

Wiltshire Municipal Waste Management Strategy 2012

(updating the Joint Municipal Waste Management Strategy 2006)

Foreword

Society now recognises that there is not an infinite supply of raw materials and the environment is not an indestructible sink for emissions, pollution and waste.

EU and government policy, backed by high and increasing taxation levels, seeks a rapid move away from landfill towards more use of waste as a resource.

In Wiltshire very considerable progress has been made in the diversion of municipal waste from landfill and in reducing waste arisings. Residents may shortly achieve 50% recycling of household waste and we have the prospect of reducing landfill to less than 25% of all waste collected by the council, compared with 80% about 10 years ago. Total collection tonnage has declined a little in recent years.

Despite this, each household in Wiltshire continues to produce on average more than one tonne of waste annually.

We therefore need to continue our radical rethink of how to reduce the amount of waste we produce, and put more of our waste to productive use (resource efficiency). The more waste we prevent, reduce, reuse and recycle, the fewer waste treatment facilities will be required. Our recent progress shows that together we can make a difference.

The more that we can do to divert non-recycled waste to energy production, the less landfill we will need.

Whilst the advantages of local treatment can only be realised where the waste industry is willing to provide facilities, there are benefits – to the local economy and community as well as the environment – of seeking local re-use and treatment. In the longer term, these industries may become an important source of local employment.

In 2006 Wiltshire's former local authorities recognised these issues and took steps to minimise the impact on the county by adopting a Joint Municipal Waste Management Strategy (JMWMS).

Significant progress has been made towards the targets set in the JMWMS. Also, the creation of Wiltshire Council from the 5 former authorities in April 2009 included the formation of a single waste authority. These major changes, together with changes in EU and government guidance and forecast waste arisings, require the strategy to be updated.

The updated strategy provides guidelines for the commissioning of waste services as existing contracts come to an end and sets targets for waste management until about 2020. Whilst longer term plans cannot be made in detail, it is also necessary for the updated strategy to provide some guidance about priorities beyond 2020, to assist in planning services.

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Executive Summary

- Wiltshire's Municipal Waste Management Strategy (WMWMS) 2012 needs to take account
 of major developments in waste services locally and nationally. Particular drivers include
 the Landfill Tax, which aims to greatly reduce the landfilling of municipal solid waste
 (MSW), and the Council's targets to increase recycling to 50% by 2014 and reduce
 landfilling to less than 25% by the same date¹.
- 2. The Council will use the updated WMWMS to guide the development of waste collection and disposal services.
- 3. At the time when the original strategy was prepared Wiltshire was experiencing a rapid growth in municipal solid waste (MSW), rising at a rate above the national average. The updated WMWMS 2012 needs to take account of the recent, widespread reduction in waste tonnages and a forecast of more modest growth. However, the council has set new targets, to encourage continued waste reduction. This is the most beneficial action in both waste management and carbon reduction terms and will encourage further benefits of more efficient resource use.
- 4. Wiltshire continues to make good progress in providing new recycling and composting services for MSW. At the time when the original strategy was adopted, the recycling rate had doubled over the previous 5 years, to reach 31.5% in 2005/06. Since then, improvements have been made, to reach a recycling rate of 42.9% during 2011-12. Further substantial development of recycling and composting services identified in the original strategy was very largely completed during 2011-12, with results now beginning to show.
- 5. In addition, the forecast need for substantial secondary recovery capacity has been largely secured, with commencement of the Lakeside Energy from waste contract in June 2009 and the signing of a contract in April 2011 for a Mechanical Biological Treatment (MBT) plant at Westbury. The MBT plant is under construction and is expected to start treating waste during 2013.
- 6. These developments, plus the reduction in waste growth, have enabled the council to work well within its Landfill Allowances and Trading Scheme (LATS) and greatly reduce tonnage subject to Landfill Tax in recent years. The council now also expects to meet its Business Plan 2011-15 targets to increase recycling to 50% by 2014 and reduce landfilling to less than 25% by the same date. These targets are more demanding than those set by EU and government policy, and will therefore ensure that Wiltshire meets the underlying Landfill Directive target to reduce biodegradable waste landfilling to 35% of the 1995 total by 2020.
- 7. The WMWMS 2012 continues to be based upon key principles, reflecting the Waste Hierarchy, which seeks to optimise the use of the most beneficial methods of landfill reduction. The Waste Hierarchy, as set out in the EU Revised Waste Framework Directive 2010, is
 - i. Prevention;
 - ii. Preparing for reuse;
 - iii. Recycling;
 - iv. Other recovery including energy recovery;
 - v. Disposal.
- 8. Due to the emphasis in the Revised Waste Framework Directive upon waste prevention and re-use, the council's major service changes, and new contracts and developments achieved to date, there is a shift in emphasis in the updated strategy towards the upper

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¹ As currently set out in the Business Plan 2011-15

- levels of the Waste Hierarchy and working with Wiltshire residents to continue success to date in waste reduction, recycling and composting.
- 9. However, the need for further major waste treatment needs to be kept under review, given the uncertainties of any forecasts of waste growth, the possibility that further reductions in landfill may be required and opportunities to achieve broader benefits such as more local conversion of waste to resources.
- 10. The first 3 principles in the WMWMS 2012 are focused on the Waste Hierarchy. Principles 4 and 5 in the original strategy have been combined, to reflect the need for close integration of planning new capacity with the continuing aim of treating waste as close to source as is practicable.

Summary of Progress

- 11. Since preparation of the Wiltshire JMWMS during the period 2004 06, Wiltshire has achieved or experienced the following:-
 - A significant slowing in the rate of growth of municipal solid waste (MSW), until 2011
 - Growing public support for waste minimisation, composting and recycling, supported by the efforts of the local authority and the Wiltshire Wildlife Trust, and the work of voluntary or local groups
 - Sale of over 5000 council-subsidised food waste digesters to Wiltshire residents
 - Implementation of key changes in waste and recycling collections, to achieve harmonised services across the whole of Wiltshire, based on alternate weekly collections and more kerbside recycling and garden waste collections
 - Significant increases in the proportion of household waste that is recycled or composted, from about 31.5% to about 43%.
 - Commencement of a contract to divert 50,000 tonnes a year of Wiltshire's non-recycled waste from landfill to energy from waste incineration (2009) and the signing of a further contract to treat up to 60,000 tonnes a year to produce refuse derived fuel (2011).
 - A reduction in the proportion of waste sent to landfill from 60.4% in 2006-07 (and over 80% in 2003-04) to 36.6% in 2011-12.

Wiltshire Municipal Waste Management Strategy (WMWMS 2012)

(updating the Joint Municipal Waste Management Strategy 2006)

Aim

The council will seek further improvement in waste management by pursuing the 4 principles in the updated WMWMS 2012 and the related policies and targets.

In the longer term, beyond 2020, the council will seek continuous improvement in services and performance, with an emphasis upon waste prevention, recycling and composting.

The council believes that waste management cannot be treated in isolation from other activities, and will promote improved links between waste management responsibilities and :-

- Use of waste materials as resources
- Other council objectives, such those set out in the Energy Change and Opportunity Strategy 2012 and strategies and policies to reduce carbon footprint
- Working with the local economy to achieve more re-use and reprocessing
- · Development of resilient communities.

Principle 1 – waste prevention and re-use

The council will provide advice, education and where possible incentives to encourage waste prevention and re-use by Wiltshire's residents.

The council will pursue a target of reducing waste after recycling and composting from 606 kilos per household achieved in 2011-12 to 545 kilos per household ² by 2015-16.

In the longer term, including beyond 2020, the council will seek to achieve further reduction in waste per household after recycling and composting, by continuous improvement to services and co-operative work with residents and partners.

The council will seek to lead by example, extending waste prevention, re-use and recycling to all premises and procurement of supplies, and will provide information and encouragement to local business, to enable the commercial sector to meet its responsibilities for waste treatment.

Notes

12. Council forecasts indicate that the target reduction in waste per household can be achieved, provided that residents continue to support waste minimisation and make good use of kerbside recycling services, which were much improved during 2011-12.

² Performance will be measured using the established methodology for National Indicator (NI) 191, which is still widely used for performance assessment and comparison

Policies – Principle 1 – Waste Prevention

- P1.1 The council will continue to work with the community and voluntary sector partners to encourage prevention, re-use and reduction of waste, with an emphasis upon:
 - i. biodegradable materials such as garden and food waste
 - ii. working with "hard to reach" sectors of the community
 - iii. a combined approach to waste prevention, re-use, reduction and recycling issues (See also Principle 2)
 - iv. working in areas where recycling rates appear to be low
 - v. working with any community area boards that wish to prioritise waste prevention and re-use and / or recycling and composting, for example through neighbourhood and community plans.

These principles are set out in the current "Recycle for Wiltshire" Joint Venture Business Plan, and should be retained in any future arrangements to deliver waste prevention, re-use, reduction and recycling.

- P1.2 The council will seek funding for schemes to incentivise waste re-use and reduction by residents, with a particular emphasis upon biodegradable waste.
- P1.3 The council will continue to work with schools, to encourage education about waste re-use, reduction and recycling, and the prevention and recycling of schools waste.
- P1.4 The council will continue to resist commercial use of household recycling centres HRCs), which is illegal and increases the cost of waste management to the council tax payer, for example by the current system of trade waste disclaimer forms and follow up action.
- P1.5 The council will support action by local business to re-use and reduce commercial waste, principally by providing information.
- P1.6 The council will provide leadership by example to local residents and the private sector by extending waste prevention, re-use, reduction and recycling facilities throughout its own premises.
- P1.7 The council will work with government to produce a Waste Prevention Plan by December 2013, as required by government to meet the requirements of the EU Revised Waste Framework Directive.
- P1.8 The council will continue to ask DEFRA to recognise the effects of local action to reduce the biodegradability of household waste, by encouraging residents to minimise their food and garden waste.

Revised Forecasts of Waste Growth

13. The council's current forecast of municipal waste tonnages is set out in Table 1. The council will use this forecast as guidance but will not hesitate to revise forecasts as new information becomes available. For example the recent introduction of a new definition of municipal waste and "local authority collected municipal waste (LACMW)" will require adjustment to tonnage figures. Updates to forecasts are not expected to normally require review of the Strategy.

Table 1: Revised Forecasts of Municipal Solid Waste, December 2011

	MSW tonnage	
2001/02	233,900	
2005/06	259,700	
2011/12	245,200	
	Forecast at 1% per	Forecast effects of
	annum (HIGH)	AWC (LOW)
2012/13	247,600	244,600
2013/14	250,100	246,100
2014/15	252,600	248,600
2015/16	255,100	251,100
2019/20	265,500	261,200

Source: Waste Service for 2013-14

Notes: Values are rounded.

Budget forecasts are likely to require some amendment, due the change in definitions made in 2011 and introduction of the term "local authority collected municipal waste" (LACMW) to differentiate this from municipal waste collected by the private sector. In future separately collected construction and demolition waste (as collected at household recycling centres) will be excluded from the definition.

AWC = alternating weekly collection.

Principle 2 - Recycling and Composting

The council will carry out the separate collection of recyclable and compostable waste materials from all accessible households, supported by publicity campaigns to encourage the use of these services by householders, to achieve a recycling rate of 50% of household waste by 2014.

The council will carry out recycling and residual waste collections on a fortnightly cycle, to encourage residents to make best use of recycling services.

In the longer term, including beyond 2020, the council will seek to achieve further increases in recycling and composting of household waste, by continuous improvement and adoption of viable step-changes to services.

Notes

- 14. The target to achieve 50% recycling by 2014 reflects the commitment in the council business plan 2011-2015. Maintenance of this performance will be required, to ensure compliance with Revised EU Waste Framework Directive target of 50% recycling by 2020.
- 15. Improvements to waste and recycling collections completed by April 2012 are forecast to lead to an increase in recycling rate to about 50% by 2013-14.
- 16. Provision of kerbside recycling collection services to flats is programmed for Summer 2012. At this point the Council will be likely to have met the commitment to provide collections to all accessible households and will have exceeded the original JMW MS target of 95%. Further development will be needed to serve areas of new housing.
- 17. The council collects the following materials at kerbside:
 - a. Glass (colour separated)
 - b. Metal cans
 - c. Paper
 - d. Aluminium foil
 - e. Textiles and shoes
 - f. Plastic bottles
 - g. Cardboard.
- 18. The Revised EU Waste Framework Directive requires separate collection of at least paper, metal, plastic and glass by 2015. The council is now compliant with this requirement, subject to acceptance that the plastic bottles and card collection can be effectively separated for recycling, and that other plastics cannot be collected economically at kerbside. To date, separation of these materials at the MRF has been effective. Recent guidance issued by WRAP provides strong support for confining kerbside collection of plastics to plastic bottles only. The government is currently finalising guidance based on the Revised EU Waste Framework Directive, to clarify conditions in which collection of comingled recyclates may be appropriate.

Policies – Principle 2 – Recycling and Composting

- P2.1 The council will continue to use guidelines for National Indicator (NI) 192 to assess recycling performance, to enable this to be compared with previous levels and with performance achieved by other local authorities. This is a measure of recycling and composting performance combined.
- P2.2 The council will also continue to monitor recycling (of dry materials) and composting (of garden waste) separately.
- P2.3 The council will seek efficiencies in the kerbside collection of dry recyclates, subject to final government guidance on conditions in which comingling will be acceptable and standards to be met in sorting comingled materials, and subject to cost and quality assessments of alternative services.
- P2.4 the council will continue to promote collection of garden waste to achieve diversion of biodegradable tonnage from landfill. This is well established in Wiltshire and is the most cost effective way of diverting biodegradable waste from landfill.
- P2.5 The council will not seek to establish separate collections of food waste, but will

pursue established measures – waste prevention and energy from waste - to divert more of this material from landfill.

This policy will be reviewed if required by changes to government legislation or financial factors.

- P2.6 To ensure that best use is made of recycling opportunities by residents, the council will continue to promote local services, in conjunction with work on waste reduction. (See also Principle 1). The council will also promote provision for collections to take place safely and efficiently in the design of areas of new development.
- P2.7 The council will maintain and seek to expand the network of household recycling centres (HRCs). There are currently 11 HRCs, located at :-

Amesbury, Devizes, Everleigh (near Pewsey), Lower Compton (near Calne), Marlborough, Melksham, Purton, Salisbury, Stanton St Quintin (near Chippenham), Trowbridge and Warminster.

P2.8 The council has identified the following settlements as priority locations for additional HRCs, subject to sites and funding being made available:

Lyneham, Ludgershall / Tidworth, Mere / Tisbury and Westbury.

In the case of Lyneham, the council will take into account the effects on local demand of the proposed changes to use of the airbase.

- P2.9 The council will seek to increase the range of recyclates collected at HRCs, where it is feasible and economic to do so, with a focus upon biodegradable and hazardous wastes and service to residents.
- P2.10 The council will seek to extend the scope of community re-use activities based at HRCs, provided these can be achieved safely and legally.
- P2.11 The council will seek to promote the development of licensed and permitted recycling centres for business waste, and to prevent illegal use of household recycling centres (see also P1.4).
- P2.12 The council will monitor the performance of mini recycling (local bring) sites, following major review the network during 2012, to respond to reduced use by residents and the major development of kerbside recycling collections. The intention will be to maintain a consistent local service backing up the expanded kerbside collections.
- P2.13 The council will review its trade waste collection, to ensure that this :-
 - a) Is based on an approved business case, which takes account of identified demand and all identifiable revenue and capital costs, including those arising from waste disposal
 - b) provides accurate tonnage figures, preferably by separate collection, or alternatively by updated and regular test-weighing of bins
 - c) if feasible, includes a significant recycling element, that prioritises biodegradable materials such as paper, card, green waste or food waste, subject to the availability of treatment facilities, and the need to give priority to treatment of household waste tonnage
 - d) Makes a sufficient financial contribution to the Council's disposal.

treatment and Landfill Tax costs, to avoid being cross-subsidised by council tax payers.

P2.14 The council will apply a similar approach to provision of services to other paying customers (formerly identified as "Schedule 2" customers under the now-updated Controlled Waste Regulations), recognising that these customers should have access to a multi-material recycling collection.

Principle 3 – Further Diversion from Landfill

The council will recover energy or otherwise divert from landfill sufficient tonnage of Municipal Solid Waste (MSW), in addition to that diverted by recycling and composting, to achieve

- a landfill rate of 25% or less of total MSW by 2014
- a landfill rate equivalent to less than 35% of the biodegradable municipal waste tonnage landfilled at 1995 by 2019-20.

In the longer term, beyond 2020, the council will seek further measures to reduce landfill, as set out in principle 4.

Notes

19. To meet its share of the EU Landfill Directive target for 2020, Wiltshire must reduce landfilling of biodegradable MSW to 35% of the tonnage landfilled in 1995. Although LATS allowances are to be abandoned by the government after 2012-13, these are based on the Landfill directive targets and are therefore a useful guide to necessary performance. The allowance for Wiltshire in 2019-20 is equivalent to a total landfill tonnage (including non biodegradable waste)³ of about 64,000 tonnes.

- 20. The landfill target of 25% or less by 2014 is in the council's business plan 2011-15. On current forecasts of MSW tonnage, a continued achievement of this target will be equivalent to landfilling no more than 65,000 to 66,000 tonnes of MSW at 2019-20 (See Table 2).
- 21. The council's target and that implied by the landfill directive are therefore forecast to exert very similar requirements at 2019-20, namely a landfill total of less than about 65,000 tonnes. However this will be dependent upon actual MSW tonnages and will need to be monitored. The local target requires action by 2014, but provision has been made to achieve this.

³ UK LATS allowances were based on assumption that MSW is about 68% biodegradable. Composition surveys have indicated that Wiltshire's waste is similar to this average.

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Table 2: Wiltshire's Landfill and Reduction Targets

	MSW Landfill %	Council Target %	MSW Landfill Tonnage	Forecast of Council Target as Tonnage
2006/07	60.4%		158,600	
2007/08	61.5%		158,700	
2008/09	56.4%		141,600	
2009/10	47.21%		115,600	
2010/11	37.47%		91,000	
2011/12	36.6%		89,900	
2012/13				
2013/14		<25%		61,500 to 65,500
2015/16		<25%		62,800 to 63,800
2019/20		<25%		65,300 to 66,400

Notes: The council target % is as set out in the Business Plan 2011-2015 (page 58). The forecast tonnage compliant with this target is based on the forecasts of MSW in Table 1

22. Currently about 37% of MSW is landfilled (2011-12). The council anticipates that increased diversion of waste to recycling and composting, following kerbside collection service improvements during 2011-12 (cross ref) and operation of the Westbury Mechanical Biological Treatment (MBT) plant from 2013 is likely to achieve these targets, as follows:

Need:

Additional landfill tonnage required to achieve and 24,000 to 28,000 tonnes maintain less than 25% MSW to landfill (from Table 2) approx.

Provision:

Forecast MSW reduction and additional recycling and composting tonnage following kerbside collection improvements

21000 tonnes

and

Forecast tonnage diversion from landfill from MBT project

37,800 tonnes

However, these changes have not yet been achieved and their progress must be monitored.

Policies – Principle 3 – Further Diversion from Landfill

- P3.1 The council will continue to monitor performance in landfill diversion and update forecasts of MSW and diversion tonnages regularly, to ensure that the targets set out in Principle 3 are met.
- P3.2 The council will support further measures to reduce municipal waste sent to landfill, where the proposals comply with the Waste Hierarchy and achieve the Aims of the WMWMS 2012.
- P3.3 The council will consider the scope for partnership with local business to achieve landfill reductions for commercial and household waste.
- P3.4 The council will promote local use of the solid recovered fuel to be manufactured at the Westbury MBT plant.

Principle 4 – Waste Treatment Capacity

The Council will monitor available capacity for diversion of Municipal Solid Waste from landfill and, subject to the requirements of planning policies and procedures, will support any additional proposals required to meet targets and policies for landfill reduction (as set out in Principle 3), and to address the following:

- The scope for developing re-use, recycling, composting and other treatment industries in Wiltshire, to avoid creating waste or convert it to resources, and to encourage treatment of waste at higher levels in the waste hierarchy
- ii. The scope for community-based action and/or public and private sector partnership action to convert waste to resources
- iii. The scope for local use of resources produced by local waste treatment, such as refuse derived fuel
- iv. Opportunities to develop additional landfill diversion capacity in the south and west of Wiltshire
- v. identified gaps in the household recycling centre network
- vi. the scope to improve the carbon efficiency of waste collection, handling and treatment facilities.

In the longer term, the council will pursue the goal of zero waste to landfill and reduction of the environmental impact of waste treatment, by continuous improvement to waste collection and treatment services.

Notes

23. The concentration of landfill, MRF and composting capacity in the north of the County is being reduced under current contracts by developments at Amesbury (WTS) and Westbury (MBT plant), plus the renewed use of the Grateley on-farm composting site. However, decisions about provision from 2016 onwards may require new facilities. Also, there is growing interest in reducing the climate change impact of Council services. The development of additional landfill diversion capacity in the south and west of Wiltshire is likely to assist in reduction of waste miles.

Policies

P4.1 The council will ensure that waste management, economic development and land use planning policies are coordinated, to encourage local action to increase resource efficiency and treatment of waste to produce new "raw materials" or energy.

End of Strategy Document