BRACKNELL FOREST BC, READING BC AND WOKINGHAM BC

RE3 JOINT MUNICIPAL WASTE MANAGEMENT STRATEGY (2008-2013)

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1. INTRODUCTION

1.1 What is a Waste Strategy?

This document is the Waste Strategy for Bracknell Forest Borough Council, Reading Borough Council and Wokingham Borough Council. The three councils have formed the waste partnership 're3' and are working together to manage waste, principally from households, generated within the three councils.

The purpose of this document is to provide a strategic framework within which the councils, in partnership with local people, will take responsibility for the waste that they produce. It has been developed in line with Defra Guidance on Municipal Waste Management Strategies and Good Practice published in 2005.

This document aims to:

- Explain the local and national factors that affect how the councils approach waste management;
- Describe what the councils plan to do to engage residents in the process of improving the management of waste; and
- Describe how the councils will seek to address some of the new challenges contained in Waste Strategy 2007.

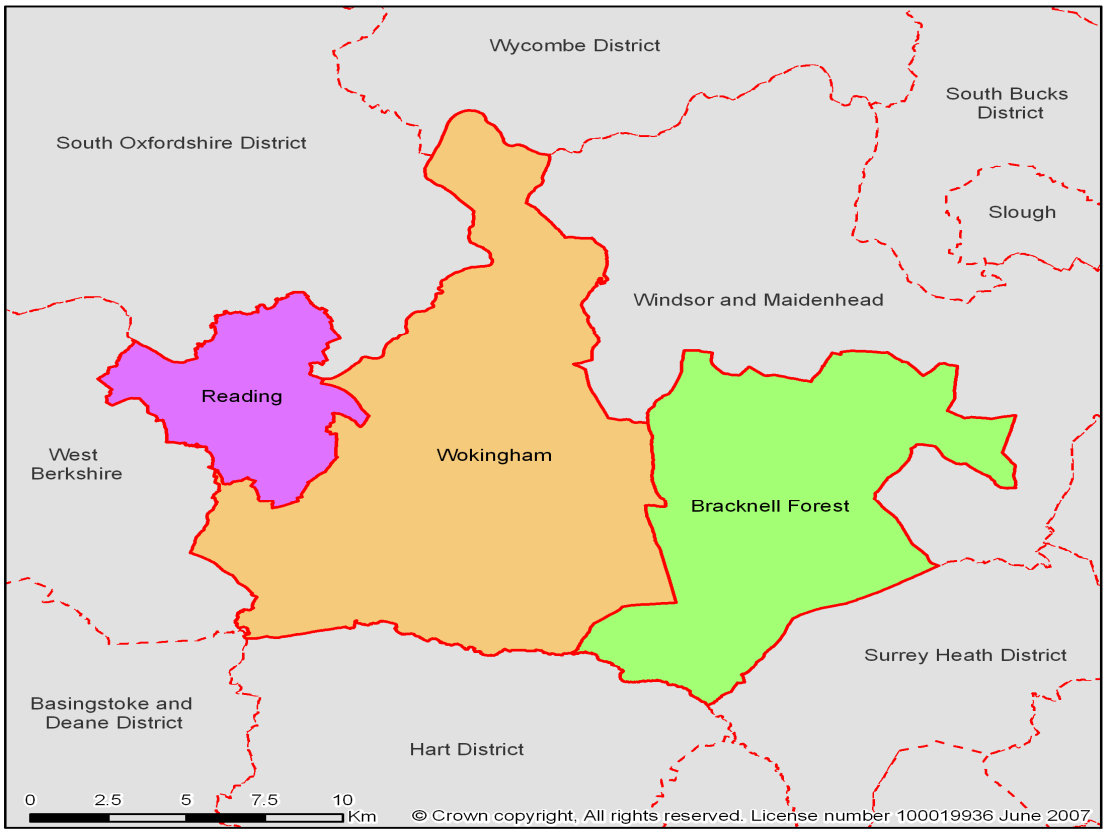
As it says in the final bullet-point above, this document describes how the re3 councils intend to respond to the agenda set by Waste Strategy 2007, the Government's vision for sustainable waste management. Since the publication of Waste Strategy 2000 (the previous strategy statement from the Government), the level of public awareness about the environment, and the impact of waste management within it, has increased.

1.2 What is re3?

re3 is the name given to the partnership between Bracknell Forest, Reading and Wokingham Borough Councils.

Figure 1 shows the location of the members of re3. The Council's area is made up of 33,000 hectares and has a population of about 410,000 people living in over 166,000 households.

Figure 1 The re3 councils



In 1998 Berkshire County Council was disaggregated under local government re-organisation and the Districts and Borough's of Berkshire became Unitary Authorities (UAs). That change is significant because Bracknell Forest, Reading and Wokingham councils' waste responsibilities widened to include the disposal of household waste as well as collection. Previously, disposal of waste and the provision of Civic Amenity Sites were the responsibility of Berkshire County Council.

The collection of waste can be operationally difficult and complex, but district and borough councils have years of experience of managing these key services. The new responsibility for disposal of waste, inherited in 1998, presented serious challenges to the Berkshire authorities which had no previous experience of dealing with it. The County Council had, however, negotiated contracts for the landfilling of waste, which ran until 2007. Whilst it was accepted that landfill was the least sustainable option, replacement facilities and the complementary changes to collection arrangements could not be provided quickly. The challenge to the re3 councils was to procure a long-term, more sustainable solution before the old County Council contracts expired and to minimise the risk that there would be no disposal routes for their residents' waste.

In 1999 the re3 councils formally agreed to work together in developing an Outline Business Case (OBC) for the new facilities they needed. By 2002 the three councils had an approved OBC and had been successful in applying for Private Finance Initiative (PFI) funding from the Government.

PFI is a form of Public Private Partnership (PPP) in which the public sector contracts out a service and the capital element of that service (e.g. facilities). The

capital element is repaid via the cost of the service but the Government also supports the public sector with PFI credits (in the case of the re3 councils this amounted to £37m). The public sector retains a distinct role in the provision of the service, distinguishing PFI from the privatisation of services, but passes some of the risk to their private sector partner.

Following the successful application by the re3 councils for PFI funding, they embarked on a procurement exercise. The waste management industry was invited to propose solutions that were both suitable to the locality and capable of managing the waste produced by residents in the three councils over a 25 year period.

In 2005, Waste Recycling Group (WRG) was appointed by the re3 councils as preferred bidder. A period of intense, detailed negotiations then followed and in October 2006 the re3 councils signed a 25 year contract with WRG – making them the fourth member of the partnership.

As our partners, WRG are already developing new waste management infrastructure in Reading and Bracknell and will manage waste from the three councils throughout the life of the contract.

1.3 Background and Context

As a result of the work of councils, their partners and increased media coverage, the general public are far more aware of 'waste issues' than they were at the turn of the century. The impact of the media is a key component because it is so powerful in shaping opinions. In the years since Waste Strategy 2000, we've experienced fridge-mountains, hazardous waste in our sheds, a deluge of Waste Electronic and Electrical Equipment (WEEE) and a large number of councils have adopted alternate weekly collections. Each of these subjects has been afforded coverage in the national media equivalent to millions of pounds in advertising costs. Some of the coverage has been imbalanced and unhelpful, which is regrettable, but it has all contributed to giving waste management a greater profile. At the same time as the profile of waste management has been raised so has the amount of funding in waste, both from Central and Local Government. With greater funding we have seen a quadrupling in recycling rates across the UK.

Through it all, the commitment of the majority of residents to separate their waste and adapt to new services has been critical. Maintaining that commitment and harnessing it in new areas is the real challenge at the heart of this Joint Waste Strategy for Bracknell Forest, Reading and Wokingham Borough Councils.

1.4 How has the joint waste strategy been developed?

This strategy has been developed between the re3 partners building upon the original WS 2000. It was subsequently updated in line with WS 2007 which was published after the first draft version of the JWS document. It has been developed in line with Defra Guidance on Municipal Waste Management Strategies and Good Practice published in 2005.

A project steering group was established to guide and comment on the formulation of the strategy. During the autumn of 2006 consultation with key stakeholders across the 3 authorities was undertaken. Following the consultation a workshop was organised with appropriate stakeholders from each authority, and representatives from the waste PFI and individual collection contractors to finalise the objectives and formulate and action plan based on WS 2007 and the latest waste management developments and best practice.

2. WHY DO WE NEED TO MANAGE OUR WASTE?

2.1 What's The Fuss?

Why is there all this fuss about waste? In the past it seemed much simpler - you just put your rubbish in the bin and the 'dustman' took it away. But it's never really been that straightforward.

Looking back at the history of waste reveals that we have almost certainly never been as wasteful as we are now. 4000 years ago the Chinese were composting waste and in Europe there were systems in place to recover scrap bronze. The city-state of Athens opened what we would now call a landfill site 2,500 years ago, decreeing that waste should be taken at least one mile beyond the city gates. Much later, in 1874, perhaps the first energy from waste plant, called a destructor, was opened in Nottingham. A year later in 1875, the Public Health Act gave responsibility to local authorities to arrange removal of waste. The Act also required residents to store waste in a "movable receptacle", which is the most likely origin of what many people still know of as a dustbin.

So waste has always been managed in some way. There were even times when public waste caused a more immediate and local problem. The difference now and in the future is that there is an increasingly obvious link between consumption of resources, the resulting waste, and its effect upon the environment.

When resources were less accessible, people were less wasteful. In the past people were less able to exploit the planet's natural resources and in many cases they were more likely to conserve the items they used or consumed. In recent decades we have lived somewhat insulated from concerns about resources because good accessibility has made resources seem plentiful. We have also largely 'externalised' the effects of depleting these resources and the pollution caused.

For the time being, resources may continue to remain accessible but our rate of consumption, for example in Europe and the US, is unsustainable. With the emergence of new, massive economies such as China and India, not only are resources gradually diminishing but 'the West' cannot take for granted that it will be able access them at the same rate or cost that it currently does.

On a less global and more local level, we can't keep landfilling the products we consume. Not only is space for landfill running out in the UK but legislation is either prohibiting it or making it too costly. Alternatives to landfill are available or being developed but the real key to being sustainable is for each of us to reduce the amount of waste we each produce.

We need to control and manage our waste. The sections below look in more detail at the reasons why.

2.2 Climate Change

Climate change is becoming an increasingly important issue in everything we do, including the management of waste.

Everyday waste contains readily biodegradable organic matter such as kitchen waste, garden waste and paper. When these wastes break down in landfill they give off methane gas. Methane is one of the greenhouse gasses which are contributing to the effects of climate change. Here are some facts from DEFRA about the link between our waste and climate change:

- Whilst CO_2 (carbon dioxide) is the most prevalent greenhouse gas, methane is 23 times more damaging to the atmosphere than CO_2;

- Methane emissions from biodegradable waste in landfill account for 40% of all UK methane emissions and 3% of total UK greenhouse gas emissions; and

- On the other hand, current UK recycling of waste materials is estimated to save more than 18 million tonnes of another greenhouse gas, CO_2, through avoided primary material production. That's equivalent to the annual CO_2 output of 5 million cars.

This last fact is important because although it's a complex thing to assess, recycling is often less energy intensive than making products from virgin materials. In the case of aluminium, for example, recycling uses 95% less energy than is used in making the same product from aluminium ore. Energy consumption is a major contributor to climate change and recycling may be one significant way of reducing it.

The way waste is collected also has an impact on climate change. Vehicles are a major source of CO_2 emissions and so reasonably recent developments like kerbside recycling enable councils to greatly reduce the number of journeys that would previously have been needed to recover the same amount of recyclable waste from residents via bring banks.

Councils are committed to helping reduce their impact, and that of residents, on climate change. Many have made a commitment via signing The Nottingham Declaration. To date almost 200 councils are signatories, each committing to working locally towards national climate change schemes, meeting the Kyoto protocol and national targets for carbon dioxide reduction.

Bracknell Forest and Reading have signed up to the Nottingham Declaration, acknowledging the increasing impact of climate change on the local community. Wokingham are proposing to adopt the declaration in the near future. The Declaration commits the Councils, with their partners and communities, to develop plans to address the causes and impacts of climate change according to local priorities.

There are many ways that, as individuals and households, we can help to reduce our contribution to climate change. What we do with our waste is one of them.

The partners of re3 are committed to the protection of the environment and fighting climate change and will continue to review ways in which these issues can be tackled.

2.3 Pressure on landfill

Landfill, as a method of waste disposal, has been under pressure for some time. Whilst there has been an historic reliance on landfill in the UK there is an increasing scarcity of void space in this country and this has increased costs.

An increasing body of legislation aimed at reducing landfill for environmental reasons has also pushed up the price of burying waste. The EU Landfill Directive is the key piece of landfill legislation. It seeks to reduce the environmental impact of landfilling by diverting BMW (Biodegradable Municipal Waste) from landfill. It also sets a uniform standard for all landfill sites in the EU. The Directive states what wastes can and cannot be landfilled and which wastes require pre-treatment prior to disposal at a landfill site. EU member states that fail to comply with the legislation may face substantial fines.

The most important aspect of the Directive for re3 is the requirement to reduce BMW waste to landfill. BMW makes up a significant proportion of household waste and includes green waste from the garden and kitchen wastes.

Figure 2 shows how LATS targets diverge from the modelled BMW to landfill in a scenario where the councils 'do nothing'.

By the 2019/20 target year the fines for re3 could be as high as £14.5 million if nothing is done to divert the BMW from landfill.

Figure 2 Combined tonnages of BMW to landfill and the gap between LATS allocations and predicted BMW arisings in re3 if nothing is done

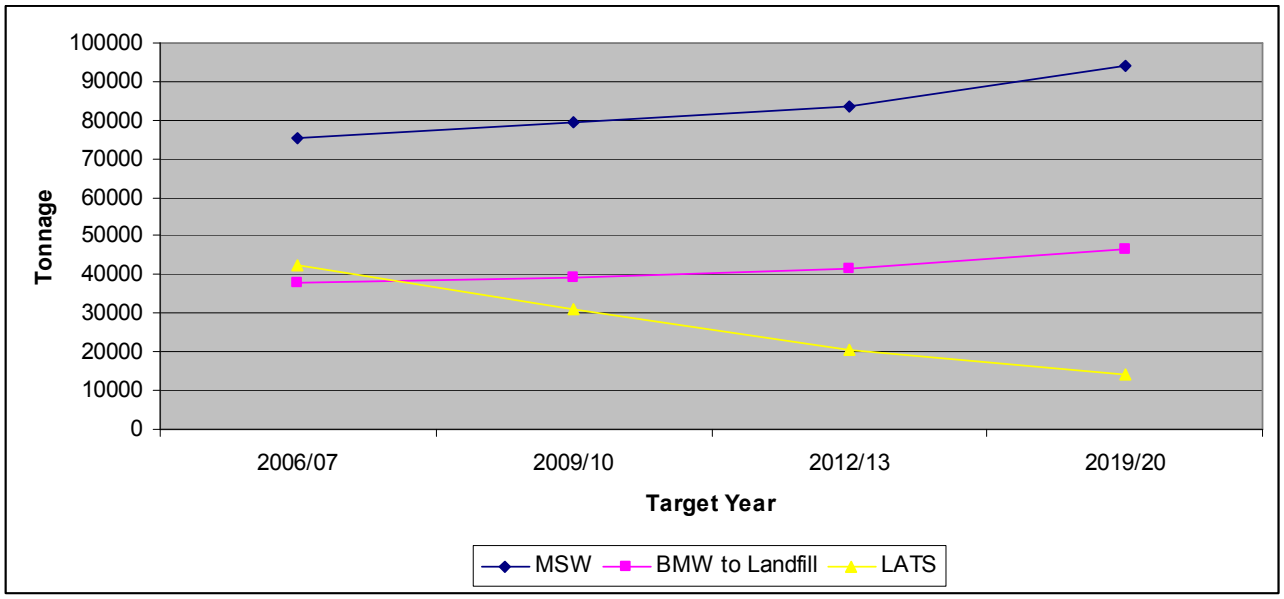


Figure 2 shows an increasing gap, in a 'do nothing' scenario, between the predicted biodegradable waste arising in the re3 area and the maximum allowances imposed on the re3 authorities for that same waste. The implications of this gap are explained below.

In the UK, the Landfill Allowance Trading Scheme (LATS) was implemented within England under the Waste and Emissions Trading Act 2003 (the 'WET Act'). The scheme provides an annually diminishing tonnage allowance for BMW that can be disposed of to landfill. Authorities failing to meet their target will be fined £150 for every tonne they are over their allowance. In order to meet these targets many councils will need to implement alternative collection and treatment practices.

Since 1997 the real cost of landfill has been supplemented by a landfill tax. The tax is designed to deter disposal to landfill and, by increasing year on year, it acts as a driver to increase the financial viability of alternative treatments. The Chancellor's Budget Report for 2007 confirmed the intention to increase the annual landfill tax escalator to £8 per annum (from £3 per annum) from 1st April 2008. From that date, in addition to the cost of collection, transport and disposal, each tonne of municipal waste will have £32 in landfill tax applied. The tax will increase by £8 until 2010 at which point it will be £48 per tonne. This is a similar level to that which applies in several other EU states where landfill taxation has successfully disincentivised the burying of waste and made alternatives viable.

The pressure on, and cost of, landfill is a major factor in the development of recycling collections and the requirement, by councils, for residents to separate their waste at Civic Amenity Sites.

2.4 Legislation

Legislation is the tool by which the EU or UK Government address the regulation of waste activity. Legislation creates a common focus and approach to an issue which may not exist without it. For example, everyone accepts that landfill is not a sustainable method of waste disposal but without the Waste and Emissions Trading Act (see explanation below); it's possible that it would continue being utilised at its present rate until we ran out of landfill capacity.

Not all legislation works exclusively in the area it is intended. The Clean Air Act of 1956 was intended to improve the quality of air which was affected, primarily in built-up areas, by the number of open fires in homes. Aside from successfully clearing the air, it also had the effect of completely changing the composition of household waste from being mainly ash to including waste products such as paper and food that would previously have been burnt in the home. As a piece of legislation designed to address air quality it also had an impact on the course of waste management in this country.

The modern starting point for any discussion on waste legislation is the Environmental Protection Act (1990). It sets out the foundations of the way that waste is managed in the UK.

It's followed by the Duty of Care Regulations (1991 and 2003) which established the duty of producers of waste to ensure that it is managed in a responsible way. The 2003 amendment extends the Duty to household waste.

The Landfill Tax Regulations 1996 established the Landfill Tax levy on the disposal of waste by landfill. This is significant because it played (and continues to play) a major role in making landfill less affordable as a means of waste disposal. This, in turn helped to focus attention and spending on alternative, and more sustainable, methods of waste management.

The Waste and Emissions Trading (WET) Act (2003) is the legislation adopted in the UK to address the EU Landfill Directive. The WET Act establishes an annually diminishing maximum amount of landfill for all Waste Disposal Authorities – an allowance. It also established the Landfill Allowance Trading Scheme (LATS) which is designed to assist the UK to collectively meet the targets and demands of the EU Landfill Directive. The LATS envisages that some councils will be more successful in diverting waste from landfill than others and provides a mechanism for those councils who landfill less than their allowance to trade their surplus permits with councils who have landfilled more than their allowance.

The EU Waste Electrical and Electronic Equipment (WEEE) Directive was passed in 2003 but did not become fully 'live' until July 2007. The WEEE Directive places specific requirements on the producers of electrical and electronic appliances to recover, for reprocessing or recycling, the appliances they make available for sale. Because the WEEE Directive is a producer responsibility style piece of legislation, it means that the costs arising from it are borne by the consumer rather than the general taxpayer.

A more comprehensive and detailed look at the legislation governing waste management can be found at Appendix 5.

2.5 Targets

2.5.1 Government Targets

Legislation describes the ways and means by which waste is managed and it often involves targets. Targets represent a specific level of performance, relative to the individual council or to a common standard, which needs to be achieved. Targets are intended to have the effect of focusing effort and providing a point of comparison.

In the case of the targets emanating from the Landfill Allowance Trading Scheme (LATS), the sum of the targets for each relevant council is equal to the national target for the reduction of Biodegradable Municipal Waste (BMW) for the UK as a whole. In this way, each council is tasked with doing its bit towards achieving the national target.

There are both statutory and non-statutory targets in place aimed at increasing the levels of recycling, composting and recovery of waste. Waste Strategy 2007 updated targets that were originally set by Government in 2000. They are listed below (the 2000 targets, where they differ, appear in brackets):

- To recycle or compost at least 40% (30%) household waste by 2010
- To recover value from 53% (45%) of municipal waste by 2010
- To recycle and compost at least 45% (33%) of household waste by 2015
- To recover value from 67% of municipal waste by 2015
- To recycle and compost at least 50% of household waste by 2020
- To recover value from 75% of municipal waste by 2020

The Landfill Allowance Trading Scheme was launched in April 2005. All local authorities with a responsibility for waste disposal have been allocated an annual allowance, and these set out the tonnage of biodegradable municipal waste (BMW) that the authority is allowed to landfill each year.

The biodegradable component of municipal waste sent to landfill is calculated using a mass balance process. It is deemed that 68% of municipal waste arisings are biodegradable, and the mass balance calculation deducts the amount of BMW diverted from landfill (e.g. recycling and composting) from the authority's total BMW arisings.

Authorities who have unused landfill allowances are able to bank them for use in future years, or can trade the allowances to other authorities to gain income. Likewise, authorities who have exceeded their annual allowance are able to borrow up to 5% of the following year's allowance, except in the year directly preceding a target year. The EU-wide target years are 2010, 2013 and 2020. Banking and borrowing cannot be used to supplement allowances in target years. This is to ensure that the UK allowance is not exceeded in a target year.

Authorities who breach their annual landfill allowance are likely to incur financial penalties of £150 per tonne for every additional tonne of BMW sent to landfill. In addition, they may be penalised equivalent to their share of any financial penalty levied against the UK as a whole for failure to meet the national landfill diversion target.

Table 1 below shows the allocations of permissible BMW to landfill for the re3 councils. The early years of the LATS scheme are less difficult to achieve. The period between 2010 and 2013 includes two target years and also a marked reduction in the amount of BMW which it is permissible to landfill.

Table 1 Landfill Allowance Trading Scheme annual allowances

Year	Bracknell	Reading	Wokingham
2005/06	39,630	54,127	40,239
2006/07	37,642	50,944	38,500
2007/08	34,991	46,700	36,181
2008/09	31,678	41,395	33,282
Target 2010	**27,703**	**35,028**	**29,084**
2010/11	24,619	31,129	26,486
2011/12	21,535	27,230	23,169
Target 2013	**18,452**	**23,331**	**19,851**
2013/14	17,660	22,330	19,000
2014/15	16,869	21,330	18,148
2015/16	16,077	20,329	17,297
2016/17	15,286	19,328	16,445
2017/18	14,494	18,327	15,594
2018/19	13,703	17,326	14,742
Target 2020	**12,911**	**16,326**	**13,891**

All three Councils currently have a surplus of LATS allowances as detailed in Table 2 below. The disparities in accumulated surpluses between the councils are a result of the level of improvement against their performance in 2001/02. Performance in 2001/02 is the base from which LATS allowances are taken.

Table 2 Current Landfill Allowance Trading Scheme Surpluses

	2005/06 Surplus	2006/07 Surplus	Cumulative Surplus
Bracknell	5,495	8,568	14,063
Reading	10,529	12,343	22,872
Wokingham	4,005	4,696	8,701

Modelling, undertaken as part of the 25 year re3 contract, predicts that the three Councils as a whole will meet their (pooled) LATS targets, with significant surpluses modelled, until 2017.

The predictions are based on expected levels of performance by the councils in terms of collections of recyclables and green waste, modelling of anticipated waste growth and modelled levels of population growth. If any of those factors change markedly, then the point in time at which the councils no longer achieve a surplus may also change. This may require additional services or infrastructure and will affect the urgency and the necessary pace of development.

2.5.2 re3 Contract Targets

The re3 councils identified targets for the contractor to meet in delivering the contract. These were in line with targets outlined in the waste plan for Berkshire, Waste Strategy 2000 (the national strategy at the time) and also took into consideration EU targets such as diversion targets from landfill. The targets to be met by the re3 contractor include:

Meet and exceed the current and future statutory Best Value Performance Indicators for recycling and composting that are set for the councils.

Meet and exceed the national targets for waste diversion outlined in Waste Strategy 2000. Recover value from 45% of municipal waste by 2010/11 and 67% by 2015/16.

Achieve a minimum 40% Best Value recycling/composting rate by 2010/11 thereby meeting Defra's conditions for approval of PFI waste schemes. Furthermore future increases will see levels rise to exceed 50% during the contract period.

Meet and exceed the diversion targets for biodegradable waste from landfill as specified in the Landfill Regulations. By 2010 reduce BMW to landfill to 75% of 1995 level. By 2013 reduce to 50% of 1995 level and by 2020 reduce to 35% of the 1995 level.

The re3 contract targets were based on Waste Strategy 2000 which are different to targets in Waste Strategy 2007 as noted below, however there is a provision in the re3 contract to review performance and targets with regard to changes in national policy and legislation

2.6 Waste Strategy for England 2007

Waste Strategy 2007 is the Government's vision for sustainable waste management. It sets the agenda for councils and also provides a forward look at potential new legislation.

The main objectives of the new strategy are to:

- Decouple waste growth in all sectors from economic growth and put more emphasis on waste prevention and re-use;
- Meet and exceed the Landfill Directive diversion targets for biodegradable municipal waste in 2010, 2013 and 2020;
- Increase diversion from landfill of non-municipal waste and secure better integration for municipal and non-municipal waste;

- Secure investment in infrastructure 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.

Underneath these high level objectives, Waste Strategy 2007 introduces or amends some notable initiatives.

Waste Strategy 2007 sets higher national targets for councils and their residents than in 2000.

- Recycling and composting of household waste – at least 40% by 2010, 45% by 2015 and 50% by 2020.

- Recovery of municipal waste – 53% by 2010, 67% by 2015 and 75% by 2020.

Further targets relating to the reduction of household residual waste (not recycled, re-used or composted) from the levels produced in 2000 have been set:

- Reduce the level of household residual waste to 29% of 2000 levels by 2010, 35% in 2015 and 45% by 2020.

The Government intends to review progress against the targets for 2015 and 2020 in 2010 and may amend them to be more ambitious**.**

An increased emphasis is given to Climate Change. The Government intends the overall impact of the strategy to be an annual net reduction in global greenhouse gas emissions from waste management. The strategy estimates that the reduction could be about 9.3 million tonnes of CO^2 - equivalent to the annual use of 3 million cars.

The reductions will be brought about through more efficient waste management, diversion from landfill and increased recycling.

Disincentives for landfilling are increased and potential incentives for recycling are unveiled. Government consulted on removing the ban on local authorities introducing **household financial incentives for waste reduction and recycling** and has opted to allow a handful of authorities to trial such an initiative with a view to issuing wider powers at a later date if the trials succeed. An example of such a scheme might involve householders receiving payments for recycling their waste, funded by ring-fenced receipts from charges levied upon those householders who choose not to recycle.

Producers, Retailers and Consumers will be targeted. The Government is keen to target each of these key areas to ensure that products are designed with their environmental impact in mind, they are not over packaged and they are readily recyclable and recycled;

Particular materials will be targeted. Paper, food and green waste, plastics and aluminium will be the principle targets because they either offer the greatest scope for capture or because recycling them has a greater impact in environmental terms.

Local and regional governance. Encouraging **local authorities to help local (particularly small) businesses** reduce and recycle their waste with cost savings through more integrated management of different waste streams; and

Encouraging the **Regional Development Agencies,** and other bodies, to work in partnership with local authorities and third sector organisations in coordinating business waste and resource management.

2.7 Joint Waste Strategy Objectives and Targets

The objectives and targets for the re3 Joint Waste Strategy have evolved as a result of local initiatives since the original JWS document was formulated. It has been updated to more closely reflect the National Waste Strategy 2007 and the Climate Change agenda which enables the re3 councils to formulate a more holistic and forward looking action plan for 2008 and beyond. The following objectives, in Table 3 below, encompass all aspects of the community, including businesses, the charity and voluntary sector. They include collection schemes, the re3 waste disposal contract facilities and government legislation, whilst still linking with the waste hierarchy.

Table 3 Joint Waste Strategy Objectives

The Local Community and Businesses	
Objective 1	The re3 councils will build on current participation in, recycling & composting and seek to further raise 'waste awareness' to effect positive behavioural change.
Objective 2	The councils will seek to support local businesses, particularly SME's, in reducing and recycling their waste.
Council Collection Services	
Objective 3	The re3 councils will seek to improve the operational, environmental and performance efficiency of their collection services and maximise the opportunity to recycle and compost as many materials as possible.
Waste Management Facilities	
Objective 4	The re3 councils, in partnership with their PFI Contractor, will strive to ensure continuous improvement in the effectiveness, efficiency and quality of the Contract Facilities
Objective 5	The councils, in partnership with their PFI Contractor, will seek to ensure that Contract Facilities are user friendly, provide excellent customer service and are responsive to users' needs.
Private and Charity Sector	
Objective 6	The councils will develop policies and approaches for managing recyclable and reusable waste in partnership with the 'charity' and voluntary sector where appropriate.
Objective 7	The councils will engage with the Private Sector, particularly those in the retail industry, to deliver improvements in waste minimisation and recycling initiatives.

Government and Legislation	
Objective 8	The councils will ensure that compliance with new and emerging legislation is achieved.
Objective 9	The councils will strive, in partnership with their PFI Contractor, to exceed all relevant waste related performance targets.
Environmental Commitment	
Objective 10	The re3 councils will work with their contactors and other partners to ensure that sustainability and efficiency is considered, in all aspects of their waste management activities, and that they minimise the carbon footprint of waste operations.

3. THE CURRENT SITUATION

This section seeks to provide a snapshot of factors relating to household waste now. Although it is only a snapshot, the information included below is helpful in both charting the progress of the councils over the last five years and in planning service developments over the next 5 years and beyond.

The relevant tables in this section (e.g. population. waste composition, council services etc) are correct at the time this Strategy is published. The overarching strategy will be reviewed after 5 years. However the Action Plan associated with the strategy document will be reviewed annually and will include progress, service changes and updated performance. This information will also be available on each of the councils' websites.

3.1 Roles and Responsibilities

The re3 councils are individually responsible for the kerbside collection of refuse, recycling and garden waste materials and bulky waste collections in their respective boroughs, via their appointed internal or external collection contractors. This includes delivery of all kerbside materials to the waste transfer stations or composting facilities which are managed by, or sub contracted to, the re3 contractor, WRG.

The collection of materials from bring recycling sites in each borough is the responsibility of the re3 contractor WRG via its sub-contractors as appropriate. Collection from charity banks is the responsibility of the individual charities. The storage, haulage and processing of all municipal waste collected by the councils is the responsibility of the re3 contractor, WRG. A project team manages the re3 contract on behalf of the 3 authorities in liaison with each of the partners.

3.2 Housing and Population

The re3 'Thames / M4 Corridor' area is characterised by dynamic economic growth, recent investment in high-tech/service industries and high employment. Partly as a result of this, the number of people living in the re3 area and the number of houses has grown significantly in recent years. Table 4 shows the current situation (2006) for population and housing for all three of the re3 members and, to show the upward trend, is accompanied by the figures from 2001.

The growth of population for each individual council is higher than the national average growth experienced in the UK since 2001, which is 0.5%[1]. Wokingham experienced growth more than double the national average in that time while Reading's population grew by more than six times the UK average. re3 as an area experienced growth of 1.9% between 2001 and 2006 - almost four times higher than the national average. Population and housing projections for all three partners up to 2026 are provided in the appendices. These figures were provided by the Joint Strategic Planning Unit (JSPU) which produced figures for each of the Berkshire unitary authorities.

1 Office of National Statistics - http://www.statistics.gov.uk/CCI/nugget.asp?ID=6

Table 4 Housing and population figures for re3 (Source: JSPU 2007)

Council	Population			Households		
	2001	2006	Growth	2001	2006	Growth
Bracknell Forest	109,650	110,517	0.8%	43,467	45,058	3.7%
Reading	144,684	149,671	3.4%	57,948	61,863	6.8%
Wokingham	150,334	152,210	1.2%	57,395	59,573	3.8%
Total	404,668	412,398	1.9%	158,810	166,494	4.8%

A combination of higher than average population growth and a national increase in the numbers of smaller households, has implications for waste generation. As numbers of people and households increase, so will the average waste arisings in each area and for re3 as a whole. Furthermore, additional housing being constructed in the area will have implications for collection rounds, bin provision and costs etc.

The information in Table 4 above is based on 2001 census and recent demographic trends may mean that population and housing may differ from projections given by the JSPU. Current trends in population indicate that these figures may differ significantly.

3.3 Current Waste Tonnages & Composition

The predicted, combined total municipal waste tonnage for the re3 councils, in the 2008/09 year, is 220,000 tonnes.

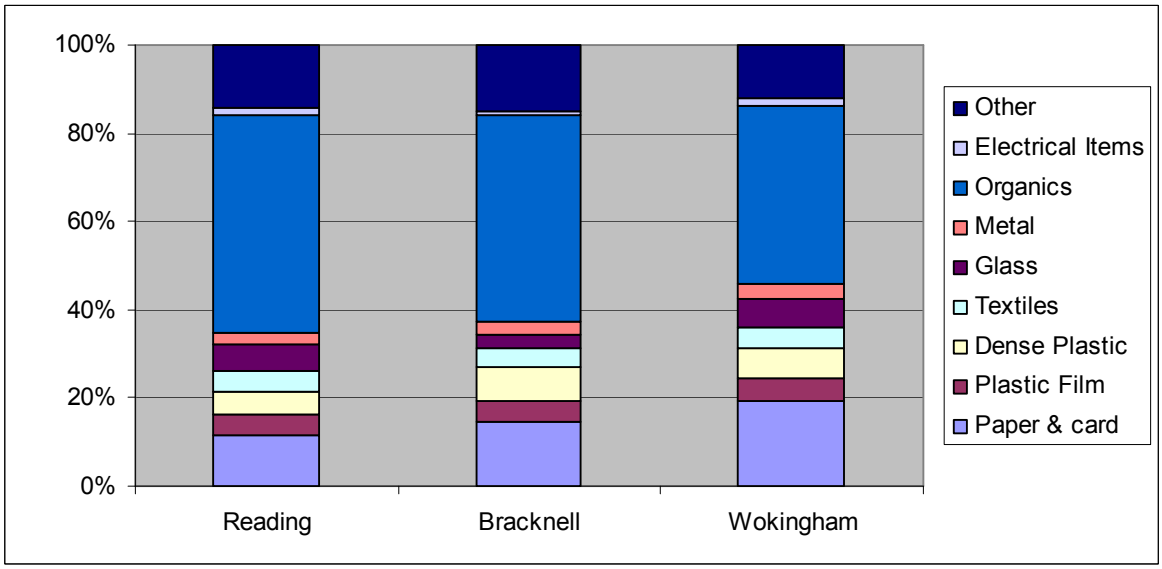
3.3.1 Waste Composition

It is true that the composition of our waste is substantially influenced by our purchasing habits. As a greater range of waste materials is collected separately for recycling, the composition of the remaining waste, intended for disposal, changes too. Ten years ago far more paper and card would have been present in our waste for disposal. Nowadays, we are capturing a great deal of it in recycling collections.

Types and quantities of household waste are often related to socio-economic group, spending power and less straight-forward factors such as the relative transience in a community. The presence of children within a household and their ages may also have a direct effect on quantities and composition of waste and on the levels of recycling and set out rates in kerbside schemes.

In understanding the composition of the waste still destined for disposal we can plan further services and assess where the greatest gains can be made. A waste compositional analysis was undertaken in June 2007 within each of the re3 council areas. Figure 3 below, uses the results of the analysis to show the average percentage composition of residual waste across all the Acorn categories for Reading, Bracknell and Wokingham.

Figure 3 Average residual waste composition for each of the three districts



From Figure 3 above it is clear that there is still a considerable amount of waste in residual bins that could be recycled. Putrescible waste accounts for a large percentage of the composition for all three districts. A significant amount of waste material, for which the councils already offer collection services (e.g. garden waste and paper) continues to be found in residual waste. This indicates that further work on awareness, and maximising the efficiency of collections, is required.

There is a significant proportion of food waste in residual waste bins. According to WRAP around a third of all the food we buy ends up being thrown away and most of this could have been eaten – it's not just peelings, cores and bones. 90% of us just don't realise how much good food we throw out, yet in the UK we throw away 6.7 million tonnes of food each year. It's not just an issue of good food going to waste or that this costs us as consumers a significant amount of money, but that there are serious environmental implications. The amount of food we throw away is a major contributor to the production of greenhouse gases in the UK.

Another key issue with the composition of waste in the re3 councils areas is that a large percentage is packaging. Packaging is continuing to grow as a main focus for waste reduction and minimisation initiatives in many areas of the UK. Waste Strategy 2007 highlights the producer responsibility regulations as an area for amendment to achieve packaging minimisation. Packaging is often necessary, for example in minimising product damage in transit and to ensure that fresh products reach the consumer. A number of retailers have agreed to work to reduce packaging and have signed an agreement called the Courtauld Commitment.

The Courtauld Commitment is an agreement between WRAP and major grocery organisations which will lead to new packaging solutions and technologies so that less rubbish ends up in the household bin. The agreement is a powerful vehicle for change and will result in real reductions in packaging and food waste.

3.4 Council Services

Each of the re3 councils offers a slightly different collection service to residents, as detailed in the Tables below. Bracknell Forest and Reading Borough Councils offer alternate weekly collections of residual waste and recycling and garden waste. Wokingham Borough Council offers weekly collections of residual waste and fortnightly collection of recyclables and garden waste. Despite the subtle differences, each offers kerbside collections of waste for disposal, items for recycling and a green waste collection for composting.

Bracknell Forest Borough Council

The Council's refuse collection contract is with SITA and is due to expire in 2011.

The recycling services provided to residents by the council are part of the council's Alternate Weekly Collection service, which picks up recyclables on one week and collects residual wastes the next. Green waste is collected at the same time as other recycling with an initial one-off charge.

Waste Material	Container	Materials Collected
Residual	Green Wheelie Bin	• General Non Recyclable Waste
Dry Recycling	Blue Wheelie Bin	• Plastic Bottles • Food and drinks cans • Empty aerosols
	Green Kerbside Boxes	• Newspapers & Magazines • Telephone directories and catalogues • Cardboard and other Paper
Garden Waste	Brown Wheelie Bin / Biodegradable Paper Bag	• Green waste

Reading Borough Council

Reading Borough Council has provided an in-house refuse collection service since it was formed.

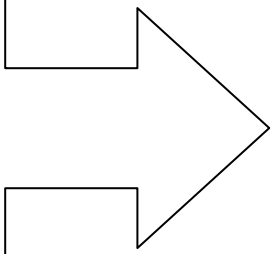
Reading operates an Alternate Weekly Collection system and collects residual waste from each household every two weeks while recyclables are collected on the alternate week. Green waste is collected by the council with an initial one-off charge.

Waste Material	**Container**	**Materials Collected**
Residual	Grey Wheelie Bin	• General Non Recyclable Waste
Dry Recycling	Red Wheelie Bin	• Newspapers & magazines • Books, telephone directories & catalogues • Cardboard & other paper • Food & drinks cans • Plastic bottles
Garden Waste	Green Wheelie Bin / Green Bag	• Green waste

Wokingham Borough Council

The Council's refuse collection contract is with SITA and is due to expire on September 30th 2009 but there is an option for an extension of up to 3 years

A weekly residual waste collection is in operation in Wokingham with fortnightly collection of recyclables. Two black boxes are provided for recyclable materials and sacks can be purchased for green waste collection. The kerbside collection service accepts mixed paper and card, green wastes, and plastic bottles.



Waste Material	Container	Materials Collected
Residual	Dustbin / Sack	• General Non Recyclable Waste
Dry Recycling	Black Boxes	• Plastic bottles • Steel and Aluminium drinks and food cans • Newspaper and magazines • Cardboard packaging •
Garden Waste	Reusable Bag	• Green waste

3.4.1 Other collection services

All of the re3 councils operate chargeable bulky household collection services for furniture and large electrical items and they all collect clinical waste. Further information about collections offered by the individual councils can be found in the Appendices or on individual council websites.

3.5 Performance

The recycling performance of councils is measured as a percentage of their total household waste arisings.

As such, a council can show how successful it has been at recycling and composting household waste from within its area. The benefit of consistent performance indicators is that over time they show progress and thus reward effort on the part of councils and most importantly their residents – who are, after all, the people who are generating the waste. They also help waste managers to identify areas needing improvement.

The current method of measuring recycling performance is a useful way of comparing the progress being made by councils across the country. However the demographic structure of authorities varies enormously, from urban areas with high rise housing blocks to leafy suburbs, and the relative performance on recycling in a Best Value Performance Indicator league table does not take account of this. Those areas with high population density, lower than average numbers of residents per household, a high number of flats and where English is not the first language tend to recycle less and often create more waste. Some parts of the re3 share these characteristics and the achievement of high recycling rates may require special attention.

Table 5 below shows the recycling performance for the three councils over the last five years. Each has made significant improvements in overall performance (figures for the last 2 months of 2007/8 are estimated).

Table 5 Recycling and Composting Rates

		2003/04	2004/05	2005/06	2006/07	2007/08
Bracknell	Recycling	14.62%	15.99%	18.69%	23.93%	25.50%
	Composting	5.76%	8.05%	9.27%	11.56%	14.52%
Reading	Recycling	14.53%	17.60%	18.30%	21.40%	25.62%
	Composting	3.35%	3.40%	3.30%	4.76%	8.76%
Wokingham	Recycling	18.45%	19.25%	21.90%	22.81%	22.11%
	Composting	7.42%	7.62%	8.40%	11.16%	15.38%

Table 6 below shows the percentage of waste to landfill from the three councils over the last five years. As the improvements in recycling have continued, so has the reduction in waste to landfill.

Table 6 Percentage of waste sent to Landfill

	2003/04	2004/05	2005/06	2006/07	2007/08
Bracknell	79.63%	75.96%	72.04%	64.43%	59.73%
Reading	82.12%	79.02%	77.72%	71.89%	62.74%
Wokingham	74.13%	73.14%	69.27%	65.60%	61.81%

4. HOW WILL WE GET THERE?

4.1 Waste Minimisation and Reuse

Tackling the growth in waste is an essential element of re3's Joint Municipal Waste Management Strategy and a key objective is to work with the local community and businesses to further raise awareness in order to effect positive behavioural change. Two Waste Minimisation Officers are employed by WRG to work with the 3 councils on waste minimisation initiatives. re3 has a Waste Minimisation Plan that sets out the strategy for the promotion of waste minimisation for the next 5 years and this plan will be subject to annual review. The broad aims are shown below:

- Reduce the amount of waste produced by households
- Increase awareness of waste issues in the community
- Encourage behavioural change in accordance with the waste hierarchy
- Develop an educational programme that ensures each child receives waste education at least once in their school life

4.2 Future Collection Strategies

The re3 partner councils will closely monitor examples of good practice on reuse, recycling and landfill diversion in other councils, both within the UK and Europe. If appropriate for our own councils then further consideration will be given to best practice and the possibility of partnership working. What works for one council may not be appropriate to all or any of the re3 councils. The re3 councils will work together to raise waste awareness in all sectors of the community.

The main thrust of our recycling services, and our approach to promoting recycling behaviour, is through our collection and disposal contract arrangements for the main post-consumer recyclable materials, i.e. paper and card, glass bottles and jars, metal cans and plastic bottles. We will add to these as industries mature.

We recognise however that there are materials outside the contractual arrangements, and will consider applications for recycling or reuse credits where proper auditable claims are made, consistent with such Statutory Guidance as may be applicable.

Furthermore, where there is a demonstrable financial and/or environmental advantage to the councils, we will consider proposals that support our efforts to increase recycling and/or reduce landfill, and if appropriate recognise these by payments consistent with Statutory Guidance, or other agreed arrangements.

The councils will consider appropriate service developments as part of the annual review of the Action Plan and one definite action is to.

- Maximise the recycling potential of the kerbside collections, CA and bring sites and therefore increase recycling.

4.3 The re3 Joint Waste PFI Contract

The re3 PFI contract has been in existence for little more than a year but already significant investment is being made in infrastructure. Phase 1, completed in January 2008, and included the development of a new Household Waste Recycling

Centre (HWRC) and transfer station at the Smallmead Site in Reading. Phase 2, commencing early in 2008, involves the development of a Material Reclamation Facility (MRF), offices and an education centre on the same site. Whilst Phase 2 is underway at Smallmead, Longshot Lane in Bracknell will also be redeveloped to improve the facilities available there. All development at the two sites should be complete by Spring 2009.

The current composting facilities at Burghfield and Planners Farm will continue to accept 15,000 tonnes per annum until 2008 when the Burghfield facility closes. Following this, further composting facilities will be provided through WRG's sites and through sub-contracts. In order to ensure that targets continue to be met, a limited quantity of waste (60,000 tonnes per annum) will be sent to the Lakeside Energy from Waste (EfW) plant situated at Colnbrook in Slough. The plant will accept a total of 400,000 tonnes a year of municipal waste generating 32MW of electricity for the national grid. Remaining residual waste from re3 will be disposed of via existing landfill contracts until they expire. At that time WRG will dispose of the waste to their site at Sutton Courtenay.

The pictures below illustrate the facilities included in the re3 contract which are currently being developed.

Figure 4 Artist's impression of the finished Waste Management Park at Smallmead, Reading.

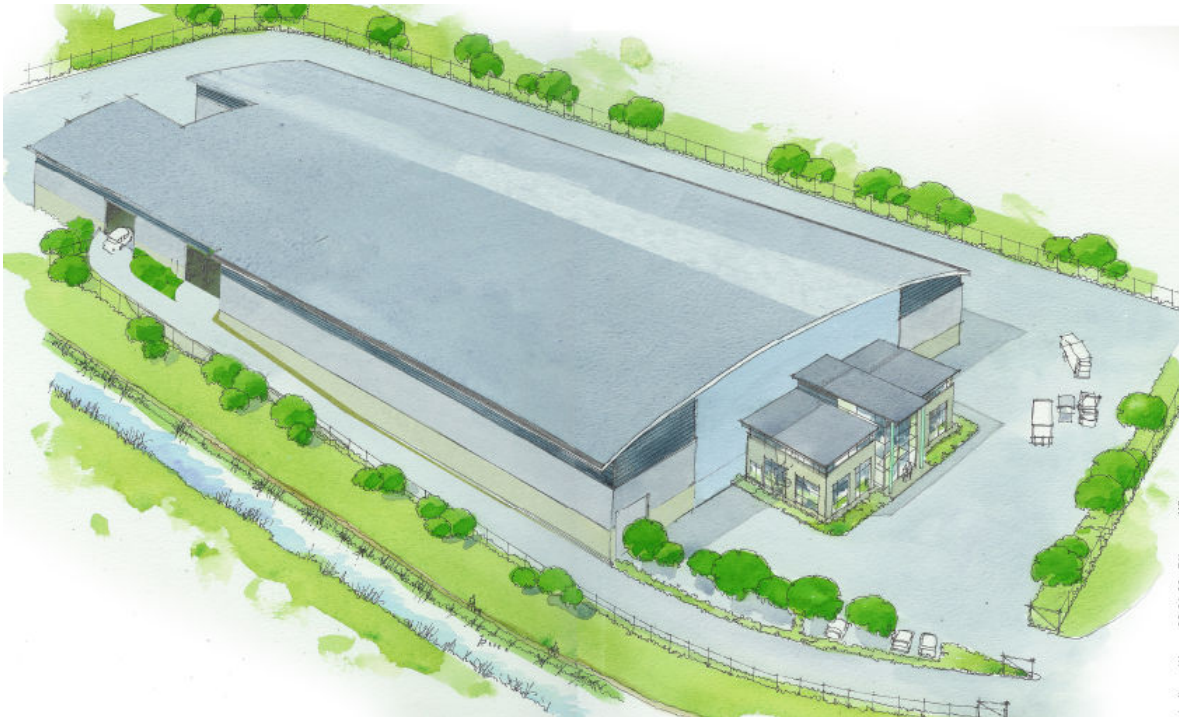


Figure 5 View of the proposed site entrance, bulk bays and MRF building at Longshot Lane

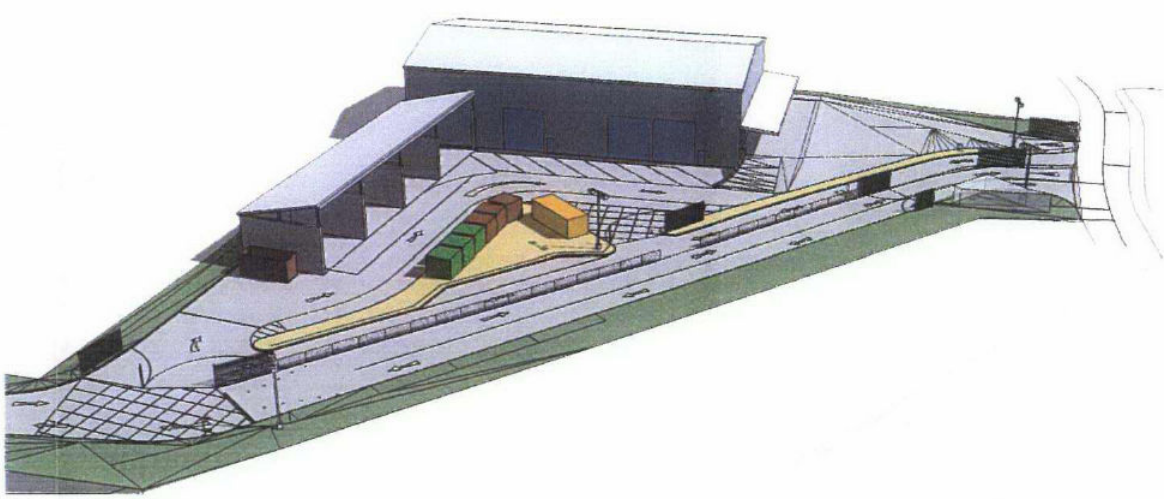


Figure 6 View of the proposed offices, visitor centre and transfer station building at Longshot Lane

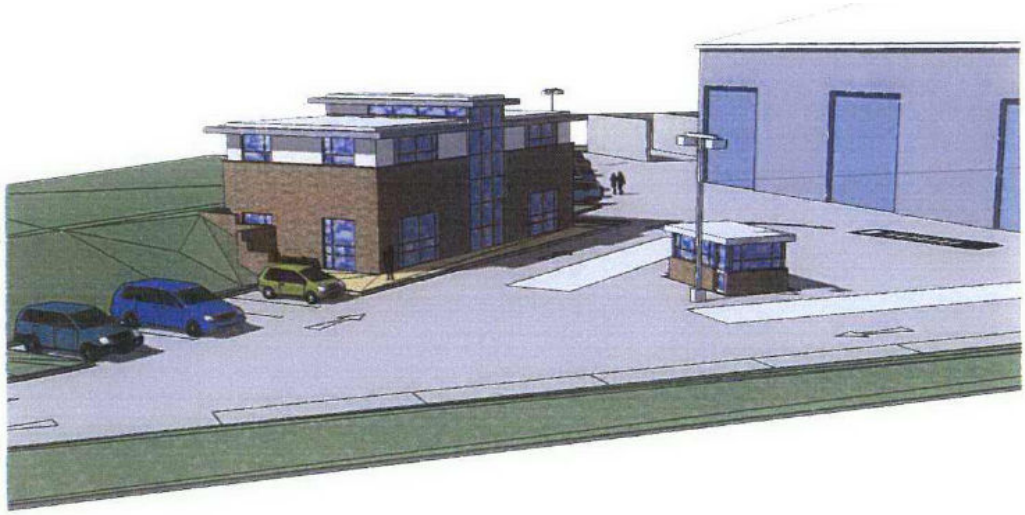


Figure 7 The Lakeside Energy from Waste Facility

Source: Viridor Waste Management: http://www.viridor-waste.co.uk/index.php

The facilities and services provided by WRG are intended to enable the partners of re3 to achieve high levels of composting and recycling, exceeding the statutory targets where possible.

Recyclate collected in kerbside collections and at CA sites is bulked at the transfer stations located at the Longshot Lane site in Bracknell Forest and Smallmead site in Reading, before onward transport for recovery. The waste contractors, WRG, employ various materials outlets, merchants and associated spot markets to secure the best financial outcomes for the councils.

The flow of materials between the three council areas and the various facilities is quite complicated, however Best Practical Environmental Option and the Proximity Principle have been considered throughout contract negotiations. The re3 councils and WRG are conscious that they need to continue to manage the number of miles travelled.

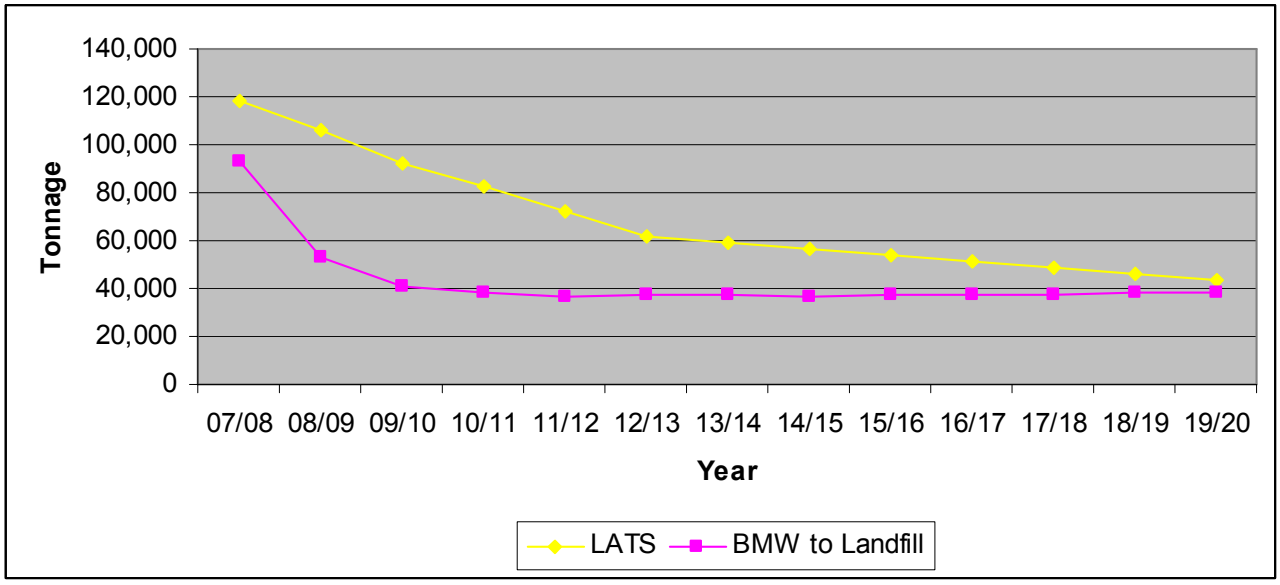
4.3.1 re3 and LATS

The PFI contract awarded to WRG includes sufficient infrastructure to enable the three disposal authorities to not just meet but exceed their LATS targets. Crucially the model shows that re3 will meet its LATS allocations in the target years and therefore not face any financial penalties. The prediction to 2019/20 is shown in the Table 7 and Figure 8 below, indicating that re3 will have allowances to spare that could either be banked or sold to other authorities.

Table 7 LATS targets and WRG predictions for diversion

Year (*target year)	LATS allocation for re3 (tonnes)	BMW to Landfill using WRG (tonnes)	Surplus allocation (tonnes)
2007/08	117,872	93,260	24,612
2008/09	106,355	53,411	52,944
2009/10*	92,535	40,491	52,044
2010/11	82,234	38,356	43,698
2011/12	71,934	36,798	35,136
2012/13*	61,634	37,188	24,446
2013/14	58,990	37,541	21,449
2014/15	56,347	36,750	19,597
2015/16	53,703	37,022	16,681
2016/17	51,059	37,323	13,736
2017/18	48,415	37,659	10,756
2018/19	45,771	38,024	7,747
2019/20*	43,128	38,420	4,708

Figure 8 LATS targets and BMW that WRG will send to landfill



Achieving the landfill diversion targets depends upon continuing development of, and public participation in, the current kerbside collection services.

Public participation will be critical to success following the completion of the new infrastructure. The contract includes the development of education centres at both Smallmead and Longshot Lane. These facilities will be managed by two Education and Waste Minimisation Officers with support from the council's project management team and the individual councils. The Education and Waste Minimisation Officers will co-ordinate efforts to reduce waste generation and educate the next generation of householders.

The Waste Minimisation Plan is appended to the Strategy. It will be reviewed annually and the appendix updated.

5. THE NEXT STEPS

5.1 Joint working

The successful implementation and delivery of the strategy will require the partner authorities and WRG to keep improving the ways in which they work together, at both an operational and strategic level. There is a clear commitment to working together in partnership under re3. Further work will be undertaken by the partnership to explore and agree options to strengthen this relationship and enhance governance arrangements, particularly where this improves operational structures. Joint working between the councils of re3 may take place in areas that include joint publicity campaigns and procurement (e.g. the joint purchase of containers to achieve economies of scale).

The achievement of the targets adopted in this strategy is dependent on increasing recycling and composting. This means that the interface between how we collect these materials and the provision of sorting and processing facilities is critical. Integrated planning and delivery of waste management services will be essential in the future and will require a joint approach to all elements of the strategy.

5.2 Action Plan

An Action Plan has been agreed by the re3 partners to ensure that the objectives of this Strategy are implemented. The Action Plan will be regularly reviewed and forms Appendix 2 of this strategy.

5.3 Monitoring the strategy

This JWS sets out how re3 plans to manage its waste in a more sustainable manner over the next 25 years. However, the delivery of the strategy will need to be monitored to establish whether key objectives, such as increasing recycling and composting rates, have been met.

The re3 Steering Group (as identified in 1.4) consists of officers and representatives from the contractor who will be responsible for monitoring the delivery of the strategy, using the achievement of items in the Action Plan to measure progress. The strategy will be reviewed on a continual basis, with a formal revision or reassessment every five years in accordance with current guidance.