RECYCLE HOW?

YOUR WASTE... YOUR CHOICE... YOUR SAY!

# The Bedfordshire Authorities Municipal Waste Management Strategy

Produced by the

**Bedfordshire Authorities Waste Partnership**

**Bedford Borough Council**
**Mid Bedfordshire District Council**
**South Bedfordshire District Council**
**Bedfordshire County Council**

April 2006

Bedfordshire county council

MID·BEDS DISTRICT COUNCIL

BEDFORD BOROUGH COUNCIL

South Bedfordshire

## ACKNOWLEDGEMENTS

The Municipal Waste Strategy for Bedfordshire was produced by Bedfordshire County Council on behalf of the Bedfordshire Authorities Waste Partnership.

The development project team comprised Steve Watson, Andrew Brown, Jennifer Watts, Abigail Basketter and James Lloyd. Further input was provided by Dr Darren Perrin and Lynsey Hunton Clarke of Entec UK Ltd.

The Bedfordshire Authorities Waste Partnership gratefully acknowledge the assistance of the Local Authority Support Unit from the Department of Environment Food and Rural Affairs for its financial and technical support in producing this strategy.

## THE WASTE STRATEGY FOR BEDFORDSHIRE

***Foreword on behalf of The Bedfordshire Authorities Waste Partnership***

It is often said that we live in a throw away society. This is certainly true however in Bedfordshire we have seen considerable growing public support for recycling and composting and recognition that we need to act. As such we believe that the authorities responsible for the publication of this Waste Strategy for Bedfordshire together with the support of the communities we serve have begun to make significant inroads into the amount of waste we send to landfill. This can be seen in the continuous rise in recycling rates since 2001 when the four authorities of the County came together to meet the increasing challenge of tackling waste.

The Bedfordshire Authorities Waste Partnership comprises Bedford Borough Council, Bedfordshire County Council, Mid Bedfordshire District Council, the authority I am proud to represent and South Bedfordshire District Council. These four authorities intend to deliver a joined up approach to every aspect of waste and recycling management across our area.

Underpinning this strategy is the waste hierarchy, we aim to reduce waste in the first instance, we then aim to promote re-use and following that we will make the most of every opportunity to recycle.

This document represents the work of dedicated members and officers from the Bedfordshire Authorities Waste Partnership who have also made a significant effort in increasing recycling to the point where over 30% of all the waste we produce is now diverted from landfill, I thank them for their commitment to date and that yet to come!

This document comes with the support of the public following an extensive period of consultation. It is through public support for our recycling programme that we have produced such remarkable results and on behalf of the Waste Partnership could I would like to thank them for their continue support.

There will be a need to constantly refer to this Waste Strategy, to test it and where needed, to refine and develop it. There are still challenges ahead and the Bedfordshire Authorities Waste Partnership intends to meet these directly and with public support on our side, the throw away society I spoke of at the beginning of this introduction will become history. I commend this Waste Strategy and the efforts of the Bedfordshire public for their sterling support.

**Thank You**

**Cllr Max McMurdo**
**Chair**

***Bedfordshire Authorities Waste Partnership***

RECYCLE HOW?

YOUR WASTE YOUR CHOICE YOUR SAY!

## Table of Contents

## CONTEXT AND PERIOD OF STRATEGY

1. In 2001, the local authorities in Bedfordshire and Luton published their strategy for dealing with waste in Bedfordshire up to year 2020. ***The Waste Strategy for Bedfordshire and Luton*** sets out policies for all wastes managed in the area, including commercial wastes, imported waste destined for landfill and the local municipal wastes for which we are directly responsible. It acts as an over-arching framework to guide the statutory waste management and land use planning functions of the Bedfordshire authorities.

2. In support of this document, came the commitment to developing the detail through two follow-on works; the **Minerals and Waste Local Plan** and the **Municipal Waste Management Strategy** both of which are statutory requirements. The first of these provides the land use planning framework for all waste management facilities: it was published by the County Council for its second round of consultation in January 2003, and adopted in 2004.

3. This **Municipal Waste Strategy for Bedfordshire** is the second follow-on document and provides the detailed implementation plan for local municipal wastes. Following extensive public consultation this is the final adopted version and presents our detailed proposals for future waste services, including recycling, composting, other potential waste treatment technologies and setting out plans and policies for the period up to year 2020.

## CURRENT AND PLANNED ARRANGEMENTS FOR WASTE MANAGEMENT

### *Headline Targets*

5. The Government specifies performance targets for recycling/composting and other recovery of municipal waste, which local authorities are expected to meet. For Bedfordshire, the targets up to year 2020 are:

| Year | Recycling/ composting (household waste) | Total recovery (all municipal wastes) |
|---|---|---|
| 2005 | 18% | 40% |
| 2010 | 30% | 45% |
| 2015 | 33% | 67% |

6. Through the policies presented in this document, we aim to meet or exceed the recycling/composting targets and to end landfill of untreated waste by the year 2010.

**The European Landfill Directive** (99/31/EC) sets mandatory targets for the reduction of biodegradable municipal waste sent to landfill. These targets are binding at the national level. The UK national targets are:

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

7. When the national Waste Strategy was published in 2000, The Bedfordshire authorities only recycled around 6% of our waste. Since then we have developed enhanced kerbside recycling/composting schemes and have dramatically improved recycling services at the Household Waste Recycling Centres. This has enabled us to almost treble our recycling rate to 16.7% in 2003/4. We are confident that the proposals detailed in this final version of the Municipal Waste Strategy document will enable us to maintain strong performance improvements. In 2003, The County Council entered into a Local Public Service Agreement (PSA) with the Government for a "stretched" target of 20% recycling by 2005, without this agreement the target would have been 18%. In March 2005 indications were that a figure in excess of 22% had been achieved.

8. There is currently little recovery of waste other than by recycling and composting and while rates for these have improved considerably, we are still reliant on landfill for just under 80% of collected waste. A small amount of residual waste from the kerbside recycling collection has recently been sent to a company producing refuse derived fuel, but this is currently only around 0.5% of the household waste stream. We have, however, commenced preparatory work towards increasing waste recovery.

***Waste Minimisation***

9. Waste minimisation is a primary objective of sustainable waste management. It is, however, reliant on understanding and voluntary lifestyle changes on behalf of residents, and can thus be hard to achieve in our consumer society. Local authorities are limited in their ability to minimise waste, and can generally only seek to influence attitudes and behaviour of waste producers through educational campaigns.

10. Educational work can operate locally, regionally and nationally. We have joined and supported a number of regional and national waste minimisation campaigns, including the East Anglia "Slim Your Bin" campaign and the national "Get Real" programme to encourage re-usable nappies in favour of the disposable items that currently account for around 4% of all municipal wastes. Initiatives like these will continue to be supported.

11. We also promote the use of home composting bins, which residents can use to reduce their biodegradable (garden and kitchen waste) output. All four authorities that constitute the Bedfordshire Authorities Waste Partnership will continue to support home composting.

12. Waste in Bedfordshire continues to grow, as the population of the County increases. Previous years have seen growth of around 4% per year and whilst there has been a slowing down of this increase, further rises and increased housing growth could see our waste double in 20 years. We propose to continue supporting waste minimisation campaigns and to promote home composting in the effort to reduce our waste.

***Recycling and Composting***

13. We are committed to increasing our recycling and composting performance as the preferred means of achieving landfill diversion. To do this we propose to develop as wide a range of recycling/composting services as possible, so as to make them as convenient as we can for local residents. We will develop our recycling services at the kerbside as well as via deposit points ("bring sites") and the Household Waste Recycling Centres (HWRCs).

14. Kerbside recycling commenced across the County in 1998 using the "Orange Bag" co-collection system. 2002 saw the start of trials for a fully segregated 3 stream collection comprising recyclable materials, compostable garden waste and then residual waste. From June 2005 all available properties will have access to this new system, which is proving highly successful. We propose to continue to developing and improving these schemes in order to increase public support. We will also be seeking to add to the list of materials that we can recycle through the scheme as and when stable markets for these materials are established.

15. We will continue to develop the HWRC services. The management contract for these sites includes specifications for enhanced recycling/composting, and has yielded considerable improvements in performance. We will continue to develop this service, including the provision of additional sites where necessary and the recycling of materials for which stable and secure markets can be established.

16. Similarly, we propose to extend our network of "bring sites" (bottle banks etc) so that we have at least one site for every 750 households in the County.

17. We will also conduct feasibility studies into extending recycling services to commercial sources, none of which are served by the current systems. Legislation introduced in 2003 both allows and encourages local authorities handling commercial waste to seek alternatives to landfill and a Partnership approach that recognises Waste Collection Authority and Waste Disposal Authority benefits will be used.

***Other waste treatments***

18. Even with our best efforts, there will always be some waste that we cannot recover by recycling and composting, owing to contamination or difficulties in achieving effective and economically efficient segregation.

19. In 2004, we commenced development work to establish an Integrated Waste Management Solution, to enable further automated materials recovery and processing of residual waste. Project planning is already underway and we aim to be operational in early 2009.

20. Together with the developments in recycling/composting services, the Integrated Waste Management Project will enable us to fully treat all our waste through an integrated management system in accordance with the requirements of Waste Strategy 2000, the Waste and Emissions Trading (WET) Act and the Landfill Directive.

***Other Actions***

21. All our plans will require the understanding and support of local residents if they are to succeed. We are therefore continuing to develop our promotional activities under the ***"Recycle Now!"*** branding, and will maintain its use in a variety of communication/consultation techniques in order to ensure that the authorities and people of Bedfordshire share a common vision and eagerness to succeed.

## 1.1 Purpose and function of the Municipal Waste Management Strategy

1.1.1 The management of waste is a major environmental issue, which currently has a high profile in the Government's policy agenda. The UK produces over 400 million tonnes of waste every year, and the key challenges are how we can reduce this level of waste and how we can make best use of the waste that we do produce. To date, most waste has simply been disposed of in landfill sites. We must now, however, consider waste in terms of **resource management**, with the emphasis on waste reduction and the recovery of resources (materials and energy) from waste. This shift is driven by a higher level of environmental awareness and is enacted through policy and legislation at European and national Government levels, in order to ensure that we deal with waste in a more responsible and sustainable manner.

1.1.2 Local authorities have particular responsibility for management of **Municipal waste**. This waste includes all waste collected from households (i.e. kerbside rounds and special collections), street litter, waste delivered to council recycling points (i.e. bottle banks and other recycling centres), municipal parks and gardens waste, council office waste, and some commercial waste (from certain shops and smaller businesses where council waste collection agreements are in place)[1].

1.1.3 The Government now expects local authorities to progressively reduce their reliance on landfill for dealing with municipal waste. It has published a national waste strategy, *Waste Strategy 2000*, which sets out policies and targets to increase recycling and other recovery of value from waste. The Government also expects local authorities to produce their own municipal waste management strategies, which should set out clear policies, targets and solutions, appropriate to the local context. Waste Strategy 2000 is currently under review; any recommendations made will feature in later amendments to this document.

1.1.4 The Bedfordshire Authorities, working also with Luton Borough Council developed a local strategic framework in response to these higher-order policies. *The Waste Strategy for Bedfordshire and Luton* was published in September 2001, following a comprehensive development programme based on interactive stakeholder engagement. Although a non statutory document, it sets the overall context for all wastes managed in Bedfordshire, including local commercial/industrial/construction/demolition wastes and imported wastes, as well as the municipal wastes for which the Bedfordshire Authorities have full managerial responsibility. It sets the context for this Strategy, as well as the land use policies of Minerals and Waste Local Plan. Key aspects are summarised in section 2.2, p11).

1.1.5 The ***Bedfordshire Authorities Municipal Waste Management Strategy*** details our proposals that relate to local municipal wastes. This was published in draft consultation form in October 2004, enabling residents, local business and community interests to have the opportunity to provide input into our proposals, and to suggest any ideas of their own. To this end, this document reflects the valued input from those parties that this strategy will strive to serve.

## 1.2 The Bedfordshire context

1.2.1 In Bedfordshire, we currently produce over 220,000 tonnes of municipal waste per year from approximately 170,000 households and this amount is growing. Historically, we have dealt with this waste simply by collection and almost immediate disposal in landfill sites. More recently, we have provided residents with a range of recycling services, initially by providing a network of "bring sites" (e.g. bottle and paper banks), and latterly via introduction of the kerbside collection "orange bag" scheme and enhanced recycling at the five Household Waste Recycling Centres (HWRC's).

1.2.2 Bedfordshire is a 'shire county', and operates

[1] Waste Strategy 2000 (pt2, p10) - DEFRA

under the two-tier district/county model of local government administration. The district level authorities in Bedfordshire are:

- Bedford Borough Council
- Mid Bedfordshire District Council
- South Bedfordshire District Council

1.2.3 The Borough and District councils are the statutory **Waste Collection Authorities** (WCAs), and have responsibility for all municipal waste collection, including all kerbside and bulky waste collections and servicing of 'bring-sites' such as bottle banks. The districts also collect street litter and abandoned vehicles and provide commercial waste collections if requested to do so.

1.2.4 Bedfordshire County Council is the **Waste Disposal Authority** (WDA). Its main function is to provide centralised waste management facilities, to which the WCAs deliver their collected waste. This system enables the County council to achieve economies of scale in waste recycling and disposal, whilst the districts can tailor their collection systems to suit their own particular circumstances. The County Council is also responsible for management of the Household Waste Recycling Centres.

1.2.5 Bedfordshire County Council is also the **Waste Planning Authority**. Under the Town and Country Planning Acts, it is responsible for the grant or refusal of planning permissions for all waste management facilities in Bedfordshire (including commercial as well as municipal sites). It is also charged with production of a forward plan, the Waste Local Plan, which sets out the policy framework for determination of planning applications. In Bedfordshire, this plan is combined with policies for minerals extraction and related development in the **Bedfordshire and Luton Minerals and Waste Local Plan**.

1.2.6 The two-tier division of functions has certain advantages, but does require close co-ordination between the WCAs, WDA and WPA. The district and county authorities have therefore developed increasingly close working relationships, which are now formalised under the **Bedfordshire Authorities Waste Partnership** (BAWP) arrangement. The BAWP is a forum comprising Executive Members and senior officers from all four Bedfordshire councils. It acts to co-ordinate waste management activities and to plan future strategy.

## 1.3 WIDER POLICY CONTEXT

1.3.1 Waste policy in Bedfordshire is subject to the requirements of higher order policies and strategies established at European, national and regional levels. These form a "cascade" of policy guidance, with a progressive refinement of policy at each level, which may be tailored to suit the particular local context. This approach ensures that local level policy is in accordance with higher aims and obligations, whilst maintaining local flexibility in decision-making and implementation.

1.3.2 The primary driver for much of the current thrust in waste management comes from European environmental policy. Of particular relevance is the EU Landfill Directive, which binds the UK as a whole into achieving key targets for diversion of waste from landfill.

1.3.3 National Government waste policy, in *Waste Strategy 2000*, interprets and builds on the European requirements. As stated, this key document is under review (2005).

1.3.4 Further detail and refinement is provided at the regional level. Bedfordshire is part of the East of England region, which in 2003 published the *East of England Regional Waste Management Strategy* in order to provide bespoke guidance for local authorities in the area.

1.3.5 *The Waste Strategy for Bedfordshire and Luton (2001)*, provides the local level interpretation of these higher order policy requirements. It was designed to be in accordance with the aims of Waste Strategy 2000, and, although antecedent, is in close conformity with the agreed East of England regional approach.

1.3.6 The *Bedfordshire Authorities Municipal Waste Management Strategy* will provide the final level of policy for dealing with our

own municipal wastes, thus completing the policy framework for our area. Whilst we must conform with the key aims and performance standards of the higher order strategies, we now have the opportunity to decide exactly what we want to do with our waste and how we are going to do it. Ultimately, Bedfordshire's waste is the responsibility of Bedfordshire's people, and we must decide for ourselves the best way to deal with it.

## 1.4 CONSULTATION PROCESS

1.4.1 This document sets out what we are required to do in terms of European, national and regional policy. It outlines what we have already achieved since publication of the Waste Strategy, and identifies what more needs to be done in the future. It presents clear Policies and Supporting Statements where neccesary designed by the Bedfordshire Authorities Waste Partnership (BAWP).

1.4.2 Following an award of funding from the Department of Environment, Food and Rural Affairs, the draft version of the Municipal Waste Strategy was issued in October 2004 and distributed to all known interested parties and individuals. Funding allowed the BAWP to engage the services of Entec UK Ltd in order to undertake a high profile public consultation exercise. This commenced in November 2004 with a series of public workshops throughout the County and supported by the distribution of some 18,000 leaflets through major retail outlets, post offices and direct to households. All responses whether from the workshops or from the questionnaire contained in the leaflet were passed to Entec UK Ltd for analysis in February 2005.

1.4.3 These finding are presented as appendices in support of this document. These reports have allowed the Waste Strategy for Bedfordshire to embrace public opinion and to acknowledge peoples views and their support for the ways and means by which we handle household waste produced by the residents of Bedfordshire.

2.1.1 This section outlines our detailed proposals for implementing the policies as regards the management of municipal wastes in Bedfordshire.

2.1.2 The overall strategic direction is summarised in section 2.2, with detailed proposals for waste minimisation, recycling/composting and other waste recovery in sections 2.5, 2.6, and 2.7. Our plans will require co-operation and publicity in order to succeed, and we outline our communications and awareness-raising strategy in section 2.9, whilst our own proposals for joint working are outlined in section 2.3.

## 2.2 STRATEGIC DIRECTION – THE WASTE STRATEGY FOR BEDFORDSHIRE AND LUTON

2.2.1 The Bedfordshire Authorities, working also with Luton Borough Council, have interpreted the higher order policy requirements, and have developed the local policy response in the *Waste Strategy for Bedfordshire and Luton (2001).*

2.2.2 *The Waste Strategy for Bedfordshire and Luton* provides the essential framework to guide and co-ordinate the working of WCA, WDA and WPA functions, and also to inform the business and investment strategies of others active in the area. It was developed through an intensive process of stakeholder engagement, involving over 100 business, community and environmental interest groups.

2.2.3 The process of strategy formulation involved stakeholders in the design and appraisal of alternative options for future waste management. This was supported by a comprehensive **sustainability appraisal**, which included Life-Cycle Analysis of environmental impacts undertaken using the Environment Agency's WISARD computer software package. This enabled identification of the local Best Practical Environmental Options for dealing with wastes in the area[2]. Following a final round of formal consultation, the final agreed strategy was adopted by each of the partner authorities.

2.2.4 Full documentation relating to the Strategy and its process of formulation may be downloaded from the internet at **www.bedfordshire.gov.uk**, following links for *environment › minerals and waste policy and planning › waste strategy for Bedfordshire and Luton*. Hard copies of all documents may also be obtained at the County council offices. The executive summary and list of policies from the *Waste Strategy for Bedfordshire and Luton (2001)* are reproduced at appendix A1.

2.2.5 *The Waste Strategy for Bedfordshire and Luton* establishes the headline policies for planning and management of wastes in Bedfordshire, but does not go into the detail of implementation. This detail is being provided by two follow-on documents. The first, the **Bedfordshire and Luton Minerals and Waste Local Plan (MWLP)**, deals with land use matters for all wastes. The second implementation vehicle is this document, the **Bedfordshire Authorities Municipal Waste Management Strategy**, which sets out detailed Policy Statements for the management of local municipal wastes under the WCA and WDA direct service functions.

2.2.6 These three documents together present the full policy framework for management of waste in Bedfordshire and should therefore be read together.

2.2.7 All adopted principles and policies underpin our approach to municipal waste management, and our proposed means of implementation are developed in the following sections of this document. The sections are set out following the order of the waste hierarchy: waste reduction, recycling/composting, waste recovery and final disposal. Each section sets out what we must do in terms of established policy at national regional and local levels; what we have achieved to date and what we propose to do in the future.

[2] The Waste Strategy for Bedfordshire and Luton expanded the concept of Best Practicable Environmental Option to encompass social and economic dimensions, so deriving the "Best Practical Sustainable Option" (see 3rd waste strategy development report, "Stakeholder participation").

**Box 1. Waste Strategy for Bedfordshire and Luton (2001) – key principles for management of local municipal wastes**

**Policy WS1: Overall landfill strategy**

We will take action to achieve the maximum possible reduction in landfill. For imported wastes, this will be achieved via development plan policies to reduce the supply of landfill capacity in Bedfordshire. For locally arising wastes, diversion will be achieved primarily via recycling and composting (or other bio-treatment). Where this is not practical, we will encourage use of energy from waste solutions in preference to landfill for locally arising wastes.

**Policy WS3: Waste Minimisation**

We will work in partnership with other agencies to consolidate and promote waste minimisation activities in Bedfordshire and Luton.

**Policy WS6: Management of Municipal Waste in Bedfordshire and Luton**

We will develop future municipal waste management systems in a detailed strategy. This will be based on the following key principles:

- We will aim to end landfill of untreated waste by year 2010.
- We will establish sufficient infrastructure to enable self-sufficiency for treatment of waste arising within Bedfordshire and Luton.
- We will establish a three-stream segregated waste kerbside collection system, integrated with treatment plant appropriate for each collected waste stream.
- As a minimum, we will recover materials for recycling and composting to the targets [as laid down under the Best Value regime]. Waste that cannot be recycled or composted will be processed for energy recovery.
- We will continue develop and enhance the network of HWRC's and local recycling sites.

## 2.3 WORKING IN PARTNERSHIP

2.3.1 Statutory responsibility for the direct management of municipal waste in Bedfordshire is divided between the **Waste Collection Authorities** (Bedford Borough Council, Mid & South Bedfordshire District Councils) and the **Waste Disposal Authority** (Bedfordshire County Council).

2.3.2 The Waste Collection Authorities (WCAs) have a duty to provide the following services:

i) Collecting household waste.

ii) Street cleansing and flytipped waste.

iii) Recycling, including development of a Recycling Plan

iv) The collection of commercial waste when requested

2.3.3 The Waste Disposal Authority (WDA) has a duty to:

i) Arrange for the disposal of all waste collected by the Collection Authorities and delivered for disposal either to the WDA or to a place nominated by the WDA.

ii) To provide places for the public to dispose of items of household waste that are not suitable for collection by the household waste collection service. These are commonly known as Tidy Tips or by the later name of Household Waste Recycling Centres. There are five such sites at present in Bedfordshire.

iii) To provide payments (recycling credits) to Waste Collection Authorities where waste is retained and recycled by the WCA.

iv) To provide payments to third party groups (usually in the community/charity sector) for recycling activities recognising the saving in disposal costs.

2.3.4 Central Government expectations of Waste Authorities are:

- To develop effective working relationships to deliver comprehensive Municipal Waste Management Strategies, taking account of Waste Strategy Guidance, and containing clear objectives and timescales for action.
- To put in place effective local arrangements to reduce waste and maximise recycling, composting and recovery of value.
- To raise local awareness of the costs of dealing with waste and of the part that individuals can play in reducing the amount of waste.
- To involve local people in decisions on waste and to work with community based schemes to promote re-use and recycling at a local and community level.
- To form consortia to facilitate better arrangements with re-processors and other outlets for recyclable material.

*(Adapted from Waste Strategy 2000)*

2.3.5 The County Council also has the statutory role of Waste Planning Authority (WPA), and administers planning controls for all waste management facilities. It has powers to grant or refuse planning permission for facilities, and may impose conditions or enter legal agreements in order to regulate their development.

2.3.6 Clearly, this complex arrangement of responsibilities requires careful co-ordination in order to ensure effective and 'joined-up' working. To this end the four Bedfordshire Authorities have formalised joint working arrangements via the establishment in 2002 of the **Bedfordshire Authorities Waste Partnership (BAWP).**

***The Bedfordshire Authorities Waste Partnership***

2.3.7 The Bedfordshire Authorities Waste Partnership comprises members of the following authorities:

- Bedford Borough Council
- Bedfordshire County Council
- Mid Bedfordshire District Council
- South Bedfordshire District Council

2.3.8 The Partnership co-ordinates the activities of all three statutory waste functions (i.e. waste collection, disposal and planning) in order to ensure an integrated strategic approach. The terms of reference for the partnership are reproduced at appendix A2.

2.3.9 The BAWP is steered by a non-executive committee, and is supported by officers of the four authorities. The BAWP enables joint consideration of policy and operational recommendations, which are then referred to the individual authorities for formal approval. The officers supporting the BAWP have a direct remit to implement and improve public services in line with all strategy decisions.

2.3.10 The BAWP also undertakes research work on waste matters, often with support of external funding grants and produces reports and other publications. To date BAWP has produced the following reports:

- Recycling in Bedfordshire: A report detailing household waste and garden waste recycling trials;
- Public Perception of recycling initiatives at Household Waste Recycling Centres;
- A Survey of Bring Sites in Bedfordshire;
- The Relationship between Bring Sites and Kerbside Collection Services;
- Waste Minimisation in Bedfordshire: including sub-reports; (a) Recycling and Waste Education in Schools; (b) Home Composting Survey.

Printed and electronic copies of all the above reports are available from the BAWP at the address at on the back cover of this document.

## 2.4 TARGETS

2.4.1 Waste policy at the European, national and regional levels specifies particular targets for reduction of landfill and increased waste recycling rates. Local authority waste strategies must be compliant with these higher order targets. For ease of reference, the higher-order targets are summarised below,

2.4.2 The **European Landfill Directive** (99/31/EC) sets mandatory targets for the reduction of biodegradable municipal waste sent to landfill. These targets are binding at the national level. The UK national targets are:

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

2.4.3 To comply with the Landfill Directive, the Government has established the national waste strategy, **Waste Strategy 2000**, which includes targets for recovery of municipal waste, and recycling/composting of household waste. Whilst the Landfill Directive specifies reductions in landfill relative to the 1995 levels, Waste Strategy 2000 factors in anticipated waste growth to derive targets that are cast in absolute percentage terms, making it easier to monitor ongoing performance.

***National waste strategy recycling/composting targets:***

- To recycle or compost at least 25% of household waste by 2005;
- To recycle or compost at least 30% of household waste by 2010;
- To recycle or compost at least 33% of household waste by 2015.

2.4.4 These targets relate specifically to household waste. This is a major constituent of municipal waste (a figure of 90% is commonly used) but is defined quite distinctly[3]. It includes waste from household collection rounds, bulky waste collections, Household Waste Recycling Centres (HWRCs), street cleansing and waste from schools[4].

***National waste strategy recovery targets:***

- To recover value from 40% of municipal waste by 2005;
- To recover value from 45% of municipal waste by 2010;
- To recover value from 67% of municipal waste by 2015.

2.4.5 'Recovery' means obtaining value from waste through any combination of recycling, composting, other forms of material recovery, or recovery of energy. These targets apply to all municipal wastes, not just household wastes.

2.4.6 The recycling and recovery targets act to specify a minimum level of materials recycling, whilst allowing flexibility as to how overall landfill diversion rates are to be achieved in specific localities. This is in order to guarantee a minimum level of materials recycling in reflection of its relative priority in terms of the "waste hierarchy" (see paragraph 2.4.8, below)

***National waste strategy key principles:***

2.4.7 *Waste Strategy 2000* also enshrines a number of **guiding principles**, which are now generally recognised as central to sustainable waste management. The key principles are:

*The precautionary principle*

Where the threat of serious or irreversible damage exists, and there is significant scientific uncertainty as to the nature and extent of such risk, then actions and decisions should be taken with appropriate caution and with the assumption that such risk exists. In effect, this means erring on the side of caution.

*The proximity principle*

To avoid undue environmental disturbance and pollution associated with bulk transport, wastes should be dealt with as close to their source of origin as possible.

[3] Definitions are given in the Environmental Protection Act 1990 and the Controlled Waste Regulations 1992

[4] Waste Strategy 2000 (pt2, p10) – DEFRA

*The waste hierarchy*

This is a framework, which gives a general guide to the order of priorities in waste management. It is not intended to be prescriptive, in recognition that in some circumstances, and for some wastes, solutions lower in the hierarchy may be the most appropriate. The order of the hierarchy is:

**1 - Reduction** - the most effective solution is generally to reduce the generation of waste in the first place. This may involve cutting down on waste by, for example, choosing products that are not over-packaged, but can also include re-use of products or materials, either for their original or a different purpose.

**2 - Recovery of materials** - this includes recycling and composting activities. Many solid wastes, including metals, plastics and paper, can be reclaimed and used to make new products in place of virgin resources. Organic wastes may be composted and returned to the soil, thus recycling essential nutrients, and reducing the use of peat and artificial fertilisers.

**3 - Recovery of energy** - where it is impractical to recycle waste (for example it may be too dirty or difficult to sort), then it may be preferable to use it for fuel. For mixed wastes, this may be by incineration, by use in industrial plant such as cement kilns, or by one of the newer reduction technologies such as pyrolysis or gasification. Another approach for organic wastes uses anaerobic digestion technology (currently widely used in sewage treatment) to produce fuel-gas, as well as digestate sludge, which may then itself be composted. All these processes can reduce the use of virgin fossil fuels and also generally reduce the pollution potential of the wastes themselves.

**4 - Disposal** - simple landfill disposal is seen as the most wasteful and potentially most polluting of all options. Only where none of the above methods offer an appropriate solution should waste be simply disposed of.

2.4.8 *Waste Strategy 2000* states that the above principles should be considered, together with more detailed appraisal of environmental impacts, to determine the **Best Practical Environmental Option (BPEO)** for dealing with waste in any particular locality and set of circumstances.

***Best Value***

2.4.9 The national targets are supported by statutory performance standards for household recycling/composting. These are administered by the Audit Commission under the **Best Value** regime, established under the Local Government Act 1999.

2.4.10 Under the duty of Best Value, local authorities are expected to deliver services to clearly defined standards which cover both cost and quality – by the most effective, economic and efficient means. Local authorities are also obliged to demonstrate continuous improvements in service delivery and cost.

2.4.11 To monitor performance, each local authority must report against a set of Best Value Performance Indicators (BVPIs), which are defined nationally in order to ensure consistent reporting. These indicators cover a wide range of local authority functions, with each work area identified by a particular BVPI code. BVPIs for waste management are listed in Table 1.

2.4.12 All local authorities have been allocated combined statutory performance standards for recycling (BVPI 82a) and composting (BVPI 82b). The recorded recycling rate for 1998/99 was used as the baseline figure for determining each authority's given target. The targets set for the Bedfordshire authorities are shown in Table 2.

2.4.13 In 2003, the County Council has entered into a **Local Public Service Agreement** (LPSA) with the Government. Under the terms of this agreement, the County Council has agreed to work towards a "stretch" target, whereby it will aim to achieve a **20% combined recycling/ composting rate by the end of 2006** (i.e. 2% over the BVPI requirement). An interim stretch target of 16% was agreed for attainment by March 2005. In exchange, the Government is providing grant assistance to

| Table 1. Waste Management BVPIs | |
|---|---|
| **BV Code** | **Indicator** |
| BVPI 82a | Percentage of the total tonnage of household waste arisings which have been recycled |
| BVPI 82b | Percentage of the total tonnage of household waste arisings which have been sent for composting |
| BVPI 82c | Percentage of the total tonnage of household waste arisings which have been used to recover heat, power and other energy sources. |
| BVPI 82d | Percentage of the total tonnage of household waste arisings that have been landfilled |
| BVPI 84 | Number of kilograms of household waste collected per head. |
| BVPI 86 | Cost of waste collection per household |
| BVPI 87 | Cost of waste disposal per tonne municipal waste |
| BVPI 91 | Percentage of population residents in the authority's area served by a kerbside collection of recyclables |

| Table 2. Statutory Performance Standards for Bedfordshire authorities | | | |
|---|---|---|---|
| **Authority** | **1998/1999 Recycling Rate (%)** | **2003/2004 Standard (%)** | **2005/2006 Standard (%)** |
| Bedford Borough Council | 4 | 10 | 18 |
| Mid Beds District Council | 5 | 10 | 18 |
| South Beds District Council | 7 | 14 | 21 |
| Bedfordshire County Council | 6 | 12 | 18 |

enhance the resources available for service improvement. Based on recent strong performance, the County Council is confident that the stretch target will be met and exceeded. Recycling performance to date is detailed in section 2.6.

***Regional waste policy***

2.4.14 There is great diversity to be found amongst England's regions and communities; each part of the country has different economic, social and environmental conditions. This diversity demands a broad range of policy responses. These form the basis of Government policy for the English regions. Bedfordshire itself is part of the East of England region, along with Essex, Hertfordshire, Cambridgeshire, Norfolk, Suffolk and their associated unitary authorities[5].

2.4.15 There are a number of agencies active at the regional level. Government departments are represented by regional Government Offices (GOs), with GO-East active in East of England. Other major bodies in East of England are the Regional Development Agency (EEDA), which co-ordinates regional economic development and regeneration, and the East of England Regional Assembly (EERA). The Regional Assembly includes elected councillors and a range of community stakeholders representing social, economic and environmental interests. It provides regional accountability for EEDA and is a sounding board for other government agencies. It is also the regional planning body with responsibility for strategic planning including preparation of regional planning guidance and the regional spatial strategy.

[5] East England unitary authorities are: Peterborough, Luton, Thurrock and Southend-on-Sea.

2.4.16 In 2003, EERA published the **Regional Waste Management Strategy for East of England (EERWMS)**. This interprets European and national waste policy requirements to provide waste management guidance that is specifically tailored to suit the particular circumstances of East of England.

2.4.17 The Regional Waste Management Strategy (RWMS) sets out a vision for "a society which secures sustainable waste management, reducing the creation of waste and maximising recycling and recovery so as to minimise the amount of material requiring disposal." For municipal waste, the following regional target has been adopted:

- Local authorities should adopt challenging but achievable targets which enable the region as a whole to achieve recovery of 40% of municipal waste at 2005, 50% at 2010 and 70% at 2015 (RWMS Policy 1);

2.4.18 Other regional policies of significance to the Bedfordshire Municipal Waste Management Strategy are summarised in appendix A3.

## 2.5 WASTE REDUCTION

***Context***

2.5.1 Without doubt, the most sustainable way to deal with waste is to avoid creating it in the first place. This is why waste minimization sits at the top of the waste hierarchy. However, it is difficult for local authorities to take direct action to minimise waste, apart from ensuring that waste produced from their own activities is minimised. Waste minimisation on the wider front is entirely dependant on the support of those who produce the waste i.e. householders and businesses.

2.5.2 For this reason, a key focus of local authority attention must be to work with others to raise awareness of waste issues, and to promote actions and initiatives that people may take to minimise the waste they produce, both in the home and at work.

2.5.3 The amount of municipal waste generated in Bedfordshire is currently growing each year. Table 3 shows total tonnages collected via the WCA kerbside collections and the WDA Household Waste Recycling Centres (HWRCs) for financial years 1994/5 to 2001/2.

**Table 3. Bedfordshire municipal waste growth**

| Year | WCA Collected Waste | % Change | HWRC Waste | % Change |
|---|---|---|---|---|
| 94/95 | 135,358 | No Data | 29,946 | No Data |
| 95/96 | 135,578 | Negative | 28,439 | - 5% |
| 96/97 | 140,185 | + 3.4% | 36,751 | + 29% |
| 97/98 | 144,835 | + 3.3% | 41,747 | + 13% |
| 98/99 | 151,000 | + 4.2% | 45,718 | + 9.5% |
| 99/00 | 158,867 | + 5.2% | 44,756 | - 2% |
| 00/01 | 166,964 | + 5.5% | 46,046 | + 2.8% |
| 01/02 | 171,593 | + 2.7% | 49,962 | + 8.5% |
| 02/03 | 173,892 | + 1.3% | 47,269 | - 5.4% |
| 03/04 | 174,606 | + 0.4% | 46,861 | - 0.8% |
| 04/05* | 179,683 | + 2.9% | 38,800 | - 17.2% |
| **Average** | **N/a** | **+ 3.21%** | **N/a** | **+ 3.24%** |

* Unaudited figures, as of May 2005 and should therefore be taken as indicative only

2.5.4 It can be seen from Table 3 that the amount of waste collected at the kerbside has been subject to a fairly steady rate of growth, amounting to around 4% per year until 2001/02 after which, increases steady to 2% approx per annum. If levels of growth were to be maintained at the higher level of 4%, the amount of waste collected could double in 20 years.

2.5.5 The pattern of growth in HWRC waste is less clear. The average figure shows an increase of 12.5% per year, but this is skewed by an increase of 29% in 96/97. This was the year in which the Government introduced the Landfill Tax, which is believed to be responsible for increasing the amount of waste entering HWRC sites, owing to small traders seeking to avoid commercial charges, and householders opting away from private skip hire in favour of taking their waste (particularly DIY waste) to the HWRCs. This should not, however, be taken as a full explanation of the 29% increase as other factors may have had an influence.

2.5.6 The 99/00 anomaly of a 2% decrease on the previous year is subject to a similar explanation. In that year, the County Council introduced a ban on large vans at HWRCs in order to stem the flow of commercial waste at the sites[6]. In 2004, following a review of national trends in HWRC management across the UK, a system of permits was introduced restricting levels of non household waste from entering the Bedfordshire sites.

2.5.7 Overall, a tendency towards a **3%** per annum increase on WCA collected material is apparent. For HWRCs the trend appears to be around **8%** per annum. These figures exceed national recorded increases in waste, and suggest a potential annual increase now approaching **5%** pa for Bedfordshire's municipal waste.

2.5.8 As a result of this, the Council commissioned a short study into forward projections of waste arisings and a review of historic trends:

- Growth has been erratic, with waste decreasing in 2003/04 but increasing between 4 and 5% the previous two years
- Taking into account provision of new housing, the average growth in waste per household between 2001/02 and 2003/04 has been 2%
- Taking into account projected growth as part of the housing expansion in addition to the 2% average growth, the County can expect to see a growth rate of approximately 3.5% if no efforts are made to minimise the amount of waste we produce

2.5.9 Such levels of municipal waste growth are clearly not sustainable. The current trend runs counter to national policy aims and, if maintained, will result in dramatically increased waste management costs, which will have to be recouped through increases in local charges, including the Council Tax. It is imperative that all residents and business of Bedfordshire should do everything possible to reduce, and where possible reverse, this growth in waste.

***What we have to do***

2.5.10 There are currently no statutory targets for the minimisation of waste production. BVPI 84, however, records the amount of municipal waste collected per person, and so allows ongoing monitoring.

2.5.11 Not withstanding the absence of specific targets, Government policy expects local authorities to do all they can to minimise waste produced in their area. It also encourages local authorities to adopt their own targets for waste reduction.

2.5.12 The East of England Regional Waste Management Strategy also expects local authorities to promote waste awareness and minimisation campaigns and undertake other initiatives aimed at minimising waste. The Regional Assembly will itself co-ordinate a waste minimisation campaign to promote a consolidated message across the whole of East England. It will also instigate further research with a view to defining an appropriate regional level target for waste reduction.

[6] This ban was subsequently replaced by a system of declaration forms and vehicle checks at the sites in order to allow legitimate public access whilst preventing abuse of the system by commercial traders.

***Progress to date***

2.5.13 The Bedfordshire Authorities have continued to support waste minimisation projects and awareness-raising campaigns, including:

2.5.13 The Bedfordshire Authorities have continued to support waste minimisation projects and awareness-raising campaigns, including:

2.5.14 **Home Composting:** - All three Bedfordshire Waste Collection Authorities (WCAs) operate a scheme to provide subsidised home composting bins and wormeries, which residents can use at home to compost their putrescible kitchen and garden wastes. Discounts over normal retail prices are in the order of 60%. The WCAs also provide advice on how to make best use of the bins, including guidance on what waste products are suitable for composting (e.g. vegetable peelings and green garden waste) and which are not (e.g. meat and dairy products). To date the three WCAs have provided over 14,000 home composting bins through the scheme.

2.5.15 The BAWP has undertaken research into use of home composting bins (report available from BAWP contacts). This suggests that the 14,000 bins sold are likely to be diverting nearly 1,500 tonnes of biodegradable waste each year.

2.5.16 **Real Nappies:** - The BAWP, working with Bedford hospital, actively promotes the GET REAL[7] campaign for use of washable nappies. Disposable nappies are estimated to account for as much as 2.5% of all household waste. In 2003, The County Council provided financial support to enable 2000 parents to try real nappies for a 12 month period.

2.5.17 The BAWP also undertake public **awareness-raising campaigns** to promote sustainable waste management, including waste minimisation and recycling. Promotional activities are detailed more fully in section 2.9 of this document. The County Council, on behalf of BAWP, supports the East Anglia "Slim Your Bin" campaign, which gives benefits of a consolidated message delivered across a wide geographical area and enables efficiency gains via pooling of resources.

2.5.18 In support of these activities, the County Council has appointed a Waste Recycling & Marketing Manager assisted by a Recycling Officer, whose remit includes the promotion of waste minimisation. Both posts deliver the "Recycle Now" campaign and work very closely with officers from other members of the Waste Partnership.

2.5.19 Each of the Partner Authorities provides information on their website as to how householders may minimise waste.

2.5.20 Notwithstanding the efforts of the Bedfordshire Authorities, municipal waste continues to grow. It is clear that more needs to be done to minimise waste.

***Proposals for future action***

2.5.21 The BAWP will continue to promote waste minimisation, working with other parties as appropriate.

2.5.22 Promotion of home composting remains one of the most effective direct actions that local authorities can undertake with respect to waste minimisation. We consider that we should build on the previous success of the home composting scheme and encourage its further take up by Bedfordshire residents.

**Policy 1: Home composting**

**The BAWP will continue to promote home composting bins, to enable residents to purchase compost bins through joint initiatives with manufacturers and to provide educational support for their use.**

2.5.23 We believe it important that we ensure waste minimisation efforts are supported by consistent promotional material in order to ensure maximum effect and to avoid mixed or confusing messages. We think that this may be best achieved by joining up with wider promotional campaigns that spread the waste minimisation message across the region as a whole.

[7] The GET REAL campaign is run by the Real Nappy Network, a voluntary organisation of patents who promote the use of washable nappies.

**Policy 2: Consolidating the message**

**The BAWP will provide consistent, continuous educational and promotional material to assist the drive to reduce waste arisings and to increase public awareness of the need to minimise waste. We will support the East of England Regional Assembly in developing and implementing a co-ordinated regional waste minimisation campaign.**

2.5.24 The Partnership is not the only body that is able to support waste minimisation. Voluntary sector groups in particular, are often better placed to take forward initiatives that lead directly to waste reduction, either by elimination at source or by promotion of re-use of waste items. A number of local groups are already active: two successful ventures are Furniture Link in Bedford and Furniture Aid in South Bedfordshire, both of which have led the way in extending the life of unwanted items of furniture. We consider that such valuable initiatives should be recognised and supported by the BAWP. We will also investigate the potential to extend 3rd party credits to support waste re-use schemes as well as recycling.

**Policy 3: 3rd party support**

**The BAWP will give maximum possible support including, where possible, financial assistance, to groups promoting waste minimisation initiatives. We will support activities that seek to end reliance on disposable commodities for which renewable options exist. We will provide an annual fund available to bodies that actively reduce waste in a non commercial setting.**

**Supporting Statement 1. Waste Minimisation**

**Waste minimisation has often been described as the "holy grail" of waste management as evidenced by its prominence in the waste hierarchy. Despite its importance, it remains extremely difficult to quantify particularly in terms of costs and recognised benefits. This strategy seeks to give full support to those areas where tangible results can be identified and to support those community groups that are in effect operating on behalf of the BAWP by promoting life style changes that can and do result in waste being reduced.**

**Home composting isn't new, in recent decades it was the norm however social changes led to it falling by the wayside only to be resurrected firstly by local authorities as a means of reducing waste and then by numerous celebrity garden designers encouraging people through the media to compost at home.**

**The Bedfordshire Authorities have long recognized the potential of home composting and have along history of promotion through regular sales of subsidized bins. South Bedfordshire District Council were one of the first authorities in the UK to become involved in this area and likewise, Bedford Borough and Mid Bedfordshire District Council have not only provided low cost compost bins but followed up by a range of educational work.**

**Real nappies are again nothing new but have in the recent past been subject to lifestyle changes and the presence of readily available, relatively cheap (in the short term) disposable alternatives. Education in the form of recognition of the true costs of one use nappies is crucial as is the ability to direct people to easy alternatives.**

**In 2003, Bedfordshire County Council provided support funding to Get Real, a consumer choice group that encourage the use of washable nappies. With support from a commercial nappy washing company based in Bedford, approaching 500 families have opted to use environmentally friendly nappies rather than disposables.**

**Supporting Statement 2. Furniture Re-use**

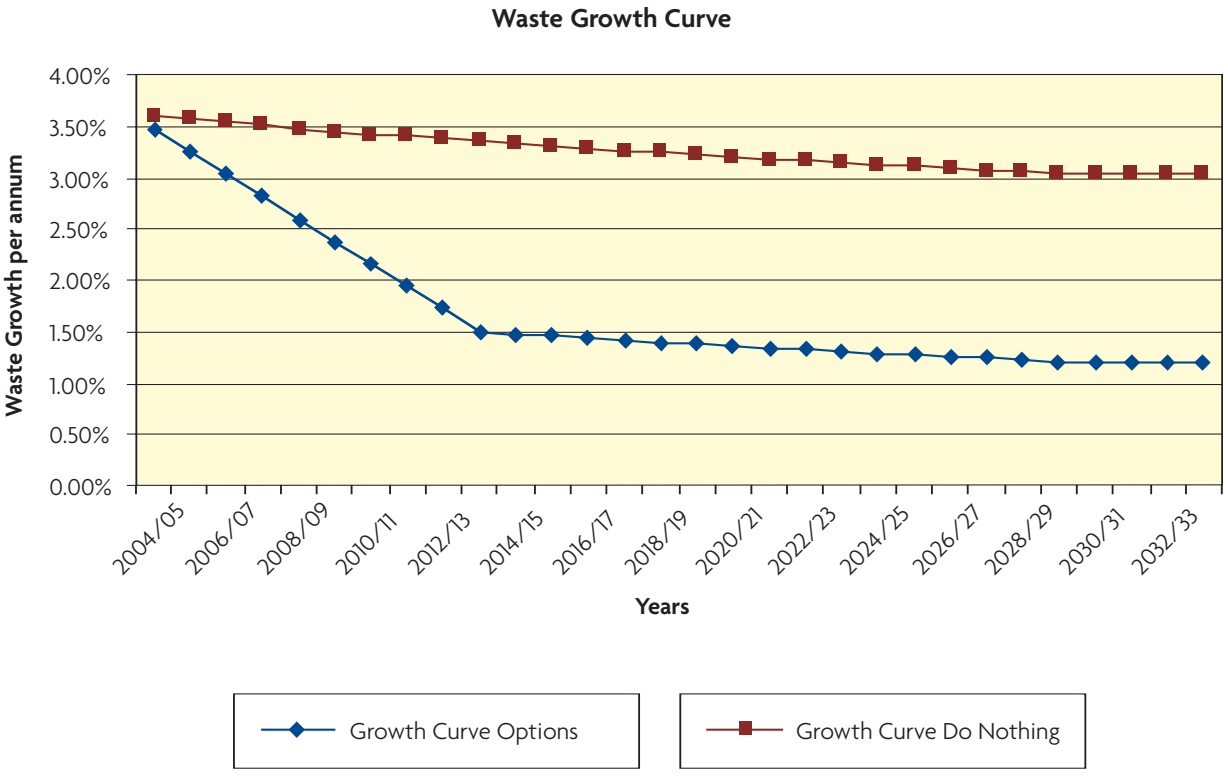
**Throughout the public consultation, there was considerable support for measures that actively reduce waste through re-use and repair. A number of charities that actively repair and renovate otherwise end of life items of furniture and white goods were identified. Representatives from three established and widely acknowledged Bedfordshire organisations attended the Workshop sessions held to support the consultations and their input was gratefully received. Their efforts divert an estimated three tonnes of material from landfill each week and provide employment opportunities for socially excluded persons and this contribution cannot be ignored.**

2.5.25 In order to put in place policies and solutions capable of meeting our future needs, it is vital to understand the future volumes of waste we are likely to be dealing with. Bedfordshire is currently earmarked for significant growth in housing numbers of the next two decades as part of national plans for expansion. This significant growth coupled with our tendancy to through ever increasing amounts away must be taken into account.

2.5.26 However, and based on the policies above, we must place targets on achieving minimisation for the near and distant future. It is assumed, as a combination of general increased waste awareness nationally and as a result of the actions above, that waste will not continue to grow at the 3.5% predicted. For the purposes of planning future capacity, waste growth per household has been reduced by 0.2% per annum, until it reaches 0% growth per household per annum.

2.5.27 Figure 1 illustrates the future growth of waste arisings in the county.

**Figure 1: Graphical representations of Growth Profiles**



| Table 4. Derivation of Waste Growth Profile | | | | | |
|---|---|---|---|---|---|
| Year | Growth Profile (per HH basis) % | Arisings per HH (tonnes) | Predicted number of HH | Predicted household waste arisings (tonnes) | Growth Profile (arising basis) % |
| 2004/05 | 1.8 | 1.099 | 162,775 | 178,851 | 3.47 |
| 2005/06 | 1.6 | 1.116 | 165,600 | 184,867 | 3.36 |
| 2006/07 | 1.4 | 1.132 | 168,425 | 190,653 | 3.13 |
| 2007/08 | 1.2 | 1.146 | 171,250 | 196,177 | 2.9 |
| 2008/09 | 1.0 | 1.157 | 174,075 | 201,407 | 2.67 |
| 2009/10 | 0.8 | 1.166 | 176,900 | 206,313 | 2.44 |
| 2010/11 | 0.6 | 1.173 | 179,725 | 210,865 | 2.21 |
| 2011/12 | 0.4 | 1.178 | 182,550 | 215,037 | 1.98 |
| 2012/13 | 0.2 | 1.180 | 185,375 | 218,801 | 1.75 |
| 2013/14 | 0 | 1.180 | 188,200 | 222,135 | 1.52 |
| 2014/15 | 0 | 1.180 | 191,025 | 225,470 | 1.50 |
| 2015/16 | 0 | 1.180 | 193,850 | 228,804 | 1.48 |
| 2016/17 | 0 | 1.180 | 196,675 | 232,139 | 1.46 |
| 2017/18 | 0 | 1.180 | 199,500 | 235,473 | 1.44 |
| 2018/19 | 0 | 1.180 | 202,325 | 238,807 | 1.42 |
| 2019/20 | 0 | 1.180 | 205,150 | 242,142 | 1.40 |
| 2020/21 | 0 | 1.180 | 207,975 | 245,476 | 1.38 |
| 2021/22 | 0 | 1.180 | 210,800 | 248,811 | 1.36 |
| 2022/23 | 0 | 1.180 | 213,625 | 252,145 | 1.34 |
| 2023/24 | 0 | 1.180 | 246,450 | 255,479 | 1.32 |
| 2024/25 | 0 | 1.180 | 219,275 | 258,814 | 1.31 |
| 2025/26 | 0 | 1.180 | 222,100 | 262,148 | 1.29 |
| 2026/27 | 0 | 1.180 | 224,925 | 265,483 | 1.27 |
| 2027/28 | 0 | 1.180 | 227,750 | 268,817 | 1.26 |
| 2028/29 | 0 | 1.180 | 230,575 | 272,151 | 1.24 |
| 2029/30 | 0 | 1.180 | 233,400 | 275,486 | 1.23 |
| 2030/31 | 0 | 1.180 | 236,225 | 278,820 | 1.21 |

## 2.6 RECYCLING AND COMPOSTING

### *Context*

2.6.1 Recycling and composting are the preferred means to achieve the waste recovery targets of the national waste strategy at maximum, combined recycling and composting rates of around 35% should be achievable in the long term, with remaining wastes subject to thermal energy recovery treatment. This would require the best practical mix of waste management methods in terms of environmental performance, costs and regulatory compliance.

2.6.2 The base year for waste capacities modelling was financial year 1998/99 and at this time recycling performance across Bedfordshire as a whole stood at around 6%. Clearly, the shift from the 6% base to the 35% aspirational aim would require intensive efforts, and in reflection of this, the Strategy adopted a ramped set of performance targets based on those of the national waste strategy. These targets, and their implications for required process capacities (taking into account projected waste growth) are reproduced in Table 4.

2.6.3 As outlined in paragraph 2.4.14 above, solid performance has enabled the County council to enter a Local Public Service Agreement, whereby the previous target for 18% recycling by 2005/6 has now been replaced by the stretch target of 20%.

### *Progress to date*

2.6.4 There are three basic means of capturing recyclable and compostable municipal wastes. The first is to provide facilities where residents may deposit such wastes. The second is to provide a kerbside collection service alongside normal waste collection rounds. And the third is to put in place technology, which is able to capture recyclable and compostable materials discarded in peoples black bins/ bags. The Bedfordshire Authorities believe that the most effective recycling performance can be attained by provided both deposit and kerbside facilities in order to ensure maximum choice and convenience for local residents, with investment in technology to recover what is still disgarded. Accordingly, a variety of recycling facilities have been developed and the County is embarking upon the Integrated Waste Treatment Project.

2.6.5 **Deposit facilities** include unmanned **"bring-sites"** comprising one or more "banks" for deposit of such items as bottles, paper, cans and textiles. Details of bring site locations and the range of materials that each site can accept may be found on each WCA website[8]. In Bedfordshire a network of such facilities has been progressively developed since the early 1980's. There are now 182 sites in total.

2.6.6 Deposit facilities also include the **Household Waste Recycling Centres** (HWRCs - formerly known as "Civic Amenity Sites" or "Tidy-Tips"), which are managed by the WDA. There are currently five such sites in Bedfordshire, located in:

- Bedford (Barker's Lane)
- Ampthill, (Abbey Lane)
- Biggleswade (Bell's Brook)
- Leighton Buzzard (Shenley Hill Road)
- Dunstable (Frenches Avenue).

2.6.7 These sites have traditionally acted primarily as simple waste disposal sites, but have recently been re-developed under a new contract arrangement, which includes performance incentives for the contractor to provide an enhanced recycling service. Residents may now deliver a range of materials for recycling, including glass, cans, paper and cardboard (including corrugated), waste oil, car batteries, electrical items and white goods (fridges etc), metals, garden waste, furniture for reuse and wood. The HWRCs now make a major contribution to recycling in Bedfordshire, accounting for over 45% of total waste recycling/ composting.

2.6.8 In 1998 the Bedfordshire Authorities began to implement a **kerbside collection** for recyclable wastes under the **"Orange-Bag"** scheme. This scheme, as originally cast, provided residents with a special orange-coloured sack, in which they could place a range of dry recyclable materials including paper, cans and plastic bottles. Once full, the bag would be placed inside the normal

[8] www.bedford.gov.uk/bedford/streetcare/bringsites.htm
www.midbeds.gov.uk/services/env_services/contract_services/recycling/default.asp
www.southbeds.gov.uk/our-services/recycling/points.html

| Table 5. Bedfordshire and Luton Waste Strategy recycling targets | | | |
|---|---|---|---|
| **Year** | **Tonnage of MSW arising** | **Percentage recycling/composting** | **Tonnage recycling/composting** |
| 1998/1999 | 203,000 | 6% | 12,250 |
| 2000/2001 | 221,000 | 6.2% | 13,750 |
| 2003/2004 | 245,000 | 12% | 29,400 |
| 2005/2006 | 231,250 | 18% | 32,276 |
| 2010* | 258,000 | 30% | 61,894 |
| 2015* | 282,000 | 33% | 74,405 |
| 2020* | 302,900 | 33% | 79,906 |
| 2025* | 323,750 | 33% | 85,408 |
| 2030* | 344,500 | 33% | 90,910 |

wheeled bin and collected with the general refuse. The bags would then be recovered from the rest of the waste at a dedicated Materials Recovery Facility (MRF), where their contents would be segregated into distinct materials prior to onward transport to reprocessing facilities. General refuse would be bulked up for onward transport to landfill. This **co-collection** technique enabled a kerbside recycling service to be provided without incurring the extra costs of running additional dedicated collection rounds. By the end of 1999, this scheme had been rolled out to cover all three WCAs. It operated as a WDA/WCA partnership, with WCAs contracting distribution and collection of the orange bags, and the WDA providing the centralised MRF (located at Elstow) under a service contract with Shanks Waste Services.

2.6.9 The co-collection scheme was cost effective, but in practice encountered a number of operational difficulties, including:

- **Public perception:** With orange bags being collected with normal waste, it proved hard to convince residents that they would actually be recovered for recycling. Having seen the bags go in the back of the refuse vehicle, many residents assumed that they were simply taken to landfill along with the other refuse.
- **System losses:** Another effect of collecting orange bags alongside normal waste in the same collection vehicles was the inevitable degree of loss, owing to orange bags bursting in the collection vehicle, and their contents being lost. This may have amounted to 10% of all orange bag recyclables. Other system losses occurred during periods of downtime at the MRF, when there was no option other than to divert all waste direct to landfill.
- **Capacity limitations:** The system relied on the operation of two processing lines at the Elstow MRF: the first passing all waste along a conveyor, for separation of orange bags; the second passing the orange bag contents over a further conveyor, for segregation of individual materials. Both processing relied on manual sorting. This two-stage process proved labour intensive and placed an upper limit on waste which could be captured for recycling.

2.6.10 In light of these limitations, the scheme has now being evolved into a full **3-stream collection** service. This provides for segregated collection of:

- "Dry recyclables" – a mixed collection of paper, metals and plastics for recycling (stream 1);

- Green (garden) wastes for composting (stream 2)
- Residual wastes which are suitable for neither recycling nor composting (stream 3)

This revised system has been progressively rolled out across all 3 WCAs and will be completed in June 2005 when, following implementation of garden waste collection services in South Bedfordshire, all available properties will have access to the scheme.

2.6.11 Under the new system, orange bags are collected separately from other wastes and delivered to the MRF as a discrete load. This allows the following advantages:

- Users of the system see their recyclable waste being collected separately, which increases confidence in the system;
- The problem of burst bags is overcome, as the vehicle contains only recyclable waste, which is delivered to the MRF as a consolidated load;
- The primary sorting line of the MRF can be eliminated so increasing system capacity.

2.6.12 The orange bag collection is complemented by collection of green garden waste suitable for composting. Collected green waste is delivered to a number of farm-based composting facilities in the County depending on point of collection. Following the commencement of composting operations at Haynes, Mid Bedfordshire in October 2004 and an enlarged site at Ravensden, Bedford in May 2005, the Bedfordshire Authorities have access to composting facilities within the County reducing the need to transport green waste out of county.

2.6.13 The last of the three collected streams is residual mixed refuse. This is currently sent to landfill, but in future we will develop means to treat and recover value from this waste.

2.6.14 The three-stream collection system is currently being implemented on the basis of a 'normal' refuse collection each week, with alternate weekly collections of orange bag recyclables and green waste. Each WCA will, however, develop and evolve the collection methods to suit their own local context. For example, Mid Beds District Council has

**Table 6. Total Waste & Recycling Rates 1994-2003**

| Year | Total waste | Landfilled | Recycled/ composted | % Recycling/ composting rate |
|---|---|---|---|---|
| 94/95 | 170,544 | 161,914 | 8,630 | 5.1 |
| 95/96 | 170,364 | 160,378 | 9,986 | 5.9 |
| 96/97 | 184,052 | 174,200 | 9,852 | 5.4 |
| 97/98 | 194,673 | 183,236 | 11,437 | 5.9 |
| 98/99 | 203,785 | 191,536 | 12,944 | 6.4 |
| 99/00 | 209,159 | 195,397 | 13,762 | 6.6 |
| 00/01 | 217,694 | 201,961 | 15,733 | 7.2 |
| 01/02 | 214,818* | 195,339* | 19,443 | 9.1 |
| 02/03 | 210,366** | 184,318 | 26,048 | 12.4 |
| 03/04 | 205,274** | 170,623 | 34,651 | 16.8 |
| 04/05 | 211,790** | 160,669 | 51,121 | 24.4 |

Notes: * Figures (amended to) exclude commercial waste.
** Figures (amended to) exclude commercial waste and rubble from HWRC sites.

already implemented an alternate fortnightly collection, with recyclables and green waste collected one week and "black bin" refuse the next. This reduces waste quantities collected direct from households and also reduces service cost. In terms of operational efficiency from a Waste Collection Authority this may be considered to be the Best Practical Environmental Option however from national perspectives there are questions as to whether waste is being recycled or displaced to other forms of waste management. Further detail of the Mid Beds scheme and possible options for other WCAs are outlined from paragraph 2.6.30.

***Recorded performance***

2.6.15 The following table and chart detail recycling performance in successive years from 1994 onwards. Figures for waste handled before this period exist but are unreliable and so for the purposes of this document, only verified figures have been used.

2.6.16 The above figures demonstrate the significant improvement in recycling performance since 1994 when precise performance recording commenced. In real terms, the amount of material recycled has nearly trebled between 1995 and 2003. However, increases in total household waste arisings have offset the recycling gains in percentages terms.

***Recycling Performance 1998 – 2004***

2.6.17 1998/99 also saw the introduction of the orange bag recycling scheme and composting at one of the County Household Waste Recycling Centres (Leighton Buzzard being used as a trial). A total of 12,944 tonnes of waste were recycled that year from the four main recovery systems.

2.6.18 The contributions of each recovery system is between 1998/9 and 2003/4 are detailed below.

2.6.19 These figures illustrate performance gains on a number of fronts. The Elstow MRF has climbed strongly, from 1,003 tonnes recovered in its first year of operation to 7,204 tonnes in 2001/2, and shows continuing gains in 2002/3 with the initial roll-out of the revised orange bag system. Further gains have been realised following implementation of the new system throughout the County.

2.6.20 Similarly, the kerbside green waste collection made a promising start in 2002, with 1,326 tonnes captured from a limited number of trial rounds in the first year of implementation (2002/3). The green waste collection is proving popular, and we anticipate strong gains as it is taken forward to full implementation.

2.6.21 HWRC recycling performance has also shown strong growth, rising from 3,147

**Table 7. Tonnage of Recycled/Composted Material 1998 - 2003 (tonnes)**

| Recovery System | 98/99 | 99/00 | 00/01 | 01/02 | 02/03 | 03/04 |
|---|---|---|---|---|---|---|
| Bring Sites | 7,067 | 5,535 | 4,038 | 4,035 | 3,817 | 4,554 |
| HWRC Recycling | 3,147 | 3,959 | 4,599 | 5,221 | 5,946 | 8,799 |
| HWRC Composting | 1,032 | 893 | 1,015 | 2,885 | 5,855 | 6,341 |
| Kerbside Recycling (Elstow MRF) | 1,003 | 3,375 | 5,992 | 7,204 | 8,488 | 10,836 |
| Kerbside Composting | 0 | 0 | 0 | 0 | 1,326 | 3,385 |
| Other | 695 | 0 | 89 | 98 | 616 | 735 |
| Total Recycled | **12,944** | **13,762** | **15,733** | **19,443** | **26,048** | **34,651** |

tonnes in 1998/9 to 8,799 tonnes in 2003/4. Again we anticipate continuing performance gains under the new HWRC contract.

2.6.22 The HWRCs have also been enhanced to accept green waste for composting. This commenced in 1998/9 as a single site trial, and was rolled out to the other four sites from 2000/2001. The HWRCs captured 5,855 tonnes of compostable green waste in 2002/3, a figure which nearly matches the total weight of all other recyclable waste deposited at the sites in that year and so making a considerable impact on overall performance.

2.6.23 Running in parallel to these increased rates, there has been a decline in the yield of WCA bring-sites, both in percentage and absolute tonnage terms. Thus, whist the kerbside and HWRC services have delivered strong performance growth, this has partly been as a result of recyclable waste being diverted from the bring-sites. This appears to indicate that some residents find the enhanced kerbside and HWRC services to be more convenient to use than the bring-sites, and demonstrates the benefit of a range of service provision. Notwithstanding the recorded decline in usage, the BAWP considers that bring-sites will continue to play a vital role in overall recycling provision: it will be essential to develop all services in order to meet future targets. As a result of developing new sites in 2003/2004, bring site tonnage has increased for the first time in five years. Additionally, enhanced staffing levels provided through the County Council Public Service Agreement have allowed officer time to be dedicated to establishing new locations for bring sites and working with local communities and landowners to increase site usage.

***Proposals for future action***

2.6.24 In the short to medium term, the Bedfordshire Authorities will continue to develop recycling services primarily by continuation of projects already underway. The intention is to enhance recycling facilities across the full range of bring sites, HWRCs and kerbside collections, thus affording residents maximum choice in how they choose to recycle their waste.

*Kerbside Services*

2.6.25 The initial trials of the enhanced three-stream kerbside collection have proven to be popular and successful. The BAWP now intends to roll out this service progressively in order to achieve full county-wide coverage. Each WCA will implement the three-stream service as best suits its own particular circumstances. Detailed proposals for each WCA are given in section 3 of this document.

2.6.26 With full implementation of the new scheme, it will be possible to reconfigure the Elstow MRF, such that it handles recyclable materials separately. Eliminating the need for space to handle mixed refuse will enable a significant increase in handling capacity, thus facilitating future development of kerbside recycling services.

2.6.27 In terms of "dry" recyclable materials, the kerbside system will initially collect the following materials:

- Steel and aluminium food and drink containers
- Newspapers and magazines
- Plastic bottles (HDPE/PET)
- Non-corrugated Cardboard (food packaging)
- Telephone directories and catalogues.

2.6.28 It may be desirable to add other recyclables to this list, although this will depend on the ability of the contractor physically accept these additional materials and then to find appropriate stable markets for all captured materials[9]. The BAWP proposes to continuously investigate adding to the list of materials that may be captured by kerbside collection. In particular, we consider that it may be desirable to provide for collection of glass, additional plastics and heavy duty cardboard as new markets for these materials are developed. At present glass can only be delivered to bring sites or HWRCs for recycling. However, South Bedfordshire District Council completed a successful trial of kerbside glass collection in April 2004 and are continuing and expanding the scheme.

[9] Success of recycling depends fundamentally on gaining access to markets for captured materials. The government, through its Waste and Resources Action Programme (WRAP), is taking action to promote the development of such markets in order to facilitate enhanced recycling. The BAWP will monitor the work of WRAP and investigate potential for further recycling as markets develop.

**Policy 4: 3-Stream Kerbside Collections**

**The BAWP will provide 3-stream kerbside collection services for all accessible households in Bedfordshire. In the initial development of the system the following materials will be collected:**

***Stream 1: Dry recyclables***

- **Steel and aluminium food and drink containers**
- **Newspapers and magazines**
- **Plastic bottles (HDPE/PET)**
- **Non-corrugated Cardboard outers (food packaging)**
- **Telephone directories.**

***Stream 2: Green garden waste***

- **Grass cuttings**
- **Plants and weeds**
- **Flowers**
- **Prunings**
- **Hedge clippings**
- **Leaves**
- **Bark**

***Stream 3: Residual waste***

- **All other household wastes**

**The BAWP will explore the potential for the provision of a kerbside collection recycling service for glass and other materials currently not included in the scheme.**

2.6.29 There are currently some limitations regarding accessibility of certain properties for the full three-stream collection. In particular, large blocks of flats tend to be serviced via communal waste deposit points, generally using 1,110 litre wheeled "Eurobins". These communal service points are not suitable for the three-stream collection service in its current form, and the BAWP have conducted trials in communal service properties to establish how they may best be provided with an effective collection service for recyclable and where possible, compostable materials. New housing developments will be obliged to include provisions for accommodating kerbside recycling services under provisions of the building regulations and the County Council's Minerals and Waste Local Plan.

**Policy 5: Increasing accessibility**

**The BAWP will aim to provide an appropriate alternate recycling service to all households that are not accessible under the main 3-stream collection system. This Policy Statement will be used to its fullest extent and recognizes that in addition to types of properties, language barriers can exclude members of Bedforshire's rich ethnic community from participation.**

**Supporting Statement 3. Increasing Accessibility**

**Policies need putting into practice and in 2004, work commenced developing recycling services in multi occupancy dwellings across Bedfordshire. Pilot projects showed that the key to successful recycling in these hard to reach housing types were caretakers and representatives from the many Housing Associations responsible for buildings maintenance. These scheme were undertaken by dedicated staff working for the Bedfordshire Authorities Waste Partnership and have brought recycling facilities within reach of thousands of properties that were excluded from the scheme.**

**Language can be a major barrier particularly in parts of Bedfordshire where the English language is secondary. There are seven identified languages in common everyday use particularly in the north of the County these being Italian, Polish, Gurjarati, Bengali, Urdu, French and Punjabi in varying degrees. In 2004 copies of leaflets in these languages were made available through major community meeting places. While basic**

**translations had been made previously, this represented a major advancement in expanding services to the County's rich and diverse ethnic groups. The leaflets proved to be a major success.**

### *Collection methods*

2.6.30 As mentioned in paragraph 2.6.14 each WCA has a certain degree of flexibility to design collection systems suited to its own particular operational context. The key defining parameter is that collection systems must be compatible with the recovery and disposal systems provided by the WDA, for example by delivering recyclable materials to the MRF in an appropriate manner.

2.6.31 The 3-stream kerbside system will allow for a variety of collection methods. Key variables include the frequency of collection and the receptacles in which the three waste fractions are collected.

2.6.32 The basic choices for receptacles are additional bins (which may be of 240 or 120 litre capacity) or single-use bags (which for compostable green wastes must be biodegradable). Different receptacles are suited for different households: those with large gardens may favour bins, whilst properties with limited outside storage space may favour bags.

2.6.33 Addition of the dry recyclable and compostable waste streams to the normal waste collection will increase total waste disposal capacity at the household unless the frequency of collections or size of residual container is reduced. As waste minimisation is the ultimate goal of sustainable waste management, this increased capacity is not desirable. Furthermore, if the collection frequency/container size is not reduced, the extra waste streams will require additional vehicles and crews, which dramatically increases service costs, with potential increase in council tax charges.

2.6.34 For these reasons, there is a strong incentive for the WCAs to either reduce the frequency of waste collections, reduce the capacity of residual refuse bins, or to move to alternate fortnightly collections (recyclables and green waste one week, residual refuse the next). This avoids the detrimental effects of increased waste capacity and service costs, and also gives an incentive for householders to minimise production of residual refuse, making most use of the recycling system in order to save space.

2.6.35 Fortnightly collection is however, dependant on the understanding and co-operation of residents, who may have reservations regarding the reduction in frequency of residual waste collection. One possible outcome may be abuse of the recycling collection, with householders simply putting normal refuse in the collection, thus undermining viability of the scheme.

2.6.36 It is clear that the detail of collection systems will need to be worked out by each WCA in close consultation with its residents. As previously stated, Mid Beds has already opted for a fortnightly collection system, while South Beds prefer the option of reduced volume residual bins. All WCAs will consult residents before making further changes to their own systems.

**Policy 6: Kerbside Collection Systems**

**In principle, the BAWP considers that it will be desirable to reduce the frequency and/or capacity of residual waste collections. However, it is recognised that such reductions may be problematic. Each WCA will therefore consult residents and conduct other investigations in order to identify the most appropriate collection system for its area.**

**Supporting Statement 4. Kerbside collection systems**

**The introduction of fortnightly collections whether for recyclable compostable or residual waste emerged as possibly the most contentious issue through the consultation exercise with some respondents using the opportunity for no other purpose than to voice concerns over what are accepted as radical changes.**

**Whilst acknowledging these concerns it must be noted that other contributors were in favour of the fortnightly collection of residual waste although there were suggestions that homes with larger families should be able to request a larger bin.**

*Household Waste Recycling Centres (HWRCs)*

2.6.37 In June 2002 a long-term contract was awarded to Wyvern Waste Services by the County Council for the operation and management of these five sites. This contract features minimum recycling targets, which are geared to ensure an on-going improvement in recycling performance. The new contract is already yielding considerable performance improvements, and represents an early success in designing waste management contracts to actively encourage a shift from disposal to recovery.

2.6.38 The County Council aims to make the HWRCs as accessible as possible to residential users wishing to deposit household waste. The current policy is for sites to be open seven days a week including bank holidays, except for Christmas Day, Boxing Day and New Year. Opening hours are 09.00 – 19.00 hrs in summer and 09.00 – 17.00 hrs in winter. We consider that this is an adequate provision, and propose to maintain these operating hours in future.

**Policy 7: HWRC Opening Hours**

**The County Council will operate Household Waste Recycling Centres on the basis of seven day opening, including Bank holidays with the exception of Christmas Day, Boxing Day and New Years Day.**

**Supporting Statement 5. Household Waste Recycling Centres**

**The public consultation exercise produced a number of suggestions for longer opening hours or additional late nights.**

**In opting to maintain its existing schedule for opening, costs for additional availability need to be balanced against the actual need and whether the additional finance required could be better employed in increasing the range of recyclable materials and the layout of the sites.**

**Bedfordshire's opening times were compared to those of other councils, some of whom close sites on Bank Holidays and weekend days and it is deemed that current opening times suit the majority of site users.**

2.6.39 Of the five HWRCs in the County, those at Barker's Lane, Bedford and Frenches Avenue, Dunstable are recognised as being sub-standard in terms of layout and capacity. The current Barkers Lane site dates from 1971, and the subsequent 30 years of urban development have placed considerable pressure on the site. The need to redevelop this site is recognised, and negotiations are at an advanced stage that will allow the existing site to be enlarged and significantly improved.

2.6.40 A similar situation exists in South Bedfordshire at the Frenches Avenue, Dunstable site. Negotiations are likewise in progress to either redevelop this site in its existing location or to move to a new site, with the intention of providing increased accessibility to recycling services for residents of the area.

2.6.41 More generally, household growth is set to be a major factor in coming years, particularly in the north west of the County, under development proposals outlined in the Milton Keynes and South Midlands Sub-Regional Study and associated Bedford growth Area Study[10]. This is likely to lead to a requirement for a second HWRC to serve the Bedford area. The County Council will undertake more detailed investigations to identify the likely scale of such need, and to identify the most appropriate location for a second site.

**Policy 8: HWRC capacity**

**The County Council will undertake necessary development at existing HWRC sites to ensure that they maintain sufficient capacity to satisfy service needs. Detailed studies into need and feasibility will be undertaken with a view to relating HWRC provision to population growth.**

**Supporting Statement 6. Household Waste Recycling Centres**

**Household waste site provision rests with the County Council. While three sites are owned by the County authority, the remaining two, Bedford and Dunstable are on land owned by the Borough Council and South Bedfordshire District Council respectively. With the full support of the Bedfordshire Authorities Waste Partnership these two sites have been highlighted for attention to improve accessibility. With regards the Bedford site, preliminary site based works have commenced (February 2005) and similar preparatory works are in and in South Bedfordshire.**

**Housing growth is a major concern in the County with a further 18,000 properties forecast. This will undoubtedly increase pressure on all recycling services and with specific regards to Policy Statement 8. Additional sites will be required, with immediate attention being the north of the County.**

*Bring sites*

2.6.42 There are currently 182 bring sites in Bedfordshire. These are distributed amongst the three WCAs as shown in Table 7. Each bring site includes deposit banks for one or more materials, which may include glass, paper and textiles.

2.6.43 In 2002/3 these sites together captured 3.817 tonnes of recyclable materials. In 1998/99, 122 sites captured over 7,000 tonnes of recyclable material. This illustrates the relative decline in bring-site use with development of the kerbside systems.

2.6.44 Not withstanding this relative decline, the bring sites still capture a significant tonnage of recyclable material, and contribute around 1.8% to the headline recycling performance in the County (i.e. 14.8% of all materials recycled).

2.6.45 The BAWP thus considers that bring sites continue to play a significant role in recycling, and proposes to maintain and develop the network. Once established, bring sites are a cost-effective means of collecting recyclables, and reductions in intensity of usage may simply be offset by a corresponding reduction in service frequency, thus maintaining overall cost efficiency. Bring sites also provide an essential service for households unable to access the current kerbside scheme, and in any event may be the preferred service choice for some residents. The BAWP also considers that all potential avenues for recycling will need to be developed in order to meet targets and provide residents with maximum convenience.

[10] More details on sub-regional growth proposals may be found at the South East Government Office website: see www.go-em.gov.uk/planning/mksm.php

| Table 7. Bring site distribution in Bedfordshire 2003 | | | |
|---|---|---|---|
| **Waste Collection Authority** | **Number of sites** | **Number of households*** | **Ratio of bring sites to households** |
| Bedford Borough Council | 72 | 59,597 | 1:828 |
| Mid Beds District Council | 62 | 48,600 | 1:784 |
| South Beds District Council | 35 | 45,667 | 1:1305 |
| All Bedfordshire | 169 | 153,864 | 1:910 |

* 2001 census household numbers

2.6.46 The Audit Commission suggests that bring sites ought to be provided at a density of at least 1:1,000 households, and preferably at 1:750 households[11]. The average density in Bedfordshire is currently 1:910, ranging from 1:784 in Mid Beds to 1:1,305 in South Beds. Overall provision is therefore reasonable, although these figures do mask some local variations in bring site density.

2.6.47 The BAWP considers that it will be appropriate to further develop the bring site network to achieve an overall density of 1 site per 750 households, as recommended by the Audit Commission. We also propose to enhance promotion and publicity for the sites, and to increase the range of materials that can be taken at each site. We believe that this should enable us fairly quickly to significantly increase the amount of recyclable material captured through the bring sites. If bring sites are to maintain their current proportional contribution in the context of the overall 2010 recycling target (30%) they will need to capture some 12,000 tonnes of recyclables by this time.

2.6.48 Placement of new bring sites does require careful consideration, not only in terms of desired density, but also as regards local amenity impacts. Glass recycling banks in particular can be noisy, and it can be hard to "retro-fit" them into the existing urban fabric. We therefore propose to develop extra sites throughout the County, but only as local amenity considerations and site availability allow. For new housing developments the County Council's Minerals and Waste Local Plan (2003) already includes a policy which encourages developers to provide bring sites that are "designed in" to the development and can thus have their potential amenity impacts minimised.

**Policy 9: Bring sites**

**The BAWP will enhance and actively promote the network of bring sites. We will aim to increase the number of sites to give an average of 1 site per 750 households. We will also increase the range of materials that may be accepted at each site. Overall, we will aim to increase the total tonnage of recyclables collected at bring sites to 8,000 tonnes per year by 2010.**

**Supporting Statement 7. Bring sites**

**Through the consultation exercise, participants expressed the need for many more bottle banks in both areas of high population and particularly rural areas. Other issues were raised by respondents including requests for more frequent emptying, concerns of tidiness, noise and the need for more publicity to show where the sites were located. These operational issues will be addressed by the relevant authorities.**

**The ability to deposit additional materials were requested by numerous respondents however there were no**

[11] Audit Commission report: *"Waste Matters" – Good practice in Waste Management*, 1997.

**responses that stated which materials should be added to the lists. Heavy duty tri ply or corrugated cardboard is one commodity that is in everyday use at household level and examples have been found in which local authorities provide recycling facilities at suitable bring sites. This will be an area for immediate attention.**

**Of note is the fact that many additional bring sites have been developed through the 2003 PSA agreement providing resources to identify new locations publicizing them when installed.**

*Schools waste*

2.6.49 Waste from schools is included in the statutory definition of household waste, and is therefore covered by the same statutory recycling/composting targets that apply to kerbside collections, HWRC's and bring-sites.

2.6.50 To date, there has been no provision for recycling services at schools. However, under the terms of the Municipal Waste Recycling Act 2003, waste collection authorities have a statutory duty to provide, by 2010, for the inclusion of two segregated recyclable waste streams as part of the "collection of household waste from any premises." Given that schools waste is included in the definition of household waste, this requirement will therefore apply where the WCA is requested to collect schools waste. However, the situation is complicated in that individual schools may also arrange for private sector waste collections, in which case the WCA/WDA would have no direct responsibility.

2.6.51 Notwithstanding the above complications, the provision of a waste recycling service in schools would complement ongoing and planned waste education activities (see section 2.9), and is thus seen as a priority for development. The BAWP therefore proposes work with schools and the education authorities to investigate the most appropriate means to establish a schools recycling service.

**Policy 10: Schools waste recycling**

**As a matter of priority, the BAWP will implement recycling services for schools. Lead authorities will be the Waste Collection Authorities in association with the Local Education authority and the WDA.**

**Supporting Statement 8. Recycling in schools**

**All the Bedfordshire Waste Authorities receive request for recycling services within schools. These enquiries are often motivated by school attendees themselves and this clear recognition of the importance of recycling and public support can in no way be ignored. Logistical problems in waste collection methods from schools have previously hampered measures to increase recycling in schools however following clear advice from the government Department of Environment, Food and Rural Affairs (DEFRA) these have been lessened.**

**It is envisaged that recycling will be made available to all County schools in 2005. This is not to say that this will be a straightforward procedure however the growing demands from those to which is a place of education or employment no longer allows a "do nothing" approach.**

**Supporting Statement 9. Overall provision of recycling services**

**Our approach to recycling is to provide as many avenues as possible for residents and this will include school properties to recycle using the method most convenient for them.**

**There is, and this has been stated, a close relationship between the three major recycling methods of kerbside, HWRC's and Bring Sites. Throughout the consultation, the opportunities to collect glass and cardboard and other plastics was a common feature. Kerbside collection of glass is both practical and, as evidenced by trials in South Bedfordshire, capable of delivering performance. However there comes a point where increased kerbside services will impinge on performance at bring sites. This has been shown with the fall in bring site tonnage as the orange bag scheme has enlarged.**

**In our support for Policy Statement 7, there will need to be clear recognition of the economics of service provision and long term, the effects of advancing one service will be to the potential detriment of another.**

## 2.7 OTHER WASTE RECOVERY

***Context***

2.7.1 In addition to the recycling and composting targets levied on Local Authorities through the Best Value regime, the Government has enacted European legislation, which will require Disposal Authorities (of which Bedfordshire is one) to divert an ever increasing amount away from landfill.

2.7.2 The basic concept behind this legislation is to reduce the ability of waste sent for landfill to generate methane (CH4), one of the main greenhouse gases. The main contributor to the production of methane in landfill is the degradation of biodegradable waste under anaerobic conditions (without the presence of oxygen). As such, the European Landfill Directive requires:

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

2.7.3 In light of this, the UK Government has produced the National Waste Strategy (WS2000), and expects all local authorities to demonstrate how they will achieve the required landfill reductions.

2.7.4 In addition to the policies and targets of the National Waste Strategy, and in order to ensure Councils meet these rigorous targets, the Government has enacted the Landfill Directive through the Waste and Emissions Trading (WET) Act. This has introduced a system of tradable landfill permits – known as the Landfill Allowance Trading Scheme (LATS). These permits are required by any authority wishing to landfill biodegradable municipal waste. They have been issued by Government to Waste Disposal Authorities. The total level of the Government permit issue will be set to ensure that the total biodegradable waste that may be sent for landfill is in line with the overall UK obligations under the Landfill Directive. Once issued, permits may be bought and sold by WDAs, thus enabling an element of local market flexibility in attainment of the overall UK obligations.

2.7.5 The allocation for Bedfordshire Waste Disposal Authority has been published on the Department for Environment, Food and Rural Affairs (DEFRA) website and is given in Appendix A6.

**Policy 11: Tradable Waste Permits**

**The County Council will seek to meet, and where possible exceed, the requirements of the Landfill Allowance Trading Scheme (LATS) by implementing the total waste recovery/treatment strategy as laid out in the Waste Strategy for Bedfordshire and Luton.**

**In addition to recycling efforts directed at household waste, the Bedfordshire Authorities Waste Partnership will commence measures to reduce the levels of commercial municipal waste being collected and consigned to immediate landfill without any form of resource recovery.**

2.7.6 The penalty for each tonne of biodegradable waste sent to landfill above the Authority's allotted limit has been set at £150. The ability to trade allowances with successful authorities may mean this figure could be reduced. However, successful authorities may wish to bank allowances to safeguard future years, or indeed cash in on their windfall leading to inflated prices anywhere up to the full cost of the fine.

For Example:

Where the council misses its target by 10,000 tonnes of BMW (5% of total MSW arisings), the cost of the penalty could be £1,500,000

2.7.7 The LATS penalty is not, however, the only fiscal driver forcing all Councils to divert all waste from landfill. The Government has for some time now put in place the landfill tax escalator. The latest (2004) budget report stated that the tax (currently at £15 per tonne for 2004/05) is set to rise by £3 each year until it reaches the plateau of £35 per tonne of waste sent to landfill. Coupled with inflation of operational costs associated with meeting ever more stringent environmental controls (e.g. Integrated Pollution Prevention and Control Regulations, etc), it is likely the total cost of landfill will rise from around £35 per tonne currently, to £60 per tonne in 2010.

For Example:

The total cost, including the LATS penalties, for sending those 10,000 tonnes to landfill could be in the region of £2,100,000

2.7.8 This problem is exacerbated by the constantly increasing amounts we throw away and the proposed new housing, which may amount to more than 80,000 new dwellings within the timeframe of this strategy. In simple terms, the average household produces 1 tonne of waste a year. A crude calculation would indicate therefore that by 2030 we may have at least another 80,000 municipal tonnes per year to manage in the County. [See section 2.5 for growth predictions and targets for Municipal and Household Wastes]

***Progress to date***

2.7.9 To date there has been very little recovery of energy from Bedfordshire's municipal wastes. Very recently, reject materials from the Elstow MRF have been consigned to a company producing refuse derived fuel (RDF) but this currently amounts to only around 0.5% of the municipal waste stream.

***Bridging the Gap***

2.7.10 Part of the answer will be to improve the ways in which we use the existing recycling and composting infrastructure and most importantly to look at how we as individuals can reduce the amount we produce.

2.7.11 The following sections look at what else the Council might do in the medium and long term to ensure that we achieve success from environmental, financial and performance standpoints.

2.7.12 The process falls into three main phases:

*Phase 1: Option identification*

- Identification of all possible options
- Initial feasibility (techno-economic analysis) assessment and selection of preferred options

*Phase 2: Detailed analysis and development of the Best Practicable Environmental Option (BPEO)*

- Detailed performance, technology and economic modelling of preferred options
- Full BPEO analysis

*Phase 3: Finance and Procurement Strategy*

- Financial modelling
- Development of a procurement strategy

***Options Identification and Selection***

2.7.13 Following Central Government guidance for the development of strategic options, with the purpose of selecting a preferred Best Practicable Environmental Option, the Council sought develop the widest possible range of waste management options, encompassing the full range of known technologies and methods of recycling, composting, diverting, treating and disposing of waste. For the purposes of this study these have been separated into four categories:

2.7.14 Primary: processes for the purpose of treating, processing and separating separately collected recyclable and compostable materials prior to delivery for further reprocessing or direct to market.

2.7.15 Secondary: processes for the treatment of primary process residues, black bin and other residual wastes.

2.7.16 Tertiary: technology for recovering the maximum energy value from black bin, primary and secondary process and other residual wastes.

2.7.17 Disposal: ultimately landfill (with or without landfill gas recovery).

2.7.18 The above approach has revealed 38 possible technical solution. Though this is a high number of options, guidance dictates that before detailed modelling, a feasibility analysis should be undertaken to reduce the number down to a suitable short list. This has been achieved through a matrix analysis and a qualitative study in order to remove those options that will not be implementable or will obviously not meet key environmental, financial and performance objectives.

2.7.19 The evaluation process is based on the Guidelines for sustainable waste management issued by the Office of the Deputy Prime Minister (ODPM). These guidelines are principally aimed at Regional Technical Advisory Boards (RTAB's) to assist in the development of strategic Regional Policies for sustainable waste management. However the elements of the approach may be adopted at the more local level to assist in the identification and elimination of waste management options. This is even more relevant within the Eastern Region, where no overarching regional BPEO has been developed and the Bedfordshire approach should therefore take into account the principals that should have been employed at a regional level as well as locally based criteria.

2.7.20 Of the 21 criteria proposed by the ODPM, some of these were able to be combined where appropriate. Meanwhile, others were deemed inappropriate for a feasibility study and were left for the later, more detailed analysis of the short list. The final list comprised:

- Likely to result in a reduction of waste growth in line with JMWMS per capita
- Likely to meet all statutory and strategy recycling and composting targets
- Likely not to provide barriers to continuous improvement to recycling and composting rates
- Likely to meet LATS targets
- Likely to exceed LATS targets
- Likely to maximise recovery value from residual waste and minimise disposal to landfill
- Adheres to the proximity principle

- Delivers solution in line with waste management hierarchy
- Environmental performance, emission to air, land and water
- Likely to minimise potential planning risk and land take
- Deliverability and proven track record of technology
- Delivery of local socio-economic improvements

2.7.21 A simple weighting procedure was used where the score for each criteria was multiplied by the weighting factor. The weighting factors were:

x 3 Highly important

x 2 Important

x 1 Less important.

2.7.22 The scoring for each criterion was on a scale of 0 to 3, with 3 representing a good performance and 0 representing a poor performance.

2.7.23 Once scored, the options were ranked and the top 5 taken through for more detailed BPEO analysis:

- 5f Maximised Recycling and Composting, MBT with composting, EfW for the RDF
- 5c Maximised Recycling and Composting, MBT with anaerobic digestion, EfW for the RDF
- 9b Maximised Recycling and Composting, MBT with composting, RDF sent to 3rd party industrial process
- 3a Maximised Recycling and Composting, MBT with anaerobic digestion, MBT residuals sent to landfill
- 3b Maximised Recycling and Composting, MBT with Composting, MBT residues sent for to landfill.

2.7.24 A definition of the technologies can be found in both Appendix A4 and the Glossary.

2.7.25 In the case of all 5 of the best performing options, enhanced recycling and composting collections, including the provision of kitchen waste composting and additional MRF capacity were required to meeting short to medium term Landfill Directive based targets prior to the procurement, construction and commissioning of the final treatment and disposal solution.

2.7.26 All five options are consistent with the East of England Regional Waste Management Strategy (2002) in so much that they:

- have the potential to meet strategy recovery targets;
- seek to ensure regional self-sufficiency; and
- ensure that any energy from waste facility includes processes to remove recyclable and compostable materials.

***Developing the BPEO***

> 'A BPEO is the outcome of a systematic and consultative decision making procedure, which emphasises the protection of the environment and the conservation of the environment across land, air and water. The BPEO procedure establishes, for a given set of objectives, the option that provides the most benefits or the least damage to the environment as a whole, at an acceptable cost, in the long term as well as the short term.'

2.7.27 A comparative qualitative and ranking approach has been taken to assessing the 5 options and "Do-Nothing" option.

2.7.28 This is undertaken within a broad matrix envelope developed by Bedfordshire County Council using the following documents as a basis for selecting criteria:

- National Waste Strategy 2000
- ODPM Guidance for developing the BPEO
- The DEFRA's sustainability criteria
- Regional and local sustainability criteria
- The Easter Region Strategy

- The Bedfordshire and Luton Waste Strategy 2001.

2.7.29 In all a set of 15 objectives and 34[?] criteria were selected. 7 of these criteria were included but not ranked on the basis that they were only relevant to site specific situations such as noise, odour and dust. It is assumed these impacts would be managed according to the highest environmental standards and that any proposal would be tested against the planning application process.

2.7.30 The criteria were subsequently given a weighting of either:

- Low
- Medium
- High
- Critical

2.7.31 The former 3 are self explanatory, however a final weighting of critical was set for criteria were a threshold would need to be met otherwise the option would be completely unacceptable to the Council.

2.7.32 In order to understand the performance and economics of the various options, techno-economic modelling was carried out to determine the likely levels of composting, recycling, recovery and landfill diversion that might be achieved. In addition, the modelling generates an oder of magnitude for the likely operation and capital cost associated with building and running the options for a period of 25 years after procurement and construction.

2.7.33 The modelling is based on a series of complex assumptions and should be taken very much as indicative as opposed to an absolute. Where results are within 5% of one another, there would not be the confidence to rank one option above another. The process is one of crystal ball gazing in order to attempt to plan for future need.

2.7.34 Table 9 gives the relative performance of each option 25 years after full roll out and construction.

2.7.35 Table 10 illustrates the likely magnitude of cost associated with each of the options. It is clear from the outset, that "Doing Nothing" is not an options, either from a performance or economic point of view.

**Table 9. Performance of Short-listed Options**

| Option | Total MSW arising (t) | Landfill in 2033 (t) | Landfill of BMW (2033) (t) | BVPI recycling/ composting (%) | BVPI Recovery (%) |
|---|---|---|---|---|---|
| 3a | 358,402 | 102,733 | 16,444 | 54.3 | – |
| 3b | 358,402 | 102,733 | 16,444 | 54.3 | – |
| 5c | 358,402 | 69,052 | 9,457 | 55.1 | 15.47 |
| 5f | 358,402 | 69,052 | 9,457 | 55.1 | 15.47 |
| 9b | 358,402 | 69,052 | 9,457 | 55.1 | 15.47 |
| Do Nothing | 428,073 | 300,367 | 186,355 | 31.5 | – |

Note - growth curve in Do Nothing = 2.3 % per annum, may be underestimated.

| Table 10. Summary of Performance against Targets | | | | | | |
|---|---|---|---|---|---|---|
| **Option** | **3a** | **3b** | **5c** | **5f** | **5f** | **Do Nothing** |
| Recycling Targets | ✔ | ✔ | ✔ | ✔ | ✔ | ✗ |
| LATS | ✔ | ✔ | ✔ | ✔ | ✔ | ✗ |
| Recovery 82c | ✗ | ✗ | ✔ | ✔ | ✔ | ✗ |
| Recovery WS2000 | ✗ | ✗ | ✔ | ✔ | ✔ | ✗ |
| Total Capex (million £) | 60 | 50 | 90 | 80 | 50 | 0.3 |
| Total Opex (million £) | 455 | 450 | 450 | 445 | 465 | 765* |

*includes cost of penalties at £150 per tonne. It does not include the cost of any additional fines

2.7.36 Based on the data generated by the techno-economic modelling, an analysis of the environmental impacts arising from each of the integrated options was carried out using WISARD (Waste Integrated Systems and Assessment for Recovery and Disposal), a life-cycle assessment (LCA) tool developed by the Environment Agency to assist Local Authorities with their assessments. The model evaluates the environmental burdens and impacts of waste management operations.

2.7.37 WISARD utilises the "avoided burden" methodology for calculating environmental burdens. For example, for recycling activities, credits are given by calculating the energy and raw materials associated with the production of that product had the recycling not been performed. Credits are also assigned to those options that generate power, as this energy production is off-set against the requirement for fossil fuels (primarily coal for electricity generation).

2.7.38 The outputs from both these modelling exercises were fed into the ranking matrix and form part of the wider BPEO process and only represent 11 of the 27 criteria assessed.

2.7.39 Each of the ranked options under each weighted criteria was colour coded to highlight where options performed badly. Table 9 gives the final ranked results from this process. The associated comparative assessment under each criteria for each option is also included.

| Objective | Indicator | 3a | 3b | 5c | 5f | 9b | Do Nothing | Importance |
|---|---|---|---|---|---|---|---|---|
| 1. To ensure prudent use of land and other resources | Resource Depletion | 1 | 1 | 1 | 1 | 1 | 6 | M |
| | Landtake | 2 | 2 | 4 | 4 | 1 | 6 | L |
| 2. To reduce gas emmisions | Emissions of greenhouse gases | 5 | 4 | 1 | 1 | 1 | 6 | H |
| 3. To minimise air quality impacts | Emissions injurious to pubic health | 2 | 2 | 4 | 4 | 4 | 1 | C |
| | Air acidification | 4 | 4 | 1 | 1 | 1 | 6 | M |
| | Ozone depletion | 2 | 1 | 5 | 3 | 3 | 6 | M |
| | Extent of odour problems<br>Extent of dust problems | | | | | | | Not ranked<br>Not ranked |
| 4. To conserve landscapes and townscapes | Visual and landscapes impacts | 2 | 2 | 4 | 4 | 1 | 6 | L |
| 5. To protect the local amenity | Extent of noise problems<br>Extent of litter and vermin problems | | | | | | | Not ranked<br>Not ranked |
| 6. To minimise adverse effects on water quality | Eutropication | 5 | 4 | 1 | 1 | 1 | 6 | H |
| | Extent of water pollution | | | | | | | Not ranked |
| 7. To minimise local transport impacts (congestion, fear and intimidation, physical damage) | Total Transport distance | 4 | 4 | 1 | 1 | 3 | 6 | L |
| | Proportion of total transport distance along roads other than "strategic highways network" | | | | | | | Not ranked |
| 8. To provide employment opportunities | Number of jobs created | 3 | 3 | 1 | 1 | 5 | 5 | L |
| 9. To provide opportunities for public involvement and education. | Potential for participation in recycling and composting | | | | | | | Not ranked |
| 10. To minimise cost of waste management | Overall costs | 3 | 1 | 5 | 4 | 2 | 6 | M |
| 11. To ensure reliability of delivery | Ability to raise Project Finance-"bankability" | 3 | 1 | 5 | 3 | 6 | 1 | C |
| | *Availability of technology* (entec recommended) | 3 | 1 | 5 | 3 | 6 | 1 | H |
| | *impact of pollution control systems* | | | | | | | Not ranked |
| 12. To conform with waste policy | Level of Conformance with Waste Hierarchy as set out in waste Strategy 2000 | 4 | 4 | 1 | 1 | 1 | 6 | M |
| | Extent to which option meets the objectives and policies of Regional Sustainable Development framework | 4 | 4 | 1 | 1 | 1 | 6 | M |
| | Extent to which option meets the objectives and policies of Bedfordshire and Luton Waste Strategy 2001 | 4 | 4 | 1 | 1 | 1 | 6 | M |
| | Meet the objectives and goals of the Bedfordshire County Council Corporate Strategy | 4 | 4 | 1 | 1 | 1 | 6 | M |
| | Meets the objectives and policies of the regional Waste Strategy | 4 | 4 | 1 | 1 | 1 | 6 | M |
| 13. To maintain flexibility in approach | Flexibility to changing volume | 2 | 2 | 5 | 5 | 4 | 1 | M |
| | Flexibility to changing composition | 2 | 2 | 5 | 4 | 4 | 1 | M |
| | Flexibility to future changing/new legislation | 3 | 1 | 4 | 4 | 1 | 6 | L |
| 14. To develop a publically acceptable solution that fosters high levels of satisfaction with the disposal service | Public acceptability | 4 | 4 | 2 | 2 | 1 | 6 | H |
| 15. Performance against targets | Meet BV82a and b (recycling and composting) | 4 | 4 | 1 | 1 | 1 | 6 | H |
| | BV82c (energy recovery) - ranked in order of performance | 4 | 4 | 1 | 1 | 1 | 6 | M |
| | Recovery (WS2000 definition) Ranked in order of performance | 4 | 4 | 1 | 1 | 1 | 6 | M |
| | Meets LATS/LFD/WET Act targets | 4 | 4 | 1 | 1 | 1 | 6 | C |

2.7.40 The effect of including the Do-Nothing scenario is to skew the scoring, making comparison between the remaining 5 options difficult. Assuming that, based on the poor performance environmentally, economically and on a performance basis, the Do-Nothing scenario is excluded, the table would look as follows:

| Objective | Indicator | 3a | 3b | 5c | 5f | 9b | Importance |
|---|---|---|---|---|---|---|---|
| 1. To ensure prudent use of land and other resources | Resource Depletion | 1 | 1 | 1 | 1 | 1 | M |
| | Landtake | 2 | 2 | 4 | 4 | 1 | L |
| 2. To reduce gas emmisions | Emissions of greenhouse gases | 5 | 4 | 1 | 1 | 1 | H |
| 3. To minimise air quality impacts | Emissions injurious to pubic health | 2 | 2 | 4 | 4 | 4 | C |
| | Air acidification | 4 | 4 | 1 | 1 | 1 | M |
| | Ozone depletion | 2 | 1 | 5 | 3 | 3 | M |
| | Extent of odour problems<br>Extent of dust problems | | | | | | Not ranked<br>Not ranked |
| 4. To conserve landscapes and townscapes | Visual and landscapes impacts | 2 | 2 | 4 | 4 | 1 | L |
| 5. To protect the local amenity | Extent of noise problems<br>Extent of litter and vermin problems | | | | | | Not ranked<br>Not ranked |
| 6. To minimise adverse effects on water quality | Eutropication | 5 | 4 | 1 | 1 | 1 | H |
| | Extent of water pollution | | | | | | Not ranked |
| 7. To minimise local transport impacts (congestion, fear and intimidation, physical damage) | Total Transport distance | 4 | 4 | 1 | 1 | 3 | L |
| | Proportion of total transport distance along roads other than "strategic highways network" | | | | | | Not ranked |
| 8. To provide employment opportunities | Number of jobs created | 3 | 3 | 1 | 1 | 5 | L |
| 9. To provide opportunities for public involvement and education. | Potential for participation in recycling and composting | | | | | | Not ranked |
| 10. To minimise cost of waste management | Overall costs | 3 | 1 | 5 | 4 | 2 | M |
| 11. To ensure reliability of delivery | Ability to raise Project Finance-"bankability" | 3 | 1 | 5 | 3 | 6 | C |
| | *Availability of technology* (entec recommended) | 3 | 1 | 5 | 3 | 6 | H |
| | *impact of pollution control systems* | | | | | | Not ranked |
| 12. To conform with waste policy | Level of Conformance with Waste Hierarchy as set out in waste Strategy 2000 | 4 | 4 | 1 | 1 | 1 | M |
| | Extent to which option meets the objectives and policies of Regional Sustainable Development framework | 4 | 4 | 1 | 1 | 1 | M |
| | Extent to which option meets the objectives and policies of Bedfordshire and Luton Waste Strategy 2001 | 4 | 4 | 1 | 1 | 1 | M |
| | Meet the objectives and goals of the Bedfordshire County Council Corporate Strategy | 4 | 4 | 1 | 1 | 1 | M |
| | Meets the objectives and policies of the regional Waste Strategy | 4 | 4 | 1 | 1 | 1 | M |
| 13. To maintain flexibility in approach | Flexibility to changing volume | 2 | 2 | 5 | 5 | 4 | M |
| | Flexibility to changing composition | 2 | 2 | 5 | 4 | 4 | M |
| | Flexibility to future changing/new legislation | 3 | 1 | 4 | 4 | 1 | L |
| 14. To develop a publically acceptable solution that fosters high levels of satisfaction with the disposal service | Public acceptability | 4 | 4 | 2 | 2 | 1 | H |
| 15. Performance against targets | Meet BV82a and b (recycling and composting) | 4 | 4 | 1 | 1 | 1 | H |
| | BV82c (energy recovery) - ranked in order of performance | 4 | 4 | 1 | 1 | 1 | M |
| | Recovery (WS2000 definition) Ranked in order of performance | 4 | 4 | 1 | 1 | 1 | M |
| | Meets LATS/LFD/WET Act targets | 4 | 4 | 1 | 1 | 1 | C |

***Proposals for future action***

2.7.41 In recognition of the requirements of the Landfill Directive, the principals highlighted in the BPEO analysis and the Waste Strategy Consultation, the WDA has undertaken preparatory planning for a project to procure Integrated Waste Management Services for Bedfordshire. Having considered the matter in detail, we consider that it will be possible for the Integrated Waste Treatment Project to begin delivering results in early 2009, prior to the 2009/10 financial year. This is also the "break-even" year, in which we estimate the cost of landfill, owing to rising landfill tax charges and allowance penalties, will exceed that of waste treatment.

2.7.42 The analysis lays some basic principals, which any future proposed scheme may be measured:

- The only way to be create a sustainable waste management solution and to avoid the possible environmental impacts associated with the proposed housing expansion is to encourage people to reduce the amount of waste they produce
- To maximise all opportunities for recycling and composting where stable and economically viable markets can be found
- To recover the maximum value in material through additional residual waste treatment post kerbside collection
- The affirmation of the Bedfordshire and Luton 2001 policy to recover energy from the final residual waste in order to minimise reliance on landfill
- That energy from waste through combustion is a viable solution for recovering energy, but only as a final solution prior to landfill and where it does not restrict recycling and composting within the County. And that mass burn incineration is not an option.

2.7.43 This BPEO supports the policy objectives of the Luton and Bedfordshire Waste Strategy (2001), in that

- Minimise the production of waste as a core value to future actions
- Recycling and composting should be maximised
- Residual waste should be treated to further remove recyclables and to reduce the biodegradability of the waste stream
- Treated materials should be sent for energy recovery in preference to landfill
- Landfill will remain a disposal route for residues arising from the overall waste service.

2.7.8 Processing and recovery of local industrial and commercial waste is a significant element of the Waste Strategy for Bedfordshire and Luton. It will therefore be desirable to use the municipal Integrated Waste Management Service as a lever to facilitate additional commercial/industrial processing capacity, and this will be considered in design of any future contracts.

**Policy 12: Integrated Waste Treatment**

**The WDA will procure an integrated waste treatment service for the processing of municipal wastes that are not recovered through recycling and composting systems. This will reduce reliance on landfill and will allow the WDA to meet its obligations under the Landfill Directive and subsequent Waste and Emissions Trading (WET) Act.**

**Supporting Statement 10. Integrated waste treatment**

**A majority of consultation participants were positive about Integrated Waste Treatment and Energy from Waste (EfW) as an option to be considered. Many recognized that technological advances have resulted in significant improvements to such facilities making them more acceptable options.**

**Although many were positive about alternatives to landfill, it is important to note that almost all participants felt that this should be a "final treatment" option following maximum recycling and post collection treatment to remove as much value from waste as possible. There was little support for mass burn incineration and comments from representatives of environmental groups that this can hamper recycling efforts.**

**This support of alternatives to landfill is remarkable and possibly reflects Bedfordshire's past history of and clear association with landfill.**

## 2.8 DISPOSAL

***Context***

2.8.1 Disposal of waste to landfill is the least desirable management option under the waste hierarchy. In Bedfordshire landfill is an issue of particular significance, owing to the historic impacts of large scale landfilling of imported wastes.

2.8.2 Local wastes would be subject to 100% treatment via recycling systems and residual waste treatment systems. Waste imports would be progressively reduced such that by 2010 only residues of waste treatment processes undertaken in source areas would be accepted.

2.8.3 Many of the actions required to achieve this shift relate to land use planning and the provision of appropriate facilities. These matters are addressed in the Bedfordshire and Luton Minerals and Waste Local Plan (MWLP).[12]

2.8.4 In terms of local municipal wastes, our aim is to achieve systems for recycling or recovery of all municipal waste by 2010. This will be achieved via the integrated recycling and recovery processes as detailed in this document.

2.8.5 Capacity projections for a reference project based on the outcome of the BPEO assessment are detailed below in Table [11].

**Table 11. Quantities of MW treated by landfill and alternative means (Bedfordshire)**

| Year | Total MSW arising (t) | annual landfill (t) | Recycling/ composting) (t) | Treatment Plant (t) | Energy Recovery |
|---|---|---|---|---|---|
| 2005 | **223,700** | | | | |
| 2010 | 258,000 | 79,250 | 144,350 | 133,100 | 42,850 |
| 2015 | 282,000 | 82,650 | 163,450 | 138,300 | 44,400 |
| 2020 | 302,900 | 85,500 | 179,400 | 143,500 | 46,250 |
| 2025 | 323,750 | 89,100 | 194,850 | 149,600 | 48,100 |
| 2030 | 344,500 | 93,400 | 209,100 | 157,050 | 50,600 |

[12] For information regarding the MWLP, contact Bedfordshire County Council or see www.bedfordshire.gov.uk/bedfordshire/staticpages.nsf/web\staticpages/environ

***Progress to date***

2.8.6 As described above, progress to date has centred on development of enhanced recycling performance. However, whilst this has produced significant results, as of March 2005, we still send approximately 77% of our municipal wastes to landfill. The major step change will occur with commissioning of the Integrated Waste Management Facility, as outlined in the preceding section of this document. Together with continuing development of recycling systems, this will enable us to meet our target of ending landfill of municipal wastes by 2010.

***Proposals for future action***

2.8.7 The actions to end untreated waste landfill are outlined in the preceding sections of this document. Together they should enable us to meet our objectives for the municipal waste stream in accordance with provisions of the Waste Strategy for Bedfordshire and Luton.

## 2.9 AWARENESS AND EDUCATIONAL CAMPAIGNS

***Context***

2.9.1 Awareness raising and educational campaigns are crucial to all elements of our waste strategy. Waste minimisation and recycling/composting activities are fundamentally dependent on the co-operation and participation of residents; we can only succeed if the people of Bedfordshire share our desire to achieve meaningful change. Similarly, the public must understand the need for new facilities, such as the IWMF, if these developments are to be accepted and supported.

2.9.2 Awareness campaigns can provide the means to achieve public support and active engagement. They provide information and guidance for schemes currently in operation and create interest in the planning of future activities. Successful campaigns will also raise public awareness of underlying sustainability issues, and hence persuade people of the need to take responsibility for management of their own wastes (as well as other impacts of their daily lives).

2.9.3 In general, the partner authorities undertake two forms of awareness campaign:

- Generic educational activities: Raising awareness of waste and sustainability issues, including the need to minimise waste production and to recycle or compost as much as possible;
- Specific campaigns: Promotion of specific initiatives or recycling systems and guidance as to their use. For example, publicity relating to the kerbside collection scheme or the availability of HWRC and bring-site facilities.

In practice, we endeavour to use these messages in a mutually reinforcing manner. Thus, for example, promotion of the orange bag scheme can also raise awareness of the need to recycle per se.

***Progress to date***

2.9.4 Until fairly recently, each of the partner authorities has undertaken promotional activities largely on an individual basis. However, with commencement of the county-wide Orange Bag recycling scheme a common approach was taken towards promotion. This was supported by the contractor, Shanks, and its own "Murphy/Murfy" recycling branding was incorporated into orange bag publicity, including pictorial information printed on the bags themselves.

2.9.5 Since then, and in particular since creation of the BAWP, the partner authorities have adopted an increasingly unified approach to publicity across the range of waste management issues with exception of South Beds. Recently, for example, the BAWP has developed the "Recycle Now!" branding in order to give a consolidated approach to publicity for recycling services.

***Specific campaigns***

2.9.6 Since 2001, the Bedfordshire Authorities have jointly undertaken the following promotional activities:

- Consolidation of recycling promotion under the "Recycle Now!" branding (see 2.9.23);

- Slim Your Bin! - Bedfordshire has signed up to the Anglia Regional Waste Awareness and associated Slim Your Bin! Campaigns. This has included Slim Your Bin! roadshows across Bedfordshire and the 'Slim Your Bin – Getting it Sorted!' schools competition;
- Direct resource support for schools at the Elstow Education Centre (see 2.9.7, below);
- Activities and other support for waste education in schools (see 2.9.12);
- Open Days at the Elstow MRF – generally two per year (see 2.9.10);
- Regular public displays and appearances in town centres, libraries and other large public events
- Purchase of a dedicated mobile exhibition trailer (see 2.9.15);
- Talks available to all town and parish councils within the County, as well as other charitable and community groups;
- Provision of information on all partner authorities' websites relating to sustainable waste management and local waste services;
- Production of the 'Householders Guide to Recycling in Bedfordshire.
- Promotional material, including bookmarks, pens, pencils, rulers, mouse mats;
- Articles and adverts in local publications including the partner authorities' own newsletters;
- Interviews on BBC Look East ('Day in the Life of the Orange Bag') and Three Counties Radio ('MRF Open Days');
- Bus advertising;
- Christmas advertising, including the 'Christmas Tree and Christmas Card Recycling Campaign' in addition to enhanced HWRC and Orange Bag promotion;
- Easter press releases on Easter Card Recycling;
- Promotion of 3-stream kerbside trials, including information leaflets, press releases and advertisements;
- Promotion of enhanced HWRC recycling service under new contract, including; press releases and advertisements informing residents of extended Summer opening times, and enhanced site signage.

***Elstow MRF Education Facilities***

2.9.7 The Materials Recycling Facility at Elstow includes an education suite, which is supported by a dedicated Education Advisor employed by Shanks. This facility was in the original design specification for the plant, and can cater for a wide range of user groups, from schools and youth clubs to adult groups.

2.9.8 Visits to the facility involve tours around the MRF followed by use of the education room for various activities and practical work. The education room is kept up to date with regard to changes in the national curriculum to ensure that the experience is relevant and informative as well as fun. The room has recently been refurbished and equipped with a range of different media so as to meet the requirements of schools and groups of all ages. A lot of the activities that are run in the Education Room may also be taken out to schools via the Recycling Exhibition Trailer.

2.9.9 With the provision of the Education Advisor there has been a marked increase in the numbers of groups visiting, and increased publicity through schools' publications has also helped. Over 1,000 people visited the Education Room in 2003, a clear indication of its value as an educational resource in Bedfordshire.

***Elstow MRF open Days***

2.9.10 Working in partnership with Shanks, a series of successful Open Days at the Materials Recycling Facility at Elstow have taken place. These have enabled people to see first hand how the orange bag recycling scheme is managed. These events continue to attract some 300 people, and have enabled residents to appreciate the scale of recycling as an ongoing operation. The open

days have also afforded the opportunity to discuss specific issues with residents. Feedback through public comments and concerns has made valuable contributions to improving Bedfordshire's recycling services.

2.9.11 It is important however not to rely on the same formula, and the most recent event moved away from previous formats by providing a combined tour of the MRF and a nearby landfill site. It is planned to continue holding open days, with different themes being introduced in order to maintain interest, public support and to raise awareness of various waste management practices in the County. We will also investigate the possibility of holding more open days per year, so long as this would not act to dilute public interest.

***Schools support***

2.9.12 In addition to the Elstow MRF education facilities, the Partner Authorities also give direct support to schools that wish to undertake waste-related educational activities.

2.9.13 This includes making waste management officers available to give presentations to schools, particularly those that may not be able to visit the MRF or may not be able to accommodate the Exhibition Trailer (see below).

2.9.14 The BAWP has also sponsored a number of waste-related competitions for schools, including the 'Talking Rot' (composting) and 'Recycled Christmas Decorations' competitions, in which pupils are encouraged to develop and present their own ideas on a particular aspect of waste.

***Recycling Exhibition Trailer***

2.9.15 The County Council, on behalf of the Waste Partnership, took delivery of a dedicated campaign exhibition trailer in June 2003. This was supported with funding from the Shanks First Fund with additional funding from the two District and Borough authorities, and will be an integral piece of equipment in the "Recycle Now!" campaign.

2.9.16 The exhibition trailer is adaptable for different venues and campaigns. Interchangeable display boards can be designed to suit the target groups and themed to suit particular awareness initiatives. Information on local recycling facilities is available for residents, including copies of the Household Recycling in Bedfordshire Guide, as well as material-specific fact sheets and information on home composting and reusable nappies. Games, promotional materials, books and video may be incorporated on the trailer. Interactive activities can be designed to suit target age-groups, although adults often find many of these games just as much fun as the children!

2.9.17 The trailer has an emphasis on face-to-face-contact with the public, thus allowing for questions and queries to be answered. It is intended to increase public understanding and appreciation of waste issues, and to provide an outlet to disseminate information.

2.9.18 The trailer will be used as a resource at county-wide events and shows (e.g. Bedford River Festival and Bedfordshire Steam and Country Fair) and for visiting supermarket car parks, town centres and schools, linking in with educational visits to the MRF.

2.9.19 The trailer is be staffed by representatives from the four partner authorities and the Shanks Education Advisor. The intention is for the trailer to be manned by a relevant officer from each district that the trailer is visiting. This ensures there is a person available to answer specific local queries. The trailer will be attending weekend events throughout Bedfordshire. The timetable for visits is continually updated, and an up to date copy can be made available upon request[13].

***Proposed future actions***

2.9.20 In general, the future strategy for awareness campaigns will be to build upon work to date. In particular, we will seek to build upon the consolidation of publicity under the Recycle Now! Campaign and other initiatives at the national and regional levels. We will also build the level of support given to waste education in schools.

[13] Contact Bedfordshire County Council, Waste Services Team, County Hall, Cauldwell Street, Bedford, MK42 9AP: Tel: 01234 228583.

2.9.21 The following are some of the key objectives that, as detailed in this strategy, the Partner Authorities will need to achieve in order to improve the delivery of waste services and enhance the overall recycling performance. Each of these elements will be supported by either a specific and targeted promotional campaign, or will be covered by general waste promotion activities:

- To increase the number of households participating in the kerbside recycling and composting scheme;
- To increase the range of recyclable material able to be collected in the orange bag, to include packaging board and complex plastics not currently accepted via the scheme (e.g. LDPE – low density polyethylene plastics such as carrier bags);
- To promote increased recycling at the Household Waste Recycling Centres;
- To increase the number, quality and extent of Bring Site facilities in the county, particularly for glass;
- To co-ordinate, promote and advertise home composting schemes, and offer long term support for those composting their garden waste at home;
- To develop better methods for dealing with batteries, tyres, hazardous materials and gas bottles;
- To develop better methods for dealing with fly-tipping and abandoned cars;
- To co-ordinate publicity/education across WDA and WCA activities;
- To dovetail with regional and national campaigns;
- To maximise the use of all available media, including a waste information website;
- To produce educational resources aimed at schools and community groups;
- To publicise the Municipal Waste Management Strategy;
- To establish procedures to monitor public satisfaction of all recycling services.

2.9.22 Particular priorities for development are detailed below.

***Consolidating the message: Recycle Now!***

2.9.23 We recognise that we will only achieve maximum awareness of waste issues by taking advantage of all opportunities to reinforce a common message. The world in which we operate plays host to businesses and other organisations competing for the public's attention. It is often detrimental for each authority to dilute the common message by using different style of promotion. It is also essential that we make maximum use of strong visual communication in order to effectively compete for the public's attention.

2.9.24 In response to this need, the BAWP has adopted a common brand image, centred on the "Recycle Now!" logo. This now features on promotional material of all BAWP Authorities for recycling schemes as well as on signage and on the livery of refuse collection vehicles. The design of the logo is flexible and allows incorporation of partner authorities own logos where appropriate; for example the County Council logo for HWRC sites and individual District Council logos for their own collection rounds. The BAWP intends to extend this branding to ensure an integrated approach to promotion covering all recycling facilities and associated communications.

**Policy Proposal 13: Branding of recycling schemes**

**The BAWP will utilise a common brand identity, based on the "Recycle Now!" logo, in order to enhance consistent promotion and public identification for all recycling services. The style and design of this branding may be reviewed and updated periodically, but will maintain the identifiable link to the brand identity. Where appropriate and necessary, national logos will likewise be incorporated.**

### *National and Regional Campaigns*

2.9.25 In addition to the Recycle Now! Campaign, the BAWP propose to support appropriate initiatives taken at the national and regional levels. Again, this will enable the Partnership to gain the benefits of a consolidated approach, as well as enabling us to capitalise on the resources committed to such initiatives by other parties.

**Policy Proposal 14: Integrated publicity campaigns**

**Where appropriate, the BAWP will tie in with national and regional waste awareness campaigns. Officers of the Partnership will work to attract national and regional promotional events to Bedfordshire. Funding opportunities for coordinated publicity campaigns will be targeted.**

### *Internet-based publicity*

2.9.26 Each partner authority currently provides waste and recycling information on its website. In furtherance of the consolidation of publicity, the BAWP intends to develop a dedicated "Recycle Now!" website. This site could be used to promote all recycling and waste services of the BAWP. It could also be used to advertise events such as open days, to detail the whereabouts of the exhibition trailer, and to give updates on the roll out of three stream collection. The site could also give contact details for dealing with queries which may not be fully addressed by the website. It may also incorporate an area for children that they can access for school projects and curriculum work as well as for fun and games.

**Policy Proposal 15: Website publicity**

**The BAWP will develop a dedicated website under the "Recycle Now!" branding in order to make information regarding waste issues and services available in an accessible and consistent manner with links to all Partner and related websites.**

### *Waste Education in Schools*

2.9.27 Raising awareness of waste issues in schools is regarded by the BAWP as a valuable activity. In addition to educating the pupils themselves, it can also provide a direct means to influence the behaviour of the rest of their families, as issues and projects are discussed in the home. The BAWP therefore intends to build on current schools work to provide increasing levels of support. A number of initiatives are proposed or underway with respect to schools support.

2.9.28 A **"Recycle Now!" video** jointly produced by Bedfordshire County Council and Shanks was launched on the 29th January 2004, and has proved to be a useful tool to raising awareness of the need to reduce, reuse and recycle as much of our waste as possible. The video continues to be used in the exhibition trailer, in the Recycling Facility Classroom at Elstow, on the "Recycle Now!" website and as part of the Waste Recycling Resource Pack for Bedfordshire Schools. Library copies of the video have been made available for use by local groups and interested individuals who may wish to borrow it. It is hoped that this video will help children and adults to understand the process of recycling and in turn maximise participation in recycling facilities and services provided.

2.9.29 The BAWP and Shanks have also jointly produced a **Waste Recycling Resource Pack** for Bedfordshire schools. Every school in Bedfordshire will receive a copy. The Pack includes a copy of the "Recycle Now!" video (in CD rom format), a set of twelve fact sheets (laminated), teachers notes, reading list and activity sheets (Key Stage 1, 2 and 3).

2.9.30 The BAWP will also continue publicity via **schools competitions,** which have proved successful and popular. For example, as part of the Bedfordshire Recycling Education Programme, middle and upper schools have been invited to take part in a competition to design a mascot character, which can be used to promote and support recycling within Bedfordshire. The winning school will receive a prize of £500 and all participating

schools will receive a certificate.

2.9.31 Similarly, for International Compost Awareness Week 2004, lower schools were invited to take part in a competition to design a poster which to be used to promote home composting and/or green waste recycling within Bedfordshire. Prizes for schools included a wormery kit, whilst the winning individuals saw their design professionally made up into posters which were displayed at the Household Waste Recycling Centres.

**Policy Proposal 16: Waste Education in Schools**

**The BAWP will develop and enhance the support given to schools by providing waste-related education materials and activities as well as the direct assistance of its waste management staff. This support will be crucial if we are to compliment WCA led measures to introduce recycling in schools throughout Bedfordshire.**

**Supporting Statement 11. Awareness campaigns**

**Compost Awareness Week takes place in May each year and is just one of an increasing number of national themed campaigns that give local authorities the opportunity to link in with their own local events.**

**In addition to weekly or seasonal campaigns, WRAP (the Waste Resources Action Programme) have developed and are producing national recycling and composting advertisements through various media including prime time television. These have the affect of enforcing the Bedfordshire authorities "Recycle Now" campaign at zero cost to the partnership.**

## 2.10 NON-HOUSEHOLD MUNICIPAL WASTE (WCA COLLECTED COMMERCIAL WASTE)

2.10.1 The statutory recycling and composting targets apply only to household wastes. However the headline targets of the national waste strategy, EU Landfill Directive, The Waste and Emissions Trading Act 2003 and the subsequent Landfill Allowance Trading Scheme apply to all municipal wastes, and this includes commercial collections undertaken by the WCAs.

2.10.2 Commercial wastes need only be collected by the WCA as and when requested, this being enshrined in S45 of the Environmental Protection Act (1990) and businesses are entitled to make their own arrangements for waste services on the open market. The choice of who collects commercial waste affects the legal status of that material. If a company opts to have its waste collected by its local authority, the waste is deemed to be "municipal" and is therefore covered by this strategy. If the waste is collected by a private operator the waste becomes totally commercial in nature and falls outside the remit of the local authority. Commercial waste collected by local authorities in Bedfordshire currently amounts to only circa 9,000 tonnes/year of some 580,000 tonnes/year total commercial industrial waste production.[14]

2.10.3 To date, there has been no direct incentive for local authorities to provide recycling services as part of the commercial waste collection, as to do so would increase service cost whilst being unable to contribute to any statutory performance standard. The requirements of the WET Act and its regulatory tool, the Landfill Allowance Trading Scheme, will alter this approach significantly.

2.10.4 As recycling has been increasing its profile nationwide, there has also been increasing demand from Bedfordshire's business community seeking access to recycling services. This growing awareness of the need to reduce waste comes with recognition that genuine cost savings can be made through effective waste management and that company profiles can be boosted by having environmental credentials.

2.10.5 Commercial waste services run by the local authorities operate on a self-financing basis.

[14] Environment Agency Strategic Waste Management Assessment 2000 (East England): NB: Commercial/industrial waste production figures are derived from Environment Agency sample-based survey and are approximate only. Total figure includes waste produced in Luton.

They must therefore be cost effective, and for many commercial wastes, landfill remains the cheapest option. With ongoing increases in landfill tax it is now becoming more feasible to operate a recycling service on a commercial basis however, the WET Act (2003) places an inbuilt incentive to limit the total amounts of all Municipal Waste collected (including commercial waste) in order not to exceed the limits of what an authority may be allowed to landfill under the Landfill Allowance Trading Scheme.

The BAWP considers that it will be necessary to ensure that all commercial waste collections carried out by WCA;s throughout the County recognise the requirements of the WET Act and LATS and will need to demonstrate that an effective service can be provided without incurring costs to any other partner member and that costs will need to reflect the overall cost of untreated landfill.

**Policy Proposal 17: Commercial Waste Recycling**

**The BAWP will ensure that statutory responsibilities under S45 of the Environmental Protection Act (EPA) are maintained and that all companies and business requesting waste collection via BAWP Waste Collection Authorities will be offered waste collection facilities. This will be in accordance with amendments to the EPA laid down in 2004, measures to reduce the landfilling of biodegradable wastes.**

2.10.6 The Partner Authorities can also provide a valuable advisory service to the local business community. With their knowledge of recycling services, the BAWP officers are often the first port of call for companies seeking advice and information about various waste issues, and in this respect, are ideally placed to act as a link between companies that offer recycling services and waste producers.

2.10.7 The BAWP officers can also provide links to local business advisory groups, such as the Bedfordshire Green Business Network and the Bedfordshire and Luton Sustainable Business Partnership and Bedfordshire Waste Exchange. Such groups are active in developing advice and mutual support for a range of sustainability interests, including waste management.

**Policy Proposal 18: Commercial waste advisory service**

**The BAWP will make its officers available to provide impartial advice on sustainable waste management to local businesses.**

**Supporting Statement 12. Commercial waste recycling**

**There were few references to commercial waste recycling in the responses to the consultation. There is little public recognition that local authorities have a role to play in commercial waste and there is likewise little or no reason why members of the public should be aware of the national status of commercial waste recycling when compared to household waste recycling.**

**Whilst an increasing number of companies are obliged to act on materials deemed to be packaging wastes, many other commercial operators and small business's have no obligations at all to recycle waste produced through their activities. This isn't to say that small and medium sized commercial enterprises are not predisposed to recycling and socially aware waste management practices. The dynamics of operating a small business however does however result in many companies seeking the cheapest easiest available means of waste disposal, this usually equates to collection and immediate landfill with no diversion.**

**Under the WET Act, commercial waste poses an immediate problem, in the first instance for the Waste Disposal Authority who will have to meet the full cost of its disposal through LATS, and secondly to the Waste Collection Authority who will be required to meet the costs passed on from the WDA.**

**This system automatically works against local authorities offering commercial waste collections and has the potential to force local councils off the playing field, therefore losing an important source of revenue.**

## 2.11 OTHER SIGNIFICANT WASTES

2.11.1 This section gives details of current management arrangements and future plans for a selection of waste streams which are subject to special handling or legislative considerations, and thus merit particular attention.

### *Clinical Waste*

2.11.2 Clinical Wastes can originate from household and commercial sources. Owing to presence of sharp items (e.g. syringe needles, scalpel blades) and potential biohazard contamination, clinical wastes require special handling arrangements.

2.11.3 A Waste Collection Authority operating a commercial waste collection service as outlined in the Environmental Protection Act will receive requests from commercial sources i.e. Dental Surgeries and Veterinary Practices for clinical waste collection services. Other requests may come direct from householders, who may have a regular need to dispose of clinical wastes from home-based healthcare programmes.

2.11.4 Commercial collections may be arranged with the local WCA. For commercial collections, charges are applied to cover the cost of the collection service. Household clinical waste collections will be provided free of charge for individuals undergoing ongoing treatment for diabetes. Other household clinical collections may be subject to commercial charge rates, and it is generally recommended that people wishing to arrange for disposal of non-diabetic clinical wastes should contact their health visitor, GP, district nurse or home care assistant, who can arrange for free collections to take place.

2.11.5 Given the particular hazards associated with clinical wastes the only practical means of treatment is by high temperature incineration. This is the means of disposal for all clinical wastes collected by the partner authorities, and there are no future plans to change this.

### *Household Hazardous Wastes*

2.11.6 Hazardous waste is not necessarily restricted to commercial and industrial sources; it can also originate at household and municipal sources, and is often in a form that may not appear to be of a hazardous nature (e.g. household fluorescent tubes). Recent legislation has added many everyday redundant household appliances to the list of hazardous waste items.

2.11.7 The Bedfordshire Waste Authorities are required by statute to make arrangements for the safe disposal of what are termed "hazardous waste" that can originate at household level. Such wastes include:

- Household and garden chemicals including corrosive materials, pesticides and wood preservatives;
- Paints;
- Oil, solvents, grease and redundant fuels;
- Lead acid batteries;
- Refrigeration units;
- Asbestos;
- Clinical Waste (see 2.11.2).

Under revised legislation, the following items will be added to this list in the lifetime of this strategy:

- Electrical appliances and electronic equipment through the WEEE Directive (see 2.11.11);
- Fluorescent tubes and other domestic strip and high output light fittings;
- Dry cell batteries;
- Abandoned vehicles.

2.11.8 In general, households only infrequently generate wastes on the above list. It is therefore not practical to undertake separate collection of these items at the kerbside, and the onus is placed instead on the householder to deliver them to the HWRCs, where arrangements are in place for their safe disposal.

2.11.9 Two exceptions are clinical waste (see above) and asbestos, both of which present particular hazards and require special handling. The WCAs will provide special collection services for these materials,

although a charge is generally applied. Alternatively, WCAs may give advice regarding commercial firms which offer specialist waste disposal services.

2.11.10 The Bedfordshire Authorities consider that kerbside collection of household hazardous wastes will continue to be economically unviable, and therefore do not intend to provide such a service (except for asbestos and clinical wastes). Facilities will continue to be provided at HWRCs, and these will be developed as additional waste items are classified as hazardous under emerging legislation. Responsibility will be placed on the householder to deliver household hazardous wastes to the HWRCs.

2.11.11 **Waste Electrical and Electronic Equipment (WEEE)** is now subject to particular recovery requirements under the EU WEEE Directive. This Directive aims to reduce the quantity of waste from electrical and electronic equipment and increase re-use, recovery and recycling. This is partly in furtherance of the general aim to increase waste recovery, but also because WEEE contains a number of potentially polluting chemicals[15], many of which are highly toxic and may persist in the environment for considerable periods of time. They also have potential to accumulate through food chains.

2.11.12 The Directive does not place obligations on local authorities, but on manufacturers, producers and distributors (i.e. retailers). However, the BAWP recognises that it can play a useful role in WEEE recovery, and we are looking into the role that HWRCs might play in providing central collection points for WEEE. As with other household hazardous wastes, we do not think that kerbside collection of WEEE would be viable.

2.11.13 The BAWP therefore proposes to include WEEE in the list of items that may be delivered to HWRCs, where it would be kept separate and sent for appropriate treatment. Given that the Directive obligations fall on producers and retailers of electronic equipment, the BAWP will seek ways to work in partnership with these parties to mutual advantage.

**Policy Proposal 19: Household Hazardous Wastes**

**The BAWP will provide services for disposal of household hazardous waste items, including Waste Electrical and Electronic Equipment (WEEE), at Household Waste Recycling Centres. Materials so delivered will be recycled or otherwise recovered wherever practical.**

***Packaging Waste***

2.11.14 Packaging forms a major component of household waste, this is particularly evident in December and January when it reaches a seasonal high. Of the various packaging materials, cardboard is particularly suitable for recovery. As a biodegradable material, it falls under the remit of the EU landfill directive, whilst it also has an enhanced market value through the Producer Responsibility Obligations (Packaging Waste) Regulations 1997. There is therefore a clear incentive to offer recycling facilities for post-consumer cardboard packaging if this can be achieved at a cost equivalent to or lower than the rate of disposal to landfill.

2.11.15 Light cardboard may be recycled via the kerbside collection system. Heavy duty (corrugated) cardboard recycling facilities were introduced into the five County Council operated Household Waste Recycling Centres as part of an eight year recycling contract in 2002. Investigations are underway regarding the feasibility of adding corrugated cardboard to the kerbside scheme.

2.11.16 The Landfill Directive targets for biodegradable municipal waste reduction will also have a direct effect on the levels of cardboard that can be collected and disposed via WCA commercial collections. Markets do exist for heavy duty cardboard and further increases in the amount of material that producers are obliged to recover will have the effect of enhancing this value to operators able to guarantee supplies of recovered material. The makes local authority commercial recycling collections increasingly viable and necessary (see 2.10, p49).

[15] WEEE contaminants may include lead, mercury, cadmium, hexavalent chromium, polychlorinated biphenyls (PCBs), polybrominated biphenyls – (PBBs) and polybrominated diphenyl ethers (PBDEs).

2.11.17 Other packaging wastes, such as plastic film are less accessible to recycling systems. Such wastes are diverse in nature and are hard to segregate effectively without incurring unacceptable levels of complexity in collection and recovery systems. There is therefore no proposal to attempt dedicated recycling of these materials, although they will be subject to recovery via the proposed integrated waste management facility (IWMF) in due course (see 2.7, p34).

**Policy Proposal 20: Packaging waste**

**The BAWP will include all cardboard packaging waste (including corrugated cardboard) in the kerbside recycling service providing it is sectioned and placed into the orange sacks.**

**In addition to facilities provided at Household Waste Recycling Centres for large items of cardboard packaging, certain larger bring site locations offer opportunities to place containers for cardboard.**

**Opportunities exist amongst the commercial customers requesting local authority waste collections for the recycling of cardboard and other packaging materials. These will be investigated by the Partnership as it seeks to diver higher levels of waste from landfill under the LATS requirements.**

**Supporting Statement 13. Packaging waste**

**Heavy duty cardboard and other plastics not catered for in the kerbside collection scheme featured heavily in the consultation exercise. A statement relating to the complexities of plastic waste recycling is included in this document as an appendix (A5).**

**The reduction of cardboard waste and indeed packaging waste in general remains one of the holy grails of local authority waste management. We receive it daily, often in large quantities. We receive demands that we do something about it and introduce recycling facilities although few commercially viable opportunities exist at present. We have no control over its presence in household and indeed municipal commercial waste and with continuing changes in consumerism its presence is increasing. The packaging of a new state of the art television is given to us within a week or two of delivery. Two or three years later, we receive the television at a Household Waste site, residents purchase a replacement and the pattern continues.**

### *Flytipping and Abandoned Vehicles*

2.11.18 Fly-tipping, the illegal dumping of waste on open land, is an anti-social activity that has increased in recent years. Fly-tipped waste can often originate from building, construction and DIY work, and highlights efforts to avoid waste disposal regulations and costs. Depending on the nature of the material, fly-tipped waste may not only be a visible intrusion but also a serious health hazard.

2.11.19 The Waste Collection Authorities of Bedfordshire monitor areas associated with fly-tipping and provide a direct removal service. Where necessary we will use specialists for removal hazardous wastes (such as asbestos). Removing the waste is, however, only a short term remediation measure, and the BAWP will be implementing procedures which aim to prevent the problem occurring in the first instance. In all incidences where the fly-tipped waste can be traced back to a particular source legal action will be taken against the perpetrators. The Police and the Environment Agency also have responsibilities in this respect and the Bedfordshire Authorities Waste Partnership will be working closely to introduce effective control measures.

2.11.20 Waste Collection Authorities have a duty under the Refuse Disposal (Amenity) Act 1978 to identify and remove **abandoned vehicles.** Under the Act, the County Council has a duty to arrange and provide disposal facilities although in practice, due to abandoned vehicles having had resale value for either spare parts or scrap metal, the County authority has had little direct

involvement. From 1998 onward, a major fall in the price of scrap metal resulted in increasing numbers of vehicles being abandoned many of which are unregistered, untaxed and uninsured. This situation has reversed during 2003 and 2004 with the demand for scrap steel in China. Abandoned vehicles are currently collected by the Waste Collection Authorities and consigned to three metal recovery companies, one in Bedfordshire, one in Buckinghamshire and the other in Cambridgeshire.

2.11.21 Vehicles contain significant amounts of hazardous materials in the form of heavy metals and fluids, which require appropriate disposal. The potential toxic nature of shredder residue, combined with continuous rises in vehicle ownership, has prompted the End of Life Vehicles (ELV) Directive, which was agreed by the EU in 2000 and transposed into UK law in April 2002.

2.11.22 There are numerous requirements under the directive with the major ones being:

- All End of Life Vehicles (whether abandoned or otherwise) must be treated by authorised and licensed dismantlers and/or shredders whose premises must meet strict requirements.
- Vehicle manufacturers and importers must pay all or a significant part of the costs of take back and treatment from January 2007.
- Vehicle producers in conjunction with dismantlers and metal recovery agents must establish adequate systems for the collection of ELVs.
- Last owners must be able to place their vehicles into these systems free of charge from January 2007.

2.11.23 It is to be hoped that the requirement for free disposal after 2007 will reduce the instances of abandoned vehicles. Meantime, however, the increased cost of treating abandoned vehicles will inevitably fall on the Bedfordshire Authorities.

2.11.24 The motor vehicles recovery industry is acting to implement the Directive requirements. A number of approved treatment facilities have now been established in the County. The Bedfordshire Authorities will ensure that appropriate facilities are utilised for disposal of abandoned vehicles, and will ensure Best Value through competitive tendering processes.

2.11.25 The Bedfordshire Authorities have recently gained direct access to DVLA licensing data, and will use this wherever possible to prosecute anyone who abandons a vehicle. Individuals selling of disposing of their vehicle must therefore ensure that the DVLA is informed of the new owners (or dismantlers) name and address.

2.11.26 The WCAs aim to ensure that abandoned vehicles are dealt with promptly within the scope of available resources. We give priority to removal of vehicles that are in a dangerous condition, and aim to remove such vehicles within 24 hours of receiving notice. Abandoned vehicles that are in generally good condition should be removed within 14 days of reporting.

**Policy Proposal 21: Flytipped waste and abandoned vehicles**

**The BAWP will work with other agencies, including the Environment Agency and Police, with the aim of clearing flytipped waste and abandoned vehicles promptly. Whenever possible, perpetrators of waste/vehicle dumping offences will be prosecuted.**

## 2.12 WASTE LOCAL PLAN

2.12.1 The County Council, as Waste Planning Authority, is charged with the production of a forward plan, which sets out policies and proposals against which planning applications for waste facilities are determined. The plan is called the Waste Local Plan, and is part of the statutory development plan for the area. In Bedfordshire, the Waste Local Plan is combined with policies for mineral extraction and processing in a combined Minerals and Waste Local Plan (MWLP), and is jointly produced with Luton Borough Council.

2.12.2 For waste matters, the main waste functions of the MWLP are:

- To identify the need, nature, scale and location of waste management sites and promote the shift to more sustainable waste management practice;
- To balance the allocation of these sites with the environmental and public amenity constraints in the County;
- To ensure sensible and prudent use of the mineral and waste resources in the County;
- To encourage reduction in use of raw materials and greater recovery of waste products;
- To seek enhanced public and environmental benefits when considering site restoration and after-use;
- To minimise the effects of waste management on the environment;
- To set out development control criteria to be applied when considering waste applications, restoration and aftercare proposals.

2.12.3 The process for producing a Local Plan is laid down under the Planning Acts and the subsequent Development Plan Regulations.[16] Under these procedures, the Planning Authority is required to produce two "deposit" drafts of the Plan for public consultation purposes, conduct a Public Inquiry into any objections which remain unresolved at the end of the second deposit stage, publish proposed modifications pursuant to recommendations of the Public Inquiry, and finally to formally adopt the Plan.

2.12.4 The current adopted MWLP for Bedfordshire and Luton was published in 1996. A replacement Plan has been produced, which develops land use policies pursuant to the provisions of the over-arching *Waste Strategy for Bedfordshire and Luton.* The 1st deposit of this Plan was published in February 2002, with the 2nd deposit following in January 2003. A Public Inquiry was held between 25 November 2003 and 9 January 2004. At time of writing the Inspector's report of inquiry findings is pending (anticipated March 2004). The County Council will consider the Inspector's recommendations before publishing any proposed modifications to the Plan later in 2004.

2.12.5 The policies of the MWLP are geared to achieve the significant enhancement of recycling and waste recovery envisaged in the Waste Strategy for Bedfordshire and Luton, together with the cessation of untreated waste landfill by 2010. The full Plan, together with supporting documentation, may be viewed online at www.bedfordshire.gov.uk, following links for "environment" and "Minerals and Waste Policy and Planning". Hard copies and further information may be obtained from the County Council.

## 2.13 TRANSPORT OF WASTE

2.13.1 Government policy aims to minimise transport pressures, particularly by reducing road-based transport. This is in order to reduce the environmental impacts of transport-based emissions, and also to ameliorate the country's growing road congestion problems. Action is encouraged on two fronts: first, to minimise need for transport; second to seek alternatives to road transport wherever possible.

2.13.2 In terms of waste management in Bedfordshire, through the policies of the Waste Strategy for Bedfordshire and Luton, we seek to minimise transport impacts by ensuring that facilities for dealing with our waste are, as far as possible, located within the County. This follows the requirements of higher-order policies with respect to the "proximity principle"[17] and county self-sufficiency[18]. Given the size of the County, and the relatively small quantities of waste produced, there are limited opportunities to exploit non-road transport (such as rail or canal), which generally depend on larger distances and weights to achieve financial viability in competition with road haulage.

2.13.3 Road base impacts may be minimised, however, by bulking-up of waste loads from small collection vehicles to larger transporters. This practice is undertaken by the BAWP, using the Elstow MRF facility to bulk-up waste for onward transport to reprocessing centres or disposal sites.

2.13.4 The County Council, as WPA, also seeks to reduce transport of waste into the County as it considers the preferred environmental solution is for such wastes to be managed closer to their source areas. Policies to this

[16] The Town and Country Planning (Development Plan) Regulations 1999 (SI 1999 No. 3280).

[17] The "proximity principle" features in the EU Waste Framework Directive (75/442/EEC) as amended, as well as the national waste strategy (WS2000).

[18] County self-sufficiency is enshrined in the East England Regional Waste Management Strategy.

effect are included in the Minerals and Waste Local Plan (see 2.12, p54).

3.1.1 This section reports the detailed context and proposals for recycling in each Waste Collection Authority in Bedfordshire, as required under section 49 of the Environmental Protection Act 1990. It outlines how each WCA will implement the aims of the BAWP as regards recycling in its area. Individual recycling plans are included for each WCA. These appear on the following pages:

# Bedford Borough Council Recycling Plan

**CONTENTS:**



BEDFORD BOROUGH COUNCIL

## 1. BACKGROUND

Bedford Borough Council covers an area of 47,641 hectares (184 sq. miles) and serves over 62,500 households. The Environmental Protection Act 1990 places a duty on the Council to collect household refuse. The Best Value Performance Indicators place a requirement on the Council to meet statutory recycling targets and this plan is intended as a framework to help us to meet these.

In common with many other authorities, Bedford Borough Council first introduced recycling schemes in the early 1980's by providing mini-recycling sites for the collection of glass, paper and cans. When Bedfordshire County Council entered into a long-term contract for waste disposal in 1997 the opportunity presented itself to provide a kerbside recycling service to every household. Thus, the 'orange sack' system was created. This provided a low cost opportunity for the Council to provide households with the opportunity to participate in recycling and in 1999 the scheme was offered to all households in the Borough. Briefly, the system entailed providing each participating household with an orange plastic sack in which residents placed recyclable paper, cans and plastic bottles. These sacks were then collected with the residual waste in the same vehicle and taken to a Materials Recycling Facility at Elstow where it was manually sorted.

The system had two major advantages. Firstly it was low cost and easily implemented and, secondly, it had the effect of raising public awareness of recycling in a tangible manner. However, the system was only expected to achieve a recycling rate of 8% at best. The introduction of government recycling targets through the Best Value Performance Indicator mechanism placed a requirement on the Council to achieve recycling rates of 10% in 2003/04 and 18% in 2005/06. It became clear that reliance solely on the orange bag scheme would not be sufficient to meet these compulsory targets.

The first stage in determining the future of waste collection and disposal in the Borough was the preparation by the Bedfordshire Waste Authorities of the Bedfordshire and Luton Joint Waste Management Strategy. This strategy laid down the principles of providing a three-stream collection which has guided the development of the service.

In December 2003, the Council consulted residents on options for providing a recycling service as part of the domestic refuse collection service. The majority of responses supported a weekly residual collection and alternating green waste/dry recyclable fortnightly collections. The Council then adopted this as its recycling scheme and plans to provide this to the whole Borough during October 2004.

## 2. CURRENT POSITION (OCTOBER 2004)

### *Residual Waste Collection*

Weekly refuse collections are provided to all households, and residents have the choice of using either a 120 or a 240 litre wheeled bin. Where wheeled bins are inappropriate, black sacks may be provided. In multi-occupancy dwellings, refuse is commonly collected using palladins or 1100 litre Eurobins.

Household Waste is taken to Stewartby landfill site for disposal.

### *Alternating dry recyclables (orange sack)/green waste collection*

In October 2004, the Council completed its roll out of the fortnightly collection service of orange bags which alternates with a fortnightly collection of green garden waste.

Householders are required to register to take part in the scheme and have the choice of biodegradable sacks or a 240-litre green-lidded bin for the collection of garden waste and rolls of orange bags for the collection of dry recyclables. Orange bags and biodegradable sacks are provided on rolls, and delivered to the doorstep of registered users every six months.

Orange bags and green garden waste are collected using separate vehicles to those used for the collection of residual waste. The orange bags are taken to the Materials

Recycling Facility at Elstow where the material is sorted, bailed and sent for reprocessing. Green garden waste is taken to a windrow facility at Ravensden for composting.

***Mini-recycling sites***

At present, there are 71 mini-recycling sites in the Bedford Borough, representing a ratio of 1 site per 874 properties. The recycling provision at these sites is:

- 43 provide facilities for collecting glass
- 51 provide facilities for collecting newspapers/magazines
- 16 provide facilities for collecting mixed cans
- 22 provide facilities for collecting textiles
- 1 provides a facility for the collection of books

In line with the Best Value Performance indicator 100% of the Borough's residents live within 1km of a recycling centre or have access to kerbside collections.

**Home Composting**

Home composting promotions have been offered since 1993, resulting in the sale of over 6,500 compost bins. A programme of composting workshops supports the promotions.

**Bedfordshire Authority Waste Partnership**

In 2002 the Bedfordshire Authority Waste Partnership (BAWP) was established to promote partnership working between the Bedfordshire authorities and encourage a common approach to waste management whilst recognising the differing requirements of each authority. BAWP meets every three months at which Members and Officers from the Borough, District and County Council's of Bedfordshire attend.

**"Recycle Now" Branding**

In February 2003, Bedford Borough Council, in partnership with the Bedfordshire County and District Councils, adopted a common approach to recycling and waste awareness promotions using the "Recycle Now" branding. This branding features prominently on the Council's recycling vehicles, and in leaflets and other waste/recycling promotions used in the Borough.

**Recycling and Composting Performance 2003/04**

Total tonnage of waste collected: 68,158 tonnes

Orange bag recycling: 3,174 tonnes

Green garden waste composting: 2,304 tonnes

Bring site recycling: 1,973 tonnes

Fridge recycling: 72 tonnes

In 2003/04 the amount of waste that was recycled and composted was 11.04% which exceeded our Government target of 10% for 2003/04. In order to meet the government recycling targets for 2005/06, a recycling and composting rate of 18% will need to be achieved.

## 3. PLANNED FUTURE ACTIVITY

***a For period 2004 to 2005***

Planned recycling activity for period 2004/05 is to:

- Complete the roll out of the kerbside collection scheme for green waste by adding a further 36,000 properties (3 refuse rounds) in October 2004;
- Promote the existing schemes through publicity campaigns and continue with the Recycle Now branding;
- Investigate and implement measures to increase the amount of recycling taking place in flats;
- Promote Real Nappies;
- Introduce an Environmental Challenge for children to complete at home. This will increase awareness of waste and recycling in conjunction with other issues such as littering and graffiti;
- Examine the costs of providing green waste collections on the rural bulky waste service;
- Identify gaps in the provision of new mini-recycling sites;

BEDFORD BOROUGH COUNCIL

- Explore the potential of collecting new materials for mini-recycling sites as the market develops;
- Investigate and support the promotion of recycling in schools;
- Continue to support the Bedfordshire Authority Waste Partnership (BAWP);
- Support Bedfordshire County Council in achieving a recycling target of 20% by 2005 as required under the County Council's Local Public Service Agreement (PSA).

***b. For period 2005/06***

- Promote the existing schemes through publicity campaigns and continue with the Recycle Now branding;
- Target poor performing recycling areas to increase participation;
- Seek external funding to improve mini-recycling sites to achieve a grade b standard, based on scoring from the Mini-Recycling Site Quality Assessment;
- Continue to develop mini-recycling sites through promotion and seeking external funding;
- Introduce 'adopt a bank' scheme to improve mini-recycling site performance;
- Continue to explore the potential of collecting new materials for mini-recycling sites as the market develops;
- Continue to support the Bedfordshire Authority Waste Partnership (BAWP);
- Support Bedfordshire County Council to achieve a recycling target of 20% by 2005 as required under the County Council's Local Public Service Agreement (PSA);
- Achieve our own Government recycling target of 18%.

***c. For period 2006/07***

- Promote the existing schemes through publicity campaigns;
- Examine the performance of the scheme and develop action plans to address poor performing areas;
- Continue to develop the mini-recycling scheme through promotion and seeking external funding;
- Develop the 'adopt' a bank scheme to improve mini-recycling site performance;
- Continue to explore the potential of collecting new materials for mini-recycling sites as the market develops;
- Continue to support the Bedfordshire Authority Waste Partnership (BAWP).

***d. Beyond 2007***

- Seek to improve our recycling performance to meet future recycling targets set by the Government;
- Promote the existing schemes through publicity campaigns;
- Consider the introduction of kerbside glass collections;
- Carry out a review to the collection arrangements and consider alternatives to promote better performance;
- Continue to support the Bedfordshire Authority Waste Partnership (BAWP).

## 4. EXISTING CONTRACTS

***a. The kerbside collection of dry recyclables***

The collection contract is currently held with DSD Contracting (the Council's DSO). The Orange Bags are transported to a Materials Recycling Facility at Elstow that is run by Shanks Waste Services Ltd on behalf of Bedfordshire County Council. At the MRF the materials are sorted and bulked. These materials are then sent to reprocessing companies as determined by Shanks Waste Ltd.

***b. The kerbside collection of garden waste***

The collection contract is currently held with DSD Contracting (the Council's DSO). The green waste is transported to the MRF at Elstow, where it is then transported to a windrow facility in Ravensden.

***c. Glass Banks***

Bedford Borough Council uses 1100 litre Eurobins and skips to collect colour-separated glass. The Council has a contract

with Wildmans to empty the skips, and DSD Contracting empties the 1100 litre Eurobins. The glass collected is sent to Berryman Recycling for reprocessing. The Council receives recycling credits for the collected material.

***d.*** ***Paper***

The collection of paper from the Borough's recycling banks is managed by DSD Contracting. DSD Contracting has a contract with Aylesford Newsprint for the collection of the paper and cardboard collected, and receives recycling credits for the collected material.

***e.*** ***Cans***

The Council has a contract with Firbank Recycling Limited for the collection of cans from the Borough's can recycling banks. The Council receives recycling credits for the collected material.

***f.*** ***Textiles and Books***

Salvation Army and Planet Aid maintain the Borough's textile banks. These organisations service the banks, collecting, weighing and recycling all contents collected. The Council pays recycling credits to Salvation Army for the material collected.

***g.*** ***Books***

Oxfam maintains the book bank. Oxfam services the bank, collects, weighs and recycles all contents collected.

***h.*** ***Third Party Recycling Organisations***

Bedford Borough Council encourages third party organisations to recycle by paying out collection credits and passing on disposal credits to those organisations that can provide a detailed audit trail.

The council also provides bulking facilities for small-scale glass recycling operations and passes on the income received from the glass to the collect.

## 5. ESTIMATED TONNAGES OF MATERIALS

The table below indicates the projected additional material that may be collected as a result of the expansion to the green waste scheme.

| **Projected Tonnages** | **2001/02** | **2002/03** | **2003/04** | **2004/05** | **2005/06** |
|---|---|---|---|---|---|
| No. Households on Green Waste/ Orange bag scheme | 0 | 8,000 | 26,000 | 62,000 (Oct 04) | 62,500 |
| Total Household Waste | 68,133 | 68,135 | 68,158 | 68,171 | 68,183 |
| Green Garden Waste | 0 | 772 | 2,304 | 3,899 | 5,538 |
| Dry Recyclables | 2,767 | 2,673 | 3,174 | 3,512 | 4,627 |
| Bring Sites (+ fridges) | 1,819 | 1,877 | 2,044 | 2,157 | 2,269 |
| **Recycling Rate** | **6.73%** | **7.81%** | **11.04%** | **14.03%** | **18.24%** |

# Mid Beds Recycling Plan

**CONTENTS:**



MID·BEDS
DISTRICT COUNCIL

## 1 BACKGROUND

In common with many other authorities Mid Beds first started recycling in the early 1990's by providing bring-sites for glass, paper and cans. Within a short space of time the Council established over 60 sites throughout a primarily rural district. The majority of those sites still exist today although the locations within some towns and villages have been changed.

When Beds County Council entered into a long-term contract for waste disposal in 1997 the opportunity presented itself to provide a kerbside recycling service to every household. Thus, the 'orange sack' system was born and by late 1998 Mid Beds was the first Bedfordshire authority to roll out the system to the whole District. Briefly the system entailed providing each participating household with an orange plastic sack in which recyclable paper, cans and plastic was collected with the residual waste in the same vehicle and taken to the Materials Recycling Facility at Elstow where it was manually sorted.

The system had two major advantages. Firstly it was low cost and easily implemented and, secondly, it had the effect of raising public awareness of recycling in a tangible manner. However, the system was only designed to achieve a recycling rate of 8% at best.

In 2002/03 Mid Beds trialled a scheme whereby recyclables are collected fortnightly on the same day of the week, as residual waste, but in a separate 'split-back' vehicle. Before the trial, the recycling rate in Mid Beds was around 6% but the trial system added a further 3% which persuaded officers and members to decide on adopting the system for the whole of the District. In April 2003 a second round was implemented and the rate rose to around 12.5%.

The trial in 2002/3 was grant funded by Environmental Body Bedfordshire with landfill tax credits administered by Shanks Ltd. A further Environmental Body Bedfordshire grant has enabled the second round to be implemented. Funding was also obtained from DEFRA by the Bedfordshire Authorities Waste Partnership in the sum of £914,000. The allocation given to Mid Beds of nearly £300,000 permitted the purchase of two Dennis TwinPack Collection vehicles with the Council another vehicles with the Council using £450,000 of it's capital reserves to purchase another three vehicles.

## 2. EFFECT OF AN ALTERNATE WEEK WASTE COLLECTION SCHEME

The existing waste management contracts expired in October 2004 and Mid Beds decided to combine waste collection, recycling and street cleansing into a single contract. In determining the specification of the waste collection/recycling element this Council decided to adopt an Alternate Week Waste Collection System, i.e. collecting recyclable waste one week and residual waste the next.

The principles behind this decision were two-fold. Firstly, such a system will make a significant impact on the level of recycling in Mid Beds in that households will need to segregate their waste to fully utilise the containers provided. The system also has the environmental benefit of requiring the least number of vehicles; in Mid Beds ten lorries will be used as opposed to fifteen if a weekly waste collection system were retained.

Secondly, alternate week collection has considerable financial benefits due mainly to the fact that fewer vehicles are necessary. It is felt that retaining a weekly residual waste collection as well as introducing the RECYCLE NOW! system would increase the waste management budget by £700,00 p.a. It is anticipated that the recycling performance of Mid Beds will rise considerably as a direct result of alternate weekly collections and it is believed that a recycling rate of 30% is within reach.

## 3. CURRENT SYSTEM

RECYCLE NOW! Is the brand image of the scheme and features prominently on vehicle livery and promotional material.

On 4 October 2004 the Council commenced a new waste management with Verdant Group Plc based on the Alternate

Week Waste Collection System. One week non-recyclable waste is collected via a 240 litre wheeled bin (or black sacks in very few cases). The following week the recyclable waste is collected using 240 litre green-lidded wheeled bins or orange sacks together with up to 5 biodegradable sacks containing garden waste. By collecting dry recyclables and garden waste in a split bodied vehicle any contamination is eliminated.

At the time of writing some 34,000 green-lidded bins have been distributed which represents around 70% of households in Mid Beds, when including those using orange sacks it may therefore be reasonably assumed that recycling participation is at least 75% but accurate of the County Council. Dry recyclables consist of paper, card, plastic bottles and cans. It is hoped that other materials may be added as soon as possible, particularly other plastic packaging and corrugated cardboard.

Glass is collected via 64 bring sites located across the District and is now collected as a mixed material. The amount collected has remained consistent at around 1300 tonnes p.a. which represents approximately 2% of the recycling rate.

It is too early to accurately predict the eventual recycling rate and waste minimisation achieved under this system but after just two weeks of operation (w/c 17/10/04) a recycling rate of 28% was calculated and, importantly residual waste tonnage reduced by some 120 tonnes compared to the weekly statistics provided three weeks prior to the introduction of the Alternate Week Waste Collection System.

## 4. LONGER TERM ISSUES AND TARGETS

The mandatory recycling target for Mid Beds by 2005/6 is 18% but it is felt that this target will be reviewed and amended at an earlier stage by the Government of the day. Locally, this council will also review its recycling performance regularly and amend its own targets accordingly. As stated previously, a 30% recycling rate is not unrealistic.

A principal concern is the ability of the industrial infrastructure to cope with the amount of recyclable material that will be produced by every authority in Britain. Apart from lack of markets, over production will inevitably drive down the prices paid for recyclate, making some schemes unviable. Mid Beds will be pressing for assurances that sustainable markets are provided. The only household recyclable left to collect that is both plentiful and of significant weight is glass. Whilst Mid Beds does not have a current plan to collect glass at the kerbside, it is appreciated that we may have to do so within the next two or three years.

The current waste management contract is for 12 years but as the fleet of vehicles reaches the end of its life in 6 years time, the opportunity will present itself to fundamentally review the recycling scheme.

Sustainability is a much over used word but that is indeed the key to a successful recycling scheme and that sustainability must be in both environmental and financial terms.

# South Bedfordshire District Council Recycling Strategy: Current Position 2003

**CONTENTS:**



South Bedfordshire

taking pride in our district

## 1. AIMS AND POSITION STATEMENT

To raise awareness of sustainable waste management best practice in the district.

To promote, deliver and monitor systems of recycling to conform to Best Practicable Environmental Options and meet 3. Government set targets.

To improve levels of participation in recycling through publicly consulted, cost effective and practicable schemes.

To promote waste minimisation through education, reduced residual bin size and home composting.

To actively improve the quality of the environment.

The council's targets for recycling/composting to be met are:

- 14% by 2003/4 and 21% by 2005/6 (Target to be pooled with BAWP authorities to 20% county-wide).
- Tonnage of waste produced during the year 2002-2003 amounted 47,865.29 tonnes.
- Recycling tonnage comprised:
- Bring site tonnage; 1,218.15 tonnes,
- Fridge recycling; 40.2 tonnes and
- Orange bag recycling; 2,768.61 tonnes
- In total producing a recycling rate of 8.42% (BVPI 82a).

Recycling set out and participation rates have increased in the newly phased schemes when compared against co-mingled collections from around 27% pre April 2002 to over 50% in 2003.

## 2. COMMUNICATION – PARTNERSHIP WORKING WITH WDA AND WCAS

South Bedfordshire District Council (SBDC) is an active partner of the Bedfordshire Authorities Waste Partnership (BAWP). Through regular officer (waste officers and planners) and member meetings, opportunities and barriers are explored. Active promotion of events is pursued through combined and branded publicity articles. Partnership operations are co-ordinated for multi authority staffed promotional recycling trailer at community events, schools and areas where the public congregate throughout the year.

## 3. COMMUNICATION – CO-OPERATION AND CO-ORDINATION WITH WASTE DEVELOPMENT ORGANISATIONS

The council formally liaises with other councils via regular attendance at a Southern Central Recycling Forum, Eastern Region Waste Management Forum, National Household Hazardous Waste Forum, Anglia Region Waste Awareness campaign and via the Local Authority Recycling Advisory Committee.

## 4. COMMUNICATION – CO-OPERATION AND CO-ORDINATION WITH THE VOLUNTARY AND COMMUNITY SECTOR

South Bedfordshire District Council works with a variety of community groups to assist in the promotion and gathering of usable waste materials. These include:

- Leighton Buzzard Scrapstore has been funded by SBDC by way of rent and rates for the past 10 years. Scrapstore services all foil banks in the district on the council's behalf.
- Leighton Linslade Recycling Initiative (LLRI) aka Furniture Aid. SBDC have funded and continue to fund the rent and rates of the group's premises for the past 10 years although the operation funds 3 full time members of staff. Council were instrumental in selection and interviewing of new board of directors at management request.
- Recycle IT! Operation is fully self-financing. Partnerships with SBDC since April 2002 have included four one-day WEEE computer amnesties netting over ten tonnes of equipment

## 5. CURRENT POSITION - 2003-2004

The council is committed to phasing out co-mingled kerbside recycling collections. Expansion and development of a weekly system of separately collected recyclate via orange bags is taking place on the same day

as domestic refuse collection. Pre-delivered rolls of orange bags and accompanying information leaflets are used. Separate recycling vehicles (funded by DEFRA and E B Bedfordshire) and dedicated crews have been phased in to cover 42,000 of the 48,000 (88%) homes in the district by late 2003. The remaining 12% are planned for implementation by mid 2004. SBDC will continue to monitor and improve the office waste recycling scheme within South Beds Council offices in partnership with the EMAS Working Group.

## 6. PLAN OF EXPANSION POLICIES 2004-2005

Council has approved year on year funding of £350,000 to continue the kerbside recycling scheme and continually reduce year on year growth in residual waste tonnage.

A further growth proposal of £135,000 was submitted and agreed by members.

This will be utilised to provide separate orange bag collection service to the remainder of the district.

Council funding has allowed for a communal block recycling system to be implemented in late 2004. This will allow incorporation and the bringing in-house of bring sites to help meet or exceed the 2005/06 target of 21% and improve the aesthetic and number (37 at March 2003) of bring sites. This will lead to increases in tonnage from 1,218 tonnes (2.6% of council's recyclate) in 2003.

Council funding will also be utilised to fund a full time Recycling Officer due to commence in September 2004.

With the aim of harnessing a dense and heavy component of the waste bin, a six month glass trial to 3800 homes commenced in October 2003. Due to its success this service has been continued and is due for expansion later in 2004. This is funded by Government Performance Grants for 2004/05 and recycling credits coupled with payments for the glass itself.

Accepting the fact that weekly recyclable and weekly refuse collection using 240 litre wheeled bins leads to increased waste tonnages, the council has implemented a policy of replacing/issuing refuse bins with the smaller 180 litre type. This will encourage minimisation and use of recycling receptacles since the council has a policy of non collection of side waste. This does not rule out looking at the following future options

A: Reducing collection frequency from weekly to alternate weekly

B: Reducing the number of properties with double bins.

## 7. PLAN OF EXPANSION POLICIES 2005-2006

Green waste kerbside collections are to be rolled out to meet 2005/6 targets from January 2005 in six distinct phases. Complete coverage of the district will take place by July 2005. This follows a successful funding application to the DEFRA Waste Minimisation and Recycling Fund. This scheme will be continued by the council when initial funding expires.

## 8. PLAN OF EXPANSION POLICIES 2006 AND BEYOND

Council has agreed the £330,000 revenue funding to continue the green waste collection service through 2006 and beyond. At today's prices this represents a total investment in the recycling service of £835,000 in 2006/07 Proposals will be linked with anticipated increases in population and household numbers of the major development areas. Contract with Service Team expires in March 2007. Council in partnership with WDA are actively researching local waste transfer station and bulking up facilities in order to ensure sustainability and proximity principle. Review of all waste services including recycling will take place in preparation for the new contract.

4.1.1 The EU Landfill Directive (1999/31/EC) places obligations on the UK Government to meet targets for reduction of biodegradable municipal waste disposed to landfill (see 2.4.3). Failure to meet these targets will result in significant fines imposed on the UK Government by the EU.

4.1.2 In light of this, the UK Government has produced the National Waste Strategy (WS2000)[19], and expects all local authorities to demonstrate how they will achieve the required landfill reductions.

4.1.3 In Bedfordshire, reduction of landfill is a cornerstone of our waste strategy. The County currently bears the impacts of large scale importation of waste for landfill, and this creates a particular sensitivity to the issue. We have therefore adopted the aim of ending landfill of untreated waste in the County by the year 2010.

4.1.4 The strategy for achieving this is set out in the *Waste Strategy for Bedfordshire and Luton*, and is developed in detail in the Minerals and Waste Local Plan and in this document. In essence, we aim to achieve maximum landfill diversion for Bedfordshire's wastes by means of recycling and composting, with all wastes not recovered by these means being subject to further processing (including further automated materials recovery) to yield a stabilised product capable of use as a fuel feedstock. In the *Waste Strategy for Bedfordshire and Luton*, we established this to be the *best practical environmental option* (BPEO) for dealing with our wastes.

4.1.5 In parallel to the measures for our own wastes, we expect those areas currently engaged in export of waste to Bedfordshire for landfill to take similar actions, or any other measure they deem appropriate, such that they cease exports of untreated wastes to Bedfordshire by 2010. We recognise that waste recovery processes will produce certain residues, for which landfill will be the only practical option, and that source areas such as London will have limited ability to accommodate this. We therefore make an allowance for the ongoing import of c0.5 million tonnes of post treatment residues post 2010. This compares with some 2.7 million tonnes of 'raw' waste currently imported into the County.

4.1.6 Our key aim is to demonstrate how maximum landfill diversion may be achieved in expectation that those areas currently sending waste to Bedfordshire will do the same.

4.1.7 In addition to the policies and targets of the National Waste Strategy, the Government has introduced a system of tradable landfill permits. These permits will be required by any authority wishing to landfill biodegradable municipal waste. They will be issued by Government to Waste Disposal Authorities. The total level of the Government permit issue will be set to ensure that the total waste that may be landfilled is in line with the overall UK obligations under the Landfill Directive. Once issued, permits may be bought and sold by WDAs, thus enabling an element of local market flexibility in attainment of the overall UK obligations.

4.1.8 Tradable permits will allow WDAs three basic options:

1 - To use all of their own allowances without any recourse to trading, landfill up to the maximum and to develop facilities to deal with any excess.

2 - To use all of their own allowances and to purchase additional permits to allow the continued use of landfill over the limit.

3 - To develop sufficient facilities to exceed the diversion targets and to trade all excess allowances to underwrite the cost of developing alternatives to landfill.

4.1.9 In line with the strategic direction established in the *Waste Strategy for Bedfordshire and Luton*, the County Council as Waste Disposal Authority proposes to employ the latter of these options. Our overall landfill diversion strategy aims for total cessation of untreated waste landfill, and may thus result in a surplus of landfill permits, which the WDA will trade to partially offset costs of implementing the Waste Strategy.

[19] Waste management is a devolved matter, and the Scottish Parliament has produced its own waste strategy.

**Policy Proposal 21: Tradable Waste Permits**

**The County Council will meet landfill diversion targets by implementing the total waste recovery/treatment strategy as laid out in the Waste Strategy for Bedfordshire and Luton.**

## 5.1 JOINT WORKING

5.1.1 The BAWP has proved to be an effective vehicle for co-ordination of policy and operations across the partners and their statutory functions. However, its non-executive constitution means that delays are inevitably encountered as key recommendations are referred back to individual authorities for final decision.

5.1.2 One possible means to improve the functioning of the BAWP would be to establish executive decision-making powers via a formal joint committee. This arrangement would enable swifter decision-making, but may risk a reduction in democratic input as the responsibilities currently assumed by committees of the partner authorities would need to be delegated to executive members nominated to the BAWP.

5.1.3 The BAWP will investigate the desirability of enhanced executive powers, together with potential means of delegation and terms of reference. In the meantime, we welcome your views on this matter.

6.1.1 This document sets out our strategic direction for municipal waste management up to year 2020. The strategy is not, however, fixed in stone for this period: circumstances will inevitably change, and we may find that some of our aims and objectives need refinement or modification.

6.1.2 To ensure the continuing relevance of the strategy, we will monitor our performance with respect to our strategic aims. We will also monitor changes in the wider context, including developments in the national and regional policy framework, as well as developments in waste management methods and technologies.

6.1.3 We already undertake comprehensive performance monitoring under the Best Value regime. This includes regular surveys to assess customer satisfaction with waste services and facilities, together with ongoing performance monitoring with respect to statutory and local targets. We also monitor service costs, so as to ensure most efficient use of public funds.

6.1.4 In addition to ongoing performance monitoring, we also ensure that the BAWP remains fully up to date with emerging developments in the wider context. Waste policy and legislation at the national and regional levels is constantly evolving, and the partner authorities are actively engaged in a number of bodies which guide such developments. We are therefore able to keep up to date with the latest developments, and also to exert direct influence on emerging policies.

6.1.5 The Partner Authorities also maintain current awareness of emerging techniques and technologies in waste management. This includes regular contact with authorities in other areas, where novel techniques may be under trial, and the lessons being learned can be adapted to Bedfordshire's advantage.

6.1.6 At present, much information is gathered for specific purposes, for example reporting of recycling performance to the Audit Commission. Other information is only used internally. The BAWP considers that it will be beneficial to collate much of this information into an annual report, which can be published to give an overview of ongoing performance and changes in the wider context.

6.1.7 The ongoing monitoring programme will indicate if and when modifications to the waste strategy are required. However, to ensure the strategy remains up to date, the BAWP proposes to undertake a thorough review on a five-yearly basis. This will enable the strategy to be refined as future circumstances unfold.

**Policy Proposal 23: Monitoring and review**

**The BAWP will undertake monitoring of performance, customer satisfaction, service cost and emerging developments in the wider context. Results of this monitoring will be published in an annual report. The waste strategy will be reviewed should monitoring suggest the need, and in any event a comprehensive review will be undertaken once every five years.**

Waste Strategy Implementation Team

BAWP
c/o Bedfordshire County Council
FREEPOST
County Hall
Cauldwell Street
Bedford MK42 9AP

E-mail: waste.partnership@bedscc.gov.uk

7.1.6 Please visit any of the following websites for further information on recycling:

www.bedfordshire.gov.uk

www.bedford.gov.uk

www.midbeds.gov.uk

www.southbeds.gov.uk

7.1.7 For telephone queries, please call Steve Watson on 01234 228681.

## A 1 WASTE STRATEGY FOR BEDFORDSHIRE AND LUTON (2001): EXECUTIVE SUMMARY AND LIST OF POLICIES

***Executive Summary***

i This document outlines our strategy for dealing with waste in Bedfordshire and Luton up to the year 2020. The strategy has been jointly developed by a partnership of Local Authorities covering the Beds and Luton area. These are:

- Bedford Borough Council
- Mid Beds District Council
- South Beds District Council
- Bedfordshire County Council
- Luton Borough Council

ii Research and development of the strategy was supported by a landfill tax grant from Shanks.first and EB Bedfordshire Ltd.

iii Bedfordshire, with its legacy of clay pits, has historically played a major role in landfill of waste in South East England. Thus, the Bedfordshire and Luton Waste Strategy is broader in scope than many of the municipal waste strategies currently in place or under development in other parts of the country, and covers our approach to all waste managed in the area: both local and imported, public and private sector.

iv The Bedfordshire and Luton Waste Strategy is an over-arching policy statement, which will guide and integrate subsequent plans and programmes. In particular, land-use elements of the strategy will be taken up in the Bedfordshire and Luton Joint Minerals and Waste Local Plan; whilst policy relating to management of local municipal wastes will be implemented and further developed via detailed Municipal Waste Management Strategies. These Municipal Waste Management Strategies will be prepared individually for the authority areas of Bedfordshire and Luton, in accordance with government guidance.

v The *Bedfordshire and Luton Waste Strategy* has been developed via an inclusive policy formulation process, involving a wide range of stakeholders from the earliest stages. The policies presented herein are designed to reflect the consensus of stakeholders.

vi The primary aim of the strategy is to **reduce reliance on landfill** to a practical minimum. This is in line with national and European policy, which identifies landfill as being among the least sustainable methods of waste management.

vii We studied data for the financial year 1998/99 to give the baseline for development of the strategy. In this year, some 3.3 million tonnes of waste was landfilled in Bedfordshire. Of this, some 2.8 million tonnes was imported from outside the area. Of the remaining 0.5 million tonnes, around 270,000 tonnes was local municipal waste, whist some 230,000 was generated by local business and industry.

viii We aim to **reduce annual imports of waste** to Bedfordshire to a level of 0.5 million tonnes by the year 2010. At this time we will seek to resist any further import of untreated waste. We will, however, make ongoing provision for disposal of pre-treated waste to a maximum level of 0.5 million tonnes/year.

ix For **local wastes**, we aim to end landfill of untreated waste by 2010. To this end, we will prioritise **materials recycling** (including composting) as the preferred means of achieving diversion from landfill. Waste which cannot be dealt with by recycling or composting will be processed for energy recovery.

x We will also prioritise initiatives to **minimise waste at source**, both in the public and private sectors. We recognise that waste minimisation is the ultimate goal of sustainable waste management. However, we also consider that real progress in this area will require a considerable shift in public awareness and attitudes, which Local Authorities have only a limited ability to influence. Thus, whilst we will take all reasonable actions to promote waste minimisation, we will continue to base our core strategy on materials recycling as the primary means of achieving landfill reduction.

xi For local **municipal** wastes, we believe that the key to achieving high levels of materials recycling is to focus on systems which facilitate segregation of waste at source (once waste is mixed up, it becomes much

harder to deal with by any means except landfill or mass incineration). We will therefore initiate research and development of suitable systems for **kerbside collection of segregated waste streams** direct from households. We will also develop and enhance the network of Civic Amenity Sites ('Tidy-Tips') and other bring-sites in order to maximise overall recycling performance.

xii The *Bedfordshire and Luton Waste Strategy* thus represents a consensus-based approach to integrated waste management in the local area. We have sought to implement national and European policy requirements in a manner tailored to suit the local context of Beds and Luton. We trust that the vision contained in this strategy will establish the required framework to place future management of waste on a secure sustainable footing.

## WASTE STRATEGY FOR BEDFORDSHIRE AND LUTON (2001)

### LIST OF POLICIES

***Policy WS1: Overall landfill strategy***

- We will take action to achieve the maximum possible reduction in landfill. For imported wastes, this will be achieved via development plan policies to reduce the supply of landfill capacity in Bedfordshire. For locally arising wastes, diversion will be achieved primarily via recycling and composting (or other bio-treatment). Where this is not practical, we will encourage use of energy from waste solutions in preference to landfill for locally arising wastes.

***Policy WS2: Imported Wastes***

- We will make the following provisions for imports of waste to Bedfordshire:
  - for municipal wastes, landfill capacity to the levels shown in table 12, and;
  - for commercial and industrial wastes, landfill capacity to the levels in table 13.
- Other than as may be appropriate in terms of application of the proximity principle for management of wastearising close to the County boundaries, we will not support development of major alternative treatment facilities in Bedfordshire for the management of imported wastes.

***Policy WS3: Waste Minimisation***

- We will work in partnership with other agencies to consolidate and promote waste minimisation activities in Bedfordshire and Luton.

***Policy WS4: Local commercial and industrial wastes***

- We will adopt the SERP 160 strategy for management of local commercial and industrial waste. This requires diversion of some 220,000 tonnes of commercial and industrial waste to alternative processing facilities by the year 2010.We will make provision for landfill, and encourage the development of alternative waste management facilities, sufficient to meet capacities shown in table 14.

***Policy WS5: Recycling of construction and demolition wastes***

- We will monitor the market for inert recycling and maintain a supply of recycling capacity sufficient to meet demand. We will endeavour to establish increased permanent capacity to balance that which is currently only covered by temporary permissions.

***Policy WS6: Management of Municipal Waste in Bedfordshire and Luton***

We will develop future municipal waste management systems in a detailed strategy. This will be based on the following key principles:

- We will aim to end landfill of untreated waste by year 2010.
- We will establish sufficient infrastructure to enable self-sufficiency for treatment of waste arising within Bedfordshire and Luton.
- We will establish a three-stream segregated waste kerbside collection system, integrated with treatment plant appropriate for each collected waste stream.
- As a minimum, we will recover materials for recycling and composting to the targets shown in table 15. Waste that cannot be recycled or composted will be processed for energy recovery.
- We will continue develop and enhance the network of Civic Amenity Sites and local recycling centres.

**Table 12. Reduction in import of MSW under SERP 160 strategy**

| Year | Annual Tonnage Imported | Cumulative Tonnage Imported |
|---|---|---|
| 2000 | 738,665 | 738,665 |
| 2005 | 392,797 | 3,394,386 |
| 2010 | 138,813 | 4,596,419 |
| 2015 | 138,813 | 5,290,484 |
| 2020 | 138,813 | 5,984,549 |

**Table 13. Projected Reduction in imported commercial and industrial waste under SERP 160 strategy**

| | SERP 160 | |
|---|---|---|
| Year | Annual Tonnage | Cumulative Tonnage |
| 2000 | 1,600,554 | 1,600,554 |
| 2005 | 914,677 | 7,545,692 |
| 2010 | 348,120 | 10,419,406 |
| 2015 | 348,120 | 12,160,006 |
| 2020 | 348,120 | 13,900,606 |

**Table 14. Landfill and alternative treatment requirements for local commercial and industrial waste**

| Year | Annual landfill tonnage | Cumulative landfill tonnage | Annual tonnage requiring alternative treatment |
|---|---|---|---|
| 2000 | 312,234 | 312,234 | 0 |
| 2005 | 201,391 | 1,540,875 | 110,843 |
| 2010 | 90,548 | 2,215,300 | 221,686 |
| 2015 | 90,548 | 2,668,040 | 221,686 |
| 2020 | 90,548 | 3,120,779 | 221,686 |

**Table 15. Targets for materials recycling/composting in Bedfordshire and Luton**

| Year | Bedfordshire | Luton |
|---|---|---|
| 2003/4 (Audit Commission) | 12% | 16% |
| 2005/6 (Audit Commission) | 18% | 24% |
| 2010 (National Waste Strategy) | 30% | 30% |
| 2015 (National Waste Strategy) | 33% | 33% |

# Terms of Reference

## for the

# Bedfordshire Authorities Waste Partnership.

This agreement is made between the following Partner Authorities under the signature of

Bedford Borough Council .....

Bedfordshire County Council .....

Mid Bedfordshire District Council.....

South Bedfordshire District Council .....

Dated .....

### 1) *Introduction*

These Terms of Reference between the above partner authorities are created and endorsed to promote Partner working on the development and implementation of a Municipal Waste Management Strategy.

The vehicle for Partner working will take the form of a forum of designated Members from the above signed Bedfordshire Authorities in order to make the best use of the combined resources of all authorities to the mutual and beneficial advantage of both Partners and residents of the County.

This group will be known as **The Bedfordshire Authorities Waste Partnership.**

### 2) *Mission Statement:*

"Partner Authorities will establish and develop the Partnership to oversee all aspects of Waste Management within Bedfordshire. The Partnership will be a forum for monitoring the delivery of services and performance including collection, recycling, composting and treatment and will investigate further joint funded options for delivering targets. Best Value will be a core principle.

Opportunities with neighbouring authorities will be explored and developed in line with the principle of Best Practice"

### 3) *The Aims and Objectives of the Bedfordshire Authorities Waste Partnership*

All Partners agree to embrace the following aims and objectives:

- to increase recycling and composting from all municipal household wastes in Bedfordshire to meet Government targets whilst encouraging and endorsing the principles of waste minimisation and re-use.
- to develop an effective Municipal Waste Strategy as a public statement as to how Municipal Waste will be handled from point of collection, during recycling and composting operations through to its delivery to a point of final treatment and disposal.
- to support the Bedfordshire Waste Management Forum comprising officers from the Partner authorities.
- to enhance the principles of environmental sustainability within the Best Value framework.
- to develop a common approach to waste related public and schools education and awareness campaigns.
- to deliver service for the benefit of all residents, business and visitors to Bedfordshire that complement and enhance the activities of other partner authorities.

### 4) *Shared Commitment*

All authorities accept the need for major change required in Municipal Waste Management in order for Bedfordshire to contribute to the following national targets.

By 2005: to recycle/compost at least 25% of household waste, recover value from 40% of municipal waste.

By 2010: to recycle/compost at least 30% of household waste, recover value from 45% of municipal waste.

By 2015: to recycle/compost at least 33% of household waste, recover value from 67% of municipal waste.

All Partner Authorities bound by these Terms of Reference will seek to fulfil their respective waste management functions and statutory responsibilities in co-operation and in awareness of the individual interim targets placed on all partners, these being:

| Authority | 1998-99 Recycling Rate | 2003-04 Standard | 2005-06 Standard |
|---|---|---|---|
| Bedford Borough Council | 4% | 10% | 18% |
| Bedfordshire County Council | 6% | 12% | 18% |
| Mid Beds District Council | 5% | 10% | 18% |
| South Beds District Council | 7% | 14% | 21% |

*Reference: Guidance for Municipal Waste Strategies, DEFRA 2000.*

### 5) *The Principles of the Bedfordshire Authorities Waste Partnership*

The principles of Best Value will be made evident at all stages of the development of the Partnership and the Municipal Waste Strategy.

All Partner Authorities agree that the four key principles detailed below will underpin the way in which their responsibilities will be fulfilled and activities will be delivered. These will be: Co-operation, Mutual Support, Unified Delivery and Consultation.

- Co-operation: All Partner Authorities recognise that the development of a sustainable Municipal Waste Strategy for Bedfordshire capable of delivering the stated targets will require more than individual authorities simply complying with statutory instruction and requirements. All Partner Authorities will maintain and develop a pro-active approach and undertake to co-operate at all levels for the development of the services encompassed by the terms Municipal Waste Management.
- Mutual Support: Members of Partner Authorities will be jointly served by officers of the authorities. All officers will embrace and advance the need for co-operation by mutual support in the development of waste service provision.
- Unified Delivery: All Partner Authorities recognise that public perception regards waste management as a single operation and has little need to be aware of the differing roles of authorities. There is a requirement therefore to offer waste services to the municipal sector in a simple defined manner.
- Consultation: All Partner Authorities recognise the vital role that consultation and openness plays in unified service development. This needs to exist both in the relationships between authorities and the community it seeks to serve and also in the relationships between Partner Authorities. Service provision by one authority may have positive or negative ramifications for another. Consultation will seek to ensure that emphasis is aimed at enhancing the positive aspects.

### 6) *Make up of the Bedfordshire Authorities Waste Partnership.*

Each Partner Authority will be represented by the Portfolio holder (Environment) and Deputy Portfolio holder (Environment) or equivalent. Members will be nominated and individual authorities simply complying endorsed by their respective authority. Observer status will be available to all other members of all Partner authorities with the agreement of the Panel. Nominated members may arrange for substitutes to attend when necessary to facilitate full representation of each partner authority at meetings of the partnership.

The Partnership will have an elected chair, and be served by a nominated Officer co-ordinator. This Officer will report back to Officers of all Partner Authorities all information likely to aid members of the Partnership.

Each Member Group will be served and supported by Officers of the respective authority.

The Partnership may make written instruction via the Officer Co-ordinator inviting the attendance at any meeting of

members, any individual for the purposes of presenting information necessary to advancing the role of the Partnership.

***7) The Municipal Waste Strategy and the Officer Support Group***

Development of the Municipal Waste Strategy will be undertaken by an Officer Support Group comprising senior officers of the respective partner authorities acting under the instruction of the Partnership.

The Officer Support Group will report back to the Partner Members all performance, development proposals and options.

***8) The Bedfordshire Waste Management Forum***

Day to day waste management operations, recycling initiatives and all short to medium term development opportunities will be undertaken by the Bedfordshire Waste Management Forum.

This forum and any associated sub groups will produce and present minutes to the Officer Support Group for relay to the Partnership.

***9) Meetings of the Bedfordshire Authorities Waste Partnership***

The Partnership will meet a minimum of six times per annum.

***10) Exemption from the stated Principles***

All Partner Authorities agree that nothing within or expressed by these Terms of Reference will prevent them from carrying out any aspects of their respective statutory duties, unduly restrict these duties or seek to force change on any partner beyond that statutory role.

***11) Review of these Terms of Reference***

All Partner Authorities agree that these Terms of Reference may require amendment and should be subject to periodic review through an appropriate mechanism if, where and when the need arises. It is therefore agreed that these Terms of Reference will be subject to Annual Review.

## A 3 EXTRACT OF POLICIES FROM THE EAST OF ENGLAND REGIONAL WASTE MANAGEMENT STRATEGY

### *Waste Reduction*

POLICY 8

Waste Disposal and Collection Authorities should

- consider the relationship between waste minimisation, waste collection and recycling/composting, when devising and operating waste management strategies including collection and recycling/composting schemes. All collection and recycling/composting schemes should be supported by a strong waste minimisation message.
- introduce reduced capacity waste collection systems throughout the Region, in conjunction with existing or new recycling/composting schemes.

### *Recycling and Composting*

POLICY 10

Government and local authorities should provide financial and other incentives to establish businesses and markets for products and raw materials made from reclaimed material, and lead by example by adopting purchasing and operational policies which establish best practice.

Waste Planning Authorities should include policies in their waste local Plans to actively encourage and support the development of waste processing facilities where these can be shown to be environmentally acceptable

Local authorities should seek to encourage initiatives by the private sector, by voluntary bodies, local groups and individuals in developing recycling/composting.

POLICY 13

In order to maximise recycling/composting, Waste Disposal Authorities, Waste Collection Authorities and private sector waste management companies should introduce separate collection of recyclable and compostable materials as early as practicable. The local authorities should ensure that "bring sites" and civic amenity sites are readily available.

POLICY 15

Local authorities should encourage composting or biodigestion of biodegradeable wastes where appropriate. In addition to providing for the collection of separated biodegradeable waste and green waste composting, initiatives such as home composting, and the use of reusable nappies should be supported, and the feasibility of on-farm composting explored.

### *Other Recovery Options*

POLICY 17

All waste treatment and energy recovery plants must include processes to remove recyclable and compostible material where this has not been carried out elsewhere. Municipal waste strategies which include energy recovery should specify performance levels for recycling/composting to avoid energy recovery inhibiting recycling/composting. Consequently energy recovery plants in the region should not be expected to handle more than 40% of the total municipal waste produced. Incineration of municipal, commercial or industrial waste without energy recovery will not be permitted. However, for some specialised operations, such as disposal of clinical waste and some specialised and hazardous wastes incineration without energy recovery may be appropriate.

POLICY 18

Action should be taken by Waste Planning, Disposal and Collection Authorities to identify the need for Waste Treatment and Energy Recovery facilities, prepare plans and proposals and, if necessary, secure the consents and finance to ensure that the facilities can be made available when needed. They will normally be located in or adjacent to urban areas and where energy recovery is included should maximise the utilisation of heat and power produced. Existing waste management sites, including landfill sites, may be appropriate locations for new facilities which would deal with a range of wastes from public and commercial sources.

***Waste Strategies***

Policy 20

Each Waste Disposal and Waste Collection Authority should adopt a municipal waste strategy which can deliver the recycling and composting targets for its area.

## A 4 TREATMENT OPTIONS

***Primary Treatment***

Primary treatment refers to those systems that treat and process separately collected waste streams in order to maximise the quantity of material recycled and composted. The following represent the technology types currently known about in the UK, Western Europe, Australasia and North America[1]:

***Materials Recycling Facility (MRF)***

A Materials Recycling (or Reclamation) Facility (MRF) is a facility where waste is received and materials which can be recycled are separated and bulked up for transfer to processors or direct to markets. There are 2 main types of MRF, Clean MRF and Dirty MRF:

A **Clean MRF** accepts separately collected co-mingled recyclables, which are generally collected mixed together in either and box, bin or bag. The MRF is required to separate the materials into individual streams. This is done in a variety of ways and a MRF is often designed with flexibility to introduce or remove processes in order to maximise throughput. The following are examples of equipment or processes and the materials they target:

- **Optical Sorting Systems:** Used on more sophisticated MRFs to separate different materials such as glass and plastics from a mixed recyclable materials stream; in addition, these can be calibrated to select specific types of a family of materials, e.g. white, green or brown glass from mixed cullet; or HDPE or PET from mixed plastics.
- **Belts, Trommels and Screens:** Typically used to segregate waste into different particle sizes and densities. By changing the aperture, inclining the equipment or changing the speed, these can select materials by general weight/ density or particle size. They do not guarantee a clean stream but can make downstream sorting easier.
- **Densimetric Tables / Ballistic Separators**: these process work by applying a force to the waste stream and selecting off materials by their reaction to that force. For example, the densimetric table vibrates at a set speed which causes materials or different densities to be bounced on the table at different heights at which blowers can be set to blow them into further processing streams. An example of this is the lighter more friable material which is often selected through this method and palletised to produce a crude RDF fraction.
- **Bag Splitters:** Mechanical devices to cut open refuse sack and liberate the waste within for further processing.
- **Shredders:** Heavy equipment used to shred or granulate material for further processing, where a more homogeneous material is required.
- **Picking Stations:** A basic alternative to optical sort systems, using physical labour to separate out specific items such as glass, plastics, etc.
- **Magnetic Separators:** A reliable method of recovering ferrous metals from a waste stream.
- **Eddy Current Separators:** Used to recover aluminium cans and items from a waste stream.
- Bailers: Commonly used method to compact and bind recyclates including plastics, paper and card, metals and other items for storage and dispatch to reprocessors.

This can be done manually - operatives 'pick' the recyclable material as it passes on a conveyor, or automatically – a variety of magnets, eddy separators and optical sensors automatically separate the mixed recyclable materials.

A **Dirty MRF** accepts raw refuse, such as that collected on standard refuse rounds, and removes some recyclable items from the waste. The fact that the waste has not been 'source separated' as in a clean MRF means that the recyclable material is often contaminated and picking it from the mixed waste is a difficult process.

[1] Countries that represent similar economic development and therefore waste stream compositions, technological development and cultural behaviour.

Both clean and dirty MRFs enable materials to be separated, bulked ready for reprocessing.

### *Open Windrow Composting*

Open windrow composting is a well established, long practiced method for producing compost from garden and vegetable wastes. Traditionally taking place on farms this more recently, in order to meet economics and political need to control the process with regard to wastes, takes place on concrete pads and may be covered by textile membranes in order to minimise odour/ bio-aerosol nuisance and speed up the degradation process.

### *In-vessel Composting*

These are generically enclosed systems, which are designed to prevent contamination of the compost and allow higher temperatures to be reached during the process. The composting process is therefore more rapid within an enclosed system. Enclosed systems (aerobic & anaerobic) are the only permissible means for composting kitchen waste as the temperatures involved meet those prescribed in the Animal By-Products Regulations 2003.

### *Anaerobic Digestion*

Anaerobic digestion reduces the bulk of organic waste by converting it into a relatively stable solid residue (digestate) similar to compost. Anaerobic digestion, however, requires an oxygen-free environment (i.e. anaerobic conditions) for the bacteria to function. The process produces a flammable gas consisting mainly of methane and carbon dioxide (biogas), which may be combusted in a standard spark ignition engine to provide heat and power.

The digestate usually requires maturation by composting before a saleable product can be produced.

### *Secondary Treatment*

The advent of the Landfill Directive and the enacting UK legislation means that the Council must consider means of treating all waste that is unable to be collected separately and also diverting the maximum amount of biodegradable waste from landfill. The following generic technologies represent those currently known about in the UK, Western Europe, Australasia and North America for the treatment of residual waste[2]:

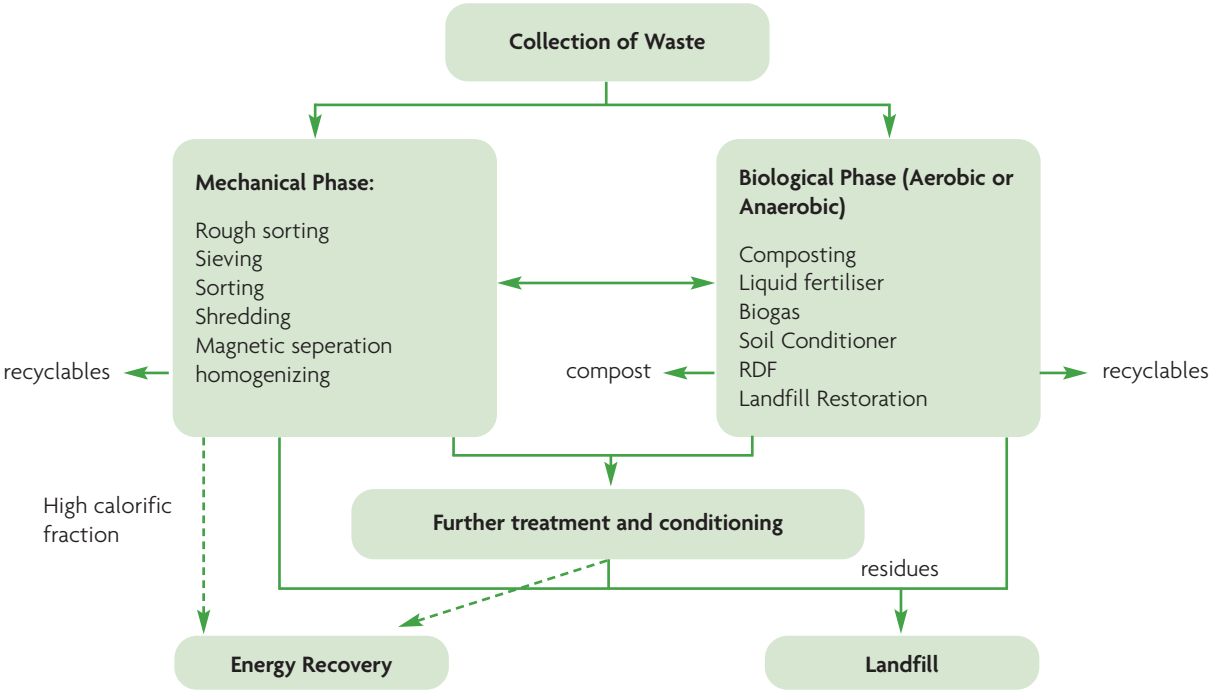



***Figure 1. diagramatic representation of the MBT process***

[2] Waste that results only after the separation of all separately collected/ deposited materials from the waste stream.

### *Mechanical Biological Treatment*

Mechanical and Biological Treatment (MBT) systems can be defined by a two stage process:

- A mechanical sorting phase either as preparation for the biological phase or as the main treatment process removing valuable recyclables from the waste stream.
- A biological phase, involving the stabilisation of the biogenic/ biodegradable fraction of the waste stream, either as a pre-treatment to mechanical sorting, or as the main process producing various valuable products from the waste (for example compost, biogas, refuse derived fuel (RDF) or soil conditioners)

There are numerous configuration concepts for the recovery of value from waste entering the plant, which are considered fully in the list of options contained in this report.

The main distinction is between **anaerobic digestion** based systems and **aerobic** based systems. For the purposes of this report MBT will be split into these two categories to take into account the different technologies. Anaerobic Digestion for source segregated biowaste materials will be separately dealt with under primary treatment.

MBT systems are, at present, most common throughout Germany and Austria, where the technology is now proven for a number of years. However, the development of these systems has been done with a highly source segregated waste stream, which is unlike the UK waste stream in many ways. For this reason, MBT systems are recommended to have either a high level of pre-sorting with a low-grade compost output; a high level of pre-sorting with stabilised biogenic/ biodegradable fraction followed by energy recovery/ landfill; or the implementation of source segregation through kerbside/ survival bag schemes to improve the quality of input material.

The use of MBT technology in the UK, relative to those markets in Germany and Austria, is low, with the main systems being supplied under license from a small number of suppliers on the continent (e.g. Shanks and Eco Decco); or having been bought and set up as companies in the UK (e.g. the purchase of Herhof Umwelttechnik by Treasury Holdings Ltd to form Herhof Environmental Ltd). There is some debate as to whether the compost produced from the UK mixed waste stream would be classed as recycling and problems locating markets for the RDF. Legislation and guidance which may improve the situation is still unclear and in some cases cannot be foreseen.

### *Autoclave*

Autoclaves have previously been developed to sterilise materials, including clinical waste. The system injects steam at above 1200C and 4 bar pressure. The action of this is to break down the organic fibrous materials into a mulch, which can then be dried, combusted, composted or used in a range of products. In addition, all metals are cleaned for automated separation and plastics tend to melt and coagulate (again being stripped of thin plastic coatings and wrappers) for automated sorting.

The system tends to treat batches of 20 tonnes for 2 hours and is seen as a pre-treatment technology facilitating better recovery and operation of down stream technologies. The technology does not reduce the biodegradability of the waste stream in any way.

### *Tertiary Treatment*

Tertiary treatment refers to the recovery of any energy value from residual wastes through the application of heat.

### *Gasification (Advanced Thermal Treatment)*

Gasification converts the bulk of the waste's carbon-containing material into gases by heating it in the controlled presence of oxygen. The products from this process form low to medium heating value fuel gases together with tars, char and ash. These products are ultimately dependent on the type of reactor as well as the waste, but most systems produce a raw gas suitable for direct firing in kilns or boilers.

***Pyrolysis (Advanced Thermal Treatment)***

Pyrolysis converts the bulk of the waste's carbon-containing material into gases and liquids by heating it in the absence of oxygen. The products from this process form low to medium heating value fuel gases together with tars, char and ash. These products are ultimately dependent on the type of reactor as well as the waste, but most systems produce a raw gas suitable for direct firing in kilns or boilers.

***Energy from Waste***

Energy from Waste refers to more traditional technologies that thermally oxidise the waste in super-stoichiometric conditions. These take the form of grates and fluidised beds of various forms of which there are many examples both in the UK and across the rest of the world. Heat and power can be recovered from the process and either fed into nearby users or to the national grid.

***Disposal***

Historically landfill has been the preferred waste disposal method in the UK. Unsorted waste is bulked at a transfer station and disposed of in an engineered landfill site. Modern landfill sites are designed to manage the waste during the lifetime of the site and measures are in place to prevent pollution incidents and problems related to the gases given off and leachate produced by decomposing waste.

## A5 STATEMENT ON PLASTICS RECYCLING

***Bedfordshire Authorities Waste Partnership***

SUPPORTING INFORMATION

***Plastics Recycling in Bedfordshire***

- Key Points: The Bedfordshire Authorities are amongst the 50% of UK recycling authorities that are able to offer collections of plastic bottles from households. With the exception of flats, all households in Bedfordshire receive such collections however nationally only 22% of households are offered a plastic bottle recycling service.
- Markets exist for major "dense" plastics (PET, HDPE and PVC).
- Markets for other plastics, LDPE and PS are limited, very selective, expensive to access and amount to only 200 tonnes per annum in the UK.

Bedfordshire County Council has a contract between itself and Shanks for the processing of kerbside "dry" recyclables. Dating from 1999 when collections commenced, the scheme initially handled newsprint, plastic bottles and steel / aluminium food and drink containers. Light cardboard (i.e. cereal boxes and other food outers) were later added to the list together with telephone directories.

Plastic packaging constitutes a significant percentage of household waste and covers a wide range of materials ranging from plastic bottles, packaging film, carrier bags, refuse sacks, formed food trays made from rigid plastics and also from thermoformed lighter plastics.

Within this list there are many different types of plastic compounds and using acronyms rather than full chemical names the most common ones are

**PET, HDPE, LDPE, Linear LDPE, PVC, PS, Expanded PS, PP.**

Each of the above has a European Identification number assigned to it (1 to 6) and this is usually associated with the recycling triangle symbol. Lesser used plastics are usually grouped as category 7

There are established stable UK markets for the major materials these being HDPE and PET with one of the major purchasers of post consumer domestic materials being LINPAC Recycling based in Yorkshire.

The global market for recyclable HDPE and PET concentrates on plastic bottles as they have a high weight compared to compacted mass, are relatively easy to identify in manual sorting facilities and likewise easy to separate in mechanised facilities, they also contain mostly liquid residue as opposed to food wastes. Many forms of food packaging do not state the precise material use and likewise many bear the cryptic word " This product can be recycled where facilities exist" whilst failing to inform that there are no facilities for recycling.

There are limited numbers of recycling schemes for other post domestic consumer materials i.e. PS and LDPE one example being the ability to recycle thermoformed polystyrene (PS) drinks containers into pencils and rulers however this needs to be regarded a very limited market and expensive to buy into. Carrier bags represent a significant part of household waste by volume but not by weight and whilst markets are limited, many major retail outlets are accepting these back at point of sale in order to meet Packaging Waste Regulations and as a display of corporate social responsibility. This is one of a growing number of areas in which post consumer domestic material is being removed from household waste whilst bypassing local authorities. Much of the strength of retail outlet led schemes is their ability to backhaul materials from across the UK to a central baling point however recent booms in the global economy have led to much if not all of this material being exported.

There is currently high demand for plastics from China however this market is only for PET, HDPE and PVC and LDPE with the remainder being burnt. As with previous rapid increases in demand, this is regarded as temporary and whilst some councils have opted into total export schemes, sometimes through third parties, this market is deemed to be finite and having caused considerable damage to UK recycling infrastructure a

situation exists whereby eastern markets will close and there will be insufficient capability within the UK or Europe to deal with the material being collected.

As stated, Bedfordshire has been collecting plastic bottles via the Shanks contract since its inception at household level in 1999. Primary plastics being recovered are HDPE and PET. PVC bottles do feature in household waste but in lesser quantities and these likewise are recovered.

HDPE and to a lesser extent PET present themselves as food trays i.e. margarine tubs and yoghurt pots etc however these are often contaminated by food residue and the disposal route for these has for a number of years been to refuse derived fuel (RDF). Again access to markets into RDF facilities are limited and this has been used as a means of disposing of non recyclable materials that inadvertently find themselves into the orange sack scheme rather than as a means of increasing landfill diversion.

As part of this contract, responsibility for maintaining markets rests with the contractor and the County Council maintain a regular overview on destinations for all recyclable materials.

It is envisaged that for the foreseeable future, the kerbside collection scheme will restrict itself to plastic bottles only with efforts being made to limit the amount of other plastics entering the MRF. Non target plastics will continue to be dealt with by Shanks as a logistical exercise rather than as part of the scheme.

Long term plans by the County Council to develop an integrated waste treatment facility will result in facilities that can handle difficult plastics.

## A6 LANDFILL ALLOWANCE TRADING SCHEME ALLOCATIONS AS APPLICABLE TO BEDFORDSHIRE COUNTY COUNCIL AS WASTE DISPOSAL AUTHORITY.

| Biodegradable waste allowances | |
|---|---|
| 2005 / 2006 | 151,390 |
| 2006 / 2007 | 142,185 |
| 2007 / 2008 | 129,911 |
| 2008 / 2009 | 114,568 |
| 2009 / 2010 | 96,158 |
| 2010 / 2011 | 85,454 |
| 2011 / 2012 | 74,751 |
| 2012 / 2013 | 64,048 |
| 2013 / 2014 | 61,301 |
| 2014 / 2015 | 58,553 |
| 2015 / 2016 | 55,806 |
| 2016 / 2017 | 53,058 |
| 2017 / 2018 | 50,311 |
| 2018 / 2019 | 47,564 |
| 2019 / 2020 | 44,816 |

The amounts detailed above relate to the tonnage of biodegradable waste that the Waste Disposal Authority will be allowed to send to landfill without treatment. Each tonne translates into an allowance and additional allowances may be purchased to cover any shortage. Alternatively surplus allowances may be traded with other UK WDA's.

Further information on LATS and the associated Waste Emissions Trading Act can be found on the following websites:

**www.defra.gov.uk**

**www.environment-agency.gov.uk**

**www.letsrecycle.com** industry based website updated daily covering all waste and recycling topics

## A 7 GLOSSARY OF TERMS AND ABBREVIATIONS

**BAWP**

Bedfordshire Authorities Waste Partnership The BAWP is a forum comprising Executive Members and senior officers from all four Bedfordshire councils. It acts to co-ordinate waste management activities and to plan future strategy.

**Best Value**

The national targets are supported by statutory performance standards for household recycling/composting. Under the duty of Best Value local authorities are expected to deliver services to clearly defined standards which cover both cost and quality – by the most effective, economic and efficient means. Local authorities are also obliged to demonstrate continuous improvements in service delivery and cost.

**BLWS**

The Waste Strategy for Bedfordshire and Luton 2001 Provides the local level interpretation of higher order policy requirements and co-ordinates statutory waste planning and management functions

**BPEO**

Best Practical Environmental Option

**Bring Sites**

Bottle Banks, Paper Banks etc

**BVPI's**

Best Value Performance Indicators To monitor performance, each local authority must report against a set of BVPI's. These are defined nationally in order to ensure consistent reporting.

**Deposit facilities**

Includes unmanned "bring-sites" comprising one or more "banks" for deposit of bottles, paper, cans and textiles.

Also includes the Household Waste Recycling Centres

**Dry recyclables**

A mixed collection of paper, metals and plastics for recycling.

**DSO**

Direct Service Organisation

**EEDA**

East of England Development Agency

**EERA**

East of England Regional Assembly

**EERWMS**

East of England Regional Waste Management Strategy Provides bespoke guidance for local authorities in the area.

**EfW**

Energy from waste

**Fly-tipping**

The illegal dumping of waste on open land

**Green waste**

Compostable (Garden) Waste

**Household Waste**

A subset of Municipal Waste: includes waste from household collection rounds, bulky waste collections, Household Waste Recycle Centres (HWRCs), street cleansing and waste from schools, but excludes commercial wastes.

**HWRC**

Household Waste Recycling Centres. Places for the public to take items of household waste that are not suitable for collection by the household waste collection service. There are currently five in Bedfordshire

**IWMF**

Integrated Waste Management Facility

**Kerbside collection**

Kerbside Collection of 3 waste streams:

- Dry Recyclables
- Green Recyclables
- Residual Waste

**MRF**

Materials Recovery Facility

**Municipal waste**

Includes all waste collected from households (i.e. kerbside rounds and special collections), street litter, waste delivered to council recycling points (i.e. bottle banks and other recycling centres), municipal parks and gardens waste, council office waste, and some commercial waste (from certain shops and smaller businesses where council waste collection agreements are in place).

**Precautionary principle**

Where the threat of serious or irreversible damage exists, and there is significant scientific uncertainty as to the nature and extent of such risk, then actions and decisions should be taken with appropriate caution.

**Proximity principle**

To avoid undue environmental disturbance and pollution associated with bulk transport, and to encourage local awareness and responsibility, wastes should be dealt with as close to their source of origin as possible.

**RDF**

Refuse derived fuel

**Residual wastes**

Suitable for neither recycling nor composting

**Waste Hierarchy**

The general order of preference for waste management methods:

- Reduce
- Recycle
- Recover
- Dispose.

**Waste Recovery**

Obtaining value from waste through any combination of recycling, composting or recovery of energy. These targets apply to all municipal wastes, not just household wastes.

**Waste Strategy 2000**

Key national strategy document, which sets out Government policy for a full range of commercial, industrial and municipal wastes.

**WCA**

Waste Collection Authorities

- Bedford Borough Council
- Mid Bedfordshire District Council
- South Bedfordshire District Council

**WDA**

Waste Disposal Authority

- Bedfordshire County Council

**WEEE**

Waste Electrical and Electronic Equipment Directive

**WPA**

Waste Planning Authority

- Bedfordshire County Council


Produced by the

**Bedfordshire Authorities Waste Partnership**

Waste Services Group
County Hall, Cauldwell Street
Bedford MK42 9AP
Tel: 01234 228681
email: waste.partnership@bedscc.gov.uk

Bedfordshire county council

MID·BEDS DISTRICT COUNCIL

Bedford Borough Council

South Bedfordshire