo and covers the period from 2006 to 2011. The 2001 Plan adopted a regional approach to integrated waste management based on the waste hierarchy established in the EU Framework Directive on Waste and set the following targets for 2013 for municipal waste in the Region:

Recycling 48%

Energy Recovery 33%

Residual Waste Disposal 19%

### Progress in Plan Implementation

Significant progress has been made towards the regional municipal recycling target by reaching a municipal recycling rate of 29% in 2004. This can be attributed to the expansion of segregated collection of dry recyclables, the provision of additional bring banks and the increased network of recycling centres. The achievements in waste prevention, minimisation and recycling have improved since the appointment of Environmental Awareness Officers by the local authorities. The Region is now well placed to implement the recommendations of the revised Plan for the next planning horizon (2006-2011).

### Waste Generation

Since the adoption of the 2001 Plan, waste arisings have continued to increase in the Region reflecting the national trend. Waste arisings are anticipated to grow over the Plan period and future years.

Waste Category	1998 (tonnes)	2004 (tonnes)	2013 (tonnes)	2020 (tonnes)
Household Waste Arisings	149,116	174,951	227,405	271,256
Commercial/Industrial Waste Arisings	53,162	173,695	209,970	236,727

Construction and Demolition (C&D) waste arisings generated in the Region in 2004 are estimated to be 1,107,735 tonnes.

### Waste Collection

The average percentage of households with the Region with a waste collection service is estimated at 63% in 2004. It is estimated that some 14% or over 25,000 tonnes of household waste remains unaccounted for (uncollected, illegally disposed of, backyard burning etc.). A total of 19,379 tonnes of segregated dry recyclables and organic waste were collected for processing in the Region in 2004. A total of 4,832 tonnes of waste was accepted for recycling at recycling centres across the region in 2004. The total number of bring banks has increased from 127 in 1998 to 287 in 2004 with 7,128 tonnes of recyclable waste collected. Approximately 67,472 tonnes of recyclable wastes were collected through the segregated collection of commercial/industrial waste.

### Waste Recovery and Recycling

The overall municipal recycling target for the Region is to achieve 48% recycling by 2013. A total of 29% of municipal waste was reported as recovered in 2004 comprising 20% household waste and 39% commercial/industrial waste. Currently recovery of C & D waste in the Region is at facilities permitted to accept soil or construction waste. Household hazardous waste is collected at either recycling centres or through a Chemcar collection service sponsored by the local authorities. Waste Electrical and Electronic Equipment (WEEE) produced by households is currently accepted at recycling centres and through demand based collection services.

## Waste Disposal

There are currently four landfills in the Region which accepted a total of 191,129 tonnes of waste in 2004. The level of waste disposal has decreased by 10% since 1998. Landfill gate fees have increased significantly and vary from €130 to €150 per tonne in the Region.

## Waste Infrastructure

The 2001 Plan made recommendations for the expansion of the existing waste infrastructure in the Region. Significant progress has been made (by both the local authorities and the private sector) in the provision of waste infrastructure in the Region.

Proposed Facilities	Number Envisaged in Plan 1999-2004	Current Status (2004)
Bring Bank Expansion	1 Bank per 500 population	1 Bank per 1,668 population
Waste Recycling Centres (Civic Amenity Facilities)	21 proposed	11 in operation, 2 planned end of 2005, 4 planned for future.
Segregated Collection	All urban areas* and 50% of rural areas	14% of total households with 3-bin system 26% of total households with 2-bin system
Green Waste Composting	6 proposed	2 local authority and 1 private sector in operation
Biological Treatment Plant	2 proposed	
Materials Recovery Facility	6 proposed	1 local authority and 9 private in operation
Transfer Station	4 proposed	1 local authority and 4 private in operation
Construction & Demolition Waste Recycling Facility	1 central facility proposed 9 locations for mobile plant recycling	5 private C&D waste licensed facilities and several small scale facilities in operation.
Thermal Treatment Plant	1 central facility proposed	None
Landfill	2 regional landfills proposed	1 site identified (South Connacht), 1 siting study in progress (North Connacht). 1 landfill under construction by private sector (East Galway).

\* An urban area is defined as a population centre greater than 1,500 persons

It is an underlying objective of this Plan to provide a range of integrated waste management infrastructure. The local authorities in the Region recognise the value of private investment in realising this aim. It is also recognised that the involvement of the private sector will be critical to the development of larger facilities (biological/thermal treatment/landfill) over the next Plan period.

## Waste Policy

In line with National Policy the Replacement Connacht Waste Management Plan will have its fundamental strategy grounded in the concept of integrated waste management. Priority will be assigned in accordance with the EU and National waste hierarchy with a strong emphasis on waste prevention and minimisation. The 2001 Plan targets are deemed valid future targets for the Region. The policy set out in this Plan will have the following specific objectives:

- Local Authorities will promote campaigns to meet the long-term challenge of waste prevention and minimisation at the household and business level,
- An integrated management approach will be applied to waste generated respecting the EU Waste Hierarchy of treatment solutions – reuse, maximum recycling, energy recovery and minimum landfill disposal,
- Local Authorities will encourage the development of sustainable waste management technologies and services for the Region whilst delivering European and National targets,
- Equity of access to waste management services and facilities will be created across the Region,
- Waste treated or disposed of at landfill in the Region will be done in accordance with highest environmental standards without causing environmental pollution, and
- Local authorities will work in partnership with the private sector to deliver waste infrastructure required in the Region.

### **Waste Prevention, Minimisation and Reuse**

Waste prevention will be an essential part of waste management policy in the Connacht Region. This will be achieved through continuing the work of the Environmental Awareness Officers at household and community level and the appointment of Green Business Officers to target the business and commercial sector. Community and voluntary groups will be encouraged to establish waste services or facilities for reuse/repair etc.



### **Waste Collection & Recycling**

It will be an objective of the local authorities in the Region to address uncollected household waste through introducing waste bye-laws, developing public awareness programmes, encouraging community type waste schemes in rural areas and continuing enforcement measures. A combined integrated system of segregated collection, bring banks and recycling centres will be provided to increase the household waste recycling rate. The appointment of Green Business Officers will inform the business and commerce sector of ways to implement segregated collection schemes to

increase source segregation of organic and dry recyclables. Waste bye-laws will also be introduced to enforce segregated collections in this sector.

### **Materials Recovery and Transfer Facilities**

An adequate network of facilities for recovery and transfer of wastes will be provided. This will be achieved through encouraging the private sector to provide and expand such facilities.

### **Biological Treatment**

Biological treatment capacity for separately collected organic waste will be developed to meet national and regional targets. It is an aim of this Plan to expand home composting, introduce a separate collection for organic food waste, provide for the collection of green waste at recycling centres and provide biological treatment and green waste composting facilities to treat separately collected organic food and green waste.

### **Pre-Treatment**

The requirement for pre-treatment of mixed residual municipal waste in the short term is recognised. This is required to comply with the EU Landfill Directive pending the development of thermal treatment.

### **Energy Recovery**

Energy recovery policy will focus on the provision of infrastructure to recover energy from residual waste after maximising recycling. The requirement to provide thermal treatment as part of an integrated waste management approach is in line with EU and National Policy.



### **Landfill Disposal**

Landfill will have a decreasing role in waste management in the Region in the future as recycling rates increase and, in particular, biological and thermal treatment facilities are introduced. The North Connacht Landfill Siting Study should proceed as additional landfill capacity is required by 2009. The timescale within which the South Connacht landfill should proceed will be determined taking account of capacity available at the East Galway Landfill. An inventory of all closed landfills and former hazardous disposal sites will be updated and a risk assessment carried out which will determine the required remediation will be carried out on a phased basis.

### **Inter-Regional Movement of Waste**

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.

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

The overall objective is to maximise the reuse and recycling of C&D waste through the implementation of the voluntary NCDWC initiative, improved regulation of the C&D waste sector and encouraging the private sector to develop C&D waste recycling facilities.



### **Hazardous Waste from Households & Small Businesses**

It is the aim of the Plan to ensure that hazardous wastes are managed through an integrated approach to prevention, collection and recycling. Improving awareness amongst householders and small businesses and the expansion of hazardous waste facilities at recycling centres are some of the objectives.

### **Waste Electrical & Electronic Equipment (WEEE) & End of Life Vehicles (ELV)**

The policy is to collect, manage, recycle, recover and dispose of WEEE and ELV and to comply with the EU Directives on Waste Electrical and Electronic Equipment and End of Life Vehicles (ELV).



### **Financial Review**

The financial review identified waste management costs in the Region, operational costs associated with different waste streams for the local authorities and 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 waste flows, and potential new waste infrastructure.

Total expenditure for the Region, for 2004, amounted to €32,486,104. Total income for 2004 amounted to €31,171,144. The operation of landfills was the largest single item of expenditure during 2004, accounting for 52% of waste management expenditure. Overall expenditure on waste collection, landfill operations and litter control accounted for over 80% of waste management expenditure.

### **Implementing the Plan**

The Plan states that 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.