
7. REVIEW OF WASTE MANAGEMENT PLAN IMPLEMENTATION

Section 12 of the Joint Waste Management Plan for South East Region (2002) (JWMPSE) outlined a number of policy actions/targets for the period of the plan. A total of six areas were identified and specific policies set.

This section will summarise the nature of the particular policies under each heading and this will be followed by a review of what has been achieved to date.

- prevention and minimisation
- waste collection
- waste recovery and recycling
- energy recovery from waste
- waste treatment
- final disposal

7.1. Waste Prevention and Minimisation

The JWMPSE proposed the following concepts to implement waste prevention, waste recovery and waste disposal measures to:

- encourage voluntary source reduction programs in businesses and industry
- endeavour to foster the ethos of producer responsibility
- encourage source reduction in the community

The 2002 Plan proposed that this would be achieved by a comprehensive and proactive waste education and awareness campaign, targeted toward the public and businesses/industry. In addition consideration was to be given to the introduction of bye-laws, where appropriate, to control litter generation and similar issues.

7.1.1. Progress Made to Date

The following has been achieved:

- The schools education programme and the 'Green Schools Programme' is actively supported.
- Information on waste management is being actively disseminated to community groups, schools and businesses through public meetings, a newsletter and the Internet.
- The Plastic Bag Levy is now in effect and enforcement officers have been appointed to ensure compliance by suppliers and retailers.
- A sponsored battery-recycling scheme for primary and secondary schools has been supported. Wexford County Council have 102 primary and secondary schools participating in this scheme
- The Local Authorities have continued to purchase and provide – at cost price - composting bins for householders. The number of home compost bins issued in the region is outlined in Table 7.1.

Table 7.1: Households participating in home composting or 3-bin organic waste collection service

Local Authority	No. of home compost bins distributed ^{Note 2}	% of household participating in home composting or 3-bin organic waste collection service
Kilkenny	4,400	17
South Tipperary	2,461	9
Waterford City	17,500 ^{Note 1}	100
Waterford County	13,000 ^{Note 1}	70
Carlow	0	0
Wexford	6,400	16
Total	43,761	

Note 1 - 3 bin collection system implemented

Note 2 - This figure represents compost bins supplied by the local authority, it does not include compost bins supplied privately through garden centres.

The National Strategy on Biodegradable Waste (April 2006) set a target to implement home composting in 20% of urban households and 50% of rural households by 2010.

7.2. Waste Collection

The JWMPSE set out policies for collection of:

- domestic waste
- commercial waste

7.2.1. Domestic Waste Collection

The policies for collection of domestic waste, as set by the JWMPSE are summarised in Table 7.2.

Table 7.2: JWMPSE Policy for Domestic Waste Collection

Policy	Target Date
2-bin collection service for all householders availing of either a public or private waste collection service 2 bins to collect: <ul style="list-style-type: none">• residual waste• dry recyclables<ul style="list-style-type: none">- paper/cardboard- paper/cardboard packaging- plastics- metal containers- uniform colour coding of segregated collection bins	2008
Polluter Pays Principle charge system	No date given
3-bin collection service for all urban areas (population greater than 1,500) <ul style="list-style-type: none">• 3 bins to collect:<ul style="list-style-type: none">- dry recyclables- organic waste- residual waste	Post 2008

7.2.2. Progress Made to Date

The roll out of the 2-bin collection service across the region (end 2004) is shown in Table 7.3. The 2-bin collection service provides for the collection of residual and dry recyclable waste streams.

Table 7.3: No. of Households participating in a 2-bin Collection Service (end 2004)

Local Authority	No. of Households	No. of Households serviced by public or private collection service	2-bin collected by the Local Authority	2-bin collected by the Private Sector	% of households (on a collection route) serviced by 2-bin
	(2002 census)				
Carlow	14,931	14,931	0	****	****
Kilkenny	25,603	20,100	1,400**	12,670	70
South Tipperary	26,410	21,600	15,000	6,600	100
Waterford City	17500***	17,500	17,500	0	100
Waterford County	18,606	15,006	13,000*	2,000 [‡]	<100
Wexford	38,011	34,500	19,000	15,500	100
TOTAL	141,061	123,637	51,500	34,770	

* 3-bin

** as reported

*** according to figures from WCC, there are 17,500 households in the City. The figure quoted in the housing census 2002 is 15,299 households.

**** commenced in 2005

The roll out of a 2-bin collection system has commenced in all local authority areas. All householders availing of a local authority collection service has access to a segregated waste collection service. The private sector has commenced the roll out of the 2-bin collection service.

All dry recyclable collection services provide for the collection of paper/cardboard, paper/cardboard packaging, plastics and metal containers.

Dry recyclables are also collected using clear plastic bags. The benefit of using clear bags is to identify contamination.

The roll out of the 3-bin collection service has commenced ahead of schedule in Waterford City and County. All householders availing of waste collection services offered by these local authorities have access to a 3-bin collection service.

7.2.3. Commercial Waste Collection

The JWMPSE set out policy for the collection of commercial waste as summarised in Table 7.4.

Table 7.4: JWMPSE Policy for Commercial Waste Collection

Policy	Target Date
3-bin collection service 3-bins to include: dry recyclables organic waste residual waste	from outset of plan (2002)
only segregated waste to be exported from the region	from outset of plan (2002)
licensing/regulations to ensure segregation of commercial waste	from outset of plan (2002)

7.2.4. Progress Made to Date

Dry recyclables and residual waste collection is widely available to all commercial and industrial waste producers in the region. Separate collection of organic waste is available to all commercial and industrial waste producers located in Waterford City and County. The local authorities are currently reviewing all AER's submitted by waste collectors in their region, to assess quantity of mixed waste leaving the region with the intention of addressing this issue.

7.3. Waste Recovery and Recycling

The JWMPSE set out the following proposals for waste recovery and recycling as summarised in Table 7.5:

Table 7.5: JWMPSE Policy on Waste Recovery and Recycling

Policy	Date
3-Bin collection System for domestic (2-bin in rural areas), industrial and commercial waste	2009
intensive home composting	2005
bring sites (1 per 1,000 of the population), recycling centres (22 in the region) and material recovery facilities in place	2005
local windrow and in-vessel biological treatment systems	2005
intensive public information and awareness campaign	duration of plan
focus on source reduction and producer responsibility	no date given
provision of integrated full range waste management facility (with waste transfer facilities)	2009

7.3.1. Progress Made to Date

The roll out of a 2-bin and 3-bin collection system has commenced in all Local Authorities. All householders availing of a Local Authority collection service has access to a segregated waste collection service. The private sector has commenced the roll out of the 2-bin collection service.

17% and 9% of householders in Kilkenny and South Tipperary respectively, have purchased home composting units. This is above the anticipated national average participation rate of 7% as outlined in the National Strategy on Biodegradable Waste, Draft Strategy Report.

The roll out of the establishment of bring centres has continued. There is 1 bring site per 400 households in the region (2004) (approximately 1 per 1,200 of population)

There are 11 recycling centres serving the region out of a proposed 22.

Waterford County Council has established a dry recyclables material recovery facility in Dungarvan. This facility has a design throughput capacity to manage 24,000 tonnes of dry recyclable with the potential to increase capacity to manage 34,000 tonnes. This facility has the capacity to manage all dry recyclables collected from householders participating in local authority operated waste collection services for the design year 2011. (This is based on the assumption that total waste generation per household is 1.28 tpa and that there is a collection coverage of 80-85%).

Green waste composting sites were established at Lismore and Dungarvan Recycling Centres. A centralised in-vessel biological waste composting facility was established by Waterford City Council. The maximum design throughput capacity of this facility is 28,000 tonnes. This facility has the capacity to treat the organic fraction of household waste produced by all householders participating in local authority operated waste collection services for the design year 2011. (The calculation is based on the assumption that total waste generation per household is 1.28 tpa and that there is a collection coverage of 80-85%).

Public information and awareness campaigns are continuously undertaken by each of the local authority Education and Awareness Officers.

Education and Awareness Officers are continuously focusing information and awareness campaigns on the need to source separate waste streams and the implementation of the Packaging Regulation and Producer Responsibility Initiatives (PRIs) e.g. End-of-Life Vehicles (ELV), Waste Electronic and Electrical Equipment (WEEE).

Pay by weight and volume charging systems have been introduced, which is believed will encourage greater recovery rates.

A Clients Representative has been appointed to procure an integrated waste management facility for the region.

7.3.2. Recovery and Recycling of Packaging Waste

The JWMPSE set the following specific policies for recovery and recycling of packaging waste in the region:

The following specific policies will be followed for packaging waste recovery in the region:-

- Local authorities will work closely with Repak Ltd to ensure that the quantity of packaging required by the Packaging Regulations and the EU Directive are recycled within the required timescales.
- Local authorities will actively enforce the Waste Management (Packaging) Regulations with a view to eliminating “free riders”, ensuring all major producers are either self-compliant or Repak members and requiring the obligations on producers of packaging waste to be met.
- Local authorities will provide information to all packaging producers in the region on the need for compliance with the Packaging Regulations and with a view to increasing packaging waste recovery. This information will also include material on the prevention of the creation of packaging waste.
- Having regard to land use planning and environmental considerations, Repak approved waste contractors will be encouraged to establish and extend collection systems and recycling facilities for packaging waste.
- In order to facilitate the application of the “Polluter Pays Principle” and the collection and recycling of packaging waste, all local authority household waste collection activities will be fully costed and appropriately charged to the householders in the region.
- Local authorities will, as part of their programmes of environmental awareness, provide information to householders on the need to recycle packaging waste and on how the production of packaging waste can be prevented.

7.3.3. Progress Made to Date

A number of local authorities including Waterford City Council, Waterford County Council, Kilkenny County Council and Carlow County Council have been engaged in co-operative initiatives with the commercial sector to encourage the prevention, minimisation, recycling and recovery of packaging waste. This cooperation will continue. The Awareness Officers in each local authority have produced initiatives with Repak to increase awareness of packaging waste and to inform both the public sector and commercial sector on the options available to them to play their role in managing packaging waste correctly. Information packs are being distributed to relevant sectors. Since the introduction of the 2-bin collection system throughout the local authority collection routes in the region, dry recyclables are collected separately.

The second bin helps to divert packaging waste from the household stream. There was an increased public awareness drive around the Christmas period in 2004 to highlight the issue of increased seasonal packaging waste generation. An advertisement campaign was run to provide information on seasonal packaging.

7.4. Energy Recovery from Waste

The JWMPSE set out proposals for energy recovery from waste as summarised in Table 7.6:

Table 7.6: JWMPSE Policy on Energy Recovery from Waste

Policy	Date
support for and promotion of the recovery and utilisation of landfill gas	duration of plan
support for an promotion of thermal treatment with energy recovery either for electricity generation or combined heat and power	duration of plan
support for an promotion of anaerobic digestion of agricultural waste streams with recovery of biogas	duration of plan
support for and promotion of generation of refuse-derived fuel (RDF)	duration of plan
an integrated waste facility incorporating thermal treatment and energy recovery	2009

7.4.1. Progress Made to Date

A Clients Representative was appointed in 2004 to procure an integrated waste management facility for the region. Recovery and utilisation of landfill gas is currently carried out in Kilbarry Landfill, Waterford.

The authorities will continue to support and promote the waste treatment options listed in table 7.6.

7.5. Waste Treatment

The specific policy of the JWMPSE with regard to the primary waste fractions is outlined in Table 7.7.

Table 7.7: JWMPSE Policy on Waste Treatment

Policy		Date
dry materials fraction	provision of materials recovery facilities	2002-2003
organic fraction	provision of biological treatment facilities both locally and at the integrated facility provision/promotion of an intensive home composting system for household organics.	locally 2004 centralised 2009
green waste (garden waste)	provision of small windrow composting facilities at the major recycling centres or other suitable locations	2005
construction & demolition waste	provision of mobile crushing and screening system located at existing/proposed waste facilities where practicable (open for consideration at other locations)	2003
residual	provision of an integrated waste management facility for residual waste with an associated waste transfer system. The adopted technology shall be a proven system, meeting the emission criteria from the environmental lifecycle assessment of this plan, having best available technology.	2009

7.5.1. Progress Made to Date

Waterford County Council has established a dry recyclables material recovery in Dungarvan. This facility has a design throughput capacity to manage 24,000 tonnes of dry recyclable with the potential to increase capacity to manage 34,000 tonnes. This facility has capacity to manage all dry recyclables collected from householders participating in Local Authority operated waste collection services for the design year 2011. (Assuming total waste generation per household is 1.28 tonne with a collection efficiency of 80-85%).

Green waste composting sites were established at Lismore and Dungarvan Recycling Centres. A centralised in-vessel biowaste composting facility was established by Waterford City Council. The maximum design throughput capacity of this facility is 28,000 tonnes. This facility has the capacity to treat all biowaste/organic fraction of household waste produced by all householders' participation in Local Authority operated waste collection services for the design year 2011. (This is based on the assumption that total waste generation per household is 1.28 tpa and that there is a collection coverage of 80-85%).

Discussions have been held with the private sector regard the viability of operating a mobile system crushing and screening system to manage construction and demolition waste within the region.

A Clients Representative has been appointed to procure an integrated waste management facility for the region.

7.6. Final Disposal

Table 7.8 outlines the specific policy of the JWMPSE for final disposal and the necessary actions to be undertaken by the region.

Table 7.8: JWMPSE Policy on Final Disposal

Policy	Date
Non-combustible residual waste is to be disposed of in residual landfills in the region.	plan implementation period (2002-2021)
Bottom ash from the thermal treatment process to be disposed of in residual landfills in the region.	
Untreated fly ash (hazardous waste) from the thermal treatment process to be disposed of in an environmentally secure manner at the nearest appropriate facility.	
Excess residual waste that cannot otherwise be dealt with is consigned to residual landfill in the region, pending provision of alternative or additional treatment/recovery facilities.	

7.6.1. Progress Made to Date

Three residual landfills are proposed for the region, these facilities are proposed for Hardbog, (South Tipperary), Garrynagree, (Waterford) and Holmestown (Wexford).

A Clients Representative has been appointed to procure an integrated waste management facility for the region.

7.7. Review of Waste Management Plan

In accordance with Section 22 of the Waste Management Act (1996), the plan must be reviewed at least every five years. The current waste management plan was developed during 2001/early 2002 and adopted in June 2002. The plan was reviewed in late 2004/early 2005. This document is the first review of the JWMPSE.

The next review of the plan is scheduled for 2010 however the plan may be reviewed before that date as deemed necessary by the regions local authorities.