

# Wiltshire Joint Municipal Waste Management Strategy 2006:

## Background Report

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## 1. Context

- 1.1 Wiltshire County Council has a statutory duty to make arrangements for the disposal of the MSW collected by the four District Councils, Kennet, North Wiltshire Salisbury and West Wiltshire. In 2004/05, 265,000 tonnes of MSW was generated in the County. This represents a year-on-year increase of 4.4% since 1998/99, and an overall increase of 29%.
- 1.2 Wiltshire County Council (WCC) and the four District Councils of Kennet, North Wiltshire, Salisbury and West Wiltshire (referred to as the Councils hereafter) have recognised the need to work together in partnership. The Councils have therefore come together to form the Wiltshire Waste Partnership (WWP). One of the functions of the WWP is to update the 2002 Municipal Waste Management Strategy and develop a Joint Municipal Waste Management Strategy (JMWMS). The JMWMS will seek to encourage recycling and composting, recover value from the waste stream and divert the biodegradable fraction, of the residual waste stream, away from landfill. It will also seek to encourage the introduction of new waste processing and treatment technologies to meet this challenge. The JMWMS will determine the most appropriate way to manage MSW generated within the County in order to protect the environment, comply with new legislation such as the EC Landfill Directive, and to meet Government targets set out within Best Value Performance Indicators.
- 1.3 The production of a JMWMS is a statutory requirement for local authorities in two-tier areas under the Waste Emissions Trading (WET) Act (2003). However, the Wiltshire authorities have a temporary exemption from the WET Act until June 2005.
- 1.4 The main disposal route in the County is via landfill. However, landfill capacity in the County is due to expire by 2010/11. Nevertheless, this is becoming a less desirable option both environmentally and economically, although some landfill facilities will be necessary in the future for the residual proportion of household waste that cannot be managed by any other means.
- 1.5 The JMWMS will aim to achieve 45% recycling of municipal solid waste by 2020<sup>1</sup> in line with the Regional Waste Strategy and the Best Practicable Environmental Option (BPEO). This will require an increase in capacity for dealing with the recyclables recovered from the waste stream, especially the compostible element, and so meet the requirements of the Government's Best Value legislation.
- 1.6 It will also be necessary to develop capacity to manage residual waste<sup>2</sup> so that the diversion requirements of the Landfill Directive and the restrictions imposed by the Landfill Allowance Trading Scheme (LATS) can be met.
- 1.7 In line with the BPEO, the Wiltshire Strategic Board (WISB)<sup>3</sup> has set itself the goal of making Wiltshire the most waste efficient County in England by 2014. WISB has adopted a vision based on a commitment to reduce waste at source and aid a reduction in the annual increase of waste produced from households. The aim of WISB is to achieve funding through a local public service agreement (LPSA). LPSA will set stretch targets that directly support the Strategic Board's Waste Efficiency Programme. This will include household waste minimisation and minimising waste in schools through education (Wiltshire Wildlife Trust, Hills Minerals and Waste,

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<sup>1</sup> Calculated as equivalent to about a 50% recycling rate for household waste. Recycling rates are normally reported as a proportion of household waste.

<sup>2</sup> Waste which cannot be recycled

<sup>3</sup> County's Local Strategic Partnership

Wiltshire County Council), both of which should help increase recycling and recovery<sup>4</sup> targets laid down in the JMWMS.

- 1.8 The Strategy will review the options for Wiltshire, with the aim of identifying the BPEO for the County within the constraints of the existing waste management contract framework.

## 2. A Profile of Wiltshire

- 2.1 Wiltshire is the 13<sup>th</sup> largest county in England by size<sup>5</sup> with a land area of 348,070 hectares and a population of 445,150, mainly concentrated in the west of the County and in the city of Salisbury to the south.

- 2.2 The County is divided into four districts: Kennet, North Wiltshire, Salisbury and West Wiltshire. The principal towns of the County are Calne, Chippenham, Devizes, Marlborough, Melksham, Trowbridge, Salisbury, Warminster, Westbury and Wootton Bassett. The County also has major centres of population close to its borders. Swindon lies to the north east of Wiltshire and Bath and Bristol to the north west of Wiltshire.

- 2.3 The Ministry of Defence is a significant employer in the County, however, the local economy is developing rapidly and there is an increasingly diverse range of economic activity. Wiltshire has an important tourist industry and new industries are emerging in the County. These include electronics, insurance, business services, pharmaceuticals, plastics, research, information technologies and communications. These industries are replacing those traditional industries centred around agriculture, food processing and engineering. Whilst farming continues to be an important activity, local industries based upon it have declined in significance.

- 2.4 Industrial changes are impacting upon the socio-demographic characteristics in Wiltshire. These in turn have an effect on the development and implementation of waste management strategies for Wiltshire. Therefore it is important that in the development of any long-term waste strategy these changes are taken into consideration. Key socio demographic issues include:

- 2.4.1 Historic trends and future projections with regard to population growth and increasing household numbers, along with a trend towards smaller households and single occupancy dwellings. These factors have important implications for future household waste arisings in Wiltshire;

- 2.4.2 Wiltshire consists of a mixture of urban and rural areas which means that there are likely to be difficulties in achieving efficiency in terms of the logistics associated with waste collection and kerbside collection systems as well as delivery to treatment/disposal plants. However, high levels of car ownership (84%) suggest that a great deal of the population is relatively affluent and mobile and is in a position to potentially access a range of alternative collection facilities;

- 2.4.3 The large land area of Wiltshire and limited transport infrastructure between the north and south of the County will impact upon the siting of waste treatment/disposal facilities and may make the long distance haulage of waste economically and environmentally unattractive.

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<sup>4</sup> See footnote 8 for a description of recovery

<sup>5</sup> Reference: [www.nationmaster.com/encyclopedia/Wiltshire](http://www.nationmaster.com/encyclopedia/Wiltshire) (land area is the administrative area of Wiltshire County Council, and therefore excludes the Unitary authority of Swindon)

### **3. Background to the Strategy**

3.1 The Councils have recognised the need to work together in partnership to determine the most appropriate way to manage MSW generated within the County, in order to protect the environment, comply with new legislation such as the EC Landfill Directive and to meet Government targets. The Councils have therefore come together to form the Wiltshire Waste Partnership (WWP) and to (amongst other aims) develop a Joint Municipal Waste Management Strategy for Wiltshire (JMWMS). The production of such a strategy is a statutory requirement under the Waste Emissions Trading Act (WET) (2003) for two tier local authorities as mentioned earlier. However Wiltshire authorities have a temporary exemption from the WET Act due to recent recycling performance.

#### **3.2 Strategy Objectives**

3.2.1 The key objectives of the JMWMS are to ensure that the County has a waste management system that is flexible, affordable, meets current and future performance standards and targets and complies with current and proposed legislative requirements.

3.2.2 During the development of this strategy a number of key principles have been explored, developed and adopted as summarised below:

3.2.3 Promote waste minimisation and awareness by engaging with the public and other stakeholders (minimisation includes reduction, home composting and re-use, followed by recycling and centralised composting).

3.2.4 Develop appropriate solutions with reference to the Best Practicable Environmental Option (BPEO) and the Proximity Principle

3.2.5 Optimise recycling and composting

3.2.6 Work within the context of the Regional Waste Strategy and the corporate aims of the Wiltshire Strategic Board (WISB)

3.2.7 Recover energy or other value from residual waste

3.2.8 Seek to minimise the County's reliance on landfill

### 3.3 **Scope of the Strategy**

3.3.1 The focus of the Strategy is MSW; that is household, commercial and industrial waste collected by local authorities. This does not mean all other wastes are being ignored, but the priority at this stage is to develop a strategy for those wastes for which the Councils have a statutory responsibility and over which they have powers to determine how they are to be managed in the future. The adopted Wiltshire and Swindon Waste Local Plan and its review will, however, also include provision for the development of treatment capacity for these other wastes.

3.3.2 The Waste Local Plan (para 8.4.12) identifies the south and west of the County as priority areas for development of any waste to energy capacity (including incineration) required to treat MSW. The reason for this is to reduce the transportation of waste over relatively long distances to the main landfill site at Lower Compton. The same principle would apply to proposals for any new treatment capacity proposed to take waste arising in these areas.

**For further information on other wastes generated in Wiltshire refer to Paper (A): Waste Streams in Wiltshire**

3.3.3 The JMWMS is not intended to cover the waste management requirements for the unitary authority of Swindon. In addition, it does not consider the detailed location of any waste management facilities. This is covered by the Wiltshire and Swindon Waste Local Plan, which was adopted in March 2005. The Waste Local Plan (WLP) provides planning policy guidance to 2011. A review has commenced to extend guidance to 2020 and meet the requirements of the Planning and Compulsory Purchase Act 2004. The JMWMS does however take into full consideration findings of the WLP, which identifies sites and sets out the policy basis against which planning permission will be granted or refused for waste related planning applications, and, to ensure that such policies enable the provision of an adequate network of waste management facilities.

3.3.4 This document is an extended summary and provides a platform for a number of supplementary documents. These supplementary documents, which make up the full JMWMS, provide the overall picture of waste management in Wiltshire and are referred to throughout this report for those who require further detail.

### 3.4 **The Need for a Strategy**

3.4.1 The JMWMS for Wiltshire examines the policy framework for the development and procurement of local authority waste management services within the County for the next twenty years (i.e. 2025). A number of alternatives for delivering the waste management service within the existing service contract structure are identified. As a starting point it assumes that:

- i) local authorities and the Wiltshire Wildlife Trust will tackle waste minimisation and raise public awareness towards waste issues
- ii) local authorities will raise rates of recycling of household waste
- iii) there will be an increase in composting activity, both by residents (minimisation) and local authorities in accordance with targets set by the government under LATS.

- iv) the County Council will seek to divert biodegradable waste away from landfill
- v) there will be a presumption to recover value from the municipal waste stream
- vi) local authorities will provide services to meet targets for recovery<sup>6</sup> of value from waste, set by national government, the Regional Assembly and the Wiltshire Strategic Board

3.4.2 It has been recognised that in order to meet the medium to long term requirements of the Landfill Directive there will be a need to adjust the approach to the management of waste arising in Wiltshire. Part of the analysis of options for the JMWMS identification includes the identification of alternative waste management solutions and an assessment of their viability within Wiltshire. It must be recognised that there are not enough waste management facilities in Wiltshire for MSW, be they for recycling, recovery or disposal and it is therefore intended that the Strategy will drive the development of the additional facilities required, to meet changing needs to 2020.

#### 4. Policy Drivers

- 4.1 The County Council has to take into account a wide range of EU and Government laws and guidance in determining appropriate waste development. These stem from the EU Waste Framework Directive and Hazardous Waste Directive. They include the Landfill and Incineration Directives, the National Waste Strategy 2000 and Planning Policy Statement 10 (PPS10) on Planning and Waste Management.
- 4.2 The policy drivers can be considered in a European, national and local context and are discussed in terms of their impact on the development of a waste strategy for Wiltshire in the sections below.

***For more detailed information on these drivers please refer to Paper (B): Waste Policy and Legislation and for Hazardous Wastes Paper (M): Topic Paper 5 - Hazardous Waste Planning and Legislative Background, Wiltshire Waste Development Forum (July 2005)***

#### 4.3 **European Legislation**

- 4.3.1 There are a range of European Directives stemming from the Waste Framework Directive. These set the foundations for sustainable waste management across the Member States and have a direct impact on the waste management practices adopted at a local level). Implemented in 2001 the **Landfill Directive** is currently forcing the biggest changes in the way we manage our waste. The overall aims of the Directive are to prevent, or reduce as far as possible, negative effects on the environment from landfilling waste. This is to be achieved through the introduction of stringent technical requirements, with specific targets set for the diversion of biodegradable municipal waste (BMW) to reduce the potential for greenhouse gas emissions from landfill (Table 1).

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<sup>6</sup> See footnote 8 for a description of recovery

**Table 1:** Reduction of biodegradable municipal waste to landfill (UK)

<b>Deadline Date</b>	<b>Reduce by</b>	<b>Baseline figure</b>
<b>2010</b>	25%	1995
<b>2013</b>	50%	1995
<b>2020</b>	65%	1995

4.3.2 Thus, the amount of waste to be landfilled over the next 20 years is tied to 1995 baseline figures, and is fixed despite increasing waste quantities. **It is this ever increasing gap between waste production and the amounts which can be landfilled that provides a driver for step changes in behaviour.** In addition to the diversion of BMW, the Landfill Directive contains a number of other significant requirements. These include a requirement for all waste to be pre-treated prior to landfill disposal (by 2004 for hazardous waste, and by 2007 all other wastes<sup>7</sup>), leading to an increased need for technological solutions and the development of appropriate facilities. There will also be a need for the development of new technology and innovative management systems for waste tyres which will be banned from disposal to landfill in 2006. The disposal of liquid wastes, infectious clinical wastes and certain types of hazardous waste to landfill are also banned, placing significant pressure on existing capacity to manage these waste streams.

4.3.3 Wiltshire, like many other counties in England has relied on landfill as the main disposal option, and will have to find alternative ways of managing the biodegradable element of the waste stream, and also the banned materials. The Department of Environment, Food and Rural Affairs (DEFRA) has introduced new legislation limiting the amount of BMW that a Waste Disposal Authority (Wiltshire County Council in this case), can dispose of via landfill, under the Landfill Allowance Trading Scheme (LATS).

*For more detailed information on these drivers please refer to Paper (B): Waste Policy and Legislation*

4.3.4 There are other Directives, such as the **Hazardous Waste Directive, Packaging and Packaging Waste Directive, Waste Incineration Directive, End of Life Vehicles Directive, and Waste Electrical and Electronic Equipment Directive** which have a direct impact on the practices which need to be implemented within Wiltshire, and these are discussed in Paper (A). In addition a number of **Thematic Strategies** are under development which will have a direct impact on the management practices for waste, and which may lead to the development of additional European policy and legislation. These are also discussed in Paper (A).

#### 4.4 **National Legislation and Policy**

4.4.1 On a national level, the UK is responsible for implementing EU Directives, and a number of strategies and policies have been developed to ensure that we work successfully towards the various targets and deadlines

4.4.2 **Waste Strategy 2000** is focused on driving waste management up the hierarchy towards more sustainable options. The Waste Strategy has set statutory recycling performance standards for local authorities that have been designed to aid progress towards national recycling targets and EU Landfill Directive Targets.

<sup>7</sup> The pre-treatment requirement does not apply to municipal solid waste (MSW), although LATS will have a similar impact.

4.4.3 Household<sup>8</sup> Waste Recycling Targets:

- i) recycle or compost at least 25% of household waste by 2005
- ii) recycle or compost at least 30% of household waste by 2010
- iii) recycle or compost at least 33% of household waste by 2015

4.4.4 Municipal<sup>9</sup> solid waste (MSW) recovery targets<sup>10</sup>:

- i) recover value from 40% of MSW by 2005
- ii) recover value from 45% of MSW by 2010, at least 30% through recycling or composting
- iii) recover value from 67% of MSW by 2015, at least half of that through recycling and composting, and to go beyond this in the longer term.

4.4.5 To ensure that all local authorities contribute to achieving these targets, the government has set statutory performance standards for recycling and composting for each local authority. The requirements for Wiltshire Districts Councils are illustrated in Table 3 (section 4.3.1).

4.4.6 In addition **Best Value Performance Indicators** (BVPI) have been set for waste and reflect the focus of the national waste strategy in relation to recycling and composting. Each Council calculates their recycling and composting rates and reports against a number of BVPIs (section 4.3.1).

4.4.7 To speed up progress and legislate for the development of sufficient opportunities for householders to recycle, the **Household Waste Recycling Act** (2003) has put in place measures to ensure that by 2010 all households will have a collection of at least two recyclates where this can be achieved at reasonable cost, and subject to alternative provision. The duty to meet the requirements of the Act is placed on English waste collection authorities. Within Wiltshire, this Act will have negligible impact as kerbside collection is already being rolled out throughout the county, and the target of 2 types of recyclate to be collected in this way by 2010 should be exceeded.

4.4.8 In conjunction with the EU Landfill Directive targets, the UK government has introduced the **Landfill Allowance Trading Scheme** (LATS) to help meet targets for diverting biodegradable municipal waste away from landfill. The **Waste and Emissions Trading Act** (2003) provides the legal framework for LATS and for the allocation of tradable landfill allowances to each waste disposal authority in England. These allowances should rapidly reduce the amount of biodegradable municipal waste sent to landfill within a specified scheme year.

4.4.9 In addition to waste policy, the waste planning system is changing. **Planning Policy Guidance Note 10** (PPG10) will be superseded by **Policy Planning Statement 10** (PPS10).

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<sup>8</sup> Household waste is all materials originating from residential properties and requiring collection and disposal by WCAs and WDAs (SW Regional Waste Strategy 2004)

<sup>9</sup> MSW is household waste and all other wastes collected by a WCA, or its agents, including municipal parks and gardens, beach cleansing, commercial or industrial wastes

<sup>10</sup> "Recover" means obtain value from wastes through one of the following means: recycling; composting; other forms of material recovery (such as anaerobic digestion); energy recovery (including incineration or combustion with direct or indirect use of the energy produced, manufacture of refuse derived fuel, gasification, pyrolysis, or other technologies)

- 4.4.10 PPS10 is concerned with the planning system's contribution to delivering sustainable waste management. The key objective is to drive waste management up the waste hierarchy addressing waste as a resource and looking to disposal as the last option. This is in line with Waste Strategy 2000, the Government's Waste Strategy and its emphasis on reducing growth in waste and moving away from landfill to a more environmental acceptable ways of managing waste. PPS10 establishes planning policy, but it does not make any changes to the environmental outcomes already set out in national policy and the European Directives, in particular the EU Waste Framework Directive.
- 4.4.11 As part of PPS10, there is a requirement for a **Strategic Environmental Assessment (SEA)**. SEA will supersede **Best Practicable Environmental Option (BPEO)**. In Wiltshire, this will apply when the County next undertakes a municipal waste management strategy. SEA is a process consistent with the SEA Directive. It is designed to ensure a high level of protection for the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development. Such plans and programmes typically include a series of individual policies designed to address the issues identified as priorities for action. These policies are specific to the development plans and to some degree the plans comprise a sum of individual policies. The SEA process evaluates processes individually and in combination against agreed environmental objectives. The purpose is to see whether the policies are likely to achieve those objectives or whether they should be amended. This is not the case with PPS which draws together rather than making policy.

#### 4.5 ***Regional and Local Policy Delivery Issues***

- 4.5.1 The national legislation requires implementation at a local level, and in some cases specific targets have been set at the district and county level to drive change and ensure that nationally we meet the requirements of the European Directives. **The South West Regional Waste strategy (RWS)** provides a foundation for meeting the imposed targets, and in terms of delivery a range of stakeholders have a responsibility for ensuring effective implementation.

#### 4.5.2 **Regional and Local level Policy and Targets**

- i) All local authorities have to respond to Best Value requirements and have a duty, as set by the **Local Government Act 1999**, towards continuous improvement. These requirements are entitled **Best Value Performance Indicators (BVPI)** and are used as a measure of improvement in waste management under local authority control. The focus of BVPIs for waste reflects the focus of the national waste strategies and drives local authority efforts in relation to recycling and composting. In terms of facility development, and the need to meet BVPIs, it should be noted that a recent change in BVPI 82b allows for the inclusion of Anaerobic Digestion (AD) as a composting process. Therefore materials sent to AD facilities can be counted as composted and included in the calculation of the Council's recycling rate. Also BV84 has been introduced to allow for household waste collected per head (kg). Table 2 illustrates the target BVPIs set for Wiltshire and the actual targets achieved.

**Table 2:** BVPI targets for Wiltshire

Performance Indicator	Description	2004-05		2005-06
		Target	Actual	Target
<b>BV82a/b</b>	total household waste recycled	27.5%	26.68%	<b>30.0%</b>
<b>BV82a</b>	total household waste recycled	19.0%*	17.96%	<b>20.0%*</b>
<b>BV82b</b>	total household waste composted	8.5%*	8.72%	<b>10.0%*</b>
<b>BV82c</b>	total household waste used to recover CHP	0.0%	0.00%	0.0%
<b>BV82d</b>	total household waste landfilled	72.5%	73.33%	<b>70%**</b>
<b>BV84</b>	household waste collected per head (kg)	542	514.96	<b>540</b>
<b>BV87</b>	waste disposal per tonne (£)	43	43.03	<b>50</b>
<b>BV90c (ref.27)</b>	satisfaction with recycling facilities and HRCs	3 yearly	93%	3 yearly

\*Notional split between BV82a and BV82b

\*\* National target in 2005/06 to achieve 40% recovery of MSW. Therefore MSW target is 60% in 2005/06.

- ii) The performance against statutory targets (Table 3) contributes to County performance against BVPI 82A/B.

4.5.3 With regard to the **Landfill Allowances Trading Scheme (LATS)**, Wiltshire County Council as the waste disposal authority will be able to determine how to use its allocation of allowances in the most effective way, allowing the trading, banking or borrowing of allowances in accordance with their investment strategy. However, the scale of financial penalties attached to the scheme (£150 per tonne for the first year 2005-06) means in reality the allocation of allowances will be viewed as targets. In 2005-06 Wiltshire's biodegradable waste landfill allowance (tonnage) is 134,000 tonnes and 2019-20 it is 43,400 tonnes. These allowances equate to approximately 70% of the anticipated biodegradable MSW tonnage in 2005-06, and less than 20% in 2019-20.

4.5.4 Adopted **Regional Planning Guidance 10 (RPG10)** 2001 promotes development of alternatives to landfill and sets out various regional targets for recycling and composting, which in turn reflect national targets. Since publication of RPG10, the Regional Assembly and its Regional Technical Advisory Body on waste have produced a Vision and **Regional Waste Strategy**. The latter sets out targets for recycling, composting and provision of waste management capacity over the period to 2020. The key implications are:

- i) proposals for a sustained reduction in the use of landfill for all wastes, which are more ambitious than EU and national targets
- ii) a municipal solid waste (MSW) recycling target that requires continued investment, to increase household waste recycling and composting from the BVPI target of 30% by 2005/06 to approximately 50% by 2020

- iii) promotion of secondary facilities to treat remaining MSW, in the form of MBT and/or energy from waste, including such technologies as incineration, pyrolysis, gasification and anaerobic digestion.

4.5.5 **The Planning and Compulsory Purchase Act** adopted in 2004 is set to radically change the way plans are made at regional and local levels. RPG10 will be superseded by a **Regional Spatial Strategy**. This will replace Structure Plans, which are prepared by county and unitary authorities.

4.5.6 **Local Plans** - prepared by district and unitary authorities - will be phased out in favour of new **Local Development Frameworks** (LDFs). The Government's reasons for bringing in the new system are to:

- i) Speed up the preparation of plans;
- ii) Ensure that plans are monitored, reviewed and kept up to date; and
- iii) Achieve more effective involvement with the community.

4.5.7 These reforms are intended to make the planning system more responsive to changing circumstances. They should also make the plan preparation process quicker and more flexible. Community involvement throughout the process will enable the people who live or work in an area to help to shape its future.

4.5.8 In addition to Waste Strategy 2000 targets, Wiltshire County Council has a **Local Public Service Agreement** (LPSA) which requires the authority to recycle or compost 27.5% of household waste by 2004/05, and a statutory pooled target of recycling or composting of 30% of household waste by 2005/06. Our pre capped target for 2005-06 was set at 33% by the government, however DEFRA have now capped our pooled target for recycling to 30%. Although we now have a reduced target of 30%, Wiltshire still aspires to 33% in the short to medium term. As part of the pooled target arrangements, the District Councils have also been given statutory recycling/composting targets (Table 3).

**Table 3:** Recycling/composting Targets at District Level

District Council	Pooled Target	
	2003/04	2005/06
<b>Kennet</b>	11%	25%
<b>North Wiltshire</b>	10%	18%
<b>Salisbury</b>	16%	30%
<b>West Wiltshire</b>	10%	21%

#### 4.5.9 Local Level Delivery

##### i) Wiltshire County Council

- a) Wiltshire County Council (WCC) has a statutory duty as a Waste Disposal Authority (WDA) under the **Environmental Protection Act 1990** (section 51) to arrange for the disposal of waste collected by the Waste Collection Authorities (District Councils) including recycled waste, and for the provision of places at which residents of Wiltshire can deposit their own household waste free of charge. The Council also provides facilities (referred to as Household Recycling Centres) where householders can take their waste. The recycling of wastes from these sites is also the responsibility of the County Council. However, WCC has also appointed a contractor who collects materials on behalf of NWDC, SDC and WWDC where they are separated for recycling. In 2005 KDC took over and extended the service in their area. Again all of these processes must meet Best Value requirements. The County Council also has a statutory duty as a land use planning authority, and is responsible for determining planning applications for developments associated with the deposit, treatment, storage, transfer, processing and disposal of waste in the County. In order to fulfil this duty, the County Council adopted the Wiltshire and Swindon Waste Local Plan in March 2005. The Waste Local Plan identifies sites and sets out the Council's planning policy framework to 2011 against which applications for development involving waste treatment and disposal will be considered.
- b) Wiltshire County Council is committed to leading by example, and in terms of waste management this means adopting good practice wherever possible to manage the waste that it generates within its offices and services. The Council is already making moves towards developing green procurement procedures internally and is keen to build upon previous successes with regard to in-house environmental initiatives.
- c) A corporate position is being developed which will set the framework for environmental systems within the council as a whole, and it is the intention that this will be disseminated to, and implemented by, all departments involved within Wiltshire County Council.

***For more detailed information on leading by example and in house initiatives please refer to Paper (B): Waste Policy and Legislation***

##### ii) District Councils

- a) Under the **Environmental Protection Act 1990** (section 45), District Councils have a statutory duty to arrange for the collection of household waste, and commercial wastes (if requested to do so), within their area. As WCAs they are also responsible for street cleaning, litter picking and clearance of flytipped waste from public land. All of these activities should meet Best Value requirements. Every WCA has a statutory duty to produce a Waste Recycling Plan, which sets out the recycling arrangements that it intends to make for the household waste arising in its area. Details of service development in each District are set out in section 5.2.3 and Tables 5a and 5b.

iii) Wiltshire Waste Partnership

- a) The **Wiltshire Waste Partnership** (WWP) was formed in 2001 following a Best Value Review of the County Council's Waste Management Service. The Partnership comprises of Officer and Member representation from the County Council and four District Councils. The constitution of the partnership was reviewed during April- June 2005, and now provides for a quarterly members' forum and up to eight officer meetings each year. Officers attending the partnership meetings are experts from the County and District Council who have many years of practical experience in the management of MSW. The key aim of the Partnership is to co-ordinate the collection and disposal of waste in order to maximise efficiency and achieve Government targets for recycling and composting of household municipal waste, whilst recognising the individual requirements of each authority. The Partnership produced the first Wiltshire Waste Management Strategy in 2002, approved by the County and Districts. Another recent success of the Partnership has been to secure funding from DEFRA to support kerbside recycling in the County. The funding started in April 2003 and ran to March 2004. The DEFRA bid was supported by the County Council's Waste Recycling and Disposal Contractor, Hills Minerals and Waste. Further developments have since been funded by the partnership.
- b) The Contractor is responsible for providing the kerbside recycling collection service (known as kerbside collection) which now covers North Wiltshire, West Wiltshire and Salisbury. 95% coverage of North and West Wiltshire by late 2005 has now been agreed. The Kennet service is undertaken by the District Council, working in partnership with Hills Minerals and Waste.
- c) Funding was also secured from DEFRA in 2003 for the implementation of the **Waste Prevention Strategy** produced on behalf of the County Council by the Wiltshire Wildlife Trust. The strategy aims to reduce the growth of MSW by encouraging change in attitude and behaviour at home, at school and in the community through educational campaigns, incentive schemes, practical advice and support. A National Waste Minimisation Conference was held in 2003, "Beyond Recycling" to launch the new strategy and share best practice.
- d) In June 2005, further funding was secured from DEFRA under the **Waste Implementation Programme** (WIP) to undertake a County wide **Compositional Analysis** over two seasons.
- e) management methods when assessing the impact of recycling collections and, the potential for extending recycling rounds, particularly into the rural areas, (ii) robust information for the contractor so they have a clear understanding of how much variety there is, (iii) information to ensure the correct waste recovery<sup>11</sup> infrastructure is in place in order to meet LATS targets and, maximise best value performance indicators (BVPIs) after source segregation is carried out.
- f) In line with the BPEO the results from the compositional analysis will be used to adjust the final Joint Municipal Waste Management Strategy, to determine what can be achieved through recycling, composting and recovery.

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<sup>11</sup> See footnote 8 for an explanation of recovery

iv) Wiltshire Strategic Board

a) The **Wiltshire Strategic Board** (WISB) is the County's Local Strategic Partnership. The WISB has set itself the goal of making Wiltshire the most waste efficient County in England by 2014. This goal supports five key recommendations made by WISB in October 2003. These are:

- To adopt a vision of a more waste efficient County based on a commitment to reduce waste at source and work to stop the annual increase in waste produced from households within the next 5 years;
- Continue to support the development of the Municipal Waste Reduction Programme including long term identification of funding;
- Lobby at national level for waste reduction to be integrated into recycling targets including the proposal for Wiltshire to pilot this approach;
- Work together to implement the partners' own internal waste reduction programmes as well as developing a high profile countywide programme of action on commercial and construction waste
- Set up a WISB Waste Working Group to oversee implementation of the programme of action.

b) The Board is composed of leaders of the County Council, the four District Councils, Chairman of the Learning and Skills Council, the Wiltshire and Swindon Economic Partnership, the Wiltshire and Swindon Long Life Partnership, the Wiltshire and Swindon Combined Fire Authority, the Wiltshire Police Authority, the Rural Regeneration Partnership, Wiltshire's Churches together, Wiltshire Wildlife Trust, the 3 Primary Care trusts, the Association of Wiltshire Towns, the National Probation Service for Wiltshire Area, Community First, Wiltshire Association of Local Councils and a Representative of the 4 Councils with a voluntary service.

c) One of the WISB aims is to achieve funding through the Local Public Service Agreements (LPSA). **LPSA2** took effect in April 2005, and runs for 3 years. One of the priorities being proposed for the LPSA is waste efficiency. LPSA2 will set a stretch target that directly support the Strategic Board's Waste Efficiency Programme. The 3 streams of work proposed within LPSA2 are the minimisation of household waste, education and minimisation of schools waste, and the minimisation of commercial waste.

v) The Waste Contractor

a) **Hills Minerals and Waste** (Ltd) provide the waste disposal service for WCC and operate the Household Recycling Centres (HRCs). They also operate 'black box' kerbside collections covering parts of North Wiltshire, Salisbury and West Wiltshire Districts. Kennet District Council undertakes the collection of recyclables in its area. The District Councils operate the collections of residual household waste, with the contractor Cleanaway being retained by West Wiltshire District Council for this purpose. Hills

Minerals and Waste operate major landfill sites at Lower Compton and Purton (both in North Wiltshire) and Chapel Farm in Swindon. Lower Compton takes municipal solid waste (MSW), plus separated green (garden) waste and recycles at its Materials Recycling Facility (MRF). Some landfill material goes to an adjoining landfill site at Sands Farm, run by Viridor Waste Management and Chapel Farm in Swindon.

b) Hills Minerals and Waste also operate waste transfer stations for household waste at Everleigh (Kennet) and Thorny Down (Salisbury). In addition to this Hills Minerals and Waste subcontract the composting of garden waste collection in Salisbury District to an on-farm composting facility at Grateley.

vi) Wiltshire Wildlife Trust

a) **Wiltshire Wildlife Trust** (WWT) is working with the Wiltshire Waste Partnership (WWP) and Hills Minerals and Waste to deliver their Waste Prevention Strategy. This programme works towards the aims and objectives set out in the Waste Prevention Strategy. The Strategy and Programme are regularly updated to reflect best practice and new opportunities. The activities are funded partly by WCC and partly by successful bids made to organisations such as **DEFRA** and **WRAP**<sup>12</sup>. Some of the waste issues addressed by the strategy are:

- Increasing the numbers of householders who compost, through the sale of subsidised compost bins (47% reported to compost at home in 2005, compared to 35% in 2003)
- Supporting home composting through a network of 'compost ambassadors' aimed at reducing the 'drop-out' rate
- Initiating and supporting community composting at several communal sites including Rowde (2004), Old Sarum and Tisbury (2005), as well as working with housing associations and voluntary groups to provide smaller communal composting facilities to local residents (10 set up in 2005)
- Developing A-Z 'Rethink Rubbish' directories for local communities, providing details of local contacts and organisations which re-use or recycle items plus details of local recycling facilities
- Developing an infrastructure and incentive scheme to encourage the use of 'real' nappies (Real Nappy Campaign)

***For more information on waste prevention please refer to Paper (C): Waste Prevention Strategy for Wiltshire 2005 – 2010***

<sup>12</sup> The Waste and Resources Action Programme (WRAP) was established in 2001 as part of the UK government's waste strategy 2000 to promote sustainable waste management. WRAP is working on a national strategic level to promote market development.

vii) Community Sector

a) The participation of local communities is recognised as essential in meeting the national targets set for waste reduction and recycling. The community and not-for-profit sector consistently show the ability to be innovative, committed to change and willing to facilitate partnerships. The WWP will work with the community sector in accordance with the recently adopted Wiltshire Compact. We look to community groups to:

- be fully involved in local authority efforts to build partnerships for more sustainable waste management
- draw on the guidance of Best Value in developing partnerships with local authorities
- continue their valuable work in motivating public involvement and increasing participation in waste reduction, re-use and recycling schemes (community composting and home composting supported by the WWT (see above)

viii) ReMaDe SW

a) A number of regional development programmes exist to address local issues under the **ReMaDe** (Recycling and Market Development) brand. ReMaDe South West is one of these and is attempting to address market development in the south west of England. It is linked through ReMaDe Network UK, with the UK co-ordinator based at WRAP.

b) ReMaDe South West as a regional development programme works on developing markets for recyclables with manufacturers, waste reprocessors and waste collectors in order to develop new supply chains. The programme aims to be a centre of excellence for recycling and market development for recyclables in the area.

c) Wiltshire County Council will provide support to help establish reprocessing capacity for recyclable material either at regional or sub regional level and will continue to support ReMaDe South West.

## 5. Current Situation

### 5.1 Waste Generation in Wiltshire

5.1.1 The amount of municipal solid waste generated in Wiltshire has been increasing year on year from just over 206,000 tonnes in 1998/99 to 265,000 tonnes in 2004/05. This represents an overall increase of approximately 29% and an average increase of 4.7% each year.

5.1.2 Household waste represents 85-90% of MSW in Wiltshire, and this has also been increasing year on year from 191,700 tonnes in 1998/99 to 226,886 tonnes in 2004/05. This represents an overall increase of approximately 18% and an average increase of 2.9% each year.

5.1.3 Population and economic growth go a long way to explain the increasing quantities of municipal and household waste, and based on previous performance and external

factors it has been recommended that a 4%<sup>13</sup> per annum growth rate is applied to future projections for MSW in Wiltshire up to 2011. For the period beyond 2011<sup>14</sup>, forecasts of a declining growth rate have been taken from the Regional Waste Strategy. These forecasts indicate an increase in MSW to approximately 360,000 tonnes by 2020.

## 5.2 **Current Waste Management Infrastructure (MSW)**

5.2.1 Historically most MSW has been disposed of in landfill sites within the County, with a limited amount being recycled or composted. In recent years however there has been a growing commitment to recycling and composting with the provision of a greater number of bring sites and household recycling centres (HRCs), as well as the introduction of kerbside collection services for segregated materials and green waste by the WCAs.

5.2.2 Since 2002 the Councils, Wiltshire Wildlife Trust and appointed contractors have concentrated on providing suitable waste management services in order to help towards achieving future targets set out in the above strategies, standards, acts and directives. This includes:

- i) Expansion of HRCs
- ii) The diversion of 41,000 tonnes of recyclables and 19,000 tonnes of green waste for composting from HRCs (2002/03 – 2004/05)
- iii) Introduction of multi-material kerbside collection for 155,000 homes collecting 5 recyclates (85% of households)
- iv) Continued expansion of mini recycling centres
- v) Schools paper recycling scheme

***For more detailed information, refer to paper (E) Waste Related Facilities and Paper (D) Municipal Waste Strategy: Facts and Figures***

### 5.2.3 **Household Recycling Centres (HRCs)**

- i) There are 10 household recycling centres (HRC) in Wiltshire (Table 4). The HRCs have a catchment area of 8kms, compared to bring sites which are considered to serve an area within a radius of 1 km.
- ii) HRCs in Wiltshire are extremely successful at diverting materials for recycling and composting. In 2004/05, 47,348 tonnes was recycled through the HRCs, representing 70.1% of the total material disposed of through the sites. This level of performance makes Wiltshire County Council one of top 5 performing local authorities in England for HRC recycling.

<sup>13</sup> Wiltshire and Swindon Waste Local Plan Inspector's Report, April 2004.

<sup>14</sup> Allowing for the impact of some waste minimisation, Wiltshire's MSW is growing at approximately 4% each year (2005). It is forecast to continue to grow at this annual average rate until 2011, and thereafter to grow at a declining rate, reaching a nil growth rate by 2015

**Table 4:** HRCs in Wiltshire

<b>District</b>	<b>Location</b>
<b>Kennet</b>	Devizes Everleigh
<b>North Wiltshire</b>	Honeyball Calne Purton Stanton St Quintin
<b>Salisbury</b>	Amesbury Salisbury
<b>West Wiltshire</b>	Melksham Trowbridge Warminster

- iii) It has been recognised that due to the spatial distribution of the sites some areas of the county are not currently served by, conveniently located, HRCs. Discussions on how a service could be provided to these areas are at an early stage, due to the current focus upon expansion of kerbside collections. However, it is recognised that three more HRCs could be needed.

#### 5.2.4 Bring banks/Mini Recycling Centres

- i) Much of the recyclable material collected in Wiltshire is recovered from the 300 or so bring sites that are maintained by Hills Minerals and Waste, Kennet District Council and Salisbury District Council. It is felt that bring sites/mini recycling centres will still have a significant part to play in Wiltshire's recycling and recovery programme even where there is substantial kerbside collection or a household recycling centre, e.g residents of flats, etc. It is also possible that the range of materials collected via the bring site network could be changed to compliment the kerbside scheme by collecting materials not covered by the black box schemes.

#### 5.2.5 Kerbside Collection

- i) Kerbside recycling was introduced to a wide area of Wiltshire in 2003/04 with the launch of a new, multi material kerbside collection service for 55,000 homes across 8 towns. During 2004/05 the service was extended to cover another 53,000 households. Prior to this the four District Councils had operated separate schemes with varying coverage and materials being collected.
- ii) This new service, operated by Hills Minerals and Waste, was promoted through the Wiltshire Waste Partnership (WWP), and collects paper, glass, cans, textiles and aluminium foil on a fortnightly basis. Each household is issued with a 55 litre container or smaller basket if required and the materials are sorted at the kerbside into the split-bodied vehicles, which ensures that all the material collected is fit for recycling. Any unsuitable or contaminated materials are left behind in the recycling box with a ticket noting why the materials have not been taken.
- iii) A number of additional schemes for paper only collection and for organic waste are also in operation across the districts. SDC has provided a kerbside recycling collection of paper and card to over 60% of householders within the

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district for a number of years and extended to cover 98% of households in 2000. Kerbside services are summarised in Tables 5a and 5b.

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**Table 5a:** Wiltshire Districts Kerbside Recycling (2005) (figures refer to households served)

	<b>Kennet</b>	<b>N Wiltshire</b>	<b>Salisbury</b>	<b>W Wiltshire</b>
<b>Hills/KDC-operated, black box</b>	<u><b>2003/04</b></u> Devizes – 5,270 Marlborough – 3,170  (KDC undertake the collection of recyclables) <b>Total - 8,440</b>	<u><b>2003/04</b></u> Chippenham – 11,730 Calne – 5,470 Wootton Bassett – 4,750 Corsham – 4,760  <b>Total - 26,710</b>	<u><b>2003/04</b></u> Paper and card collection already in place for 48,500 households	<u><b>2003/04</b></u> Trowbridge – 11,510 Melksham – 8,440  <b>Total - 19,950</b>
	<u><b>2004/05</b></u>  No service development	<u><b>2004/05</b></u> Lyneham – 1,833 Malmesbury – 2,081 Cricklade – 1,720 Purton – 1,679  <b>Total – 7,313</b>	<u><b>2004/05</b></u> Salisbury – 16,600 Wilton – 1,741 Amesbury – 3,502 Durrington – 2,426 Laverstock – 1,730  <b>Total - 26,000</b>	<u><b>2004/05</b></u> Bradford on Avon – 4,305 Westbury – 7,495 Warminster – 7,571  <b>Total - 19,371</b>
<b>Total households served</b>	<b>Total – 8,440</b>	<b>Total – 34,023</b>	<b>Total – 26,000</b>	<b>Total – 39,321</b>
<b>Garden waste</b>	Bag charge (£4.90 for 5). <b>This waste is landfilled.</b> Collected by KDC	Long term trial (1,200 households in Pewsham. From <u><b>2005/06</b></u> 6,600 charged wheeled bins to be made available. Collected by NWDC	<u><b>2004/05</b></u> - charged paper sack scheme introduced to the areas with black box recycling. Collected by SDC.	<u><b>2004/05</b></u> – 240ltr green bins (20,500 households in Trowbridge/Melksham with alternate wk refuse collections. Collected by Cleanaway).
<b>Other</b>	Paper only collection (in black boxes) to 20,000 households. Collected by KDC		Paper/cardboard collection to 22,000 households. No container provided. Collected by SDC	

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**Table 5b:** Wiltshire Districts Kerbside Recycling – Developments 2005/06<sup>15</sup>

	<b>Kennet</b>	<b>N Wiltshire</b>	<b>Salisbury</b>	<b>W Wiltshire</b>
<b>Hills/KDC-operated, black box</b>	<b>2005/06</b> – Converting paper-only collections (in black boxes) to multi-material collections. KDC to confirm number of households. Scheme extended to cover 98% of households (approx. 32,340 households) KDC service – 2006/07 further extension of multi material collection to remainder of the district	<b>2005/06</b> – Scheme extended to cover 95% of households (approx. 51,000 households)		<b>2005/06</b> – Extension of scheme to a further 11,000 households covering 95% of the district.
<b>Garden waste</b>	<b>2005/06</b> – 4,000 charged (£20 pa) 180 litre wheeled bin being introduced. Bags will still be available. Collected by KDC 2006/07 – further garden waste collection in tandem with alternate weekly refuse collections.	<b>2005/06</b> - 6,000 charged wheeled bins to be made available. Collected by NWDC	<b>2005/06</b> - Full year operation and consolidation of scheme.	<b>2005/06</b> – 240 litre green wheeled bins to 19,500 households in BoA, Westbury & Warminster, plus 11,000 households in remainder of the district (in tandem with introducing alternate week refuse collections). Collected by Cleanaway

2004/05: 107,400 households across Wiltshire were served by black box collections, representing 59% coverage.

2005/06: A total of 158,000 households were receiving black box collections, achieving 86% coverage.

### 5.2.6 Composting Facilities

- i) Through the Wiltshire Wildlife Trust (WWT), Wiltshire County Council supports the use of home and community composting. Wiltshire has one of the highest rates the UK with 47% of households and 140 schools using home composters. However, this is mainly suited to people who are willing to correctly manage the process and ultimately use the resulting compost in their own gardens or throughout the community. Those who are not able to do this can either take their green waste to a HRC or if the service is provided, have it collected from the kerbside. Alternatively, there are community composting sites operating throughout the County, which may be utilised. These include the Rowde site operated by CARE, the Old Sarum site operated by Shaw Trust, and a site under construction at Tisbury as well as working with housing associations to provide composting facilities to local residents across the county (where facilities exist). However, home composting often takes place successfully alongside green waste collections at the same property as it can cope with cardboard and uncooked food waste where most green collections cannot. Community composting is particularly useful in rural areas without access to green collections or HRCs.
- ii) WWT has been awarded funding by Department of Environment, Food and Rural Affairs (DEFRA) and Wiltshire County Council, to pilot the use of “in-vessel” composting machines in 10 educational establishments in Wiltshire. The in-vessel machines will convert catering wastes into compost in just a few weeks, in an enclosed heat-controlled unit.
- iii) In addition to providing a cost-saving waste disposal solution to schools, the project will use the machine as an educational resource for pupils, highlighting the benefits of home composting, supported by staff from WWT.
- iv) This exciting and innovative project has the potential to lead the way in the use of small scale in-vessel composting at a national level. In addition, each pilot school will retain the in-vessel machine after completion of the project in March 2006, as a long-term resource for the school.
- v) Each District Council can decide on how best to collect green waste. Green waste that is collected from the kerbside is sent to Lower Compton or a farm site at Grateley on the Wiltshire/Hampshire border for composting. It is important that green waste is composted not only to meet targets but also to conserve peat bogs, which have traditionally been used to produce compost. In order to preserve peat and help Wiltshire meet its recycling targets, Hills Minerals and Waste have created “Warrior Compost”.
- vi) “Warrior Compost” is made from local green waste that is brought to Hills’ recycling complex at Lower Compton where it undergoes a rigorously monitored process. The raw material is first finely shredded, then stacked in “windrows” and constantly turned and moistened as necessary to speed up the decomposition process which takes some 20 weeks.
- vii) The end-product has to meet strict rules in order to adhere to the requirements of the Soil Association and Composting Association (PAS100) both of whom have accredited “Warrior Compost.”
- viii) In terms of additional provision, the Waste Local Plan has previously identified a need for a limited amount of additional green waste composting, plus a

need for three in-vessel composting or anaerobic digestion facilities in line with the Regional Waste Strategy and the BPEO. The composting facilities at Lower Compton have been expanded and have a 36,000 tonne capacity per year, with a current throughput of 20,000 tonnes (2005). A further farm site located in West Wiltshire is proposed for 2005/06. Additional farm sites may be developed, to reduce the transportation of green waste.

#### 5.2.7 Materials Recycling Facility

- i) Currently Hills Minerals and Waste operate a Materials Recycling Facility (MRF) at Lower Compton. It is currently the only MRF servicing the Wiltshire Waste Partnership and it accepts all material collected via the kerbside schemes, mini recycling centres and Household Recycling Sites across the county. The MRF utilises both mechanised and hand-sorting lines to separate the recyclables.
- ii) Hills state-of-the-art £1.3 million MRF handles everything from daily newspapers to aerosols. Mixed paper is sorted to separate paper from cardboard and steel cans are separated from aluminium ones. The materials are then crushed or baled for easy transportation to the reprocessors around the country.
- iii) Mixed plastic bottles are spiked and baled, but Hills are considering separating the different types of plastic, such as HDPE, PET and PVC, and taking them to various outlets for re-processing. The MRF has a permitted capacity of 2,500 tonnes per month (30,000 tonnes per annum) and a current throughput of 27,705 tonnes in (2004/05).
- iv) The Waste Local Plan has identified a need for at least two new strategically located MRFs in line with the Regional Waste Strategy and the BPEO.

#### 5.2.8 Overview of Provision at the District Level and Plans for Infrastructure Development

***Further detail of the provision at District level is available from Paper (E): Waste Related Facilities, Paper (G): District Council Recycling Plans***

- i) Kennet District Council
  - a) Kennet District Council provide a fortnightly collection recycling service to 32,340 properties. Glass, cans, paper and textiles are collected from the kerbside in 55ltr black boxes. In April 2006 this service will be expanded to cover the whole district.
  - b) All recovered materials are transferred to Hills' MRF at Compton Basset for sorting and onward transmission to re-processors.
  - c) Kennet has two HRCs; the first was established in Everleigh near Pewsey, the second at Hopton Industrial Estate, Devizes. The non-recyclable waste from the HRCs and the refuse collected from households, is taken to Compton Basset landfill site. Approximately 40% of this waste is first delivered to the waste transfer station at Everleigh.
  - d) There are 53 mini recycling centres across the District (as of January 2005) some of which are school sites accepting only paper and the rest collect a range of materials.

e) A chargeable garden waste collection service was introduced in April 2005. This service currently collects from 4,000 properties throughout the district using 180 ltr wheeled bins.

f) Kennet have introduced a charge for the collection of bulky waste.

ii) North Wiltshire District Council

a) In the latter part of 2003 a 180 litre wheeled bin service for the collection of refuse was introduced across the District. This new service replaced the previous "black sack" service. A multi material fortnightly kerbside recycling collection service is in place across the whole district, and garden waste is collected from a trial area, comprising of 1200 properties (See Table 5a and 5b).

b) In addition the Council has introduced a fortnightly collection of garden waste which will be available to 6,000 properties across the District during 2005/06. Householders will be charged £29 for collections, which will use 240 litre bins.

c) The non-recyclable waste from HRCs and from the refuse collected from households is taken to Compton Basset landfill site and Chapel Farm landfill site in Swindon.

d) There are 33 mini recycling centres which collect a range of recyclables. In addition there are three HRCs, at Purton, Stanton St Quintin and Honeyball near Calne.

e) Since December 2001, charges have been in place for bulky waste collections.

iii) Salisbury District Council

a) A multi material fortnightly kerbside collection service operated by Hills currently services approximately 26,000 properties. Salisbury District Council also provides a sack collection for garden waste to these householders, for which a charge is made, and a collection of cardboard. A waste paper and cardboard collection service provided by Salisbury District Council covers the remaining 22,500 households of the district (See Table 5a and 5b).

b) There are plans to expand the multi material kerbside collection service, and the garden waste collection service. There are also plans to increase the number of mini recycling centres, the District Council having invested in a specialist vehicle to service the sites.

c) The non-recyclable waste from the HRCs in addition to the refuse collected from households, is taken to Compton Basset landfill site via the waste transfer station at Thorny Down.

d) There are currently 62 mini recycling centres in the district collecting a range of materials, plus two HRCs at Amesbury and Salisbury.

e) Salisbury District Council also operates a successful internal waste minimisation and recycling scheme that has considerably reduced the

waste from the offices going to landfill. Compostable waste is also dealt with on site at one of the compost units or wormeries set up in the office grounds.

iv) West Wiltshire District Council

- a) A multi-material fortnightly kerbside collection service is being expanded to serve 97% of properties in West Wiltshire by April 2006. Residents are provided with a black box for the collection of paper, cans, glass, textiles and aluminium foil. The Council is also expanding its fortnightly collection of organic waste alternating with a fortnightly collection of domestic (residual) waste to cover the whole district, again by April 2006.
- b) There are over 100 mini recycling centres across the District collecting a range of materials and three HRCs at Melksham, Trowbridge and Warminster. The non-recyclable waste from the HRCs and the refuse collected from households is taken to Compton Basset landfill site and Sands Farm landfill site.

v) Communications Development

- a) In addition to these District-specific service developments Wiltshire County Council has employed a Communications Manager with specific responsibility for promoting waste awareness and recycling schemes. The aim is to develop a comprehensive County-wide campaign which results in increased participation rates and yields from the kerbside collections schemes, HRCs and bring sites (mini recycling centres) through a greater understanding of the issues surrounding waste and recycling. It is hoped that the combined effect of the new services and promotions will increase recycling rates in Wiltshire to over 30% during 2005-06.

### 5.3 **Recycling Performance**

5.3.1 Progress with regard to recycling in Wiltshire has been extremely positive and as can be seen by Table 6 targets set for 2003/04 have been achieved.

**Table 6:** Recycling/composting of household waste in 2003/04

	<b>Kennet</b>	<b>North Wiltshire</b>	<b>Salisbury</b>	<b>West Wiltshire</b>	<b>Wiltshire County</b>	<b>England</b>
<b>Target</b>	11%	10%	16%	10%	20%	<b>17%</b>
<b>Achieved</b>	11.3%	11.5%	17.4%	9.8%	21%	<b>17.7%</b>

5.3.2 However there are more challenging targets in place for 2005/06 and although Wiltshire is performing well, further progress will have to be made in terms of ensuring adequate provision of facilities for householders, and maximising participation if the targets are to be successfully met (Table 7).

**Table 7:** 2005/06 Targets for Recycling/composting of household waste

	<b>Kennet</b>	<b>North Wiltshire</b>	<b>Salisbury</b>	<b>West Wiltshire</b>	<b>Wiltshire County</b>	<b>England</b>
<b>Target</b>	25%	18%	30%	21%	30%	<b>25%</b>
<b>March 2005</b>	15.0%	16.3%	18.6%	16.8%	26.7%	-
<b>Dec 2005</b>	20.9%	17.2%	21.2%	26%	31.6%	-

*Further details on householder participation can be found in Paper (F): Resident Consultation on Recycling Behaviour*

## 6. Options for the Future

6.1 The Strategy will aim to achieve 50% recycling of household waste by 2020, in line with Regional Waste Strategy. However this will leave up to 50% of the waste produced to be managed by recovery<sup>16</sup> or disposal techniques of some kind. Thus, additional capacity will be required in Wiltshire to deal with both the recyclables recovered from the waste stream, especially the compostible element, and the residual waste that will need to be pre treated prior to landfill or disposed of via an alternative route.

6.2 In order to ensure that the medium to long term waste management needs are met within Wiltshire the shortfalls have been identified and a number of alternative waste management solutions have been considered. Their viability within the County has been assessed against legislative requirements and local needs. The range of options proposed have been assessed in terms of whether they present the Best Practicable Environmental Option for Wiltshire within the constraints of the existing waste management contract framework between Hills Minerals and Waste and Wiltshire County Council.

*Further details are provided in Paper (J): Environmental Options Using Wizard; Paper (K) Environmental Option Assessment BPEO*

### 6.3 Identification of Shortfalls and Needs

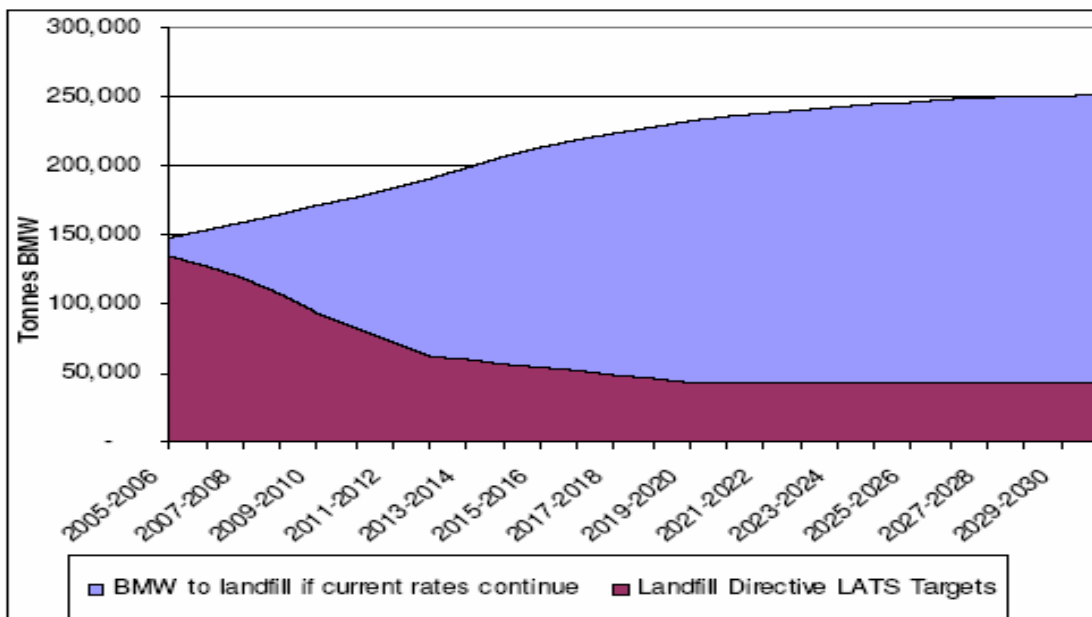
6.3.1 The main disposal route in the county is via landfill. Historically it has represented the cheapest option but with the increasing costs associated with landfill, other more sustainable techniques are becoming economically viable. This trend towards placing more emphasis on waste recycling and alternative treatment and disposal practices has been recognised. This is evident within the current Wiltshire County Council waste disposal contract, which incentivises recycling and composting, and the County's current Municipal Waste Management Strategy provides the framework for reducing reliance on landfill as a disposal method. However it needs to be acknowledged that some landfill facilities will be required in the future for the residual proportion of household waste produced that cannot be managed by other means.

<sup>16</sup> See footnote 8 for a description of recovery

- 6.3.2 Since the closure of Westbury landfill in 2004, there are only two landfill sites which accept MSW in the County. Both are located in North Wiltshire. It is currently forecast in the Waste Local Plan that MSW landfill capacity will expire by 2010/2011. The Waste Local Plan (WLP) review process is examining the potential for allocation of new sites for landfill in the period up to 2020.
- 6.3.3 In addition to the pressures on capacity, there is a real requirement to develop alternative waste treatment facilities for biodegradable municipal waste as a result of the diversion requirements in the Landfill Directive, and the restrictions imposed by LATS. Figure 1 illustrates background assumptions used to consider the BPEO for new capacity. The likely amount of BMW sent to landfill over a 25 year period based upon 2002-03 actual data, projected using an annual growth rate that reduces from the current rate of 5.6% to 0.3% by 2030-31<sup>17</sup>. The mass balance model used to calculate the projected tonnages assumes that the District Councils and the County meet their respective Statutory Targets for Recycling and Composting in 2005-06.
- 6.3.4 According to the Waste Prevention Strategy for Wiltshire (Paper (C) and the Best Practicable Environmental Option (BPEO) even if Wiltshire boosted its household recycling and recovery rates to as much as 40% within as little as five years, there would still be more household waste to dispose of than there is at the present time both residual and biodegradable. Therefore, simply increasing the rate of recycling is not enough given the overall growth in waste arisings.
- 6.3.5 It is evident that, even when the statutory targets for 2005-06 have been met, there is a considerable amount of residual waste that requires treatment or disposal. Figure 2 illustrates the residual waste treatment capacity required in order to meet the landfill directive targets, after increased recycling to 40% by 2019/20 and figure 3 illustrates the residual capacity required after maximised recycling to 50% by 2020.

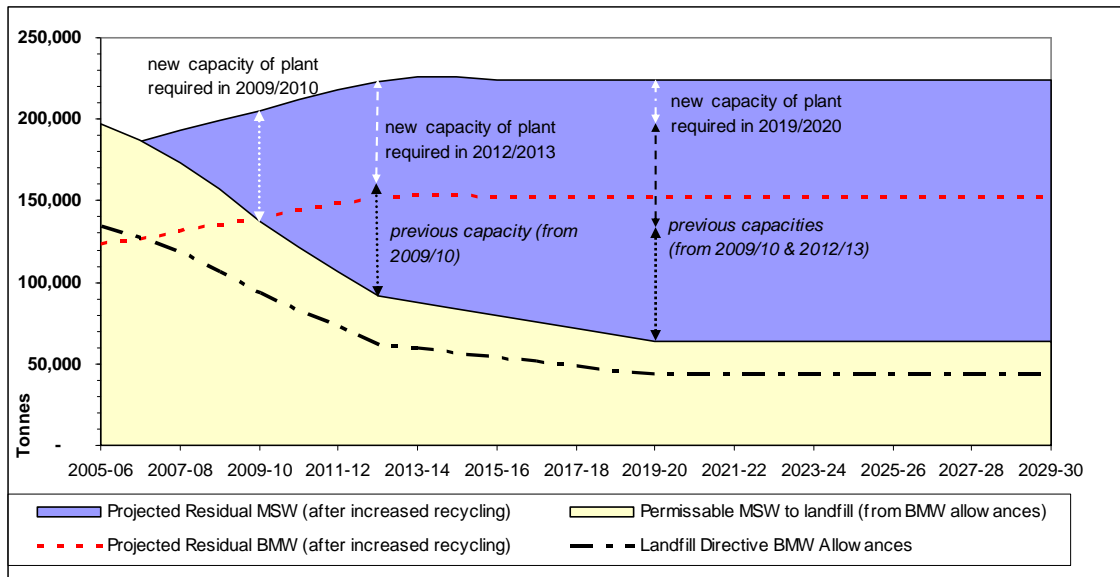
Further details are provided in Paper (K): Environmental Option Assessment: BPEO

**Figure 1:** Predicted BMW landfilled if situation continues at current rates and Landfill Directive BMW landfill allowances



<sup>17</sup> The BMW forecast is compatible with the forecasts of total growth in MSW to 2020 referred to elsewhere in the report.

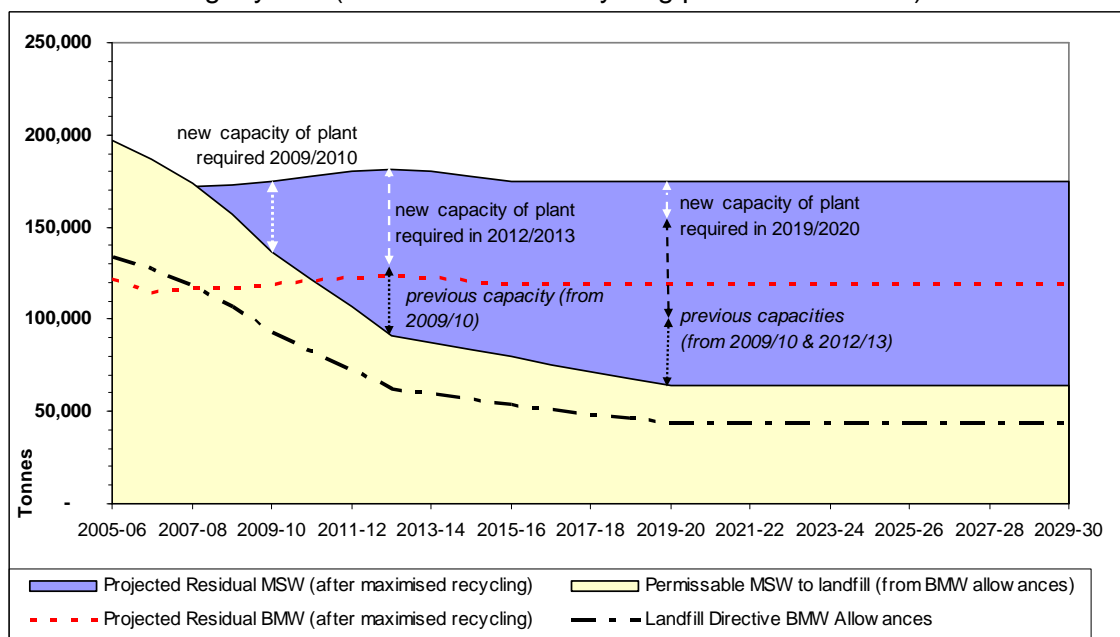
**Figure 2:** New Residual waste treatment capacity required for Landfill Directive target years (after increased recycling 33%)



6.3.6 It is evident that, even after kerbside recycling has taken place, there is a considerable quantity of residual waste that still requires treatment or disposal. The gap between the allowable and the actual MSW sent to landfill is represented on each chart with a white arrow. The approximate minimum capacity of plant required is then calculated for each Landfill Directive target year, as summarised in Table 8 below. It is assumed that for the intervening years extra capacity may be developed or landfill permits may be purchased.

6.3.7 Recent work on published LATS allowances confirms these findings, although indicating that the capacity required by 2020 with a maximum recycling performance may be 118,000 tonnes per annum, rather than 88,000 (Table 8).

**Figure 3:** New Residual waste treatment capacity required for Landfill Directive target years (after maximised recycling performance 50%)



**Table 8:** Indicative new residual waste treatment capacities required for each Landfill Directive target year (additional tonnes per annum capacity)

	Capacity required by 2009/10	Additional capacity required by 2012/13	Capacity required by 2019/20	Cumulative Total required by 2020	
				BPEO forecast	LATS forecast
Residual treatment capacity required for Landfill Directive targets years (after increased recycling performance)	68,000	64,000	28,000	160,000	174,000
Residual treatment capacity required for Landfill Directive target years (after maximised recycling performance)	3,000	57,000	28,000	88,000	118,000

6.3.8 It should be stressed that Figures 2 and 3 are shown for illustrative purposes and the actual capacity of treatment systems will depend upon the type of process and waste streams being targeted. For example it may be that smaller facilities would be required if only certain biodegradable fractions (such as kitchen waste) were targeted for treatment. Alternatively, larger facilities would be required if the technology utilised for removing BMW was not 100% efficient.

6.3.9 During work on the Regional Waste Strategy, it was identified that there was a need for additional waste management capacity to treat MSW as well as a substantial need for recycling and composting capacity in order to meet the regional targets (see table 9). In addition to this, secondary treatment capacity was also highlighted.

**Table 9:** Forecast of Municipal Solid Waste Arisings and Management Capacity Required to meet Regional Waste Strategy Targets in Wiltshire and Swindon at 2020 (000 tonnes per annum)

	A	B	C	D
	Recycling/ Composting Source separated wastes	Secondary Treatment MBT/ Thermal Non separated wastes	Landfill	Total
<b>DRWS*</b> <b>forecast</b>	240	290	90	620
<b>WPAs**forecast</b>	200	240	215	655
<b>Est: current capacity</b>	190	0	265	455

\* DRWS = Draft Regional Waste Strategy

\*\* WPAs = Waste Planning Authorities

- 6.3.10 The comparison between the Regional Waste Strategy (RWS) targets and the local forecasts also provides a comparison of current capacity for waste treatment and landfill, based on surveys of facilities undertaken in 2004 by Wiltshire and Swindon officers. The comparison indicated a major shortage of secondary treatment capacity, echoing the findings of the BPEO and LATS forecasts illustrated in Table 8.
- 6.3.11 The RWS forecast for all wastes at 2020 is similar to estimates made by the Waste Planning Authorities (WPAs). However, the WPAs forecast MSW growth to be slightly higher than that made by the RWS. This is because the regional forecast is based on an assumption that there will be a rapid fall in growth rates, but recorded arisings in Wiltshire have continued to grow above the national average.
- 6.3.12 For MSW, much of the forecast requirement for recycling and composting capacity may already be in place. Development at sites identified in the WLP, including some additional HRCs and composting capacity, could deliver the forecast extra requirement. (This excludes the requirement for additional *collection services*, to provide any additional tonnage for treatment)
- 6.3.13 However, major capacity for “secondary treatment” (MBT and or thermal) will be required, as stated in the BPEO starting from a nil supply currently, for MSW. The RWS forecast supports proposals in the WLP for additional strategic sites, including waste to energy.
- 6.3.14 The RWS also highlights a marked decline compared with existing annual capacity for the amount of landfill required for residual wastes. For MSW the RWS forecasts capacities of some 90,000 tonnes per annum by 2020, compared with an existing fill rate of about 265,000 tonnes. When compared to WCC forecasts, the RWS forecast appears optimistic, regarding both the overall growth of waste and the creation of “secondary treatment”. Moreover, even at the level of need forecast by the RWS, new landfill sites will be required as existing capacity is used up.
- 6.3.15 It is clear from above that as Wiltshire faces more pressures on current capacity, the need for additional infrastructure by 2010-11 is paramount, and that simply increasing the rates of recycling is not enough to comply with recycling and recovery<sup>18</sup> targets.

**For more information refer to Paper (K): Environmental Option Assessment BPEO**

#### 6.4 **Option Assessment through BPEO**

6.4.1 Taking the findings of the Waste Local Plan and the current analysis of recycling services into consideration, a number of long term options were identified to enable a variety of future scenarios for Wiltshire to be investigated using modelling techniques. The long term options selected for consideration include a Baseline option that meets the statutory recycling and composting targets for 2005-06 but which relies on landfill for the primary route of waste disposal. The other options have been identified from an assessment of waste management solutions being considered throughout England. They include examples of currently available technologies for landfill diversion, namely Energy from Waste (EfW) (including incineration) and Mechanical/Biological Treatment (MBT).

6.4.2 An analysis of the environmental impacts arising from each of the disposal options was carried out using WISARD (Waste Integrated Systems and Assessment for Recovery and Disposal), a life-cycle assessment (LCA) tool developed by the

<sup>18</sup> See footnote 8 for an explanation of recovery

Environment Agency to assist Local Authorities with their BPEO assessments. The model evaluates the environmental burdens and impacts of waste management operations.

6.4.3 *'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.'*

6.4.4 Although BPEO has been used for this Joint Municipal Waste Management Strategy it will be superseded in future reviews by Strategic Environmental Assessment (SEA). SEA is a requirement of PPS 10 and is concerned with the planning system's contribution to delivering sustainable waste management. However, Wiltshire initiated its BPEO before SEA was introduced, and therefore has an exemption during the life of this strategy.

***For more information refer to Paper (J): Environmental Options Using Wisard***

#### **6.5 Alternative Waste Management Solutions**

6.5.1 Ten options, including the Baseline Option, have been modelled whereby the targeted materials for recycling and recovery are removed through various collection and bring systems and the remaining residual waste is then treated and disposed of using different technologies. See Table 10.

***For more detailed information refer to Paper (K): Environmental Option Assessment: BPEO***

**Table 10:** Options Identification

Option	Description	Notes
Baseline	<b>Increased recycling and composting</b> , to meet BVPI targets for 2005/06 with slight increase thereafter. <b>Landfill</b> continues to be the principal disposal route for residual waste.	This option is not sustainable, but shows effect of continuing current practice.
Option 1	As baseline scenario, but <u>sufficient</u> residual waste treated through <b>EfW</b> in order to meet Landfill Directive targets.	This shows the energy from waste capacity that would be needed to meet the Landfill Directive.
Option 2	As baseline scenario, but <u>majority</u> of the residual waste treated by bio-stabilising <b>MBT</b> , with residues and RDF disposed to landfill.	This tests whether bio-stabilising MBT can by itself meet the Landfill Directive.
Option 3	As baseline scenario, but <u>majority</u> of residual waste treated by bio-stabilising <b>MBT</b> , with <b>RDF</b> sent to energy recovery.	This tests the effect of marketing the RDF fraction from the MBT process. <i>Sub-options for environmental and cost modelling only:</i> ➤ 3 - assumes RDF is sent to an industrial boiler with a combined heat and power outlet. ➤ 3a - assumes RDF is sent to conventional EfW facility
Option 4	<b>Maximised dry recycling and composting</b> , by diversion of recyclable waste from kerbside collection. <b>Landfill</b> continues to be the principal disposal route for residual waste.	This tests whether maximised source-segregation can by itself meet the Landfill Directive.
Option 5	As option 4, but <u>majority</u> of the residual waste treated by bio-stabilising <b>MBT</b> , with residues and RDF disposed to landfill.	As option 2, but less reliance on treatment systems and more on source-segregation.
Option 6	As option 4, but <u>sufficient</u> residual waste treated through <b>EfW</b> in order to meet Landfill Directive targets.	As option 1, but less reliance on treatment systems.
Option 7	As option 5, but tests increased bio-stabilisation through <b>MBT</b> in order to meet or exceed the Landfill Directive.	This tests what assumptions on bio-stabilising MBT systems would be required to meet/exceed the Landfill Directive.
Option 8	As option 4, but <u>majority</u> of the residual waste treated through <b>EfW</b> in order to maximise waste diversion and exceed the Landfill Directive targets.	This maximises diversion from landfill and the recovery of value from the waste remaining after intensive recycling has taken place.
Option 9	As option 4, but <u>majority</u> of residual waste treated by <b>MBT</b> , with <b>RDF</b> sent to energy recovery, and the organic fraction of MBT sent to <b>Anaerobic Digestion</b>	This tests the effect of marketing the RDF fraction, and further increasing recycling rates by sending the compost from the MBT process to Anaerobic Digestion
Option 10	As option 4, with fixed third party contract for 100,000 tonnes of <b>EfW</b> , and 60,000-90,000 tonnes local bio-stabilising <b>MBT</b> , with <b>RDF</b> sent to energy recovery.	This tests a hybrid option where the County uses a mixture of EfW and MBT, through both third party contracts and dedicated local facilities. <i>Sub-options for environmental and cost modelling only:</i> ➤ 10a Assumes EfW and RDF sent to third party markets out of county. ➤ 10b Assumes RDF is treated in county in an industrial boiler with a combined heat and power outlet. EfW still out of County

EfW = Energy from Waste (including Incineration).

RDF = Refuse Derived Fuel

MBT = Mechanical / Biological Treatment, a mix of recycling and composting style processes

6.6 ***Preferred Options***

- 6.6.1 Only the options<sup>19</sup> that involve combustion of waste in some form will meet all of the Landfill Directive targets.
- 6.6.2 The Baseline Option and Option 4 will not meet the obligations set out within the Landfill Directive. Shortfalls would need to be made up through the purchase of tradable permits through the government's Landfill Allowance Tradable Permits Scheme (LATS)
- 6.6.3 Options 2 and 5 meet the landfill directive targets for 2010 and 2013 only, which demonstrates that MBT without combustion of RDF will not divert enough biodegradable waste from landfill. This assumes that residues are 50% stabilised.
- 6.6.4 Options 6, 8 and 9 all exceed the Landfill Directive targets but environmental performance and overall cost implications must be taken into account.
- 6.6.5 Options 3 and 9 have the better overall ratings on the BPEO analysis using WISARD where the impacts of the different options are measured against the following indicators:
- i) *Global warming*
  - ii) *Air acidification*
  - iii) *Low level ozone formation*
  - iv) *Eutrophication*
  - v) *Depletion of non-renewable resources*
  - vi) *Dioxins and furans*
- 6.6.6 Therefore the use of MBT, AD and EfW facilities presents the BPEO for Wiltshire. They would work in conjunction to maximise recycling and recovery rates, and would meet or exceed the Landfill Directive targets for 2020. These choices reflect the WLP and the Regional BPEO.

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<sup>19</sup> Option 7 was not modelled because at the time the BPEO was undertaken the Environment Agency had not taken a decision on the degree of stabilisation which could be achieved through MBT. It was therefore not realistic at this time to assume that the MBT process would stabilise waste to such a degree that it would exceed Landfill Directive targets.

## **7. Summary of Options Analysis**

- 7.1 In accordance with the Government's Waste Strategy 2000, Municipal Waste Management Strategies should demonstrate that all opportunities for waste reduction, reuse, recycling and composting have been considered before Residual Waste Treatment. Pre treatment of the waste to recover materials not collected from the kerbside may form part of the process. If the strategic waste management sites identified within the Waste Local Plan or other non allocated sites are not suitable for the development and installation of large scale conventional EfW plant (eg an incinerator), an alternative solution may necessitate the installation of MSW pre-processing facilities prior to some form of Energy from Waste recovery process. In such a case it is likely that a facility will be presented with residues from the pre-processing plant.
- 7.2 On this basis, EfW, as defined above, would therefore be expected to be an acceptable option for Wiltshire County Council. The main issue then is the technology choice for the pre-processing of waste: either conventional enhanced kerbside collection of individual waste streams or a system that is more reliant on the processing of a mixed material or residual waste stream. Evidence from the industries that will be the markets for recyclables suggests that high quality product will be in demand with lower prices paid for contaminated product lines. It would therefore appear prudent to invest in systems that will have the ability to secure a market for their reclaimed materials.

**8. Proposals highlighted in the Joint Municipal Waste Management Strategy - 2005 to 2020**

- 8.1 The JMWMS for Wiltshire is based on the objectives set out in section 3.1 and the assumptions in section 3.3 of the Background Document. Proposals build on existing commitments, and public support for waste minimisation, recycling and composting. They reflect the findings of the Wiltshire BPEO study and other studies and forecasts. These principles will help define how future treatment capacity and collection services develop. However, the operational evolution of these services will be defined within the supporting WWP Business Plan.
- 8.2 The Wiltshire Waste Partnership will work together and with the Wiltshire Wildlife Trust and appointed contractors, to implement the following key principles and key policies.

8.3 **Key Principles and Key Policies**

**Principle 1**

Support and encourage the minimisation/re-use of MSW by Wiltshire’s householders, local authorities and businesses in pursuit of an objective to reduce waste growth to 1% less than the forecast growth rate<sup>20</sup> each year, illustrated in the table below:

**Table 11:** Forecast waste arisings with 1% waste minimisation target

	Year	Pop'n	H'hld Waste*	Kilos per head of pop'n pre-minimisation target	Kilos per head of pop'n with 1% minimisation target
<b>Actual*</b>	2001/02	433,508	202,873	467.98	
	2002/03	437,321	219,206	501.25	
	2003/04	440,661	218,184	495.13	
	2004/05	445,153	226,885	509.68	
<b>Forecast</b>	2005/06	449,632	238,265	529.91	524.81
	2006/07	454,271	247,796	545.48	534.99
	2007/08	459,146	257,708	561.28	545.13
	2008/09	463,115	268,016	578.72	556.62

Note \* H'hld waste figure adjusted to take account of definition changes between 2001 and 2005.

Examples of actions to be taken:

- a) Working with schools to educate young people about waste issues, in particular purchasing decisions, re-use and recycling (Waste Action)
- b) Encouraging home/community composting and the use of re-usable nappies
- c) Providing local directories for waste re-use and recycling opportunities
- d) Supporting a development network of re-use services in Wiltshire, to extend the life of household items such as furniture and electrical goods
- e) Encouraging waste efficiency and recycling in the commercial sector
- f) Utilising Local Plan policies when working with developers to carry out waste audits as part of any new development

<sup>20</sup> Wiltshire’s MSW is growing at approximately 4% each year (2005). It is forecast to continue to grow at this annual average rate until 2011, and thereafter to grow at a declining rate, reaching a nil growth rate by 2015

**Principle 2**

**Carry out the separate collection of recyclable and compostable waste materials for reuse purposes, supported by publicity campaigns to encourage the use of these services by householders, to be consistent with the following targets for Wiltshire:**

- ii) 2005/06 – 33% of household waste recycled and/or composted (WWP target<sup>21</sup>)
- iii) 2010/11 – 40% of household waste recycled and/or composted (WWP interim target)
- iv) 2019/20 – 50% of household waste recycled and/or composted (WWP target<sup>22</sup>)
- v) 2010/11 – 95% of households served by kerbside collection of multiple recyclables<sup>23</sup>
- vi) 2010/11 – All collections of residual waste to be fortnightly

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<sup>21</sup> The former BVPI target of 33% by 2005/06 has been capped by Central Government at 30%. However, 33% has been retained as a local target.

<sup>22</sup> Consistent with the SW Regional Waste Strategy target of 45% of MSW recycled and/or composted. For information, current forecasts indicate that the recycled and/or composted tonnage will need to increase from 27.5% in 2004/05 to 30% in 2005/06, 40% in 2010/11 (132,000 tonnes) and 50% in 2020/21 (182,000 tonnes)

<sup>23</sup> Household Waste Recycling Act 2003 requires WCAs to collect at least 2 types of recyclable waste by 2010

**Principle 3**

**Recover sufficient waste tonnage to reduce Wiltshire’s reliance on landfill for biodegradable waste under the Landfill Allowance Trading Scheme (LATS), as follows:**

**Table 12:** LATS allowances and requirement for additional recovery

<b>Year</b>	<b>LATS tonnage allocation for biodegradable MSW (per annum/rounded)</b>	<b>Gap between forecast waste arisings and LATS allowance, requiring recovery in addition to recycling/composting target<sup>24</sup></b>
<b>2005/06</b>	134,000	-
<b>2010/11</b>	82,800	76,000
<b>2015/16</b>	54,100	122,000
<b>2019/20</b>	43,400	118,000

Increased recovery will be pursued by recycling and composting, plus the use of secondary recovery methods identified in the Regional Waste Strategy BPEO<sup>25</sup> and the Wiltshire BPEO, i.e. mechanical and biological treatment (MBT) and/or Energy from Waste (including incineration, pyrolysis, gasification and other technologies as they become available) or biological treatment (including in-vessel composting and anaerobic digestion and other technologies as they become available), with landfill to be increasingly considered as an option of last resort.

<sup>24</sup> The forecast recovery tonnage reflects the proposal for recycling and composting performance of 50% by 2020 (maximised)

<sup>25</sup> BPEO – Best Practicable Environmental Option.

**Principle 4**

**Increase MSW management facilities in pursuit of recycling, composting and overall recovery targets, as follows:**

**(i) Facilities required to meet targets up to 2010/11**

- Maximisation of capacity at the Lower Compton MRF (25,000 tonnes per annum)
- Maximisation of capacity at the Lower Compton outdoor composting facility (30,000 tonnes per annum)
- Provision of additional outdoor composting capacity (up to 20,000 tonnes per annum)
- MBT and/or Energy from Waste (including incineration, pyrolysis, gasification) or biological treatment (including in vessel composting and anaerobic digestion), to meet a forecast need of 76,000 to 93,000 tonnes per annum in total

**(ii) Facilities required to meet targets up to 2015/16**

- Additional MRF capacity to serve areas away from Lower Compton (25,000 tonnes per annum)
- Up to 3 additional Household Recycling Centres (HRCs) to fill gaps in the network
- MBT and/or Energy from Waste (including incineration, pyrolysis, gasification) or biological treatment (including in vessel composting and anaerobic digestion), to meet a forecast need of 122,000 to 161,000 tonnes per annum in total

**(iii) Facilities required to meet targets up to 2019/20**

- MBT and/or Energy from Waste (including incineration, pyrolysis, gasification) or biological treatment (including in vessel composting and anaerobic digestion), to meet a forecast need of 174,000 tonnes per annum in total)

**Principle 5**

**Support and encourage the provision of facilities by working in partnership with the private sector, with a particular emphasis upon development in the south and west of the County, in accordance with the Proximity Principle and the Wiltshire and Swindon Waste Local Plan.**

Facilities for municipal waste treatment and disposal are currently concentrated in North Wiltshire mainly at Lower Compton. Development of additional required capacity in the south and west of the County would enable more waste to be treated at source.

**Key Policies**

1. Work with the WWP to maintain and improve the capacity for managing household and commercial waste in Wiltshire by re-use, recycling and recovery
2. Increase the levels of public participation in recycling and minimisation schemes through education, information and incentivisation.
3. Improve collective working via the WWP to ensure the best net benefit to householders
4. Understand how emerging technologies could manage waste more sustainably
5. Facilitate the potential development of facilities for the treatment of residual waste from household and commercial streams
6. Develop closer working practices to address commercial waste streams
7. Work in partnership to optimise the procurement, delivery and success of new services
8. Give consideration to the local, regional and national planning context of waste management
9. Recognise the needs, and contributions, that other stakeholders have in developing the Strategy
10. Improve communication and working with local community organisations, referring to Community Plans as appropriate.

***For more information on Key Policies in Wiltshire refer to Paper (L): Key Policies***

#### 8.4 Risk Management

- 8.4.1 The Wiltshire Waste Partnership (WWP) will seek to identify and minimise key risks when delivering the JMWMS as well as existing obligations early in service delivery. These risks will be managed throughout the duration of the JMWMS.
- 8.4.2 The WWPs Business Plan for Waste Management in Wiltshire provides an opportunity to amend the JMWMS if required. Also, a County Council LATS Trading Strategy is in place which provides a transparent approach to trading in LATS allowances. Although there are risks to trading, for example the need to avoid over or under purchasing or selling allowances in accordance with forecasts, the system offers opportunities for banking and borrowing in most years, through further trading to adjust allowances. The risk of not trading is that penalties will have to be paid on any surplus landfill tonnage (currently £150.00 per tonne).

#### 8.5 Monitoring and Evaluation

- 8.5.1 Monitoring and evaluation is an important element of the JMWMS. Sound evaluation by the WWP will measure the success of its contractor and the WWT, capturing the learning from service implementation, and thus building on existing knowledge as well as continuing to provide better services now and in the future.
- 8.5.2 The WWP receives returns from contractors, District Councils and the WWT on a monthly basis. These returns are evaluated and the partnership monitors actions on a continual basis.