

## SECTION 4: Landfill Directive Strategic Plan

The Landfill Directive requires a significant reduction in the quantity of biodegradable municipal waste (BMW) going to landfill over the next 20 years.

The Government plans to introduce a tradeable permit system to control the landfilling of biodegradable waste and to ensure compliance with the Directive. Under the proposed system Waste Disposal Authorities will be allocated permits, allowing them to landfill specified quantities of biodegradable waste. However the exact operation of the permit system is still to be agreed. The final design and operation of the tradable permit system may have a significant impact on how we plan to reduce our dependence on landfill across the county.

This section of the Strategy sets out Leicestershire's Strategic Plan for achieving the Landfill Directive diversion targets based on current understanding. This will need to be reviewed once the tradable permit allocations and operation of the system have been announced.

### Estimated Diversion Requirements

The Landfill Directive sets the following targets on the UK: The national targets are;

- By 2010 reduce the biodegradable municipal waste disposed to landfill to 75% of that produced in 1995
- By 2013 reduce biodegradable municipal waste disposed to landfill to 50% of that produced in 1995
- By 2020 reduce biodegradable municipal waste disposed to landfill to 35% of that produced in 1995.

The subsequent amount of biodegradable waste that will require diversion from landfill in Leicestershire is set out in Table 1.

**Table 1: Direct translation of Landfill Directive Targets for Leicestershire**

Landfill Directive Requirements	1995 (tonnes)	2010 (tonnes)	2013 (tonnes)	2020 (tonnes)
Municipal Waste Arisings	296,763	477,800	502,100	563,100
Estimated Biodegradable content of MSW	178,058	286,700	301,300	337,800
Biodegradable MSW permitted to landfill <sup>8</sup>	178,058	133,500 (75%)	89,000 (50%)	62,300 (35%)
Biodegradable MSW diversion required		153,100	212,200	275,500
Assumptions				
1. For background on waste growth see Appendix B				

<sup>8</sup> The amount of biodegradable waste is assumed to be 60% of municipal waste based on DETR Guidance set out in the consultation paper on Tradable Permits, March 2001.

## Strategic Plan for Achieving Targets

The Strategic Plan for achieving the diversion targets has two key elements:

- Achieving 2010 targets through recycling and composting systems developed to achieve statutory performance standards; and
- Achieving 2013/2020 targets by developing new treatment capacity.

### 2010 Target

In 2010, approximately 153,000 tonnes of biodegradable waste needs to be diverted from landfill. The recycling and composting systems developed to achieve the 2003/04 and 2005/06 performance standards will deliver the majority of the required diversions. The key sources of diversion are summarised below;

- Kerbside Green Waste, approximately 15,000 tonnes
- Bring/Kerbside Collection of Paper/Card/Textiles, approximately 55,000 tonnes
- RHW Site segregation of Green Waste, approximately 45,000 tonnes
- RHW Site segregation of dry recyclables, approximately 5,000 tonnes

The additional diversion required can be achieved by improving the performance of the current collection systems (to achieve a recycling and composting rate in excess of 33%) or expanding organics waste collection systems.

The Partnership therefore propose to monitor the performance of the collection systems up to 2005 to determine if these schemes can provide the required diversion rates without expansion. Expansion of the organic waste collection will be considered if performance and waste data suggest that the necessary diversion cannot be achieved by the collection systems outlined in section 6

Continual monitoring of progress against targets will also be linked to regular monitoring of waste growth rates as target predictions for biodegradable waste diversion will require adjustment in line with any changes in the amount of municipal waste produced in the county.

### 2013 and 2020 Targets

The 2013 and 2020 targets are unlikely to be achieved by the proposed recycling and composting infrastructure alone, therefore additional waste treatment capacity will be required to achieve the targets. The type and scale of this additional treatment capacity will be dependant on the performance of recycling and composting systems. Therefore the Partnership proposes to select the option(s) to achieve the 2013 and 2020 targets following the review of the strategy in 2005 as this allows:

- The performance of recycling and composting systems to be assessed;
- Treatment options to be evaluated; and
- Sufficient time for the necessary infrastructure to be developed.

The key actions and timescales for achieving the Landfill Directive diversion targets are set out in Table 2.

**Table 2: Landfill Directive Strategic Plan Actions**

<b>Date</b>	<b>Action</b>	<b>Comment</b>
2002 to 2005	Implement recycling and composting systems to achieve performance standards	Monitor development of tradable permit system
2004	Review implications of the tradable permit system	Evaluate if permit allocations are consistent with Strategy assumptions
2005	Review performance of recycling and composting systems and their ability to achieve the 2010 target	Plan the expansion of organics collections, if required
2005	Based on performance of recycling and composting systems select treatment option to achieve 2013 and 2020 targets	Start procurement process to allow development of facilities by 2013
Beyond 2005	On-going monitoring of performance	

## Glossary

<b>Best Practicable Environmental Option (BPEO)</b>	The option that provides the most benefit or least damage to the environment as a whole, at acceptable cost, and in the long term as well as the short term.
<b>Best Value</b>	The duty on local authorities to deliver effective, economic and efficient services and seek improvement in the quality and standard of their service provision.
<b>Biodegradable waste</b>	Waste which is able to decompose through the action of bacteria or other microbes. This includes materials such as paper, food waste and green garden waste.
<b>Bring facilities/banks</b>	Containers provided at convenient locations where members of the public can bring clean segregated materials such as glass and aluminium cans for recycling.
<b>Centralised composting</b>	Large scale composting of source segregated organic garden and park waste. Typically involves the use of windrows (ie long rows of shredded material) on farms or landfill sites.
<b>Clinical waste</b>	Defined in the Controlled Waste Regulations 1992 as <p>“any waste which consists wholly or partly of human or animal tissue, blood or other bodily fluids, excretions, drugs or other pharmaceutical products, swabs or dressings, or syringes, needles or other sharp instruments, being waste which unless rendered safe may prove hazardous to any person coming into contact with it; and</p> <p>any other waste arising from medical, nursing, dental, veterinary, pharmaceutical or similar practice, investigation, treatment, care, teaching or research, or the collection of blood for transfusion, being waste which may cause infection to any person coming into contact with it”</p>
<b>Composting</b>	The degradation of organic wastes in the presence of oxygen to produce a fertiliser or soil conditioner.
<b>Dry recyclables</b>	Materials such as paper, textiles and cans, that can be collected through kerbside schemes or bring banks.
<b>Energy from Waste</b>	Central processing facilities, primarily incineration, whereby energy may be recovered from waste. The resultant energy can be used to create power, heat or combined heat and power.
<b>Fly tipping</b>	The unregulated and illegal dumping of waste.
<b>Green procurement</b>	The development of contracts for services or purchasing arrangements, that encourage sustainable waste management.
<b>Green waste</b>	Biodegradable waste from gardens and parks.
<b>Hazardous waste</b>	Defined in the Landfill Regulations as any waste defined in Article 1 (4) of Directive 91/689/EEC on hazardous waste
<b>Home composting</b>	Use of a garden container into which garden waste and other biodegradable materials are placed for composting.
<b>Household waste</b>	Waste from domestic properties including waste from HWRCs, material collected for recycling and composting, plus waste from educational establishments, nursing and residential homes and street cleansing waste.

<b>Recycling and Household Waste Site (RHWS)</b>	A site provided by the local authority, to which local residents can deliver bulky household waste, garden waste and a range of recyclable materials.
<b>Kerbside collection</b>	Door to door collection of recyclable materials that the householder has put out for collection from outside the property.
<b>Landfill</b>	The engineered deposit of waste into or onto land.
<b>Materials Recovery Facility (MRF)</b>	A central facility to separate, process and store materials for recycling. A 'clean' MRF receives recyclables collected separately from refuse; at a 'dirty' MRF, recyclables arrive co-mingled with refuse.
<b>Municipal waste</b>	Waste collected by or on behalf of local authorities. Primarily household waste but includes commercial waste.
<b>Non-hazardous waste</b>	Defined in the Landfill Regulations as waste which is not hazardous waste.
<b>Organic waste</b>	Materials such as food and vegetable waste.
<b>PCB</b>	Polychlorinated Biphenyls.
<b>PRN</b>	Producer Responsibility Note – a receipt issued by a reprocessor to demonstrate the recycling of packaging waste. PRNs have a monetary value and can be sold to companies who have a recycling obligation under the Packaging Regulations.
<b>Recyclables</b>	Materials which are suitable for recycling
<b>Recycling</b>	The collection, processing and treatment of waste to make it re-usable in whole or part.
<b>Stakeholder</b>	A person or group of people who have an involvement or interest in a waste management service.
<b>Sustainable Development</b>	Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.
<b>Sustainable Waste Management</b>	The efficient use of resources to minimise waste and the use of waste in a way that contributes to the economic, social and environmental goals of sustainable development.
<b>Thermal treatment</b>	Treatment and disposal of municipal waste by burning or degradation. Mass burn incineration is the most widely used method of thermal treatment.
<b>Transfer Station</b>	Facility where previously collected household waste and recyclable materials are compacted and loaded into bulk transfer vehicles for onward transport to a recovery or disposal facility. Used to reduce transport costs and vehicle numbers.