

Overview & Scrutiny Committee for Community & Environmental Services

Issues paper on key waste strategy elements

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A PURPOSE OF REPORT

To begin the debate on the key issues at the core of the waste strategy and seek the views of members on their preferred direction way forward.

B PROPOSED ACTION

The Overview & Scrutiny Committee is invited to:

- a) **CONSIDER** the information and questions posed.
- b) **DEBATE** the key issues.
- c) **CONSIDER how you wish to work with the Joint Waste Committee (JWC) on progressing the Waste Strategy and putting the options for waste management in Buckinghamshire before residents**

C DETAILED REPORT

Future municipal waste management in Buckinghamshire – WHY, WHAT, WHERE, HOW, WHEN?

Introduction

1. This issues paper is designed to explore the core issues of the future Buckinghamshire waste management strategy debate. It is important to widen the debate and get formal responses to feed in to the strategy development.

Where are we now? – The current situation

2. Currently, around 270,000 tonnes of municipal wastes are produced in Buckinghamshire each year. The majority of this is from households and most of it is landfilled. However, Buckinghamshire has been successful in embracing the recycling agenda of the last five years and currently recycles 29% of this waste. Despite this good recycling rate, there is a residual waste management requirement, and annual arising is currently around 192,000 tonnes.
3. The revision of the existing 2002 waste strategy commenced in late 2004. This work was required due to legislative changes and has progressed steadily with support from consultant Jacobs Babbie. The timetable for this work is finite. The key drivers (explored in the next section), combined with time to procure a contract, and to construct facilities, mean that decisions are required this year.
4. The paper on the procurement finance method goes to Cabinet in July, and further reports on procurement and the waste strategy are due to be considered by Cabinet in September and October respectively. For the procurement process to be effective, the waste strategy needs to be implemented, and we have a completion date of November 2006 to aim for. In order to procure any type of contract, the partnership will need to agree a range of service requirements. With waste, a commodity that changes over time, this may be challenging.

5. Reaching agreement with all partners will be crucial. This will allow an integrated contract to be successfully procured and commissioned. This contract will be designed as flexibly as possible, providing the partnership with a mechanism to service customers while delivering best value in the years to come.

Why change at all?

6. The EU landfill directive puts strict limits on the amount of waste that can be land filled in the future. The reasons for this are linked to resource reuse and climate change. Each English Waste Disposal Authority (WDA) has an allowance of Biodegradable Municipal Waste (BMW) which they can landfill each year for the next 15 years. The amount of BMW that can be land filled is enacted by parliament under the Waste and Emissions Trading (WET) Act 2003. In England, a scheme with limits for the disposal of BMW to landfill has been implemented. It came in to force on April 1st 2005 and is know as LATS – the Landfill Allowance Trading Scheme.
7. BMW comprises all those materials that naturally biodegrade over time and includes materials such as:
 - Paper, card, magazines, pamphlets, books etc.
 - Wool, cotton and all other natural textile waste.
 - Kitchen, food and other organic / biowastes.
 - Garden and wood waste.
 - Other miscellaneous wastes such as sawdust, wood shavings and cat litter.

The majority of the mass of the waste from households is BMW. Government estimates for the UK as a whole have put this at up to 68%.

8. High levels of recycling and composting have been a part of the waste strategy for Buckinghamshire since 2002. Best Value Performance Indicators (BVPI's) are key targets for all local authorities. In the 2001 strategy, recommendations to *'maximise the potential recycling'* and to seek to *'meet our performance standards and national targets'* were made. The strategy states that *'by 2015, the WSB will need to plan to recover value from 67% of the municipal waste that is collected'*.
9. Recently, the Government reduced the recycling and composting targets, capping the BVPI's at 30%. The current Buckinghamshire rate of 29% is close to the 30% cap, but this level of recycling although helpful in diverting waste from landfill, it is not enough to avoid the need to procure a long-term waste management treatment solution for the residual waste fraction that remains.

Question 1. Is there still commitment to achieve the agreed long-term recycling targets as agreed in the current Waste Strategy for Buckinghamshire?

10. In summer 2004, the County Council commissioned a 'Technical Options Appraisal' (here after referred to as the 'Options Appraisal' from here on) to look at BMW diversion from landfill. This report, completed in February 2005, considered planned and enhanced initiatives for front end recycling and options for the residue requiring additional waste treatment. Details of the initiatives planned by partner authorities are shown at the end of this report in the appendix.
11. The optimised recycling and composting rates indicated in the Options Appraisal are detailed below. They are vital to assist the WDA, and therefore the partnership, with its LATS compliance strategy.
 - 32% - 2005
 - 46% - 2010
 - 50% - 2015
 - 51% - 2020

Research from Jacobs Babbie indicates that these levels of recycling and composting can be achieved by optimising existing schemes and by fully implementing all planned initiatives as shown in the appendix at the end of this report. However, despite this optimisation, itself a challenge for authorities, the higher level of recycling and composting still leaves half of the municipal waste mass for some sort of residual treatment, and some of this is BMW.

12. The 'Do Nothing' scenario was modelled with other scenarios. It looked at continuing to recycle and landfill at the current rates, while buying allowances to comply with LATS. This scenario was more expensive than many treatment technology options modelled and would involve significant market uncertainty as well as increased landfill disposal and tax costs. This scenario is not attractive to the WDA and initial responses from WCA's indicate they understand this.
13. The LATS scheme allows you to bank allowances, to borrow allowances and therefore to trade these as a marketable commodity in the trading years of the scheme. There are key target years for focus, 2010, 2013 and 2020, taken from the EU directive. The allowances and waste tonnage information for Buckinghamshire are shown in the appendix.
14. In the first two years of the LATS scheme (2005/06 and 2006/07), the County Council will be able to bank allowances for future use. However, this position is dependent on the complete implementation of the WCA's (WDC, SBDC, CDC) rollout of kitchen and green wastes. In the following year, these allowances will be used. As from 2008/09, it is likely that the WDA will have to buy allowances as it will exceed its own BMW allowances.
15. The link to the existing BVPI's for recycling and composting is clear. Recycling and composting separation and collection schemes can reduce the amount of BMW going to landfill by removing paper, card, food and green waste from the waste stream at source. This helps the WCA's meet their BVPI targets and helps the WDA meet its BMW diversion targets. It also enables quality recyclates to be collected and marketed.
16. If planned WCA schemes are not implemented, or existing schemes are not optimised or enhanced, this helps neither the WDA nor WCA achieve targets. The success of any waste partnership, strategy and contract, is likely to be determined by the reaction to the LATS challenge. As part of this challenge, all authorities, particularly WCA's, should consider if recycling and composting should be achieved at kerbside or centrally.
17. In response to the LATS diversion requirements, the County Council's Options Appraisal considered the technology choices that could be used to divert BMW from landfill. Technology combinations were assessed to see if they would meet these targets and costed against the costs of BMW disposal to landfill under the LATS scheme.
18. One key element of all options that met the LATS targets was the requirement for residual management using some form of thermal treatment, as part of the system. This is in alignment with the EU policies, UK Government policy, SEERA regional policy, and more importantly with the aims of the 2002 Waste Strategy for Buckinghamshire (Core principles to 2021) and the 2004 Buckinghamshire Minerals and Waste Local Plan (policy 17).

Question 2. In 2002, the adopted strategy showed the commitment for 'high technology waste management methods, including incineration with energy recovery' for the management of Buckinghamshire's waste. Is this statement as actively supported now, as it was in 2002?

Question 3. Are there any technologies that you would, or would not, support?

19. The sizing of these facilities is an important consideration and a number of factors affect this. The waste growth associated with the way we live our lives, estimated nationally to be just under 3%, must be accommodated (this is despite our existing and planned waste minimisation campaigns), as must the waste growth from population growth (significant

growth is planned for Buckinghamshire by the UK Government in the next 30 years, which LATS does not take account of despite representations). The amount of recycling and composting is another key consideration. The sizing of any technology system would need to provide prudent capacity to accommodate waste growth and uncertainty.

Question 4. If all Government guidelines, such as the proximity principle and waste hierarchy, were to be satisfied, and it were technically and financially attractive to do so, do you consider the possible import of municipal recyclate, compostable materials or other wastes, for processing or treatment into the new county facilities as being unacceptable?

Where? – Spatial arrangement of facilities.

20. A corner stone of waste policy in the UK is the proximity principle. This principle states that 'waste should be disposed of as closely as possible to where it is produced'. The proximity principle can be applied using demographic information. Please see the enclosed map of population density based on the UK census of 2001 shown in the appendix.

Question 5. In recognizing the proximity principle, do you have any views on the location of future residual waste management facilities in the county, for example a single facility vs. multiple facilities?

Question 6. Do you have the desire to deliver a strategy that might result in waste residual waste management facilities being developed and commissioned in your county?

How? – How will it be procured?

21. The Options Appraisal project was managed by the procurement officer and developed a reference project for further financial modelling, to look at how the service might be procured. This process produced two viable options, Private Finance Initiative (PFI) and Prudential Borrowing (PB). Both have merits, but both are quite different, and have specific requirements that would affect the type of contract that could be procured. As an example, PFI financing would normally require an agreed stretch level of recycling and composting. DEFRA would look for a rate of 50% or above, of the total waste tonnage, by the end of the PFI contract period. Future papers on this subject to be presented to Cabinet are due in the late summer and autumn.

22. To date, the additional costs of recyclate collection experienced by WCA's have been mitigated by the payment of Recycling Credits from the WDA. Despite the lack of BVPI's beyond 2005/06 and the capping of the rate for this year at 30%, this system of fund allocation continues. These payments support recycling activity in WCA areas and are considered important in maintaining landfill diversion.

23. The type of technology and the type of contract will affect the required specification for the feedstock. Formal agreements between the partners are likely to be required. This is vital to ensure the confidence of all parties – the finance providers, the contractors and the local authority partners.

24. In response to this, local authority partners could consider the possibility of pooling targets and other opportunities might exist for the five Buckinghamshire authorities to combine their efforts in a consistent fashion across the county in their pursuit of these ends.

Question 7. Do WCA wish to consider pooling their current or future recycling and composting targets with other authorities in Buckinghamshire?

Question 8. Would your authority be interested in developing opportunities for joint working with other authorities to deliver consistent and homogenous recycling systems, thereby helping the creation of consistent recycling and residual waste streams?

When? - When will this happen?

25. The LATS targets apply from April 2005. It is likely that by 2008/09 the WDA will be in an allowance deficit position, possibly earlier if planned schemes are not implemented. The WDA will need to buy allowances to avoid fines of £150 per tonne. In order to mitigate this, a procurement process for a new technology system will be required and the County Council will seek a cabinet decision on the procurement method in July this year. This will begin the process for the future development of waste management processes.
26. From the experience of others in the UK, it has been shown that the procurement and planning application stages of a long-term waste contract can be quite protracted. Regardless of the technology choice, the procurement period of some two to three years, and the planning process lasting some two to three years is a realistic time frame to consider. The build time of many of these facilities can be between one and two years. Therefore, the full process from concept to commissioning could take five to eight years.
27. The WDA has to act now, to work with the partners, to agree the core elements of the strategy, to deliver a residual waste management system that it is legally required to provide for the residents of the county.
28. The WCA's should commence consideration of how they will support the WDA in its desire to move sensitively and swiftly, in the interest of best value and environmental service delivery, to try to procure a suitable and sustainable residual waste management system for the residents of Buckinghamshire. Equally, the WDA must consider how it might help the WCA's in achieving enhanced recycling and composting schemes.
29. Before DEFRA approval, Municipal Waste Management Strategies require Strategic Environmental Assessment (SEA) and consultation with stakeholders. The SEA process begin in July this year with the public consultation of our draft strategy likely to begin in early 2006 following the SEA input and further feedback from all authorities.
30. The strategy will be an important consideration in the new Waste and Minerals planning document. The development of the new LDF (Local Development Framework, the portfolio of documents that will replace the Minerals and Waste Local Plan) for Minerals and Waste begins in spring 2006, and the revised waste strategy will be an important consideration in this process.

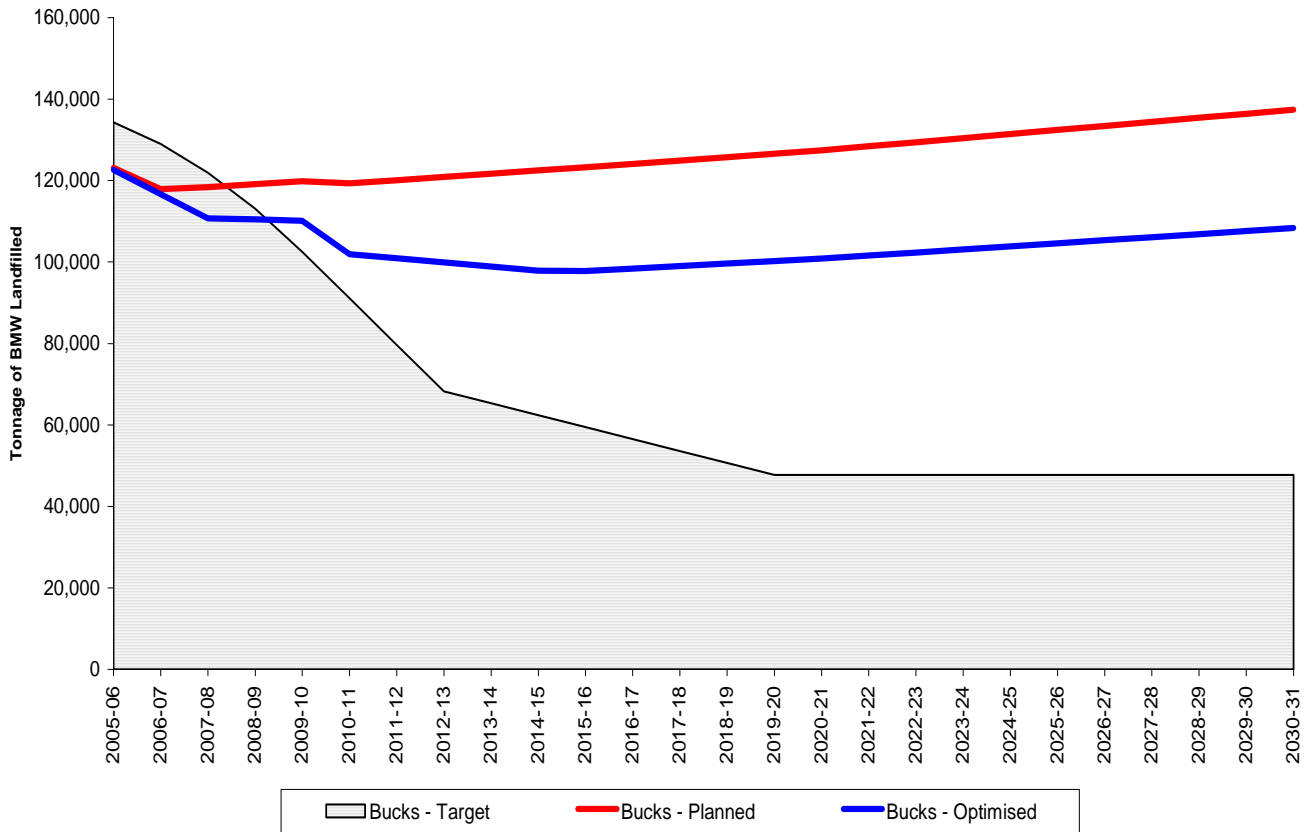
Conclusion

31. This issues paper is designed to focus the minds of the readers on to the key issues of the future of residual municipal waste management in Buckinghamshire, The key questions WHY, WHAT, WHERE, HOW and WHEN need to be addressed. The consideration, review and input in to the developing strategy by County Council OSC members is essential

Appendices – see attached.

Appendix 1 – LATS allowances (to follow as an addendum)

BCC Landfill Allowance Trading Scheme Targets with Planned and Optimised Performance



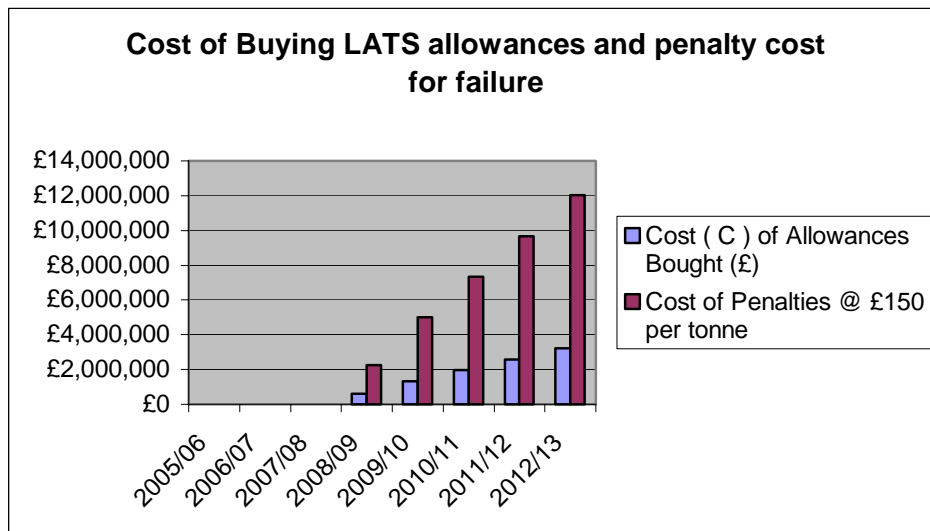
Appendix 2

LATS Trading and Penalty Assumptions

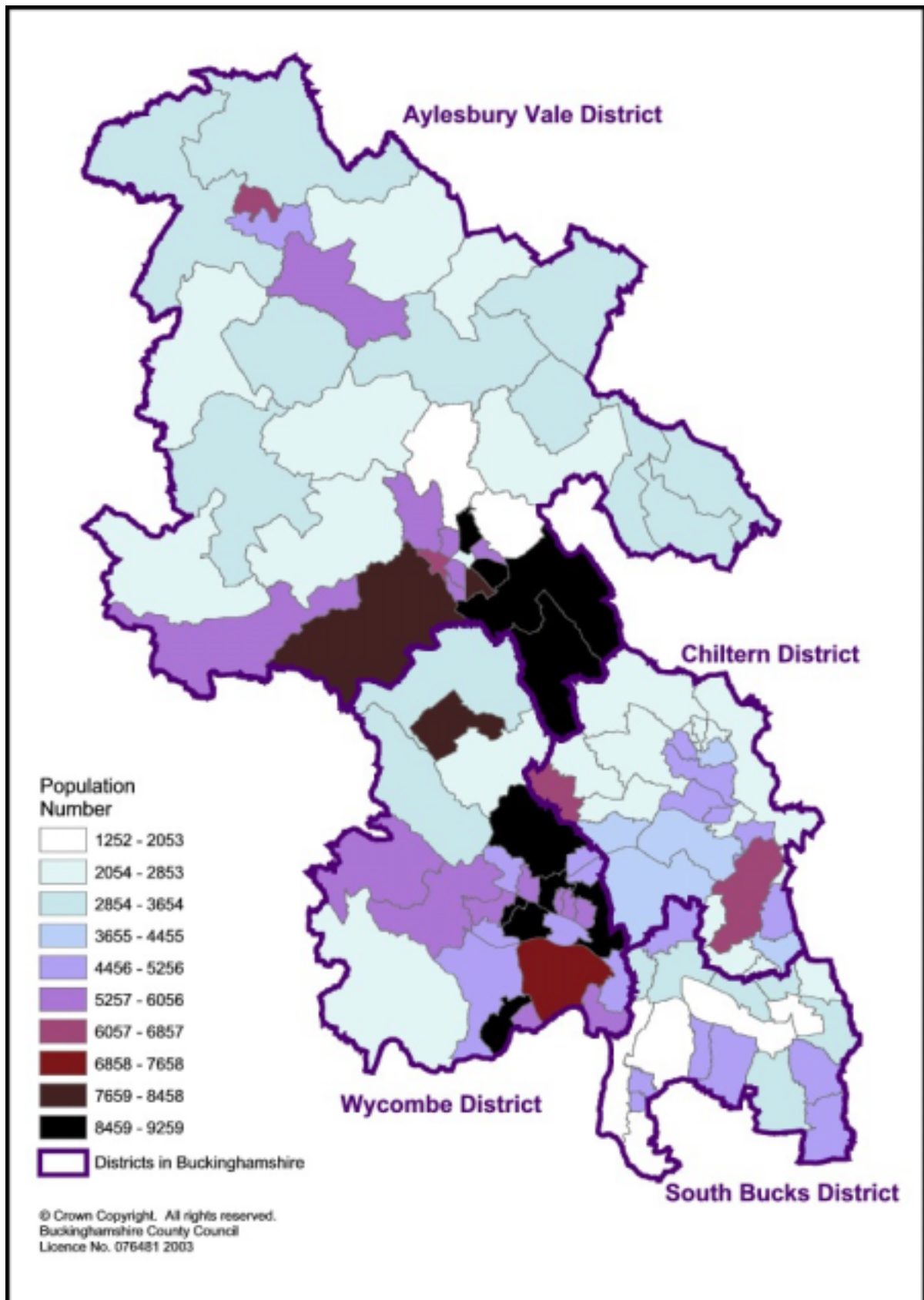
(Based on full roll out of green & kitchen waste collection schemes by WDC, CDC & SBDC)

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Allowances Banked	6,274	10,549	4,072	-	-	-	-	-
Allowances Bought	-	-	-	15,020	33,497	48,929	64,482	80,160
Assumed Price per allowance	-	-	-	£40	£40	£40	£40	£40
Cost of allowances	-	-	-	£599,200	£1,339,880	£1,957,160	£2,579,280	£3,206,400
Cost of Penalties	-	-	-	£2.25m	£5m	£7.4m	£9.7m	£12m

- Cost of Penalties set at £150 per tonne.
- Trading costs could range between £20 - £149 per tonne and is market dependant



Appendix 3 – Map 1 - Population density by ward in Buckinghamshire.



Appendix 4 - Table 1 – Partnership performance against Strategy 2002 objectives.

Recommended 2002 WSB initiatives	Have the initiatives been achieved? February 2005	Enhanced Joint working
Waste Minimisation Initiatives to achieve c. 0.5% p.a. reduction in arisings per household by 2003/04 (BCC)	There have been good initiatives introduced. There was a 6.7% growth in arisings per household in 04/05. Growth has varied.	Yes
Provide one or more new HWRCs by 2005/06 (BCC)	A new HRWC is due to be built at Ashton Clinton 07/08	Yes
Relocate HWRC site for Beaconsfield by 2003/04 (BCC)	South Bucks is providing funding due to take place 05/06	No
High Heavens HWRC. Extend within site by 2003/04 (BCC)	This is scheduled to start in January 2006 subject to planning permission	Yes
High Heavens waste disposal complex. Develop composting facility by 2003/04 (BCC)	This was completed in July 2004	No
Buckingham HWRC. Extend within site by 2005/06 (BCC)	Minor work has been carried out to improve Buckingham HWRC	No
Chesham HWRC. Extend within site by 2005/06 (BCC)	Minor work will take place in 05/06 to improve Chesham HWRC	Yes
Amersham HWRC. Extend within site by 2003/04 (BCC)	Minor work in 2006	Yes with CDC
Kerbside monthly collection of glass using box/basket to 60% of premises by 2003/04 (AVDC)	88% in 04/05 Successful glass consortium with Chiltern District Council	
Kerbside monthly collection of glass using box/basket to remaining 40% of premises by 2005/06 (AVDC)	88% in 04/05 Successful glass consortium with Chiltern District Council	
Bring scheme facilities for cardboard & mixed papers by 2003/04 [based on 25 sites] (AVDC)	AVDC have put 15 net new sites	
Increased bring scheme provision of 25 new sites for various materials By 2003/04 (AVDC)	15 net new sites	
Enhanced kerbside collection of paper by 2003/04 (CDC)	This has not been achieved as there was some contractual issues	
Enhanced kerbside collection of glass by 2003/04 (CDC)	This has not been achieved as there was some contractual issues	
Enhancement of existing recycling schemes by 2003/04 (SBDC)	This initiative was achieved through funding from Defra	Yes
Provision of kerbside glass collection scheme by 2003/04 (SBDC)	This initiative was achieved through funding from Defra	Yes
Paper collection with kerbside boxes to 85% households by 2003/04 (WDC)	This initiative was achieved	
Paper collection with kerbside boxes to remaining 15% of households by 2005/06 (WDC)	This initiative is delayed indefinitely as its not value for money	
Wheeled bin Green Waste collection to 85% of households by 2003/04 (WDC)	04/05 – 20%05/06 – just under 60%	
Wheeled bin Green Waste collection to remaining 15% of households by 2005/06 (WDC)	This is an initiative for the future	
Kerbside collection of plastic, glass & cans with boxes to 85% of households by 2008/09 (WDC)	Increased from 2% to 20% for cans and plastics	
Kerbside collection of plastic, glass & cans with boxes to remaining 15% of households by 2010/11 (WDC)	This is an initiative for the future	
Phase in alternate week collections of household waste by 2008/09 (WDC)	Will be achieving 60% in 05/06	

Appendix 5 - Table 2 - Authority initiatives planned for the years ahead (Taken from the WDA Options Appraisal).

	2003/04	2004/05	2005/06	2006/07	2007/08	2010/11
BCC	Extend 2 Household Waste Recycling Facility (HWRCs)	High Heavens HWRC expansion Autumn 2004	Relocate Beaconsfield Site		Amersham HWRC expansion	
		Chesham HWRC expansion in 2004/05	Extend 2 HWRCs		Provide one or more HWRCs for the County	
AVDC		Kerbside monthly collection of glass to 90% of residents (starts Oct 2004)				
		5 new bring sites				
CDC	Enhance kerbside for paper and glass	Kitchen waste commencing Feb 05 2004/05 78 tonnes	Green Kitchen 2005/06 2,062 tonnes			
SBDC	Enhance existing recycling schemes	Kitchen waste commencing March 05 2004/05 90 tonnes	Green Kitchen 2005/06 2,062 tonnes (est.).	Green Kitchen waste 2006/07 3,800 tonnes (est.).		
WDC	Paper collection with boxes to 85% of WDC households	Green waste kerbside collection to 18% of residents (12,000 properties)	Green Kitchen waste 2005/06 6875 tonnes (36% - 24,000 Properties) Kerbside can / plastic collections to properties (18% 12,000 properties)		Kerbside can / plastic collections to properties (85% total coverage) properties Completion of roll out of GROW to remainder of all suitable properties.	Roll out of plastic, and cans for WDC to remaining suitable properties. Approx 15%
		Kitchen waste commencing June 04 1,874 tonnes				

Appendix 6 - Table 3 (below on two pages) – Specific theoretical ‘optimising’ processes designed to deliver enhanced recycling from existing schemes (Taken from the WDA Options Appraisal).

DC	Year	Stream	K/s / BB	Scheme	Targeted	Roll out	Participation	Recognition
Aylesbury Vale DC	2007	Organic	K/s	Introduce a kitchen, green and card waste collection	93%	90%	60%	60%
	2010	Fe	K/s	Increase Targeted by introducing aerosols	75%	n/c	n/c	n/c
	2010	Fe	BB	Increase Targeted by introducing aerosols	75%	n/c	n/c	n/c
	2010	Fe	K/s	Steadily increase participation/recognition rates	n/c	n/c	87%	50%
	2010	Glass	K/s	Increase roll out to 95%	n/c	95%	n/c	n/c
	2010	Glass	BB	Increase participation in non-served areas	n/c	n/c	30%	n/c
	2010	Glass	K/s	Steadily increase participation/recognition rates	n/c	n/c	87%	70%
	2010	Non Fe	K/s	Increase Targeted by introducing aerosols and foil	84.5%	n/c	n/c	n/c
	2010	Non Fe	BB	Increase Targeted by introducing aerosols and foil	84.5%	n/c	n/c	n/c
	2010	Non Fe	K/s	Steadily increase participation/recognition rates	n/c	n/c	87%	50%
	2010	Paper	K/s	Steadily increase participation/recognition rates	n/c	n/c	87%	90%
	2010	Plastic	K/s	Steadily increase participation/recognition rates	n/c	n/c	87%	65%
	2015	Fe	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	70%
	2015	Glass	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	80%
	2015	Glass	K/s	Steadily increase participation/recognition rates	n/c	n/c	n/c	90%
	2015	Non Fe	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	70%
	2015	Organic	K/s	Steadily increase participation/recognition rates	n/c	n/c	70%	70%
2015	Plastics	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	70%	
Chiltern DC	2007	Green	K/s	Move to alternate weekly collection of green waste	?	?	?	?
	2010	Fe	K/s	Introduce an Fe waste collection –	47.7%	95%	70%	60%
	2010	Fe	K/s	Increase Targeted by introducing aerosols	55%	n/c	n/c	n/c
	2010	Non Fe	K/s	Increase Targeted by introducing aerosols and foil	51.7%	n/c	n/c	n/c
	2010	Non Fe	K/s	Introduce a Non Fe waste collection	47.4%	95%	70%	60%
	2010	Plastics	K/s	Introduce a plastic waste collection	39.3%	95%	70%	60%
	2010	Organic	K/s	Steadily increase participation/recognition rates	98.3%	n/c	n/c	n/c
	2010	Paper	K/s	Steadily increase participation/recognition rates	n/c	n/c	87%	n/c
	2010	Glass	K/s	Steadily increase participation/recognition rates	n/c	n/c	87%	70%
	2010	Organic	K/s	Steadily increase participation/recognition rates	n/c	n/c	70%	n/c
	2015	Paper	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	n/c
	2015	Plastics	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	70%
	2015	Glass	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	90%
	2015	Fe	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	70%
2015	Non Fe	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	70%	

DC	Year	Stream	K/s / BB	Scheme	Targeted	Roll out	Participation	Recognition
South Bucks DC	2007	All	K/s	Introduce mini-recycling schemes to flats	75%	95%	50%	60%
	2007	All	K/s	Increase roll out of wheelie bin containers	?	?	?	?
	2010	Green	K/s	Trial and Introduce a green waste collection	?	?	?	?
	2010	Fe	BB	Increase Targeted by introducing aerosols	57.4%	n/c	n/c	n/c
	2010	Non Fe	BB	Increase Targeted by introducing aerosols and foil	53.3%	n/c	n/c	n/c
	2010	Glass	K/s	Increase glass roll out	n/c	95%	n/c	n/c
	2010	Plastic	K/s	Increase plastic waste collection	49.7%	95%	70%	60%
	2010	Paper	K/s	Steadily increase participation/recognition rates	n/c	n/c	80%	n/c
	2010	Glass	K/s	Steadily increase participation/recognition rates	n/c	n/c	80%	60%
	2010	Fe	K/s	Steadily increase participation/recognition rates	n/c	n/c	70%	60%
	2010	Non Fe	K/s	Steadily increase participation/recognition rates	n/c	n/c	70%	60%
	2010	Organic	K/s	Steadily increase participation/recognition rates	n/c	n/c	70%	n/c
	2015	Paper	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	n/c
	2015	Plastic	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	70%
	2015	Glass	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	90%
	2015	Fe	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	90%
	2015	Non Fe	K/s	Steadily increase participation/recognition rates	n/c	n/c	90%	90%
2010	Paper	BB	Introduce a paper bring bank	72.2%	95%	8%	90%	
Wycombe DC	2006	All	K/s	Move to alternate weekly collection	?	?	?	?
	2010	Plastics	K/s	Increase roll out	n/c	95%	n/c	n/c
	2010	Fe	K/s	Increase roll out	n/c	95%	n/c	n/c
	2010	Non Fe	K/s	Increase roll out	n/c	95%	n/c	n/c
	2010	Fe	K/s	Increase Targeted by introducing aerosols	61.5%	n/c	n/c	n/c
	2010	Fe	BB	Increase Targeted by introducing aerosols	61.5%	n/c	n/c	n/c
	2010	Non Fe	K/s	Increase Targeted by introducing aerosols	58.1%	n/c	n/c	n/c
	2010	Organic	K/s	Increase roll out	n/c	95%	n/c	n/c
	2010	Paper	K/s	Increase roll out and increase participation rates	n/c	95%	70%	n/c
	2010	Glass	K/s	Introduce the collection of glass	98.9%	95%	70%	80%