

## **SECTION 2: Main Policies and Plans**

### **1. Introduction**

#### **1.1 Why do we need a waste management strategy?**

Key changes are required to the way that waste is managed in Leicestershire over the next 20 years. This is in response to a number of regulatory changes at both a national and European level that require waste to be handled in a more sustainable manner and which require local authorities to be more than a facility for collecting and disposing of waste. The key drivers are:

- The introduction of statutory performance standards for the recycling and composting of household waste that must be met
- European and national legislation that require the amount of waste disposed to landfill to be significantly reduced and alternative disposal routes developed.

Responses to legislative change must be carried out in conjunction with taking steps to reduce the amount of waste that we produce. The development of a Municipal Waste Management Strategy for Leicestershire provides a framework in which new collection and disposal infrastructure can be developed. It also enables the Leicestershire authorities to work together in partnership to achieve common goals and targets and gain benefit from joint working arrangements.

The Waste Management Partnership has guided the development of the Leicestershire Municipal Waste Management Strategy. It has been prepared on behalf of the following authorities: Leicestershire County Council and the District and Borough Councils of Blaby, Charnwood, Harborough, Hinckley & Bosworth, Melton, NW Leicestershire, and Oadby & Wigston. It covers the period from 2002 to 2020.

Local Plans and policies considered in the development of the Waste Management Strategy include the Waste Local Plan for Leicester and Rutland 1995-2006 which provides land use policies of relevance to the development of new waste management facilities. Details of the planning policy context are summarised in Appendix A.

#### **1.2 Key issues addressed in the Strategy**

This Strategy document sets out the key policy objectives and regulatory targets for waste collection, recycling and disposal in Leicestershire and outlines the key stages for implementing these changes.

This document includes four main sections and has been prepared consistent with the guidance issued by the former Department of Environment, Transport and the Regions (DETR). Section 1 presented a summary of key policies, targets and achievements. Section 2 is the core of the Strategy and includes

- details of the Strategy development process,
- current waste management arrangements,
- national policies and targets
- local policies and objectives
- plans for achieving targets – including proposed changes to the waste collection and disposal infrastructure

- non-household municipal waste and priority waste streams
- Strategy implementation plan and monitoring arrangements

Section 3 contains details of each collection authority and their current plans for changes to waste collection systems. Recycling Plans for each authority are included in Appendix 2. Section 4 relates to the Landfill Directive and includes a strategy for meeting permit allocations.

## 2. Developing a Strategy for Leicestershire

### 2.1 The Leicestershire Waste Management Partnership

The local authorities in Leicestershire joined together in 1998 to form the Leicestershire Waste Management Partnership in order to establish a framework for working together to meet future challenges concerning the management of municipal waste within the county.

In forming this Partnership the authorities recognised that, in order to successfully meet the challenges ahead, working together and making decisions based on the total service, rather than just considering the problem from the perspective of one authority, would produce a more co-ordinated and sustainable result.

The Waste Management Partnership includes the 7 district and borough councils, Leicester City Council and Leicestershire County Council. Leicester City has made its own arrangements for waste management but continues to be a member of the Partnership.

#### 2.1.1 Organisational Structure

The development of this Strategy and the work of the Partnership has been led by a Working Group of officers from the County Council and two of the district councils, Charnwood Borough Council and Melton Borough Council.

The Working Group reports to the Member Steering Group where all councils are represented. Recommendations made by this Group are forwarded to the individual partner authorities to ratify.

#### 2.1.2 Framework Agreement

The Partnership is underpinned by a framework document setting out the main principles and strategic objectives that have guided the development of this Strategy. These are:

##### Guiding Principle

To provide the most cost effective, sustainable and reliable service for the collection and disposal of waste, taking into account the BPEO, which seeks to provide the Best Value to all council tax payers, by:

- Meeting all legal requirements
- Minimising the amount of waste generated
- Reducing the amount of waste for final disposal
- Increasing public awareness of waste management
- Being transparent and open in decision-making
- Increasing sustainability within waste management
- Retaining flexibility

##### Strategic Objectives

- jointly research, develop and implement detailed schemes to attain targets and maintain and enhance such schemes
- enhance economic and employment opportunities wherever possible within the principles of sustainability and Best Value
- minimise the vehicular movements of waste
- increase recycling and economies of scale through shared resources and investment;
- co-ordinate Leicestershire-wide public awareness and promotion campaigns.

## 2.2 How the Strategy has been developed

### 2.2.1 Development of the Preferred Strategy

The development of this Strategy has been undertaken in a number of stages;

- **October 2000 – October 2001** assessment of current services and development of outline options for consideration by the Partnership.
  - An analysis of the current situation in Leicestershire in terms of municipal waste arisings and waste collection and disposal arrangements and identification of the key issues facing the councils in terms of waste management.
  - Building on the baseline position, a number of generic waste management options suitable for managing municipal waste in the County were assessed. The assessment covered implementation costs and the ability of each option to meet recycling and recovery targets and other local aspirations/objectives relating to waste management.
  - Based on the generic options, two potential waste management solutions were selected by the partner authorities for more detailed analysis. A detailed assessment of the two options was carried out against agreed evaluation criteria, which included capacity and facility issues, environmental impacts, cost, ability to meet targets and land use planning implications.
- **January 2002 – July 2002** Consultation Process
- **July 2002 - Ongoing** development of Action Plans to form the basis of each partner authority's contribution to achieving the Strategy targets.

### 2.2.2 Consultation on the Preferred Strategy

As the changes we need to make in our waste management practices will affect all householders and residents of Leicestershire and the success of any new initiatives depends on everyone taking part the Leicestershire councils sought the views of local residents and other stakeholders. Views were obtained through a number of consultation methods including a survey of residents, a community group workshop, and a waste industry survey.

#### Public Consultation

A 4-page document outlining possible waste management options, accompanied by a questionnaire was distributed to a sample of 10,000 residents across Leicestershire. Further copies of the summary document were made available at public buildings and council offices and placed on the County Council website. The survey was managed by MORI.

The questionnaire addressed a range of waste management issues including general awareness of waste issues, perception of current waste management services, and attitudes to waste reduction, recycling and other waste management technologies

Just under 2,000 questionnaires were returned which is a response rate of 20%. The results were assessed as having a statistically high confidence level in terms of the responses obtained. The findings can be summarised as follows:

- Provision of waste management information to householders was considered important and would influence their recycling behaviour.
- 84% overall satisfaction with the refuse collection service
- 54% overall satisfaction with current recycling facilities although this varied between districts and reflected the current level of provision
- 61% satisfaction with the recycling and household waste sites
- High demand (78%) for kerbside recycling collection services but respondents felt that the key is to make the system as simple to use as possible.
- 77% likely to support a separate collection of kitchen/garden waste
- High percentage in favour of a weekly collection for refuse and kitchen waste, fortnightly for dry recyclables and garden waste. Less likely to support an alternate weekly collection of residual waste
- Cost and environmental impact considered the two most important factors when considering waste management options for Leicestershire
- 68% of respondents were in favour of working to exceed current statutory recycling standards
- 74% of respondents felt that incineration to generate electricity was the best option to deal with residual waste (i.e. waste that remains after recycling and composting)

### **Stakeholder Consultation**

A community group workshop was held in June 2002 to seek views on options for improving recycling performance and current barriers to participation, attitudes to different treatment options and key issues that should be considered by the Partnership. The main findings are summarised as follows;

- Recycling - Storage, time constraints and understanding of what can be recycled were considered as a barrier to participation in recycling. Therefore systems should be as simple as possible and greater focus should be placed on education and communication.
- Treatment Options - Differing views were offered on the collection of food waste. Recognition of the likely negative public perception towards incineration (and other forms of thermal treatment) but also that there would be a need for some capacity in the future once recycling/composting has been maximised.

### Waste Management Industry

A summary document was also distributed to representatives from the waste management industries and feedback requested on a number of issues which included the proposed options for managing household waste, in particular the collection and treatment technologies proposed, and future contractual and facility options. Responses were received from the key waste management contractors in the area who were broadly supportive of the collection and disposal options being proposed. Responses can be summarised as follows;

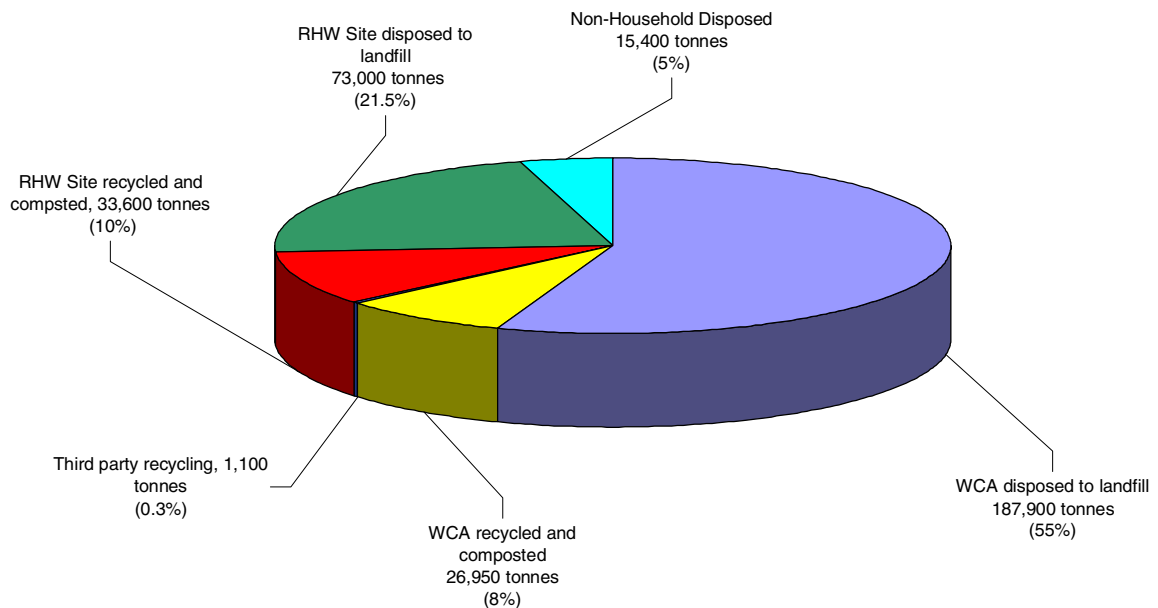
- supportive of collection and treatment options being considered are they are based on proven technologies
- not in favour of the co-mingled collection of glass at the kerbside, a two stream, i.e. paper and card separate from containers (glass, plastics, cans) or kerbside sort collection system would be preferable
- benefit in also collecting textiles separately
- support the weekly collection of recyclables to ensure high participation
- higher participation and capture rates can be achieved by using wheeled bins rather than plastic sacks
- there is benefit in maximising green waste segregation at RHW sites rather than implementing kerbside collections.
- supportive of thermal treatment but should also consider emerging technologies such as gasification and pyrolysis once commercially proven

### 3. Evaluation of Current Arrangements

#### 3.1 Summary of current arrangements

A review of existing arrangements was carried out based on 2000/01 data to provide an overall picture of how municipal waste is managed in Leicestershire. Household waste collected in Leicestershire was approximately 325,000 tonnes in 2000/01, the majority of which was disposed to landfill (81%) with 18.3% recycled or composted. The WCA's and the WDA also collected a further 15,400 tonnes of non-household municipal waste that was disposed to landfill. The majority of this was commercial and industrial waste. This breakdown of municipal waste is summarised in Figure 3.1

**Figure 3.1 Municipal Waste Management in 2000/01**



#### 3.2 Municipal Waste

Table 3.1 summarises the municipal arisings for the period of 1995 to 2001 and shows that municipal waste has increased by 41,300 tonnes over the six year period, an increase of 14%. This is equivalent to an average annual increase in municipal waste of 2.6%. Household waste has increased by 3.2% per annum over the same period.

**Table 3.1 Municipal Arisings 1995 to 2001**

	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01
Total Household Arisings (t)	274,996	297,675	324,190	340,220	330,090	322,562
Total Municipal Arisings (t)	296,763	320,983	350,069	365,618	356,131	338,003
Average Household Waste per household	1.160	1.237	1.328	1.372	1.296	1.255
Average Municipal Waste per Capita	0.506	0.542	0.588	0.612	0.589	0.554

The increase in municipal waste is due both to the increase in the number of households in the county (approximately 20,000 over the six year period) and the amount of waste produced per household. This was 1.160 tonnes per household in 1995 compared to 1.255 per household in 2000/01. The amount of municipal waste produced per head of population also increased from 0.506 to 0.554 tonnes per person.

Municipal and household arisings are shown for each collection authority in Table 3.2.

**Table 3.2 Municipal and Household Waste by Authority in 2000/01**

<b>Council</b>	<b>MSW (tonnes)</b>	<b>Household (tonnes)</b>
Blaby	31,654	30,421
Charnwood	47,375	47,320
Harborough	29,795	29,795
Hinckley & Bosworth	36,419	36,419
Melton Borough	18,153	18,079
NW Leicestershire	42,265	38,286
Oadby & Wigston	15,622	15,622
Total WCA	221,283	215,942
CA Site Waste	116,720	106,620
<b>Total Arisings</b>	<b>338,003</b>	<b>322,562</b>

### 3.3 Refuse Collection

All household waste generated within Leicestershire is collected for disposal by the six collection authorities. The predominant collection method is plastic sacks. Harborough and North West Leicestershire provide 240 litre wheeled bins to residents and Blaby provide 140 litre wheeled bins.

All authorities operate a weekly collection service. Blaby and North West Leicestershire provide the service in house while the remaining 5 authorities contract to either Onyx, SITA or Service Team for refuse collection.

### 3.4 Recycling and Household Waste Sites (RHWS)

There are 14 Recycling and Household Waste Sites, provided by the County Council which offer facilities for the householder to dispose of household waste and also facilities for recycling of materials such as scrap metal, paper, cardboard, glass and green waste. Hazardous materials such as engine oil and car batteries, fridges and freezers are also accepted.

Waste collected at RHWS's was 106,600 tonnes which is just over 30% of the total household waste collected in Leicestershire in 1999/00.

### 3.5 Recycling and Composting

In 2000/01 approximately 61,600 tonnes of material was separated from the household waste stream for recycling and composting which is a household recycling rate of 19%. This was carried out through a number of different routes and includes material collected through bring sites and kerbside collections, materials separated at the RHW sites and third party recycling.

#### 3.5.1 Kerbside Collections

All collection authorities provide either a fortnightly or weekly kerbside collection for a variety of materials, although most focus on paper, cans, plastic and textiles. These schemes collected approximately 18,500 tonnes of material in 2000/01. This is 66% of the material collected for recycling by the collection authorities. The voluntary and community sector collected a further 1,050 tonnes for recycling and composting.

Three authorities provide a kerbside collection of garden wastes. 1,200 tonnes were collected in 2000/01, which is 4% of the total materials collected for recycling and composting. The kerbside collection services for recyclable materials are summarised in Table 3.4.

### 3.5.2 Bring Sites

In addition to the kerbside collection facilities each district provides a number of bring sites for a wide range of materials such as glass, plastic, cans, textiles, books, etc. Bring sites accounted for 7,300 tonnes of the material collected for recycling in 2000/01, which is 26% of the total collected for recycling by the collection authorities. The number of bring sites currently provided by each district is summarised in Table 3.3.

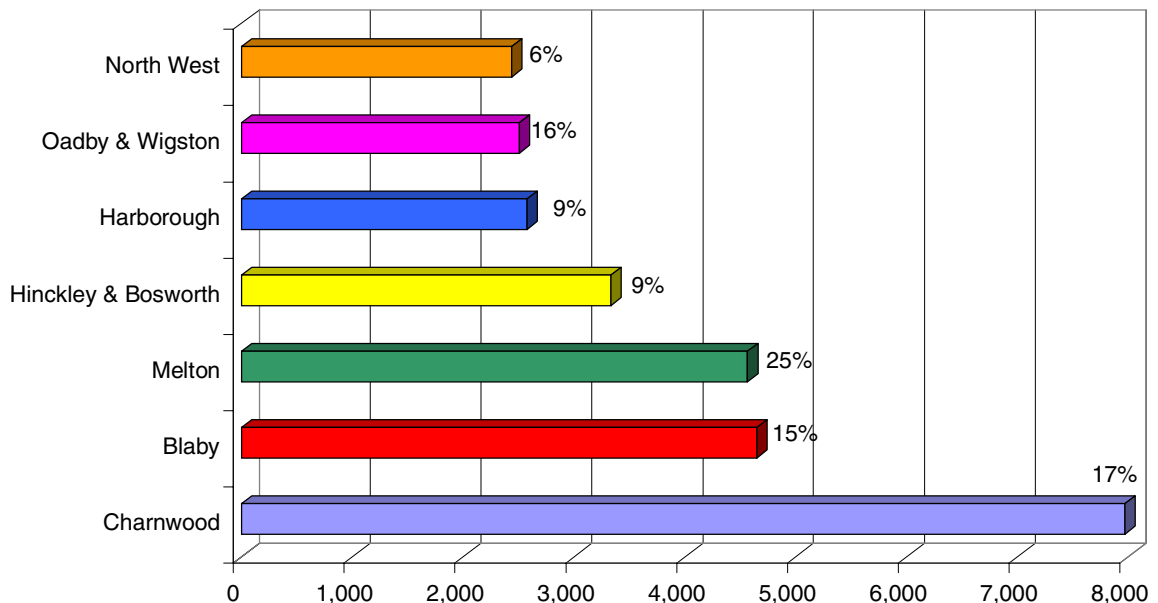
**Table 3.3 Current Bring Site Provision**

District	Number of Bring Sites	Households per site
Blaby	30	1,213
Charnwood	60	1,102
Harborough	39	821
Hinckley & Bosworth	32	1,303
Melton	75	268
North West Leicestershire	45	818
Oadby & Wigston	15	1,443
Total	296	860

Current provision of bring sites is approximately 300 sites per 254,800 households which is equivalent to one site per 860 households. Provision varies amongst the districts with Melton having the highest level of bring site provision with one site per 268 households.

The amount of waste collected for recycling in 2000/01 on a district level through kerbside collections and bring banks is summarised in Figure 3.2.

**Figure 3.2 Household waste collected for recycling in 2000/01**



### 3.5.3 RHW Sites

In 2000/01 33,600 tonnes of waste was separated for recycling and composting at RHW sites of which approximately 70% was green waste for composting. This was 31.5% of the total household waste received at these sites. Overall recycling at RHW sites contributes just under 54% of the total amount of household waste collected for recycling and composted in Leicestershire.



### 3.6 Waste Disposal

The county is currently heavily reliant on landfill with the majority of waste (81% in 2000/01) sent for landfill disposal. Waste is taken to one of three sites within Leicestershire (Enderby, Cottesbach and Bradgate landfills) or sites within neighbouring counties. Landfill capacity within the county is running out with only Cottesbatch having greater than five years remaining capacity. Provision has been made within the Waste Local Plan for new landfill provision to be available at Newhurst Quarry and New Albion, both sites are located within the County.

Materials collected for recycling are either sorted at one of two local materials recycling facilities (MRFs) at Whetstone or Melton or taken directly to reprocessing locations outside the county. The Whetstone MRF has a capacity of 10,000 tonnes and handles paper, cans and plastic bottles collected from Charnwood, Oadby & Wigston and Blaby. The facility in Melton operates at approximately 1,000 tonnes per annum. Leicester City also operates a MRF that may offer additional capacity. There is a large windrow composting facility at Lount where the majority of green waste segregated at the RHW sites is taken. A smaller composting facility is located near the Kibworth RHW site and a number of on farm composting sites serve the Melton and Blaby green waste collections.

**Table 3.4 Current Kerbside Recycling Collections**

<b>Council</b>	<b>Materials Collected</b>	<b>Collection System</b>
<b>Blaby</b>	Paper, cans, plastic bottles	Wheeled bin 60% of households Fortnightly collection
	Paper and card	Wheeled bin 40% of households Fortnightly collection
	Garden waste	Wheeled Bin 4% of households Fortnightly collection
<b>Charnwood</b>	paper, cans, plastic bottles	Green plastic sack 100% of households Fortnightly collection
	Garden Waste	33% of households Pre-paid plastic sack Collection on request
<b>Harborough</b>	Paper, cans, glass	Box Collection 20,000 households Fortnightly
<b>Hinckley &amp; Bosworth</b>	newspaper & magazines	Blue bag 75% of households Fortnightly collection
	Garden Waste	Pre-paid plastic sack 25% of households Fortnightly summer, monthly winter
<b>Melton</b>	cans, plastic bottles, glass, textiles	Grey plastic sack 100% of households Weekly collection
	paper	Green plastic sack 100% of households weekly collection
	Garden Waste	Plastic bag 100% of households fortnightly collection
<b>North West Leicestershire</b>	paper, plastic, bottles, cans	Wheeled bin (240 litre) 8% of households Monthly collection
	Paper	Plastic bag 60% of households Monthly collection
<b>Oadby &amp; Wigston</b>	paper, cans, plastic	Plastic sack 98% of households Fortnightly collection
	Garden Waste	Pre-paid plastic sack 100% of households Collection on request

## 4. National Policies and Targets.

The development of this Strategy is influenced by a number of key national policies as well as local priorities and objectives. The key national policies shaping waste management in Leicestershire are summarised below.

### 4.1 Waste Strategy 2000

*Waste Strategy 2000* emphasises the need to manage waste in a more sustainable manner. It sets a number of targets and national goals for improvements in waste management within England, the key goals are:

- To recover value from 40% of municipal waste by 2005, 45% by 2010, and 67% by 2015 (through recycling, composting, other forms of material recovery or energy recovery via waste combustion); and
- To recycle or compost at least 25% of household waste by 2005, 30% by 2010, and 33% by 2015.

#### 4.1.1 Statutory recycling and composting standards

To ensure that local authorities contribute to achieving these targets statutory performance standards were introduced under the Best Value framework. Targets are set at both a WCA and WDA level for 2003/04 and 2005/06. The statutory performance targets for Leicestershire as a whole are to recycle/compost;

- 22% of household waste in 2003/04, and
- 33% in 2005/06

These targets include both the individual district targets (that vary for each district) and the recycling performance required by the County Council as waste disposal authority. The performance targets for each of the Leicestershire authorities are shown in Table 4.1.

**Table 4.1 Statutory Performance Standards for each WCA**

Authority	1998/99 Recycling Rate (%)	2000/01 Recycling Rate (%)	2003/04 Standard (%)	2005/06 Standard (%)
Blaby DC	10	15	20	30
Charnwood BC	17	17	33	36
Harborough DC	5	9	10	18
Hinckley & Bosworth BC	9	9	18	27
Melton BC	19	25	33	40
NWL DC	8	6	16	24
Oadby and Wigston BC	16	16	33	36
<b>Leicestershire County Council</b>	<b>11</b>	<b>19</b>	<b>22</b>	<b>33</b>

### 4.1.2 Implications for Leicestershire

The effect of translating these municipal recovery, recycling and composting targets in *Waste Strategy 2000* to Leicestershire as a whole is summarised in Figure 4.1. It is likely that the Government will set higher standards beyond 2005/06 in order to meet the 2010 national target.

The estimates for meeting the targets are based on predictions of future growth which consider;

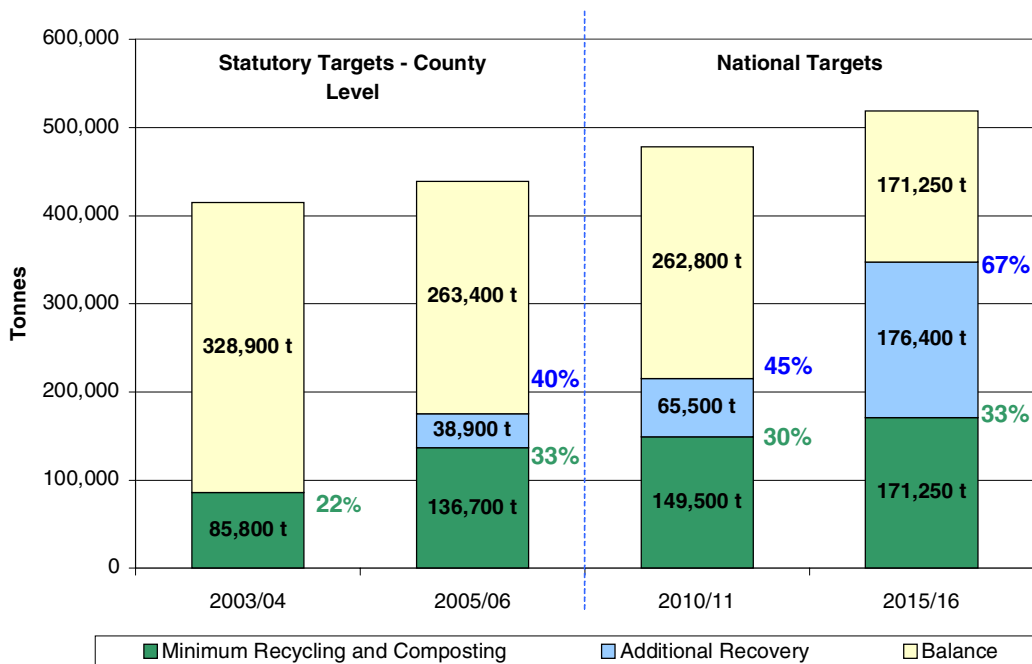
- past trends in waste arisings - waste has been increasing at 3-4% per year; and
- growth in households - 45,000 more homes are to be built in Leicestershire by 2020

For waste planning purposes a 'working estimate' was developed that combines high and low projections extrapolated from historical trends (1995/96 to 1999/00 data). The assumptions developed to underpin the Strategy are that waste per household will increase at about 3% pa to 2005 (the high growth) and thereafter slow down to 1% pa (low growth). Further details are provided in Appendix 2.

However waste figures for 2000/01 appear to be closer to the 'low growth' rate, which if this trend continues in subsequent years will have impacts for the development of the Strategy in terms of the amount of waste requiring treatment and disposal and also the level of recycling and composting that must be achieved to meet the targets. Therefore trends in waste arising should be monitored on a regular basis to ensure that strategic plans are consistent with changing trends in waste production.

Figures presented in this and subsequent sections relate to the 'working estimate' projections however the impact of the low growth projections will also be considered in the development of the Strategy.

**Figure 4.1 Estimated level of recycling and composting required to meet *Waste Strategy 2000* targets<sup>1</sup> in Leicestershire**



<sup>1</sup> Based on the 'Working Estimate' for Waste Growth

Total recycling and composting in Leicestershire was 48,286 tonnes (15%) in 1999/00 increasing to 61,643 tonnes (19%) in 2000/01. Therefore in order to meet the recycling targets in 2005 the tonnage collected in 2000/01 must be more than doubled. The implications of the targets for each authority individually are summarised in Table 4.2.

**Table 4.2 Estimate of quantities to be collected for recycling/composting to meet the statutory performance targets<sup>2</sup>**

Authority	2000/01 Recycling (tonnes)	2003/04 Target (tonnes)	2005/06 Target (tonnes)
Blaby DC	4,654	6,200	9,800
Charnwood BC	7,975	20,700	24,600
Harborough DC	2,578	3,400	6,300
Hinckley & Bosworth BC	3,335	8,200	13,100
Melton BC	4,570	6,700	8,400
NWL DC	2,440	7,900	12,600
Oadby & Wigston BC	2,507	7,000	8,100
<b>Total WCA</b>	<b>28,059</b>	<b>60,100</b>	<b>82,900</b>
WDA tonnes (from RHW sites)	33,584	25,700	53,800
<b>County Total</b>	<b>61,643</b>	<b>85,800</b>	<b>136,700</b>

Table 4.2 highlights that in order to meet the targets in 2003/04 each district must double the current levels of recycling achieved. However, on a countywide level this is equivalent to an additional 17-20,000 tonnes compared to the quantity collected in 2000/01. Increasing levels of recycling and composting are therefore priority issues for Leicestershire. The proposed arrangements for achieving these targets are discussed in Section 6.

#### 4.2 Landfill Directive Biodegradable Waste Diversion Targets

The EU Landfill Directive contains three targets aimed at reducing the amount of biodegradable municipal waste disposed of to landfill. 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 Landfill Directive will significantly change the way in which biodegradable municipal waste is managed. While the authorities are facing the immediate task of developing services to meet the statutory recycling and composting standards, the longer term implications of the Landfill Directive are also considered within this Strategy.

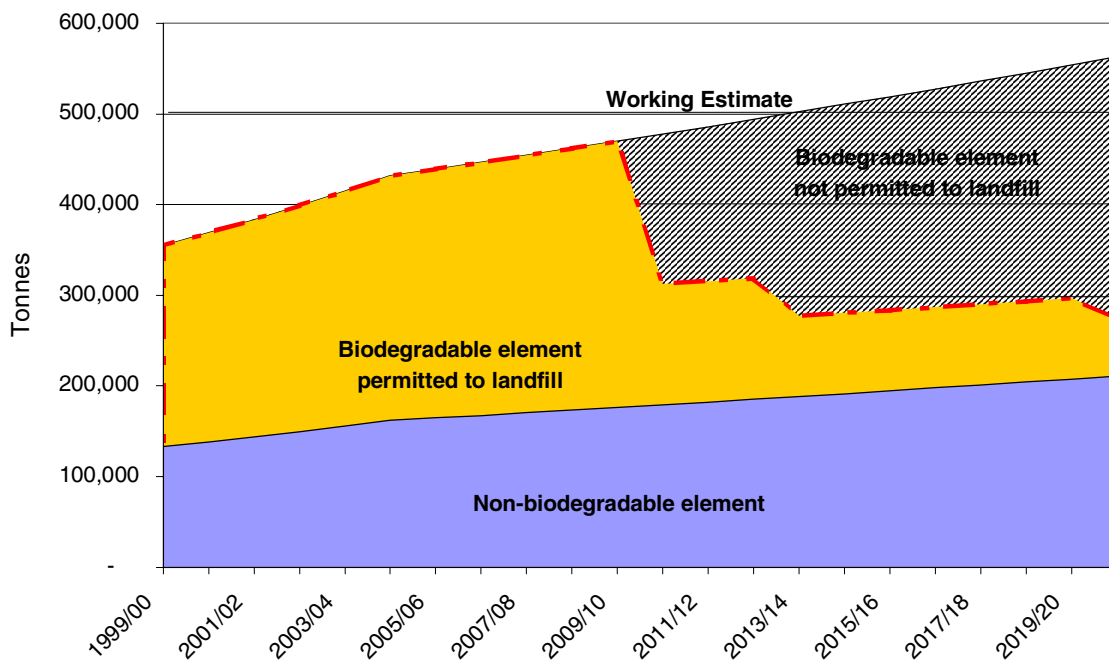
<sup>2</sup> Showing the range of projections required based for both the low and working estimate projections

The amount of biodegradable waste that will require diverting from landfill in Leicestershire is set out in Table 4.3 and Figure 4.2.

**Table 4.3 Implications of Biodegradable Diversion Targets for Leicestershire (based on the ‘Working Estimate’ for Waste Growth)**

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 Municipal Waste	178,058	286,700	301,300	337,800
Biodegradable municipal waste permitted to landfill <sup>3</sup>	178,058	133,500 (75%)	89,000 (50%)	62,300 (35%)
Biodegradable municipal waste diversion required		<b>153,100</b>	<b>212,200</b>	<b>275,500</b>

**Figure 4.2 Biodegradable Element Requiring Alternative Treatment**



The waste diverted to meet the statutory recycling and composting standards will make a contribution to the Landfill Directive targets. However, more biodegradable waste will need to be diverted to achieve the targets, either through increased recycling and composting, biological waste treatment or thermal treatment. The Strategy proposes that thermal treatment should be considered as a means of diverting additional biodegradable waste,

<sup>3</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. However recent compositional analysis for wheeled bin collections indicates that the biodegradable content could be nearer 70%. ‘Analysis of waste entering a typical small landfill site in the South Wales Valleys: Compositional Report, Cardiff University, November 2000, Envirospira analysis of household waste composition in Wirral, March 2000

however, only after the collection of materials for recycling and composting has first been maximised.

### **4.3 Tradable Permits**

The Government (DETR) issued a consultation paper on Tradable Landfill Permits in March 2001. The paper discussed three options for the allocation of biodegradable waste diversion targets and permits to ensure compliance with the Directive. Permits will be held by Waste Disposal Authorities and will allow the authority to landfill a certain tonnage of waste. The diversion targets could be met through recycling, composting, biological waste treatment or thermal treatment. If a WDA diverts more than the minimum they would have spare landfill permits which they could trade with authorities that miss their targets. Primary legislation is required to establish a tradable permit system.

The three options proposed are:

- Allocation of targets and permits on the basis of current biodegradable municipal waste landfilled
- Allocation of permits and targets on the basis of 1995 BMW arisings
- Allocation of permits on the basis of current BMW landfilled and targets on 1995 arisings

To date, the results of the consultation have not been made available by Government. However it is likely that the Government will introduce a permit system in England by 2004, and set annual targets up to 2010.

### **4.4 Landfill Tax**

The Landfill Tax is an environmental tax on the disposal of waste to landfill. It was introduced in 1996 at a rate of £7/tonne for active waste and £2/tonne for inactive waste. Active waste includes all non-inert waste such as commercial and municipal waste. In 1998, the Government introduced an escalator effect causing the landfill tax to increase by £1 every year until it reaches £15 in April 2004. The current rate of tax for municipal waste (in addition to any waste disposal fee) is £13/tonne. At the 2002 Budget announcement, the Chancellor announced that the Government:

*“anticipates that the rates of Landfill Tax will need to be increased significantly in the medium term as part of the mix of future policy measures. The Government will take future decisions on landfill tax, and consider the case for a tax on incineration, in the light of the findings of the PIU (Performance and Innovation Unit) waste project”*

Therefore, for the purpose of the development of this Strategy it has been assumed that Landfill Tax will increase further in the future, thereby making the cost other treatment options more favourable.

## **5. Local Policies and Objectives**

### **5.1 Partnership as a means of achieving the targets**

The Waste Management Partnership is central to the success of changing waste management practices in Leicestershire. This Strategy is a result of the success achieved by the Partnership to date. Successful implementation of the Strategy requires that new waste management arrangements are put in place, however it also requires that the Partnership continues to work together to develop the required infrastructure and ensure the delivery of the services.

### **5.2 Future Partnership Working**

In the short term the Partnership will continue to operate in its current format of the Member Steering Group supported by the Officer Working Group, however in order to support the implementation of the Strategy a new organisational structure will be required.

Under the current format decisions are made by the partner authorities based on recommendations from the Member Steering Group. A common reporting structure has been agreed whereby all partner authorities receive the same report. All reports are agreed by the Member Steering Group and are presented to the individual authorities by their representative on the Steering Group.

The Member Steering Group will consider options for the management of the Strategy implementation process. Recommendations for a new organisational structure will be made to all authorities and will be agreed within the next 12 months.

### **5.3 Community Partnerships**

The individual authorities are involved in a number of community partnership initiatives. For example, Charnwood have developed a programme of education initiatives in local primary schools in conjunction with the Environment Network using tools such as the Waste Watch 'Recycling Robot' and waste audits to promote waste issues. Melton Borough Council support the Melton and District Furniture Project and are developing an Eco Centre at the local MRF facility to promote increase recycling awareness and assist in local education programmes.

On a county level Leicestershire County Council has provided Environ, a Leicester based environmental charity with funds to carry out community projects for a number of years. In the past this work has included projects such as developing educational worksheets for tours of waste management facilities, providing a recycling road show for schools and setting up a home composting club called Leicestershire Rotters. During 2002 Environ plan to increase membership to Leicestershire Rotters by creating a website and display and providing information at school assemblies.

### **5.4 Local Objectives**

The basis for the development of waste management in the county is set out in the guiding principles and strategic objectives of the Waste Management Partnership. The authorities in Leicestershire will work together to reduce the growth in waste arisings, to increase recycling and composting, and to increase the awareness of waste management issues and the involvement of the community. Specific local objectives, although not in order of priority, are:

**Policy 1: Reduce waste growth:**

Raise awareness of waste issues and the importance of waste reduction in order to slow the future growth in waste arisings.

**Policy 2: Meet the Statutory Recycling Targets:**

All partner authorities to strive to meet their individual performance targets in 2003/04 and 2005/06.

**Policy 3: Meet the Landfill Directive Targets of diverting waste from landfill**

By focusing initially on increasing recycling and composting whilst keeping under review alternative treatment technologies that will enable the longer term targets to be met.

**Policy 4: Deliver Best Value**

Ensure the delivery of services to a high standard consistent with the principles of best value whilst considering the best practicable environmental solution.

**Policy 5 Local Sustainability**

Local sustainability issues will be considered, including opportunities to enhance the local economy and employment and minimise environmental and traffic impacts.

**Policy 6: Education and Awareness**

Develop a waste management awareness campaign to support the provision of new services and investment in new facilities and to ensure public involvement at all stages.

## 6. Plans for Achieving the Targets (Proposed Solution)

Achieving the recycling, recovery and waste diversion targets is a challenging process and requires considerable effort from all stakeholders and will necessitate additional resources to be made available to support this change. Success relies on increasing the number of people taking part in recycling activities, diverting a large proportion of the available materials, securing additional funding and ensuring that the increased tonnage of recyclable materials collected have secure market outlets.

### 6.1 Initial Options Development

The Partnership has investigated and discussed a number of different solutions for dealing with municipal waste in Leicestershire. The initial work was carried out on a countywide basis, i.e. the same solution was considered for the whole of Leicestershire, subsequently the collection authorities have given further consideration as to how these options might be implemented locally. Options were assessed on the following criteria:

- **Performance requirements** – the ability of selected options to meet *Waste Strategy 2000* and Landfill Directive targets at each of the key dates. The ability to minimise the amount of waste disposed to landfill and the degree of public participation required in the collection system was also considered.
- **Capacity and facility provision** required at each of the key dates, 2003, 2005, 2010, 2013 and 2020 and an assessment of sensitivity to providing different sizes/capacity of treatment plant and related land use planning implications was carried out.
- **Typical costs** of providing the collection and treatment infrastructure, including for comparison, the cost of a ‘do nothing’ option (i.e. continuing with the current arrangements)
- **Risk**, considering important issues such as the availability of markets for recyclable materials and current technology capabilities.
- **Environmental impact appraisal**, using the WISARD<sup>4</sup> Life Cycle Assessment software tool, selected options were modelled for 2005, 2010 and 2020 and compared against the current arrangements.

A wide range of collection, sorting, treatment and disposal methods have been evaluated in accordance with the criteria summarised above and a solution that is capable of meeting the targets has been identified. The solution is based on both a short term and long term approach that recognises that widespread changes to the sorting, treatment and disposal infrastructure cannot be implemented immediately and therefore must be a staged process. This will also enable progress against Strategy targets to be monitored on a regular basis and allow an element of flexibility to be included in the Strategy so that new and developing technologies can be considered where appropriate. It also allows the Strategy to be an evolving document that can respond to legislative as well as technological change.

### 6.2 Waste Awareness Campaign

Education and awareness are recognised as essential to support the implementation of the Strategy and promote the reduction of waste and encourage the use of the recycling and composting facilities offered to the householder. The Partnership will develop a public awareness campaign. The focus of such a campaign will be to promote;

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<sup>4</sup> The WISARD model was developed by the Ecobilan Group (now Pricewaterhouse Coopers) and the Environment Agency

- The importance of taking part in recycling and composting schemes and to provide information about the range of services provided locally
- The reduction of waste production at source
- Increased awareness of the importance of waste issues – a key issue raised in the MORI survey

Initiatives will be aimed at a number of different groups such as the general public, schools, community groups as well as local business. The promotion of waste issues with the public will underpin the implementation of the Strategy at all levels.

### **6.3 Waste Reduction**

The development of new waste management services is not the only answer to producing more sustainable waste management within Leicestershire. Waste reduction is a vital element of the Strategy because successful waste reduction will make targets easier to achieve. We will actively promote the reduction of waste in the home and encourage householders to take more responsibility for the waste that they produce. Examples of key actions and activities include;

- Promote home composting
- Provide information on waste reduction measures such as;
  - Reducing junk mail
  - Buying products with least packaging
  - Providing information on local initiatives and encouraging the development of community-based waste reduction initiatives.

The promotion of waste reduction will underpin both the short and long term strategy options.

### **6.4 Short Term Strategy (up to April 2006)**

The key objectives are for each authority to meet its statutory performance targets and for the county as a whole to aim to meet the national recovery target;

- Each authority to double its recycling and composting rate (as set out in Table 4.2). Countywide, this is equivalent to;
  - 85,500 t by 2003/04
  - 136,700 t by 2005/06
- Aim to achieve the national recovery target of 40% in 2005 – this requires an additional 38,900 tonnes to be recycled or composted.

Achieving all targets will require 175,600 tonnes of materials to be recycled and composted in 2005/06.

#### **6.4.1 Increased Recycling/Composting**

To meet the short term statutory targets the amount of recycling/composting achieved in the county in 2000/01 must more than double from 61,000 tonnes up to 136,700 tonnes by 2005/06. If the national recovery target is also achieved then at least 175,600 tonnes will need to be collected for recycling and composting.

This will be achieved by a number of different routes;

- **Increase Provision of Bring Sites** – The number of bring sites will be increased to ensure that materials not collected at the kerbside can be collected, e.g. glass, books, etc and to ensure that all households have access to recycling facilities. Provision will be dependent on local situation but will be increased where possible (provision is currently 1 site per 860 households countywide).
- **Increase Multi-Material Kerbside Collections** – All districts offer a kerbside collection to a number of householders. These schemes will be expanded to cover the majority of householders and all households will be encouraged to participate on a regular basis. Materials collected will include paper, cans, plastic and in some areas glass.

The increased tonnage collected through kerbside schemes will require new sorting/bulking (MRF) capacity to be developed

- **Increase Separate Green Waste Collections** – Provide a separate green garden waste collection in all districts for the majority of householders. This is likely to be a kerbside collection scheme in most authorities.

The increased coverage of kerbside schemes will require additional windrow or on-farm composting capacity to be developed.

To meet the statutory target in 2005/06 at least 27% of the collected (by the collection authorities) household waste stream must be diverted for recycling and composting compared to 9% in 2000/01. A diversion of at least 30% will be required in order to meet the national recovery target in 2005.

- **Increase recycling performance at Recycling and Household Waste sites** – The diversion rate of recyclable materials at RHW sites will be increased. A 31% diversion rate was achieved across all sites in 2000/01. At least 40% diversion must be achieved across all sites by 2005/6, increasing to 50% if the national recovery target is to be reached.

While all the collection authorities agree that new or expanded schemes for the collection of dry recyclables are required, the type and phasing of such schemes will vary according to local priorities. Variations between authorities will include;

- Materials targeted for collection, however a minimum number of materials will be agreed
- Households to be served by kerbside schemes, e.g. this will vary depending on the mix of housing type within each district
- Method of delivery to sorting and bulking facilities

#### 6.4.2 Processing and Treatment Facilities

To handle the increased quantity of materials for recycling and composting the following treatment and processing capacity will need to be in place and operational by 2005;

- Sorting/MRF facilities for between 70-80,000 tonnes from kerbside collections, equivalent to two facilities capable of processing 40,000 tonnes per annum (which is an additional 70,000 tonnes based on current capacity). The precise nature of this capacity will depend on confirmation of the collection arrangements.

These tonnages assume that each authority delivers all material collected to shared facilities within Leicestershire. However, for operational reasons it may be more

appropriate for some councils to use existing facilities located outside Leicestershire. For example Harborough currently deliver kerbside collected material to a facility in Northamptonshire. If it is assumed that this material continues to be taken outside the county then the required a Sorting/MRF facility of 65-75,000 tonnes will be required.

- Windrow and/or on farm composting capacity for between 50,000 and 60,000 tonnes. The majority of this capacity is already available in the county with between 35-40,000 tonnes of available at two centralised facilities (Lount and Kibworth) and up to 15,000 tonnes identified at on farm composting sites.

An additional 10,000 tonnes may be required if recovery targets are achieved in 2005.

- In addition transfer and/or bulking capacity may be required by 2005 to transfer dry recyclables and compostables to the new treatment facilities or for the storage of material collected through bring sites, in particular for glass. This will depend on the location of new MRF capacity.

### **6.4.3 Disposal**

In the short term all waste that is not recycled or composted will be disposed of to landfill sites. There is sufficient capacity within the county to meet disposal requirements up to 2005 and there is provision within the Waste Local Plan for further capacity.

## **6.5 Long Term Options (April 2006 to 2020)**

The long term targets for 2006 to 2020 are to:

- maintain 33% recycling and composting to 2015 (recycle and compost at least 171,250 tonnes in 2015).
- achieve 45% recovery in 2010, increasing to 67% recovery by 2015 (equivalent to recovering value from 347,700 tonnes of waste in 2015, including recycling and composting 171,250 tonnes)
- achieve the Landfill Directive diversion targets in 2010, 2013 and 2020. This is equivalent to diverting 275,500 tonnes from landfill in 2020.

### **6.5.1 Meeting the Recycling and Composting Targets**

The short term recycling and recovery targets for some of the partner authorities and for Leicestershire as a whole exceed the national 2010 and 2015 recycling and composting targets. Maintaining this levels of waste diversion is reliant on high levels of participation being achieved and places continued responsibility on householders to segregate their waste and participate in the schemes provided. At least 80% of households must regularly participate in the kerbside collections provided to continue to achieve targets.

Depending on the performance in the short term it may be necessary to introduce additional collection schemes, such as the collection of glass or kitchen waste from the kerbside to increase performance levels.

### **6.5.2 Meeting the Landfill Directive Requirements**

Recycling and composting at least 33% countywide will contribute towards the 2010 recovery target and Landfill Directive biodegradable waste diversion targets. To achieve the 2010 target without having to acquire additional landfill permits or introduce alternative treatment methods then additional waste diversion, in particular biodegradable waste diversion will be required. This could be achieved through the additional collection of organics waste, in particular kitchen waste at the kerbside or increased diversion at Recycling and Household Waste Sites. Alternatively thermal treatment capacity will be required before 2013.

To meet the landfill directive target in 2013 and the recovery target in 2015 it is estimated that a thermal treatment capacity of 175,000 tonnes will be required by 2013 rising to 260,000 in 2020. This would mean the provision of between 1-2 facilities located in the county.

### **6.5.3 Disposal Requirements**

The long term strategy for waste management in Leicestershire will result in a lower proportion of waste disposed to landfill. However landfill will continue to be an important part of the system as residues from treatment and processing options will continue to be disposed to landfill. Landfill is also the only disposal option for some wastes.

## **7.0 Non-Household Municipal Waste**

### **7.1 Commercial & Industrial**

Of the total commercial and industrial waste arising in Leicestershire only a small proportion is collected by the waste collection authorities as part of their trade waste collections. Five out of the seven councils offer a dedicated trade waste collection. Trade waste made up 7% of the municipal waste stream in 1999/00.

Recycling and Household Waste Sites are for household waste only and are therefore not licensed for the collection of trade waste. However experience has shown that these sites are often used illegally by business and traders. In order to monitor the use of these sites more closely a permit system has been introduced for vans and trailers. Residents wishing to dispose of their waste at these sites with vans, commercial type vehicles or trailers must apply for a permit before visiting a site in the County. Permits are issued free of charge.

### **7.2 Abandoned Vehicles**

The incidence of abandoned vehicles are a significant problem for many councils. Responsibility for the removal and disposal of abandoned vehicles is set out in the Refuse Disposal (Amenity) Act 1978 which gives the WCA and WDA a shared role in the removal and disposal of vehicles.

In Leicestershire the County Council and four of the districts have a joint contract with a licensed vehicle dismantler for the collection and removal of abandoned vehicles. The other WCA's make their own arrangements with contractors for the removal of abandoned vehicles. Approximately 1,025 vehicles were removed in Leicestershire in 2000/01.

The Government produced a consultation paper in October 2001 on measures to deal with the problem of abandoned cars. In April 2002 new measures for dealing with abandoned vehicles were announced. This included powers to remove vehicles within 24 hours and easier methods of tracing vehicle ownership through the DVLA.

The issue of abandoned vehicles has further implications when the EU Directive on the End of Life Vehicles (ELV's) comes into force. The Directive sets targets for reuse and recycling of end-of-life vehicles, 85% recovery of all ELV's by weight by January 2006 and 95% by January 2015.

The End of Life Vehicle Directive was adopted by the EU in October 2000 and member states were given until 21 April 2002 to transpose the Directive into national law. The UK is currently reviewing what form the regulations should take to achieve the targets. A consultation paper was issued by the Government in August 2001. To comply with the ELV Directive a level of 85% recycling must be achieved by January 2006 and 95% recycling by January 2015.

In the short term the authorities will continue with the Joint Disposal Agreement. Longer term policies will be developed once the impact of implementing the ELV Directive is more clear and regulations have been produced.

### **7.3 Illegal Waste Disposal and Fly-tipping**

Fly tipped material is waste that is illegally dumped or tipped on a site that is not licensed to accept waste. Both local authorities and the Environment Agency have powers to deal with fly tipped waste, the requirements for which are set out in a 'Fly-tipping Protocol' (agreed by the Environment Agency and the Local Government Association) which details the responsibilities of the two bodies in responding to fly tipping incidents.

Responsibility for fly tipping lies with the WCA's in Leicestershire and approximately 205 tonnes of fly tipped waste was removed by the WCA's during 2000/01 from specific incidents. The total figure is likely to be higher as some fly tipping incidents are small and easily collected as part of the normal refuse collection round.

Countywide procedures for dealing with fly tipping waste are currently under discussion and an enforcement protocol for all WCA's will be produced. Local policies for dealing with fly tipped waste will be regularly reviewed and updated where necessary.

## 8.0 Specific Waste Streams

### 8.1 Clinical Waste

Clinical waste is defined in the Controlled Waste Regulations 1992 and the Health Services Advisory Committee puts clinical waste into five categories as shown below:

Waste Group	Type of Clinical Waste
Group A	Includes the following items; identifiable human tissue*, blood, animal carcasses and tissue from veterinary centres, hospitals or laboratories.  Soiled surgical dressings, swabs and other similar soiled waste.  Other waste materials, for example from infectious disease cases, excluding any in Groups B-E
Group B	Discarded syringe needles, cartridges, broken glass and any other contaminated disposable sharp instruments or items.
Group C	Microbiological cultures and potentially infected waste from pathology departments and other clinical or research laboratories.
Group D	Drugs or other pharmaceutical products
Group E <sup>+</sup>	Items used to dispose of urine, faeces and other bodily secretions or excretions which do not fall within Group A. This includes used disposable bed pans or bed pan liners, incontinence pads, stoma bags and urine containers <sup>+</sup>

\* All identifiable human tissues, whether infected or not, may only be disposed of by incineration

+ Where the risk assessment shows an insignificant infection or hazard risk, these wastes are not clinical as defined in the Controlled Waste Regulations 1992.

Group E wastes that arise from households are not classified as clinical waste if the illness being treated has no specific risk. Most Group E wastes are therefore not identified within the household waste stream and are collected along with the normal household refuse and disposed to landfill.

Wastes that are associated with illness or fall into categories A to D (e.g. needles and certain dressings) are regarded as clinical. Collection authorities have a duty to collect clinical waste and the collection authorities in Leicestershire provide a service to collect clinical waste on request from the householder. This service is provided free of charge to householders.

The County Council supply yellow bags to each WCA who are responsible for the collection of material from households and delivery of the bags to a licensed contractor for final disposal. The disposal contract applies countywide and all clinical waste collected by the WCA's is disposed of by incineration. In 2000/01, 76 tonnes of household clinical waste was collected by the collection authorities.

### 8.2 Hazardous Waste

The municipal waste stream contains waste that may have hazardous properties and require special handling and disposal arrangements as part of the waste collection service or at RHW sites. There are increasing legislative requirements for separate collection of specific hazardous household wastes.

An important piece of legislation that will impact hazardous household waste is the Hazardous Waste Directive (91/689/EEC) which aims to provide a precise and uniform

European-wide definition of hazardous waste and to ensure the correct management and regulation of such waste.

The HWD defines hazardous waste as wastes featuring on a list (European Waste Catalogue - EWC) drawn up by the European Commission, because they possess one or more of the hazardous properties set out in the HWD. This list is subject to periodic review, the most recent of which was completed in 2002. The EWC 2002 has many entries for waste that may not have been previously classified as hazardous. Key waste streams include End of Life Vehicles, wastes containing cathode rays – e.g. televisions and computers. These changes are currently subject to public consultation before incorporation into UK legislation.

Procedures for dealing with hazardous waste from the municipal waste stream, in particular provision of services at RHW sites will be reviewed once the full impact of the legislative changes are known.

Current procedures in place in Leicestershire are described in the following sections.

### **8.2.1 Asbestos**

Asbestos arising from the household waste stream is typically bonded asbestos. Although its use is now prohibited, some waste will arise from household renovation work. Households in Leicestershire are advised to dispose of asbestos at RHW sites. Five of the RHWS in Leicestershire accept cement bonded asbestos, however disposal requires application for short term permit which is available from the county free of charge.

### **8.2.2 Fridges and Freezers**

The introduction of the Ozone Depleting Substances Regulations 2037/2000 introduced a new means of disposing of domestic fridges and freezers. The regulations came into effect on the 1 January 2002 and require that CFCs are extracted from the insulation foam in domestic fridges and freezers prior to final disposal or recovery. This recovery is in addition to the 'degassing' of cooling circuits that local authorities have carried out for some time.

Leicestershire County Council have been removing gas on all domestic fridges delivered to its Recycling and Households Waste Sites for many years prior to recycling the units. In the light of the new regulations RHWS will continue to take domestic fridges and freezers delivered by householders which will be processed using the appropriate equipment and recycled without releasing harmful gases into the environment.

Approximately 5,000 fridges and freezers were handled at RHWS across Leicestershire in 2000/01.

### **8.2.3 Batteries**

A draft Directive on battery recycling is being considered by the EU. A key provision is the introduction of collection and recycling targets for all batteries from 2004.

Facilities for the recovery of car batteries are provided at all RHWS, however there is currently no collection system for the recycling and collection of household batteries. Provision for battery collection will be reviewed in the light of new UK legislation.

### **8.2.4 Other Hazardous Waste**

The County Council provides a central drop off point for small quantities of miscellaneous hazardous materials. This is managed by the County Council and is periodically emptied by a specialist waste management contractor.

The provision of systems to handle hazardous waste from the municipal waste stream will be continually reviewed and updated in line with changes in the legislation mentioned above. There will also need to be an increased level of public awareness in terms of these collection

and return systems. These will be maintained through the planned waste awareness and education programmes.

### **8.3 PCB containing Equipment**

Polychlorinated Biphenyls (PCB's) have long been recognised as a threat to the environment because they are not easily broken down in the environment and tend to accumulate in animal and human tissue. Agreements for the phase out and destruction of PCBs have been in place for some years and the use of PCBs in equipment has been banned since 1986.

In accordance the PCB regulations<sup>5</sup> the holders of equipment containing more than 5 dm<sup>3</sup> of polychlorinated biphenyls (PCB's) were required to dispose of them by 31 December 2001. However equipment containing volumes of less than 5dm<sup>3</sup> are likely to remain within equipment still in use, e.g. in old domestic appliances such as washing machines.

Where such items are identified as part of the municipal waste stream, e.g. at RHW sites arrangements will be made for the separate collection and disposal of items at suitable facilities.

### **8.4 Packaging**

Targets for the recovery and recycling of packaging waste are set out in the Producer Responsibility Obligations (Packaging Waste) Regulations 1997 (as amended). Most businesses that handle packaging must recover and recycle certain tonnages of packaging waste each year. It applies to companies with a turnover of more than £2M who handle more than 50 tonnes of packaging to recover and recycle a set percentage of packaging waste. Companies can reduce their obligation by reducing the amount of packaging they handle.

The regulations are enforced by the Environment Agency and presently some 9,000 companies in England and Wales come under the first of the Producer Responsibility legislation. Last year 3.5 million tonnes of packing waste was recycled in the UK as a result of the regulations.

A voluntary accreditation scheme is also operated by the Agency for reprocessors, who issue evidence of compliance with recovery and recycling obligations through notes call Packaging Recovery Notes (PRN's). These notes are used by obligated producers as evidence that packaging recovery has occurred.

Local authorities can play a part in achieving the targets in the packaging regulations by working with compliance schemes and reprocessors to collect a high quality of recycled materials. Approximately 21% of the total dustbin contents consist of used packaging<sup>6</sup> such as plastic bottles, glass bottles and metal cans. These materials are being targeted by the Leicestershire WCA's as part of achieving the short term recycling targets which if achieved in 2005/06 will segregate approximately 38,000 tonnes of packaging material from the household waste stream in Leicestershire.

As part of the education and awareness campaign developed to support the Strategy the Leicestershire authorities will ensure that the public (i.e. end users of packaging) are informed about the role that they play in contributing to the reuse, recovery and recycling of packaging. They will also continue to provide facilities to collect these materials from householders and where appropriate consider opportunities for working with compliance schemes and obligated companies to increase the level of packaging material collected.

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<sup>5</sup> The Environmental Protection (Disposal of PCBs and other Dangerous Substances) (England and Wales) Regulations 2000

<sup>6</sup> Industry Council for Packaging and the Environment (INCPEN)

## 8.5 WEEE

The EU Directive on Waste Electrical and Electronic Equipment (WEEE) was first proposed in June 2000 but is still in draft form and therefore subject to change before the final texts are agreed at the end of 2002. The UK then has 18 months to transpose the Directive into national law.

The Directive applies to a range of electrical and electronic equipment and aims to reduce the quantity of waste equipment and to maximise the recycling and recovery of equipment that has reached the end of its useful life. Of particular importance to local authorities is the requirement to introduce separate collection systems for household electronic equipment, enabling a minimum of 4kgs per person each year to be collected by the end of 2006.

In Leicestershire, with a population of approximately 613,000, this would require a collection of at least 2,450 tonnes per annum. However details of the schemes and the industry requirements for compliance with the regulations have still to be produced by the government.

The levels of WEEE recycling and re-use currently taking place are harder to estimate. However research by ICER<sup>7</sup> suggest that recovery rates of 4kg per person are already being achieved through bulky household collections provided by WCA's and collections at RHWS.

Fridges and freezers and mobile phones currently have a specific collection and disposal route in Leicestershire. Householders can recycled unwanted mobile phones at RHW sites and raise money for the British Red Cross. Phones with minor problems are repaired whilst others are stripped and all components re-used or recycled.

Further collection systems for WEEE will be developed once the legislation has been approved at an EU level and guidance on implementing the regulations in the UK has been produced and the level of collection required more fully defined.

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<sup>7</sup> Industry Council for Electronic Equipment Recycling

## **9.0 Strategy Implementation & Monitoring**

Implementing the policies in this Strategy and the solution outlined in section 6 will require new waste management arrangements and infrastructure to be established. To ensure that progress is achieved this will mean that the WCA's and the WDA complete a number of actions according to a specific timetable which will involve the development of new collection systems in conjunction with the procurement of new facilities. The timetable for implementing the new collection and treatment infrastructure is outlined in this section.

### **9.1 New Collection Systems**

#### **9.1.1 Waste Collection Authorities**

The expansion of kerbside collection systems and other collection facilities must be planned at a local level. Firstly bring site provision will be reviewed and additional sites identified where possible. It is important to ensure an equal access to facilities for all households. In particular residents for whom a kerbside collection is not practical, e.g. living in flats have access to recycling facilities.

The second priority is for individual councils to increase the provision of kerbside recycling facilities. This will involve a number of actions and decisions which relate to the following aspects of a collection service;

- The number of properties to be served by each collection system
- Containers to be used
- Collection frequency
- Collection Routes
- Number and type of additional collection vehicles
- Timetable for phasing new collection schemes

#### **9.1.2 Waste Disposal Authority**

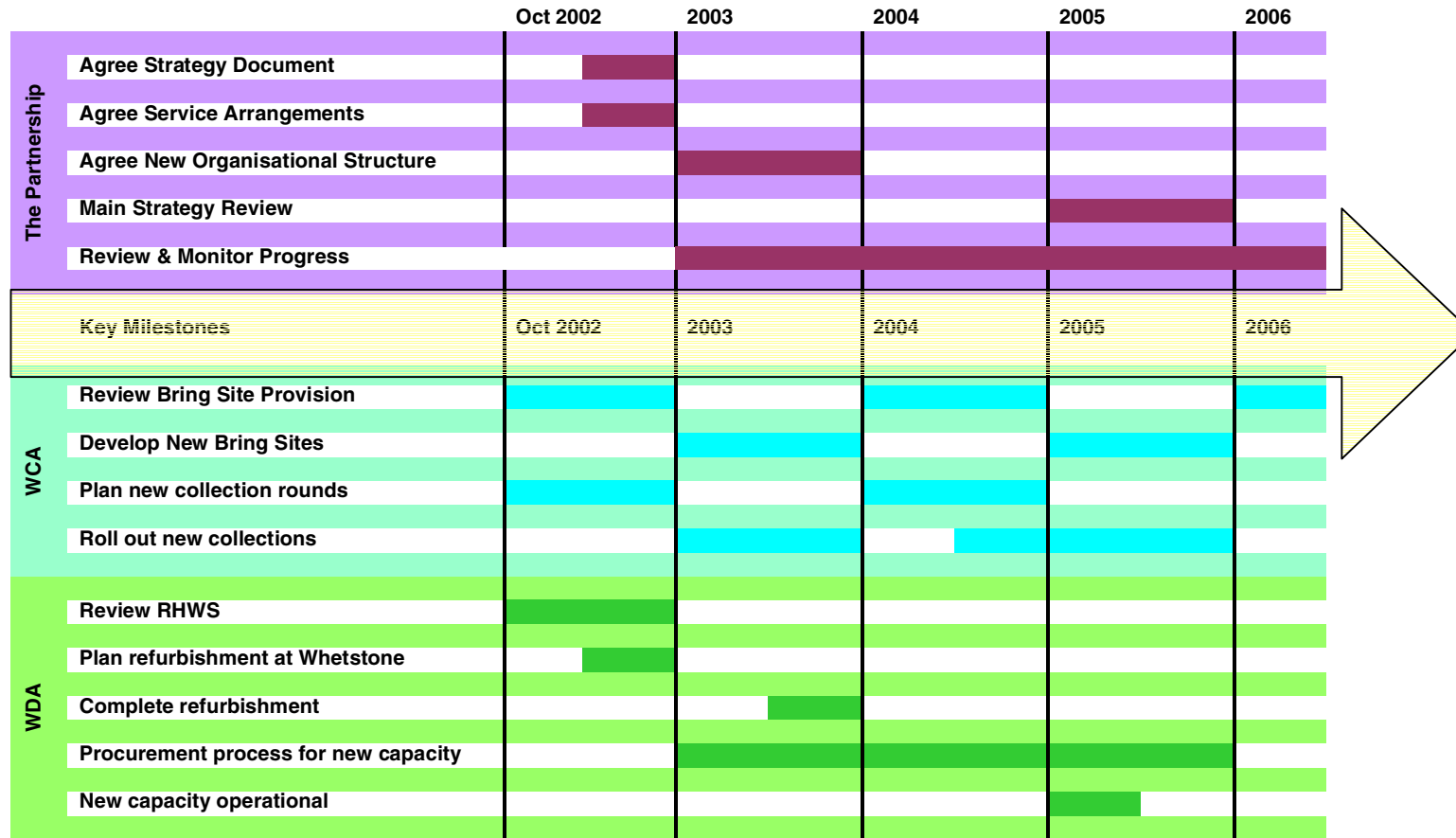
In addition to the expansion of kerbside collection systems and bring sites it is also important that the facilities at RHWS are improved. A review of individual site performance will be carried out to identify opportunities for improvement at each site, e.g. considering issues such as site layout, provision of containers and overall site operation. Action will continue to be taken to reduce the quantity of waste, in particular trade waste, requiring disposal at these sites whilst also ensuring consistent service provision across all sites.

### **9.2 Timetable for Implementation**

Some key actions and timescales for developing collection systems in the short term are set out in Figure 9.1. These must be carried out in line with the development of new processing capacity and an education and awareness campaign.

The review of the Strategy in 2005 will consider progress against current targets and assess the requirement for future processing capacity, in particular thermal treatment capacity in order that adequate time is allowed for the procurement and construction of such facilities.

Figure 9.1 Short Term Timetable for establishing new collection systems



### 9.3 New Waste Management Infrastructure

Section 6 outlined the need for new sorting and treatment infrastructure by 2005. The tonnages presented in section 6.4 are subject to agreement between the partner authorities regarding the materials that will be collected from the kerbside, the format for delivery to the MRF and whether each district intends to use centrally provided facilities.

To ensure that the required capacity is in place an assessment of the current facilities will be carried out in particular at Whetstone MRF to assess the ability for expansion of the existing capacity. Subject to planning permission and site suitability expansion of current facilities will be carried out by the end of 2003.

Once the initial review has been carried out the specifications for new facilities can be drawn up and potential new sites identified. Individual or combined contracts will be let for the build, design and operation of these facilities. The key actions to ensure provision of this capacity are to;

- |   |                  |
|---|------------------|
| • Agreement from WCA's regarding collection systems for delivery to MRF         | By December 2002 |
| • Review of current facilities and identify possibility for expansion/extension | By December 2002 |
| • Prepare specification and tender documents for new facilities                 | By April 2003    |
| • Tender and evaluation for new contracts                                       | By October 2003  |
| • Contract Award  | October 2003     |
| • Facilities Operational  | April 2005       |

### 9.4 Monitoring and Review

#### 9.4.1 Strategy Review

The continued success and development of this strategy is dependent of this document being adaptable to change and flexible. Therefore the strategy will be monitored to measure the general effectiveness in achieving its aims and any changes required in the light of new information or significant changes to policy. The following issues must be monitored;

- Changes in European and national legislation and policy
- Information about the amount of waste being produced
- Changes in population and household projections
- Technological improvements and impacts on waste management
- Waste management developments in neighbouring authorities
- Performance Against Targets and Objectives

The strategy is for the period up to 2020, however it will be reviewed in 2005 to ensure that it continues to be up to date and to incorporate any significant changes in the points above. Subsequent full strategy reviews will take place at 5 yearly intervals.

To support the development and review of the main strategy the Partnership authorities have agreed to develop individual Action Plans that will form the basis of their contribution towards meeting the recycling and composting targets for 2003/04 and 2005/06. These Action Plans will set out the annual recycling and composting targets that each authority is working towards and enable progress against achieving the statutory targets to be monitored. They will also allow changes in waste arising to be continually monitored. .

#### **9.4.2 Data Collection and Review**

As well as reviewing the content of the strategy it will be necessary to review the underlying data contained within the strategy document. The strategy is based on the best available municipal waste data however there may be a requirement to review the data collected for specific waste streams, for example commercial and industrial waste, construction and demolition waste and priority waste streams such as WEEE, packaging and tyres. A formal review of the baseline data will be carried out in conjunction with the first strategy review in 2005 however waste arising data will continue to be monitored on an annual basis to ensure consistency with current estimates of future waste growth and identify priority areas for strategy review.