Darlington, Hartlepool, Middlesbrough, Redcar and Cleveland and Stockton on Tees Borough Councils

Joint Waste Management Strategy

Draft Headline Strategy

September 2007










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Document Revisions

No.	Details	Date
1	Draft Report	June 2007
2	Draft Report	July 2007
3	Draft Report	September 2007

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Doc Reg No. 20083 RR003i5

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Entec UK Limited

Draft Report Disclaimer

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1. Introduction

1.1 Context

The Tees Valley Authorities are committed to working together to develop cost effective and sustainable methods of dealing with waste. The Tees Valley Authorities are:

- Darlington Borough Council
- Hartlepool Borough Council;
- Middlesbrough Council;
- Redcar & Cleveland Borough Council; and
- Stockton on Tees Borough Council.

In 2002, the Authorities of Hartlepool, Middlesbrough, Redcar and Cleveland and Stockton on Tees produced a Joint Waste Management Strategy. The strategy set out how the Authorities would deal with the area's waste up until the year 2020. This strategy did not include Darlington Borough Council as the Authority historically partnered Durham County Council for the delivery of services. Darlington Borough Council published their Interim Waste Management Strategy in 2003 which included their aims and objectives for their waste service until the expiry of their current waste disposal contract in 2008.

The Authorities have now all introduced recycling collections and with the help of residents, has resulted in a household recycling and composting rate of 25% in 2006/07. In addition to recycling and composting, energy is recovered from 52% of the household waste stream with only 23% of the household waste stream, continued to be sent to landfill for disposal. This is significant progress, however there is commitment to continue to improve on these achievements by increasing the amount that is recycled and to continue to contribute to the protection of the local and wider environment.

1.2 Why do we need another Waste Strategy?

A waste strategy sets out how Authorities will work together over the coming years to meet the requirements of the National Waste Strategy for England and Wales to ensure a more sustainable future for local residents.

The 2002 Tees Valley Joint Waste Management Strategy and the 2003 Darlington Waste Strategy provided a number of policies and actions to allow the Authorities to meet such requirements at the time. Many of these have been achieved by the Authorities meaning that new policies and actions are required. UK targets and drivers for changing the management of municipal waste have also changed since the original strategies were published and

the impact of these changes must be reviewed to ensure that the management of waste in the Tees Valley will continue to meet targets.

National reviews by the Treasury have been published which require other key considerations to be incorporated within the Strategy. The Stern Review on the Economics of Climate Change[1] requires Authorities to develop waste policies incorporating measures to mitigate the potential contribution of services to Climate Change. In addition, The Review of Subnational Economic Development & Regeneration[2] has encouraged the Tees Valley Authorities to develop Multi Area Agreements (MAAs). MAAs will provide collective targets and performance indicators for areas where policies cross Local Authority boundaries and where benefits may be gained due to the managing of issues at a higher spatial level. These agreements will encourage links between economic development and environmental impacts within the sub-region.

1.3 The Strategy Development Process

This new strategy has been developed using the most recent guidance from Department of Environment, Food and Rural Affairs (Defra). It has been developed in tandem with a Sustainability Appraisal, which has shaped the content of the strategy. This incorporates the requirements of the Strategic Environmental Assessment (SEA) Directive.

The process has required discussions with the Authorities and other waste management stakeholders. It is now provided for public consultation to ensure the views of local residents are included.

1.4 What the Strategy Covers

This strategy focuses on the management of the 'municipal' waste stream as the Tees Valley Authorities are responsible for the management of these waste types. It also considers the potential for commercial and industrial wastes to be managed in a more sustainable way, similar to that proposed for municipal waste.

'Municipal' waste includes the following waste types:

- Waste collected directly from householders by the Tees Valley Authorities. This includes waste for disposal to landfill and waste that is collected for recycling and composting. It also includes other collections, including clinical waste collections and special bulky uplifts.
- Any wastes that are collected by the Authorities at their Household Waste Recycling Centres or Bring Sites (i.e. bottle banks).

[1] http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm

[2] http://www.hm-treasury.gov.uk/media/9/5/subnational_econ_review170707.pdf

- Other wastes that are collected by the Authorities from their own premises, including their own offices and schools and waste generated by individual services (including parks and highways).
- Waste collected by each Authority through their street cleaning and litter picking operations, and wastes that are cleared from fly tipping incidents.
- Commercial waste which the Local Authorities have been requested to collect.

1.5 Waste Strategy Principles

At the beginning of the strategy development process, the Tees Valley Authorities agreed that the new Joint Waste Management Strategy should aim to provide a sustainable future for the Tees Valley through the following principles:

- To reduce waste generation;
- To be achievable and affordable;
- To work towards zero landfill;
- To minimise the impact on climate change;
- To have an accountable and deliverable structure; and
- To contribute towards economic regeneration.

These principles have been used to guide the development of the most sustainable option for the future and have informed the development of policies and actions.

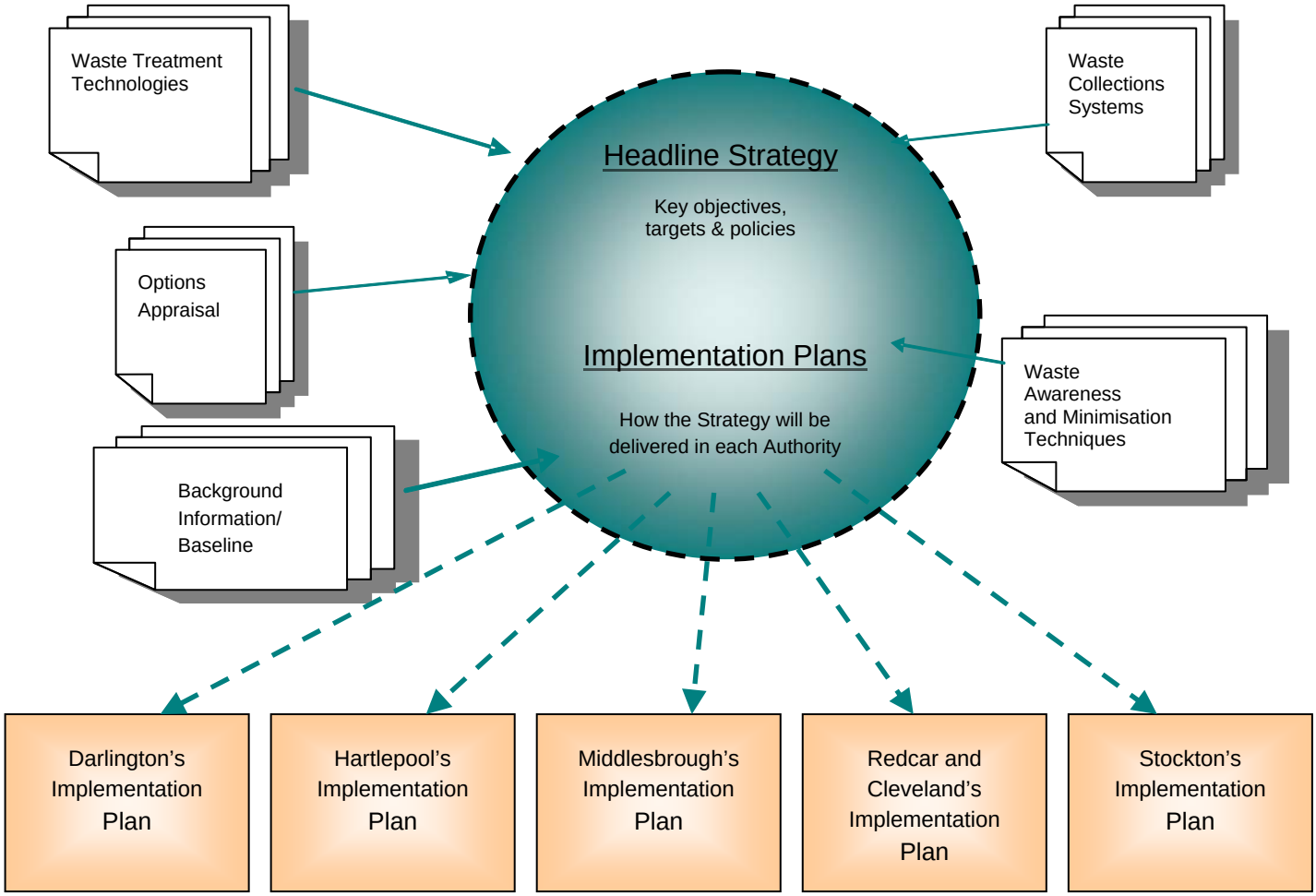
1.6 The Format of the Strategy

This document contains the Headline Strategy. It is supported by a series of technical documents as shown in Figure 1.1 which have been prepared to assist in the decision making process. These are:

- Background Information and Baseline;
- Review of Waste Awareness and Minimisation Techniques;
- Review of Waste Collection Systems; and
- Review of Waste Treatment Technologies.

A technical Options Appraisal has also been undertaken as part of the strategy development process and this is included as an Appendix to this Headline Strategy.

Figure 1.1 Waste Management Strategy Format



The Headline Strategy, Policies and Actions will be agreed at a joint, strategic level and this will steer the direction of local delivery through a series of Implementation Plans.

2. The Challenge Ahead

Waste Management in the UK has undergone significant change in the past few years driven by increased awareness of climate change and resource use. Drivers relevant to a sustainable waste strategy are shown in Figure 2.1 below along with the targets that are set to ensure aspirations are met. This chapter provides a brief outline of the identified Drivers and Targets. Further information is provided in the Supporting Document 'Background Information'.

Figure 2.1 Drivers and Targets for Change

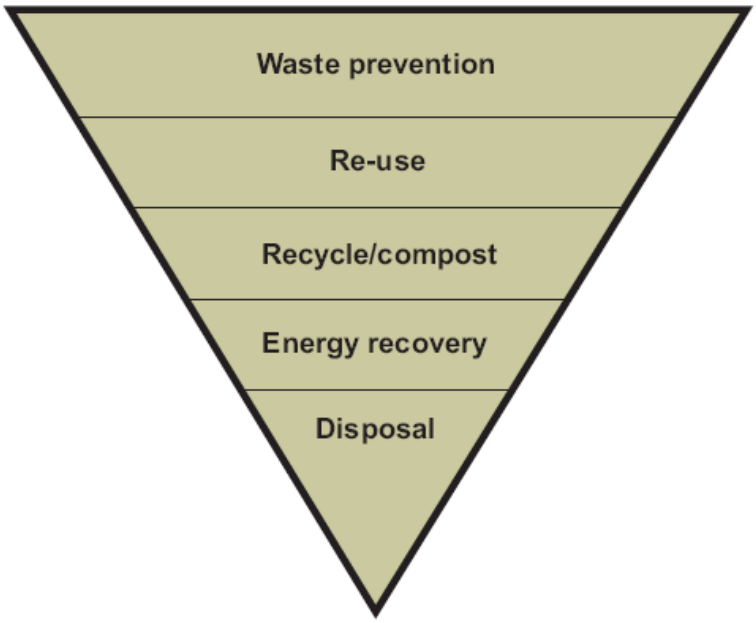
2.1 The Drivers for Change

2.1.1 European Waste Framework Directive

The Waste Framework Directive and the planned revision to this document is the key documentation steering the course of Waste Management within the UK. One of the core aims of the Directive is to encourage the identification of the value of waste materials as a resource, rather than simply a problem that must be dealt with. This approach recognises the value of waste materials either through recycling, composting or recovery and that simple disposal of this material is a 'waste'.

The European Waste Framework Directive introduced the concept of the Waste Hierarchy which is shown as Figure 2.2. Waste prevention is at the top of the Waste Hierarchy and as such is the preferred option for dealing with waste. The hierarchy then moves through options of reuse, recycling/composting and energy recovery with disposal as the least preferred option for the management of waste. It is important to recognise that disposal still remains within the Waste Hierarchy since there will always be some waste streams for which landfill disposal will remain the most sustainable option.

Figure 2.2 The Waste Hierarchy



2.1.2 The Landfill Directive

The European Union (EU) implemented this Directive to minimise the environmental impacts associated with landfill sites. Significantly the Landfill Directive introduced targets with regards to the amount of Biodegradable Municipal Waste (BMW) that may be disposed of to landfill (Table 2.1). Biodegradable waste is organic material that breaks down producing a mixture of greenhouse gases that can contribute to Climate Change.

Table 2.1 National Diversion Targets for Biodegradable Municipal Waste

Year	Target
2010	By 2010 to reduce the amount of BMW to landfill to 75% of that produced in 1995.
2013	By 2013 to reduce the amount of BMW to landfill to 50% of that produced in 1995.
2020	By 2020 to reduce the amount of BMW to landfill to 35% of that produced in 1995.

2.1.3 The Household Waste Recycling Act

The Household Waste Recycling Act 2003 amends the Environmental Protection Act and places a general duty on Local Authorities to ensure that by December 2010 they collect at least two recyclable wastes together or individually separated from the rest of the household waste stream. Authorities are not required to comply with this Act where the cost of doing so is found to be unreasonably high. The aim of this Act is to support Local Authorities in achieving their statutory recycling targets.

2.1.4 National Waste Strategy

Waste Strategy for England 2007 was published by Defra in May 2007 and is intended to be the Strategy upon which all Local Waste Strategies are based. It builds upon the previous Waste Strategy 2000 but aims for greater ambition by addressing the key challenges for the future through additional steps. It provides new Government objectives which are to:

- Break the link between waste growth (in all sectors) from economic growth and put more emphasis on waste prevention and re-use;
- Increase diversion from landfill of commercial and industrial wastes and improve the links between facilities for the treatment of all waste streams;
- Secure the investment in waste treatment facilities needed to divert waste from landfill and for the management of hazardous waste; and

- Get the most environmental benefit from that investment, through increased recycling of resources and recovery of energy from residual waste using a mix of technologies.

2.1.5 The Waste and Emissions Trading Act

The UK Government introduced the Waste and Emissions Trading (WET) Act to ensure that the UK meets the targets set by the Landfill Directive. This Act has been implemented in England through the Landfill Allowance Trading Scheme (LATS) Regulations. These regulations allocate allowances to each Authority to specify how many tonnes of BMW may be disposed of to landfill each year. These regulations include the option to fine Authorities who fail to meet their allocated targets. If the UK as a whole fails to meet its target, the EU may impose a fine that the UK Government may decide to split between the Authorities that have missed their targets.

2.1.6 Producer Responsibility

Whilst UK and Tees Valley residents are helping to reduce the amount of waste generated, the government is ensuring that the organisations who produce and sell products and packaging take responsibility for the waste that is subsequently produced. Although this legislation does not directly apply to Local Authorities, this legislation may impact the services they provide. In particular, Local Authorities may assume a co-ordinating role for the collection of relevant waste streams to aid the commercial sector in meeting their targets. Producer Responsibility legislation includes the Producer Responsibility Obligations (Packaging Waste) Regulations, the Waste Electrical and Electronic Equipment Regulations, the End of Life Vehicles Regulations and the Batteries Directive.

2.1.7 The Proximity Principle and Self Sufficiency

These principles require wastes to be treated and disposed of as close as possible to their place of origin. This aims to reduce the overall environmental impact of waste management through a reduction in the transportation of waste materials. The provision of Tees Valley facilities will also benefit the area by providing local jobs and contributing to the local economy.

2.1.8 Climate Change

The evidence is now clear that greenhouse gas emissions from human activity are affecting the world's climate and that a failure to act to reduce emissions and to adapt to both current and predicted climate change will eventually damage economic growth[3].

Recycling, composting and recovery have an important role to play in the protection of the environment in relation to Climate Change. Recycling saves energy in the extraction and processing of raw materials. Recovering energy

[3] Review of Sub National Economic Development and Regeneration. HM Treasury July 2007

from waste replaces the need for energy generation from other sources and therefore reduces the overall carbon footprint. Recycling, composting and recovery also divert materials from landfills which are responsible for producing greenhouse gases and contributing to Climate Change.

The recent 'Review of Sub National Economic Development and Regeneration', published by the Treasury, seeks to align Climate Change principles with Economic Development at a sub-regional level. The Tees Valley Authorities are developing a Multi Area Agreement facilitated by the Joint Strategy Unit, linking resource management with environmental stewardship and economic development in the sub-region.

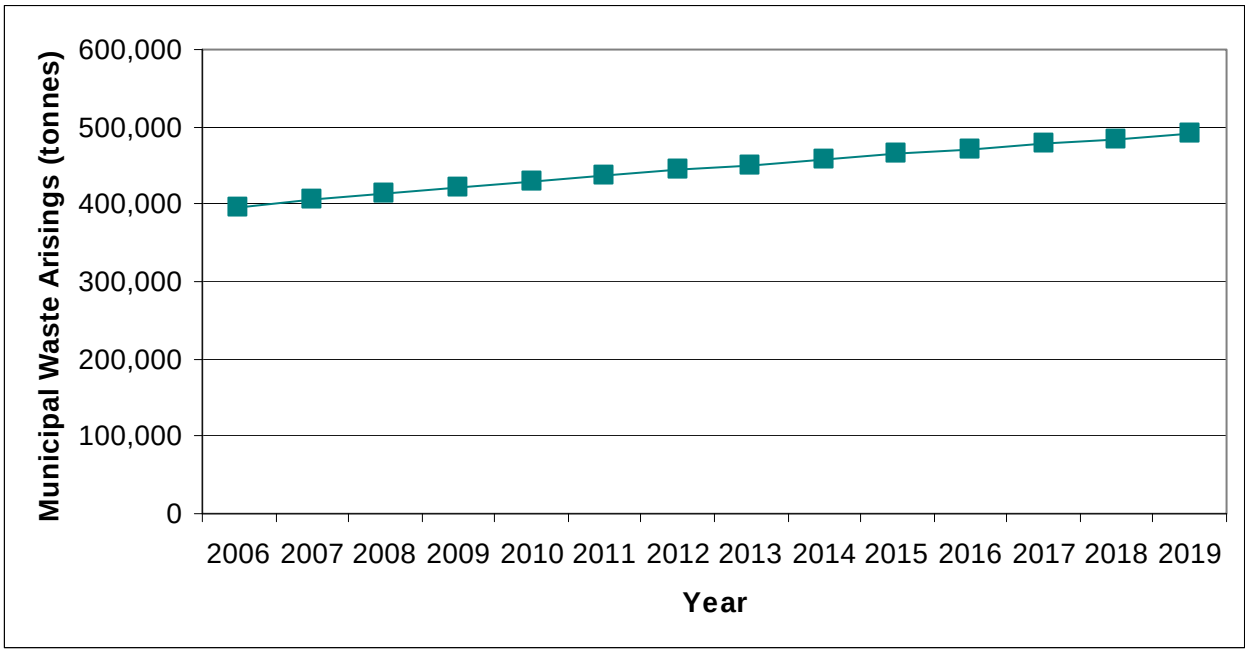
2.1.9 Sustainability

Sustainability is summed up by the phrase 'meeting the needs of today without compromising the ability of future generations to meet their own needs'. This phrase in a waste context encourages us to find ways of managing our waste as a resource rather than simply discarding it. Sustainability also requires consideration of social and economic factors. This may include consideration of utilising local facilities to provide local jobs, or encouraging the provision of services by the community sector.

2.1.10 Waste Growth

In common with most other areas of the UK, the Tees Valley had until recently seen the tonnage of waste it directly handles increase year by year. Housing and population growth, increased visitor numbers, increased product packaging and a general trend towards 'disposable' living all contributed to this increase. Total waste arisings within the Tees Valley Authorities have been variable over the last few years with some of the Authorities reporting growth and others decline. The Tees Valley Authorities have predicted the future growth in the Municipal Waste Stream by assuming that future waste growth will continue at similar levels to those that have happened historically. However, they also predict that year on year, growth will gradually reduce as householders begin to work more towards reducing their waste stream. The predicted growth in waste is also attributed to a predicted increase in the number of households within the Tees Valley sub-region, although it is recognised that the overall population in the Tees Valley is likely to decline over the same time period.

Figure 2.3 Predicted Municipal Waste Growth Profile



2.1.11 Public Demand

The Tees Valley Authorities monitor customer satisfaction with current waste services through the Best Value Performance Indicators (BVPIs) 90 a, b and c. These indicators measure customer satisfaction in terms of the waste collection service provided, the recycling service provided and the waste disposal service provided. These surveys have found a high level of satisfaction with the waste services provided demonstrating the commitment of householders within the Tees Valley to use recycling and composting collections. The results of recent satisfaction surveys are shown in Table 2.2 below.

Table 2.2 Best Value Performance Indicators relating to Customer Satisfaction

Authority	Year	BVPI 90a Customer Satisfaction with Waste Collection Service(% satisfied with current service)	BVPI 90b Customer Satisfaction with Waste Recycling Service (% satisfied with current service)	BVPI 90c Customer Satisfaction with Civic Amenity Sites (% satisfied with current service)
Darlington	2000	80%	59%	77%
	2003	81%	63%	81%
	2006	83%	71%	86%
Hartlepool	2000	85%	67%	74%
	2003	89%	80%	84%
	2006	72%	73%	89%
Middlesbrough	2000	79%	50%	58%
	2003	86%	52%	77%
	2006	83%	65%	80%
Redcar and Cleveland	2000	89%	49%	68%
	2003	88%	62%	72%
	2006	65%	68%	79%
Stockton on Tees	2000	80%	46%	57%
	2003	93%	72%	84%
	2006	93%	75%	84%

2.2 The Targets

2.2.1 National Waste Strategy Targets

The National Waste Strategy provides a greater focus for the prevention of waste with a new target to reduce the amount of household waste not re-used, recycled or composted by 29% from 2000 levels by 2010 and by 45% by 2020. This is equivalent to a fall of 50% per person since 2000 by 2020 (from 450kg per person in 2000 to 225kg in 2020).

Higher national targets have also been set for recycling and composting of household waste:

- At least 40% by 2010;
- 45% by 2015; and

- 50% by 2020.

Also for recovery (which includes recycling, composting and energy recovery from waste) of municipal waste:

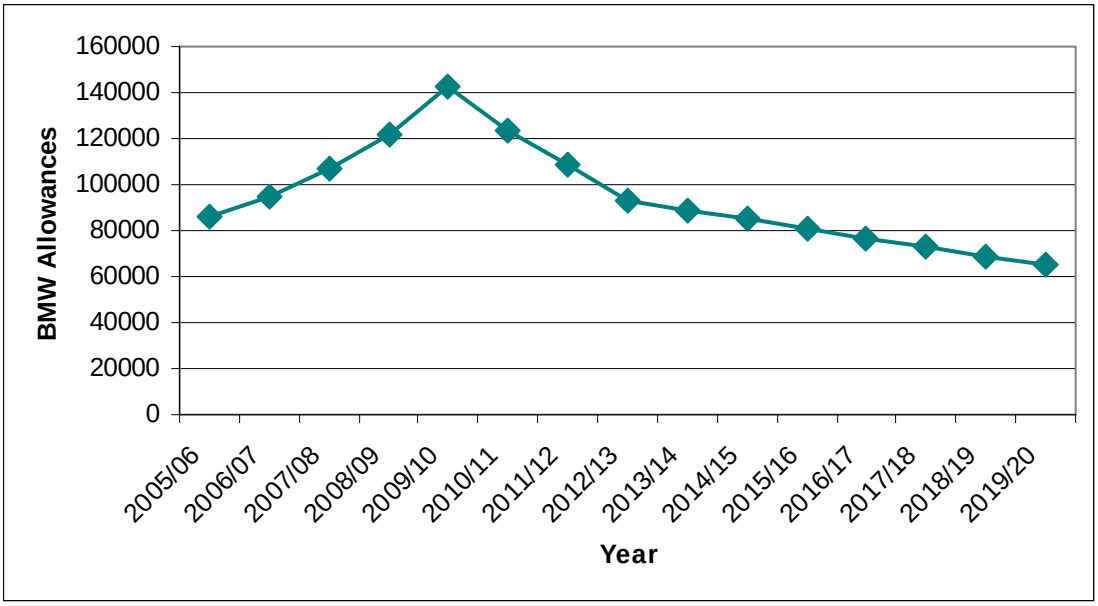
- 53% by 2010; and
- 67% by 2015 and 75% by 2020

The government will review the targets for 2015 and 2020 in light of progress to 2010.

2.2.2 LATS Targets

Allowances were allocated by the government based on individual Authorities 2001/02 waste data. The combined allocations for the Tees Valley Authorities are shown in Figure 2.4 below.

Figure 2.4 Combined Tees Valley Authorities Biodegradable Municipal Waste Allowances



2.2.3 Local Authority Targets

The 2000 National Waste Strategy introduced individual recycling and composting targets for all Local Authorities in the form of Best Value Performance Indicators (BVPIs) set each year until 2006/07. It is assumed that new targets will be set as part of the Local Area Agreements in line with the requirements of the 2007 National Waste Strategy. A Local Area Agreement (LAA) is a three year statutory agreement between Local Authorities, their partners and the Government. The key aims of which are:

- To improve co-ordination between central government and Local Authorities and their partners;

- To improve service delivery;
- To improve efficiency;
- To improve partnership working; and
- To enable Local Authorities to provide better leadership.

Targets are set to encourage Authorities to meet their agreed obligations as shown in Table 2.3. These are non statutory targets designed to encourage the Authorities to continuously improve the services they provide, and ultimately meet their requirements under the statutory targets described above.

Table 2.3 Summary of Local Area Agreement Targets

Authority	Targets
Darlington	Increase the percentage of household waste recycled and composted to 35% by 2009/10; Minimise the amount of household waste to landfill to 76% by 2009; and Restrict the growth in kilograms of household waste collected per head to 613kg by 2009.
Hartlepool	Increase in the percentage of municipal waste recycled or composted from 22% in 2006/07, to 23% in 2007/08, and 24% in 2008/09 ; and Reduction in the percentage of municipal waste landfilled from 18% in 2005/06 to 17% in 2007/08 and 165 in 2008/09
Middlesbrough	Increase in the percentage of the total tonnage of household waste recycled from 18% in 2007/08, to 19% in 2008/09 and 20% in 2009/10. Increase in the percentage of the total tonnage of household waste sent for composting from 3% in 2007/08 to 4% in 2008/09 and 4.5% in 2009/10. Reduction in the percentage of the total tonnage of household waste that has been used to recover heat, power and other energy sources from 72% in 2007/08, 70% in 2008/09 and 68.5% in 2009/10. No increase in the proportion of the waste stream sent to landfill, remaining at a level of 7% until 2009/10. Increase in the number of new households that participate in home composting from 400 in 2007/08 to 420 in 2008/09 and 450 in 2009/10. Increase in the tonnage of home composting not entering the waste stream from 114 tonnes in 2007/08, 162 in 2008/09 and 180 in 2009/10.
Redcar and Cleveland	Reduction in the percentage of municipal waste landfilled, with targets set of 9% for 2007/08, 8.5% in 2008/09 and 8% in 2009/10. Increase in the percentage of municipal waste recycled or composted to 41% by 2007/08, 42% by 2008/09 and 43% by 2009/10.
Stockton	Increase in the percentage of household waste recycled from 8.83% in 2004 to 16% in 2007, including a 7% increase in Neighbourhood Renewal Areas. Increase in the percentage of household waste composted from 2.03% in 2004 to 6% in 2007 Reduction in the percentage of household waste used to recover heat, power and other energy sources from 74% in 2004 to 68% in 2007 Reduction in the percentage of household waste landfilled from 13.3% in 2004 to 10% in 2007

3. The Current Situation

3.1 Waste Management in the Tees Valley

3.1.1 Current Levels of Waste Generated

In 2006/07 a total of 397,000 tonnes of municipal waste was generated in the Tees Valley. 322,000 tonnes of this material was household waste, with the remainder collected from the Local Authorities owned premises or commercial customers. Summary data on the levels of waste generated and the methods of treatment are provided in Table 3.1 below, a full breakdown of waste streams is contained within the Supporting Document "Background Information".

Table 3.1 Summary of Municipal Waste Arisings 2006/07

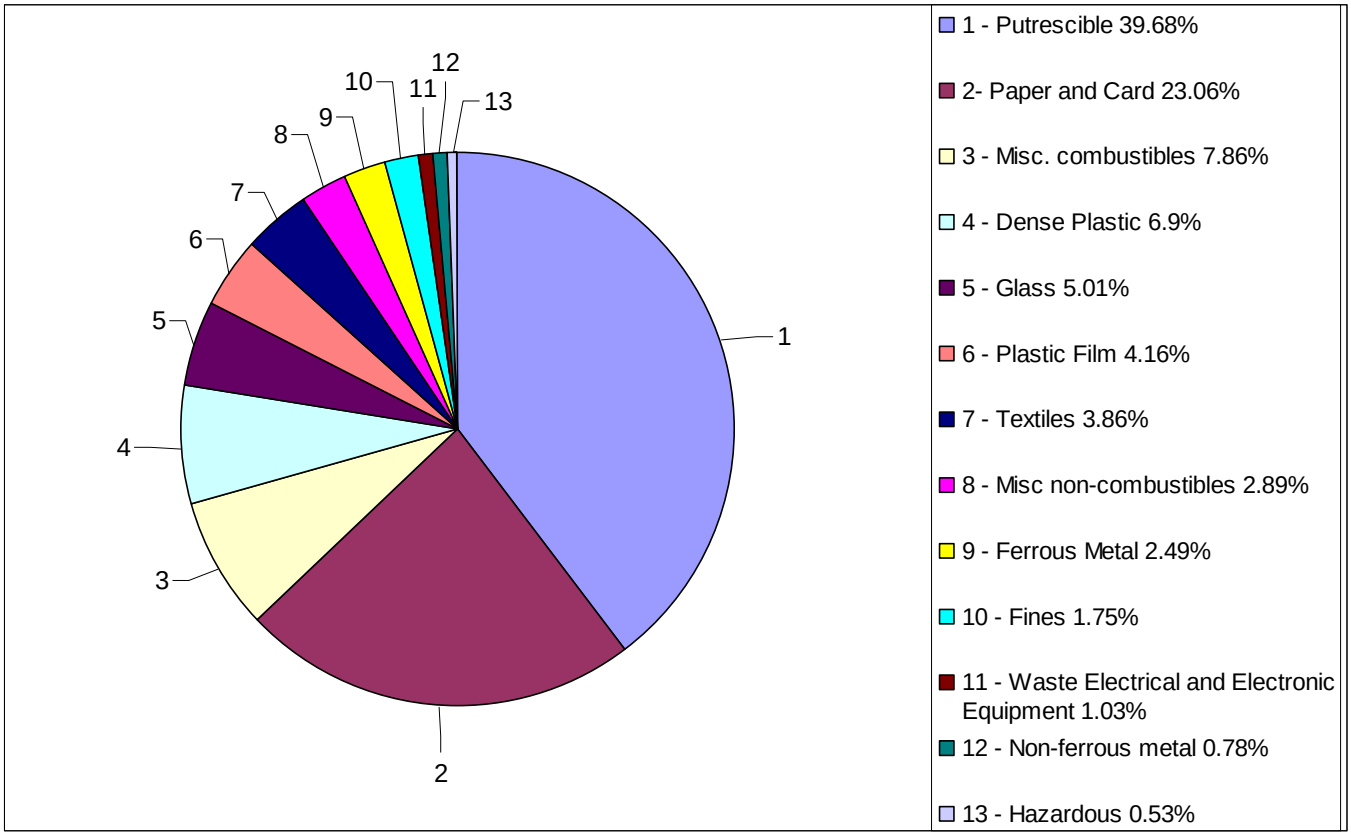
		Darlington	Hartlepool	Middlesbrough	Redcar & Cleveland	Stockton on Tees	Tees Valley Total
Household Waste	Population	99200	90000	137600	138600	186700	**652100**
	Household Recycling (tonnes)	11550	12870	9670	24310	18900	**77300**
	Household Waste to EfW (tonnes)	0	25820	45420	35850	62260	**169350**
	Household Waste to Landfill (tonnes)	41390	3660	8280	11400	7720	**72450**
	TOTAL HOUSEHOLD WASTE (tonnes)	**52940**	**43150**	**64170**	**73660**	**88280**	**322200**
Other Waste	Commercial Waste to Recovery/ Recycling (tonnes)	890	9830	6290	5900	6550	**29460**
	Commercial Waste to landfill (tonnes)	4330	2390	3210	2290	7510	**19730**
	Rubble (tonnes)	8600	2440	2520	8710	3060	**25330**
	TOTAL OTHER WASTE (tonnes)	13820	14660	12020	16900	17120	**74520**

3.1.2 Municipal Waste Composition

Understanding the types of waste that make up the municipal waste stream is important as it allows us to accurately identify what waste streams can be targeted for reuse, reduction and recycling. The Tees Valley Authorities

identified the types and relative amounts of waste within the household waste stream in October 2005 through a compositional study. The results of this study are illustrated in Figure 3.1.

Figure 3.1 Average Household Waste Composition within the Tees Valley



Some of the terms used in the waste compositional analysis are explained below:

- Miscellaneous Combustibles – this category includes disposable nappies, sanitary products, wood and carpet materials. These materials do not easily fit into other categories but are grouped together as they share characteristics that mean that they combust.

- Miscellaneous non-combustibles – this includes ceramics and hardcore material. Again, these materials do not fit easily into other categories but are grouped together as they share characteristics that they will not burn easily.

- Waste Electrical and Electronic Equipment (WEEE) – this category includes a range of household electrical and electronic appliances, including items such as toasters, hairdryers, electric toothbrushes and video, computer and audio equipment.

- Putrescible – this is a broad category that includes organic materials that have an ability to rot. It includes both food waste, typically from kitchens, and garden waste, such as grass cuttings and hedge clippings. It also includes some other materials including hair, soil and animal bedding.

- Fine material – this refers to any materials less than 1cm in diameter which can not be otherwise categorised. This can include both organic and inorganic materials.

3.1.3 Current Waste Management Practice

Waste Awareness and Minimisation

The Waste Hierarchy shows that the best way to manage waste is to minimise the production of the waste in the first instance. Waste minimisation is also called waste prevention or waste reduction. The amount of waste generated is affected by consumer behaviour, which is related to the social structure, personal income and societal wealth. Minimising the amount of waste produced reduces the costs associated with the collection and disposal or reprocessing of waste. Measures have been introduced by the Tees Valley Authorities to reduce the amount of waste produced within the sub-region. Detail on these activities is included in the Supporting Document "Waste Awareness and Minimisation."

Waste Collections

Nearly all households in the Tees Valley have access to kerbside recycling services. Kerbside recycling services are provided in addition to residual collections of general waste that is taken either to the Energy from Waste facility or to landfill. The services offered by each Authority differ and are summarised in Table 3.2 below.

Table 3.2 Waste Collection Arrangements within the Tees Valley June 2007

Authority	Residual Waste Scheme	Alternate Week Collection? (yes/no)	Dry-recyclables Scheme	Green Waste Scheme
Darlington	Black sack collections, weekly	No	Kerbside box & Bag – Glass, cans, paper, plastics and textiles	Separate chargeable green waste service for disposal
Hartlepool	240 litre wheeled-bin, fortnightly (66%)	Yes	Kerbside box & Bag & Sack - Glass, cans, textiles , paper, plastic and cardboard	Fortnightly green waste, 240 litre bin – split body collection with plastics
Middlesbrough	240 litre wheeled-bin, weekly	No	Kerbside box & Bag -Glass, cans, paper and textiles	Fortnightly green waste sack collection, introduced in March 2007
Redcar and Cleveland	240 litre wheeled-bin, fortnightly	Yes	Kerbside box & Bag & Sack - Glass, cans, paper, textiles, plastic and cardboard.	Fortnightly green waste, 240 litre wheeled bin
Stockton on Tees	240 litre wheeled-bin, weekly	No	Kerbside box & Bag – Glass, cans, paper and batteries	Fortnightly green waste, sack collection

Footnote: Alternative Special Provision is in place in some areas responding to local requirements

The remainder of the household waste is collected by the Local Authorities through the Household Waste Recycling Centres (HWRCs) and the bring sites (e.g. bottle and textile banks). These have been provided throughout the Authority areas to enable local residents to deposit their household waste or to recycle additional materials free of charge.

Waste Treatment/Recovery

52% of the total residual household waste stream, equating to 169,000 tonnes, was taken to the Energy from Waste (EfW) facility at Haverton Hill in 2006/07. This facility is operated by SITA Tees Valley Ltd, a joint venture company of SITA UK and the Hartlepool, Middlesbrough, Redcar and Cleveland and Stockton Authorities. The facility has been operational since May 1998 and recovers energy which would otherwise be disposed to landfill. The Tees Valley Authorities except Darlington are contracted to taking their waste to this facility until 2020. The waste disposal contract is managed by the Tees Valley Joint Strategy Unit which acts on behalf of the Authorities under a formal agreement. Darlington are currently procuring a treatment/ disposal contract to allow them to meet LATS targets until 2020.

Green waste is collected by the partner Authorities and is composted at a number of facilities both within and very close to the Tees Valley. These facilities compost organic green waste through encouraging natural organisms that breakdown organic matter in nature. This process produces a high quality compost material that may be used as a soil conditioner. A proportion of the composted material is made available to householders by the Authorities through various outlets, including Household Waste Recycling Centres (HWRCs).

Recyclable materials that are collected at the kerbside and from the bring and household waste recycling facilities are recycled and reprocessed through a range of facilities both within Tees Valley and outwith the sub-region. The Tees Valley Authorities are committed to minimising the impact associated with the transportation of recyclables and ensure where possible that materials are recycled within the UK.

Waste Disposal

In 2006/07 the remainder of the residual household waste stream, 72,500 tonnes or 23%, was disposed to landfill. These landfills are situated within the Tees Valley and, for Darlington, in County Durham, in order to minimise the impacts associated with the transportation of waste. The landfills are operated and controlled under Pollution, Prevention and Control permits to ensure a high standard of environmental protection and in order to minimise the potential harm to human health. The landfills are fully complaint with the requirements of the European Landfill Directive and have been designed to capture any landfill gas generated which is then flared to minimise the associated environmental impact of this emission.

3.2 Performance against Statutory Targets

3.2.1 National Waste Strategy Targets

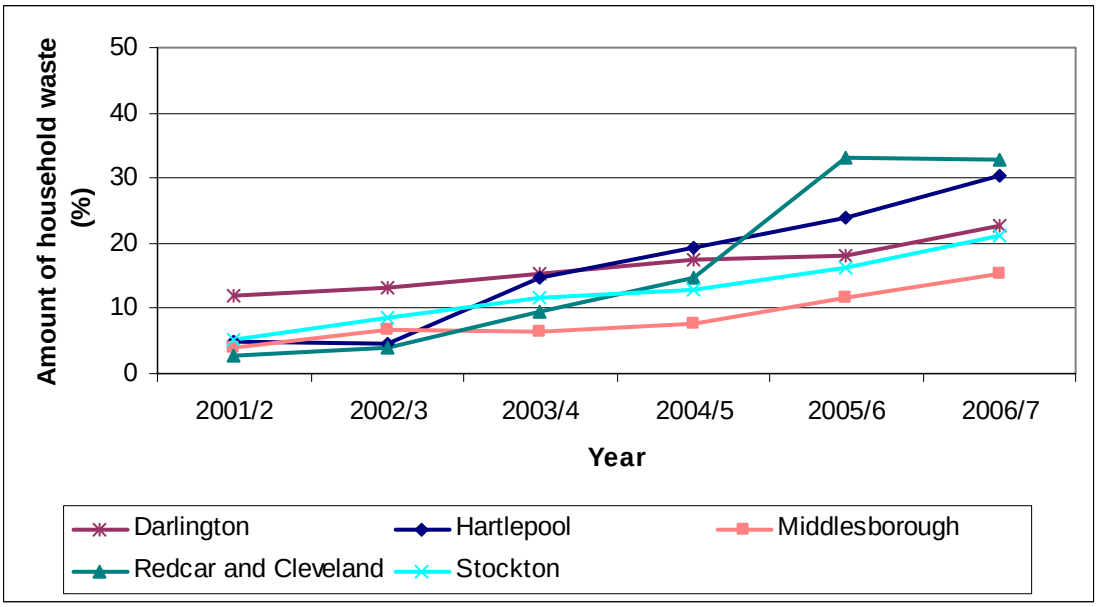
To date householders have enabled the Tees Valley Authorities to reach a combined recycling and composting level of 25% for 2006/07. The individual performance levels are shown in Table 3.3 below. Redcar and Cleveland Borough Council has received 'Beacon' status to recognise their success in achieving nearly 36% recycling/composting in 2005/06 demonstrating that more can be done. The Beacon Scheme identifies excellence and innovation in local government and encourages Authorities to learn from each other and deliver high quality services to all. This level is well on the way to meeting the 2010 target of 40% and must be matched by the other Authorities. More is however required in order for the Authorities to meet 45% by 2015 and 50% by 2020.

Table 3.3 Household Recycling and Composting Performance

Local Authority	Actual Recycling/ Composting Statutory Performance (BV82a + b) 2006/07	National Waste Strategy Targets Household Recycling and Composting		
		2010	2015	2020
Darlington	22.5%			
Hartlepool	27.6%			
Middlesbrough	15.4%	40%	45%	50%
Redcar and Cleveland	35.9%			
Stockton on Tees	21.3%			

Figure 3.2 shows the historic levels of recycling and composting by the Tees Valley Authorities.

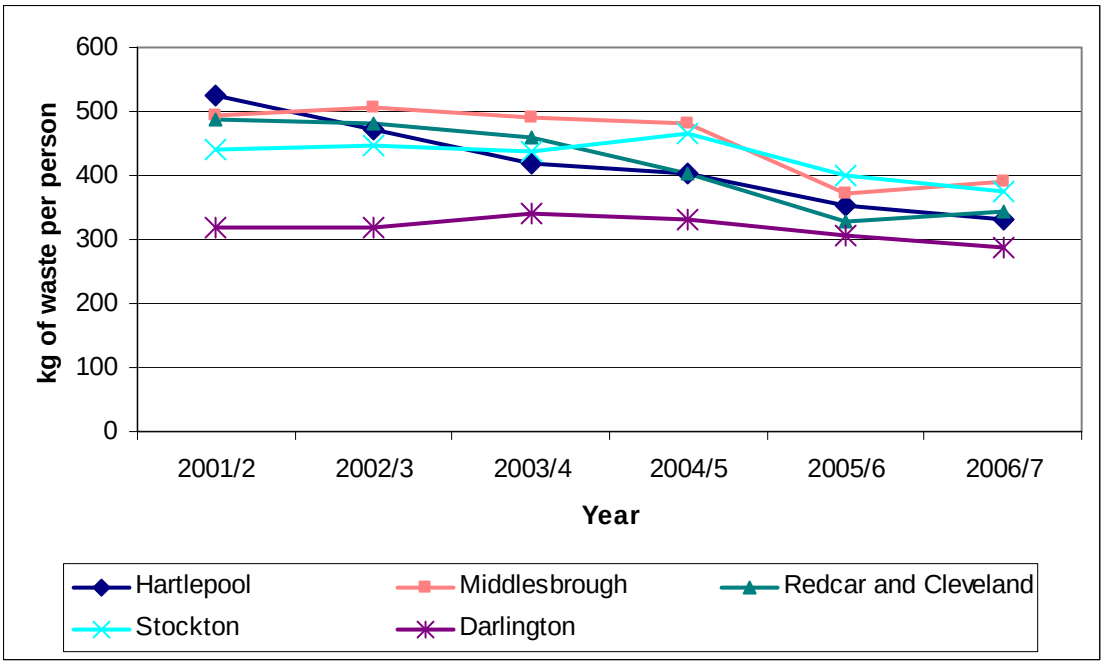
Figure 3.2 Percentage recycling and composting of the total household waste stream in the Tees Valley Authorities



Due to the EfW contract, 53% of the remaining household waste or 50% of remaining municipal waste is already recovered, meaning that the national target of 53% recovery (where recovery includes recycling, composting and energy recovery) of MSW for 2010 has already been achieved. However, additional recovery is required in order to meet the 67% by 2015 and 75% by 2020 targets.

Figure 3.3 below shows the amount of residual waste per person for the Tees Valley Authorities. The future targets for the residual waste stream per person has been calculated on a 2005 baseline figure of 370 kg per person, and are 310 kg per person by 2010, 270 kg per person by 2015 and 225kg per person by 2020.

Figure 3.3 Kilograms of residual waste per person in the Tees Valley Authorities



3.2.2 LATS Targets

Figure 3.4 below illustrates the combined LATS allocation for the whole of the Tees Valley. This identifies that at the current rates of landfill and the projections of the amount of BMW to be landfilled the LATS allocation for the Tees Valley is sufficient to allow the current levels of landfill to be maintained. The blue shaded area shows the total allowance for the Tees Valley Authorities and the maroon area shows the predicted amount of waste to landfill within the sub-region. Combining the targets and projected levels of waste to landfill masks the potential for Darlington to miss their LATS targets were they to continue to dispose of current levels of waste to landfill. However, due to the high level of energy recovery achieved through the use of EfW for Hartlepool, Middlesbrough, Redcar and Cleveland and Stockton the Authorities will meet their obligations whilst this contract is in place. It will be essential for the Authorities to maintain this level of recovery beyond 2020 when the current contract ends.

Figure 3.4 Landfill Allowance Trading Scheme (LATS) Allocation for the Tees Valley

Overall, the Authorities are currently performing well against the statutory targets, as a result of significant investment, the willingness of residents to become more sustainable and the implementation of actions through the current Waste Management Strategies. It is clear however that more can and must be done if the Authorities are to succeed in meeting future targets and providing a more sustainable future for the residents of Tees Valley. This could include increased performance of the current services, but potentially new or improved services. The way in which the Tees Valley will achieve its aims is the subject of this Joint Waste Management Strategy.

4. Options for Future Waste Management

4.1 Options Development

The complex nature of waste collections, handling, reuse, recycling, treatment and disposal means that the Tees Valley could achieve their aims through a number of different routes. A total of eighty one options were considered. A screening process was used to narrow down the full list of options to nine possible options, including the baseline. These nine options were then considered in detail using qualitative and quantitative tests to arrive at a preferred option. Details of the options appraisal process are provided in the supporting document.

The nine remaining options are shown in Table 4.1 below. It was agreed at the workshop that EfW should remain as the dominant disposal route for residual waste for Hartlepool, Middlesbrough, Redcar and Cleveland and Stockton, once recyclables have been removed. The groups acknowledged the financial and operational implications of changing the EfW contract, and also considered that improvements are possible in the performance of the plant. The current EfW contract is in place until 2020. It was recognised by the partner Authorities that the consideration of the treatment of the residual waste stream after this time must commence within suitable timescales to allow procurement of a new contract. The residual waste stream that cannot be sent to the EfW or that is landfilled due to downtime at this facility may be available for an alternative residual treatment. It is recognised that merchant plants are being planned, including an Eco-Park facility within Redcar and Cleveland which incorporates an autoclave facility that may provide an opportunity for increasing recycling.

Darlington Borough Council (BC) joined the Strategy development process in August 2007. However, representatives of Darlington BC were present at the initial stakeholder workshop and where able to inform this process. Since joining this strategy, Darlington BC has endorsed the outcomes of this workshop.

Table 4.1 Shortlisted Options

Option	Requirement	To be achieved by:
A	Continue Current Service	No Change
B	Improve current waste prevention and minimisation, improve current collection systems, build no further treatment capacity, with residual to EfW or landfill for final disposal.	Improve the amount and quality of calendars and other materials sent out, expand publicity schemes Collect more materials at the kerbside (e.g. kitchen waste) and reduce the number of containers Send all residual material to EfW or landfill

Option	Requirement	To be achieved by:
C	Improve current waste prevention and minimisation, improve current collection systems, build new treatment capacity, residual to EfW or landfill for final disposal	Improve the amount and quality of calendars and other materials sent out, expand publicity schemes Collect more materials at the kerbside (e.g. kitchen waste) and reduce the number of containers Build a Waste treatment facility to reduce the amount of residual waste sent for final disposal
D	Improve current waste prevention and minimisation, revise collection systems for optimum performance, build no further treatment capacity, residual to EfW or landfill for final disposal.	Improve the amount and quality of calendars and other materials sent out Establish a new approach to collection systems for optimum performance which includes considering co-mingled collections, different vehicles and the addition of further materials e.g. kitchen waste Send all residual material to EfW or landfill
E	Improve current waste prevention and minimisation, revise collection systems for optimum performance, build new treatment capacity, residual to EfW or landfill for final disposal.	Improve the amount and quality of calendars and other materials sent out, expand publicity schemes Establish a new approach to collection systems for optimum performance which includes considering co-mingled collections, different vehicles and the addition of further materials e.g. kitchen waste Build a waste treatment facility to reduce the amount of residual waste sent for final disposal
F	Implement brand new waste prevention and minimisation strategy, improve current collection systems for optimum performance, build no further treatment capacity, residual to EfW or landfill for final disposal.	Develop a new co-ordinated campaign for prevention and minimisation in line with UK Best Practice Collect more materials at the kerbside (e.g. kitchen waste) and reduce the number of containers, Improve the network of bring banks Send all residual material to EfW or landfill
G	Implement brand new waste prevention and minimisation strategy, improve current collection systems for optimum performance, build new treatment capacity, residual to EfW or landfill for final disposal.	Develop a new co-ordinated campaign for prevention and minimisation in line with UK Best Practice Collect more materials at the kerbside (e.g. kitchen waste) and reduce the number of containers, Improve the network of bring banks Build a waste treatment facility to reduce the amount of residual waste sent for final disposal
H	Implement brand new waste prevention and minimisation strategy, revise collection systems for optimum performance, build no further treatment capacity, residual to EfW or landfill for final disposal.	Develop a new co-ordinated campaign for prevention and minimisation in line with UK Best Practice Establish a new approach to collection systems for optimum performance which includes considering co-mingled collections, different vehicles and the addition of further materials e.g. kitchen waste. Improve the network of bring banks Send all residual material to EfW or landfill
I	Implement brand new waste prevention and minimisation strategy, revise collection systems for optimum performance, build new treatment capacity, residual to EfW or landfill for final disposal.	Develop a new co-ordinated campaign for prevention and minimisation in line with UK Best Practice Establish a new approach to collection systems for optimum performance which includes considering co-mingled collections, different vehicles and the addition of further materials e.g. kitchen waste. Improve the network of bring banks Build a waste treatment facility to reduce the amount of residual waste sent for final disposal

4.2 Choosing the Preferred Option

As a major public sector plan, the new Joint Waste Strategy is required to meet the requirements of the Strategic Environmental Appraisal (SEA) Regulations. Alongside the early strategy development, Entec produced a SEA Scoping Report, which was available for public consultation for 5 weeks ending on the 23rd March 2007. This Scoping Report introduced a number of Sustainability Criteria against which strategic decisions, such as the determination of a Preferred Option, should be assessed. These criteria are:

- To reduce waste generation;
- To support the beneficial re-use and recycling of waste;
- To divert waste away from landfill;
- To reduce the movement of waste and increase choice of transport mode;
- To improve access to waste facilities;
- To make better use of all resources;
- To maintain good air and environmental quality for all;
- To protect and enhance the quality of the sub regions controlled waters;
- To protect and enhance the sub-regions biodiversity and geodiversity;
- To protect and enhance the quality and diversity of the rural land and landscapes;
- To reduce the causes and impacts of climate change;
- To reduce crime;
- To ensure high and stable levels of employment and economic growth; and
- To raise awareness of waste management generally and contribute towards a social acceptance of the waste hierarchy.

4.3 The Preferred Option

The preferred options were considered against the Sustainability Criteria through both a qualitative and quantitative assessment process. The output of the process found that the preferred option was Option I which requires:

- A new approach to Waste Awareness and Minimisation;

- A new approach to Waste Collections;
- Additional Waste Treatment Facilities to divert additional waste from landfill; and
- Continued use of the EfW facility for waste recovery.

The focus for the Tees Valley Authorities is therefore on increasing and improving Waste Awareness and Minimisation measures, investing in collection services through revision of current collection services, potentially including food waste collections, and identifying opportunities to divert additional waste from landfill. It should be recognised that the provision of any food waste collection service will require the introduction of a suitable facility to treat such a waste stream. This facility would either take the form of an Anaerobic Digester or an In Vessel Composting facility and may either be a merchant plant or a plant procured by the partner Authorities.

5. Delivering the Preferred Option

5.1 Introduction

To enable the Tees Valley Authorities to deliver the Preferred Option, the Authorities have developed a series of draft Policies. These Policies will be achieved through a range of Actions and the development of individual Authority Implementation Plans. The draft Actions include timescales for achievement and are designed to be flexible to enable the Authorities to find local solutions for sustainable waste management since it is recognised that what works for one Authority may not be successful in another, due to the diversity of the Tees Valley. The remainder of this Strategy sets out the draft Policies and Actions and is supported by the draft individual Implementation Plans which will be available for consultation later in the year.

These draft Actions and Policies will be reviewed in light of feedback from the Consultation process and the output from the Strategic Environmental Assessment.

5.2 Joint Working

Policy 1
We will continue to work together in partnership with other stakeholders in order to ensure sustainable waste management within the Tees Valley. We will strive for sub-regional self-sufficiency and be mindful of the proximity principle.

The Gershon Review of 2004-05 was an independent review of public sector efficiencies. This looked at ways that Local Authorities could work more efficiently, providing good service provision but minimising costs to local people. This review encouraged Local Authorities to work together to minimise duplication of costs.

The Tees Valley Authorities have a history of Joint Working, as demonstrated previously through their joint procurement of kerbside and treatment services and the green waste framework, and this strategy seeks to enhance the partnership and levels of Joint Working between the Authorities. The delivery of continued sustainable waste management will require additional resources to be invested in capital and revenue budgets and there are likely to be financial savings where services can be procured jointly and resource savings where knowledge and experiences can be shared.

Actions
• We will seek to identify opportunities where we may gain financial or resource efficiency savings through joint working or joint procurement of services or equipment to deliver Value for Money for the residents of the Tees Valley. • We will share best practice for the delivery of the Strategy in order to deliver Value for Money services that meet or exceed local and national targets and aspirations. We will work together to ensure that we maximise the potential of Landfill Allowances. • Where the potential development of an additional residual treatment facility is identified the partner Authorities will work together with other partners to identify suitable local outlets for the output from the treatment facility.

5.3 Sustainable Waste Management

Policy 2
We will work to ensure that the services delivered by the Tees Valley Authorities implement methods of sustainable waste management in line with the Waste Hierarchy.

Sustainability requires consideration of environmental, social and economic impacts of service provision. The Tees Valley Authorities will consider all aspects of sustainability prior to the introduction of new services. In particular, the Authorities will consider the potential environmental impacts, including the potential to contribute to Climate Change, associated with all aspects of the service and will encourage the Councils to identify ways to encourage social and economic regeneration through the provision of services.

The Tees Valley Authorities are committed to the principles of the Waste Hierarchy which is currently demonstrated by their investment in Waste Awareness and Minimisation and Front-end Recycling Services. Other Policies provide further clarification with regards to their commitments to individual tiers of the Waste Hierarchy.

Actions
• We will deliver services with due consideration of the sustainability of such services, in particular considering the Global Warming Potential of services which may contribute to Climate Change. • We will carry out a regular analysis of the composition of waste within the Tees Valley in order to monitor performance and inform service planning.

5.4 Revised Waste Awareness and Minimisation

Policy 3
We will aim to promote waste awareness and minimisation and encourage householders, schools and local businesses to consider the impact of their behaviour with regards to their waste stream. We will jointly aim towards limiting the growth rate as agreed in the Regional Spatial Strategy.

An important step towards achieving a waste management service led by waste minimisation is to raise public awareness of waste and to encourage the public to fully adopt sustainable behaviour with regards to the waste that they produce. The public can prevent large quantities of waste from entering the municipal waste stream, for example by changing shopping habits, re-using materials, reducing waste food and home composting. This reduces the amount of material which requires further management. Waste Minimisation is a message that will be promoted early in the implementation of the Joint Waste Management Strategy and reinforced by ongoing awareness campaigns. In particular, awareness should differentiate between avoiding materials from entering the waste stream and the sustainable management of those which do enter.

In general, the benefits identified from waste minimisation activities are:

- Reduction in the total quantity of waste that needs to be collected, treated and disposed of by Local Authorities;
  - Reducing the impact of transport associated with collections;
  - Reducing reliance on waste management facilities;
  - Helping Authorities to meet targets, including landfill diversion and waste growth; and
  - Reducing the associated costs.
- Helping people to reduce the impact of their environmental footprint through increased general awareness of the environmental impact of consumption.

Actions
• We will develop a Communications Strategy locally with partners using corporate identity and branding and the national 'RecycleNow' campaign. • We will develop a co-ordinated schools programme with partners, for example through the Eco-schools programme. This will cover topics including waste awareness and minimisation and Climate Change. • We will continue to educate members of the public through a variety of waste awareness techniques and campaigns. • We will work with partners to encourage trade waste producers to minimise and recycle their waste, through the promotion of suitable organisations, e.g. Envirowise. We will improve dialogue with the commercial sector to encourage the development of Waste Minimisation Plans. We will link with the Green Business Forum. • We will continue to support the community sector in the development of waste minimisation and reuse initiatives. We will seek methods of supporting the current activities and the development of additional activities. We will seek improved links with the community sector through the participation of Renew Tees Valley on the Recycling Officers Group. • We will encourage the continued use of Home and Community Composting through our Communications Strategy as a means to minimise the amount of waste they produce. • We will measure customer satisfaction through regular satisfaction surveys. These surveys will be carried out at an individual Authority level, with the results of these surveys compared at a sub-regional level. This will allow us to benchmark the services provided to ensure a high standard of customer service throughout the Tees Valley..

5.5 Revised Waste Collections

Policy 4
We will work towards increasing the proportion of material that is collected for recycling and composting through kerbside schemes, bring sites and Household Waste Recycling Centres.

The waste minimisation, publicity and recycling measures described in this Strategy are designed to encourage participation in services by householders and to achieve high levels of recycling and composting. The targets provided by the National Waste Strategy will be the minimum targets for the Authorities who, with assistance from householders will seek to achieve the highest rates possible.

The following sections look at the proposed actions for different elements of the waste collection service.

5.5.1 Kerbside Collections

The Tees Valley Authorities have invested significantly in the kerbside collection services available to all householders within the sub-region. The Authorities are committed to maintain and improve these services, allowing all householders to recycle a variety of materials at the kerbside or in close proximity to their dwelling. We will continue to listen to the public about what services we should provide through effective consultation processes.

5.5.2 Bulky Waste Collections

The Tees Valley Authorities recognise that the bulky waste collection services provide a useful service, especially for those who have limited access to Household Waste Recycling Centres, and are committed to the future provision of these services.

5.5.3 Bring Sites

The Authorities recognise that Bring Sites provide a useful service to householders, supplementing the kerbside collection schemes and providing increased choice.

5.5.4 Household Waste Recycling Centres (HWRCs)

The Tees Valley Authorities are committed to a programme of improving and extending the HWRC service to allow more householders to access this service and use these facilities for the separate collection of a range of materials.

5.5.5 Trade Waste Collections

The Tees Valley Authorities recognise the importance of Trade Waste Collections to local businesses and also the potential value of the resource contained within this waste stream.

5.5.6 Other Waste Streams

The Authorities recognise that other waste streams, such as those generated by the Authorities themselves have an important role to play in achieving high levels of recycling and composting within the sub-region and to provide and encourage sustainable methods of collecting waste.

There is also the need for new markets to be developed for the materials collected for recycling and composting. Some materials will require regional facilities to be built, and it is not directly within the control of the Tees Valley Authorities. However efforts will be made to monitor changes in market outlets and to develop local markets where possible.

Actions

- We will carry out participation surveys of recycling services every 2 years and implement appropriate action plans.
- We will carry out a public consultation on the suitability of introducing weekly food waste collections by 2012 where this will contribute to sustainable waste services.
- Investigate systems for the collection of recyclate and organic wastes from all households, including multi occupancy and provide additional services where this reduces the environmental impact of managing the whole municipal waste stream
- We will review the bulky waste collection services provided by 2009. With partners, including the third sector, we will identify ways in which we may increase the minimisation, reuse and the recycling of this waste stream. We will continue to benchmark services provided by each Authority to identify the best practice with regards to bulky waste collections.
- We will review local 'bring site' facilities for householders to allow them to conveniently recycle materials in suitable and accessible locations. We will review the current provision of bring site facilities to ensure sufficient provision of these facilities. We will ensure that additional facilities are placed with due regard to the local neighbourhood.
- We will ensure adequate current and future provision of Household Waste Recycling Centres (HWRC) to enable householders to recycle and deposit wastes. Where it is identified that there is not sufficient HWRC capacity we will identify suitable sites for the development of additional facilities in conjunction with the development framework
- We will develop any new HWRCs in line with Best Practice to ensure a high level of recycling and composting is achieved at the site and to minimise the amount of residual waste. HWRCs will be adequately manned to ensure that householders are provided with information to enable them to use the site correctly and maximise the amount of material that they segregate for recycling. Contracts for the provision of HWRCs will require providers to maximise recycling of the waste stream received at these facilities.
- We will continue to monitor quantities and types of wastes within the residual waste stream that go to landfill. We will assess with partners the viability of introducing measures to recycle and recover value from this waste stream
- We will continue to ensure that Value for Money trade waste services are available and maximise trade waste recycling, e.g. with support from BREW. We will investigate the potential to develop services at Household Waste Recycling Centres and other suitable locations that allow for deposits of trade waste at an appropriate charge.
- We will encourage the development of recycling facilities in buildings and places open to the public through dialogue with the business community.
- We will endeavour to act as a model of good practice by providing where possible recycling facilities in all council buildings by 2010.
- We will investigate options for maximising the amount of waste that may be reused or recycled from our own waste stream by 2010. This will include Council services including but not limited to Highways and Grounds services.
- We will review best practice of on-street recycling provision for separate collection of litter. We will investigate the potential to operate a trial of street recycling collection systems within the sub-region. This will assist in the achievement of recycling targets and will also improve the profile of waste management within the Tees Valley.
- We will investigate the composition of street sweeping and gully wastes by 2012 and identify options for

the recycling of this waste stream. • We will investigate the potential for the development of a Tees Valley Construction and Demolition reuse and recycling centre.

5.6 Additional Waste Treatment Facilities

Policy 5
We will seek to maximise the amount of material that is recycled, composted or recovered from the residual waste stream.

Hartlepool, Middlesbrough, Redcar and Cleveland and Stockton Authorities currently recover a significant proportion of the waste stream through the Haverton Hill EfW plant, and are committed to do so until 2020. Darlington BC still relies heavily on landfill for the disposal of residual waste but has recently commenced a procurement process for the diversion of some of this waste stream. There may be opportunities for all of the Authorities to recycle and recover additional materials from some of the material that is currently sent to landfill. In particular, the development of an Eco-park and other planned facilities may allow the Authorities to increase recycling and recovery for relatively smaller tonnages where there is insufficient tonnage to support a dedicated facility.

Actions
• We will maintain the good dialogue with the Waste Management industry within the Tees Valley and the North East Region and will investigate the potential for diversion of additional materials from the residual waste stream through new facilities as they are developed. • We will plan for the future provision of residual waste treatment capacity beyond 2020 from 2015 to ensure we continue to meet targets on the diversion of waste from landfill.

5.7 The Residual Waste Stream

Policy 6
We will strive to minimise the amount of waste that is disposed of in line with our principle of working towards zero waste to landfill.

Using the Haverton Hill EfW and the new contract to be let by Darlington BC will allow the Tees Valley Authorities to divert significant levels of residual waste from landfill. However, landfill will remain within the

range of facilities required for the sustainable management of waste in the Tees Valley for those wastes whose characteristics make landfilling the most sustainable option.

Actions
• We will seek to minimise the amount of waste to landfill through increasing recycling and composting and recovery of value from residual wastes and will investigate options for the more sustainable management of the municipal waste stream. • We will review on an annual basis the landfill capacity available within the Tees Valley for the landfilling for the disposal of municipal waste and formulate actions with the waste industry to address any capacity gap if it arises.

5.8 Monitoring and Review

Policy 7
We will regularly monitor and review this Strategy in consultation with stakeholders and the public to ensure that it links with other plans and strategies.

It is important that this Strategy links with other key documents within the Tees Valley and that the progress of work towards Actions is monitored to ensure that the Authorities implement the preferred option and attain targets. The Policies and Actions Plan details all the actions, the group responsible for ensuring that actions are met and the timescale in which actions should be met. This Policies and Actions Plan will be discussed during the Annual Review of the Waste Management Strategy to ensure progress is being made.

Actions
• The provision of future waste services will be steered by the Tees Valley Joint Waste Strategy and other related plans. These related plans will include, but not be limited to the Regional Spatial Strategy, the Regional Waste Plan, the Minerals and Waste Plan, and the Local Development Framework Plan. • We will ensure that the Local Development Framework considers appropriate sites for the development of waste facilities. This will minimise the planning risk and ensure that additional facilities may be developed as required in order to deliver regional self sufficiency. • We will jointly review these policies and the progress on actions on an annual basis and report the results through an Annual Report. This report will include a review of the previous year success and the progress being made towards targets. This Annual Review will be made available to our Members and to the general public through inclusion on our websites. • We will ensure that local neighbourhoods are protected through the delivery of this Strategy through the implementation of policies and enforcement of regulations and will link with other agencies where required.

- We will work to develop individually Supplementary Planning documents or provide other planning advice which will require developers to ensure that adequate provision is made for the storage of bins and containers for recycling and disposal of waste and vehicle access is adequate within new build and converted properties.
- We will individually develop sustainable procurement policies to ensure that due consideration is given to the purchasing of recycled and reused materials over virgin sources in order to support the local and national recycling sector.